

R-12 Extended Capacities (Tons) - EX2 Series

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX2-00X    | 0.23           | 0.14                             | 0.27 | 0.30 | 0.33 | 0.36 | 0.39 | 0.14                             | 0.16 | 0.18 | 0.20 | 0.22 | 0.24 | 0.13                             | 0.15 | 0.17 | 0.19 | 0.21 | 0.22 |
| EX2-000    | 0.4            | 0.24                             | 0.46 | 0.52 | 0.58 | 0.63 | 0.68 | 0.24                             | 0.28 | 0.31 | 0.35 | 0.38 | 0.41 | 0.23                             | 0.27 | 0.30 | 0.33 | 0.36 | 0.39 |
| EX2-001    | 0.81           | 0.49                             | 0.94 | 1.05 | 1.17 | 1.28 | 1.38 | 0.48                             | 0.55 | 0.62 | 0.69 | 0.75 | 0.82 | 0.46                             | 0.53 | 0.59 | 0.66 | 0.73 | 0.79 |
| EX2-002    | 1.1            | 0.67                             | 1.27 | 1.42 | 1.59 | 1.74 | 1.88 | 0.65                             | 0.75 | 0.84 | 0.94 | 1.03 | 1.11 | 0.63                             | 0.73 | 0.81 | 0.91 | 1.00 | 1.08 |
| EX2-003    | 2.0            | 1.21                             | 2.31 | 2.58 | 2.89 | 3.16 | 3.42 | 1.19                             | 1.37 | 1.54 | 1.72 | 1.88 | 2.03 | 1.14                             | 1.32 | 1.47 | 1.65 | 1.80 | 1.95 |
| EX2-004    | 2.7            | 1.63                             | 3.12 | 3.49 | 3.90 | 4.27 | 4.61 | 1.60                             | 1.85 | 2.07 | 2.31 | 2.53 | 2.73 | 1.54                             | 1.78 | 1.99 | 2.22 | 2.43 | 2.63 |
| EX2-M00    | 4.3            | 2.60                             | 4.97 | 5.55 | 6.21 | 6.80 | 7.34 | 2.55                             | 2.94 | 3.29 | 3.68 | 4.03 | 4.35 | 2.45                             | 2.83 | 3.16 | 3.54 | 3.87 | 4.18 |

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX2-00X    | 0.23           | 0.13                             | 0.27 | 0.30 | 0.33 | 0.36 | 0.39 | 0.14                             | 0.16 | 0.18 | 0.20 | 0.22 | 0.24 | 0.11                             | 0.13 | 0.14 | 0.16 | 0.17 | 0.19 |
| EX2-000    | 0.4            | 0.22                             | 0.46 | 0.52 | 0.58 | 0.63 | 0.68 | 0.24                             | 0.28 | 0.31 | 0.35 | 0.38 | 0.41 | 0.20                             | 0.23 | 0.26 | 0.29 | 0.32 | 0.34 |
| EX2-001    | 0.81           | 0.44                             | 0.84 | 1.05 | 1.17 | 1.28 | 1.38 | 0.48                             | 0.55 | 0.62 | 0.69 | 0.75 | 0.82 | 0.40                             | 0.46 | 0.52 | 0.58 | 0.63 | 0.68 |
| EX2-002    | 1.1            | 0.60                             | 1.27 | 1.42 | 1.59 | 1.74 | 1.88 | 0.66                             | 0.76 | 0.85 | 0.95 | 1.04 | 1.13 | 0.54                             | 0.62 | 0.70 | 0.78 | 0.85 | 0.92 |
| EX2-003    | 2.0            | 1.09                             | 2.31 | 2.58 | 2.89 | 3.16 | 3.42 | 1.20                             | 1.39 | 1.55 | 1.73 | 1.90 | 2.05 | 0.98                             | 1.13 | 1.27 | 1.41 | 1.55 | 1.67 |
| EX2-004    | 2.7            | 1.47                             | 3.12 | 3.49 | 3.90 | 4.27 | 4.61 | 1.40                             | 1.62 | 1.81 | 2.02 | 2.21 | 2.39 | 1.33                             | 1.54 | 1.72 | 1.92 | 2.10 | 2.27 |
| EX2-M00    | 4.3            | 2.34                             | 4.97 | 5.55 | 6.21 | 6.80 | 7.34 | 2.57                             | 2.97 | 3.32 | 3.71 | 4.06 | 4.39 | 2.12                             | 2.45 | 2.74 | 3.08 | 3.35 | 3.62 |

R-22 Extended Capacities (Tons) - EX2 Series

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX2-00X    | 0.23           | 0.18                             | 0.21 | 0.23 | 0.26 | 0.28 | 0.31 | 0.18                             | 0.21 | 0.23 | 0.26 | 0.28 | 0.31 | 0.17                             | 0.20 | 0.22 | 0.25 | 0.27 | 0.29 |
| EX2-000    | 0.4            | 0.31                             | 0.36 | 0.40 | 0.45 | 0.49 | 0.53 | 0.31                             | 0.36 | 0.40 | 0.45 | 0.49 | 0.53 | 0.30                             | 0.35 | 0.39 | 0.43 | 0.47 | 0.51 |
| EX2-001    | 0.81           | 0.64                             | 0.74 | 0.83 | 0.92 | 1.01 | 1.09 | 0.63                             | 0.73 | 0.81 | 0.91 | 1.00 | 1.08 | 0.61                             | 0.70 | 0.79 | 0.88 | 0.96 | 1.04 |
| EX2-002    | 1.1            | 0.86                             | 0.99 | 1.11 | 1.24 | 1.36 | 1.47 | 0.85                             | 0.98 | 1.10 | 1.23 | 1.34 | 1.45 | 0.83                             | 0.96 | 1.07 | 1.20 | 1.31 | 1.42 |
| EX2-003    | 2.0            | 1.57                             | 1.81 | 2.08 | 2.27 | 2.48 | 2.68 | 1.55                             | 1.79 | 2.00 | 2.21 | 2.45 | 2.65 | 1.51                             | 1.74 | 1.95 | 2.18 | 2.39 | 2.58 |
| EX2-004    | 2.7            | 2.12                             | 2.45 | 2.74 | 3.06 | 3.35 | 3.62 | 2.10                             | 2.42 | 2.71 | 3.03 | 3.32 | 3.59 | 2.04                             | 2.36 | 2.63 | 2.94 | 3.23 | 3.48 |
| EX2-M00    | 4.3            | 3.38                             | 3.90 | 4.36 | 4.88 | 5.34 | 5.77 | 3.34                             | 3.86 | 4.31 | 4.82 | 5.28 | 5.70 | 3.25                             | 3.75 | 4.20 | 4.69 | 5.14 | 5.55 |

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX2-00X    | 0.23           | 0.17                             | 0.20 | 0.22 | 0.25 | 0.27 | 0.29 | 0.19                             | 0.21 | 0.24 | 0.26 | 0.28 | 0.30 | 0.18                             | 0.20 | 0.23 | 0.25 | 0.27 | 0.28 |
| EX2-000    | 0.4            | 0.29                             | 0.33 | 0.37 | 0.42 | 0.46 | 0.50 | 0.33                             | 0.37 | 0.41 | 0.45 | 0.49 | 0.52 | 0.32                             | 0.36 | 0.40 | 0.44 | 0.47 | 0.51 |
| EX2-001    | 0.81           | 0.60                             | 0.69 | 0.77 | 0.87 | 0.95 | 1.02 | 0.67                             | 0.75 | 0.84 | 0.92 | 0.99 | 1.06 | 0.64                             | 0.72 | 0.80 | 0.88 | 0.95 | 1.01 |
| EX2-002    | 1.1            | 0.81                             | 0.94 | 1.05 | 1.17 | 1.28 | 1.38 | 0.90                             | 1.01 | 1.13 | 1.23 | 1.33 | 1.42 | 0.87                             | 0.97 | 1.09 | 1.19 | 1.29 | 1.38 |
| EX2-003    | 2.0            | 1.47                             | 1.70 | 1.90 | 2.12 | 2.32 | 2.51 | 1.64                             | 1.83 | 2.05 | 2.25 | 2.43 | 2.59 | 1.59                             | 1.78 | 1.99 | 2.18 | 2.35 | 2.51 |
| EX2-004    | 2.7            | 1.99                             | 2.30 | 2.57 | 2.87 | 3.15 | 3.40 | 2.22                             | 2.48 | 2.78 | 3.04 | 3.28 | 3.51 | 2.14                             | 2.39 | 2.68 | 2.93 | 3.17 | 3.38 |
| EX2-M00    | 4.3            | 3.16                             | 3.65 | 4.08 | 4.56 | 5.00 | 5.40 | 3.54                             | 3.96 | 4.43 | 4.85 | 5.24 | 5.60 | 3.42                             | 3.82 | 4.28 | 4.68 | 5.06 | 5.41 |

**R-134a Extended Capacities (Tons) - EX2 Series**

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX2-00X    | 0.23           | 0.17                             | 0.20 | 0.22 | 0.25 | 0.27 | 0.29 | 0.17                             | 0.20 | 0.22 | 0.25 | 0.27 | 0.29 | 0.16                             | 0.18 | 0.21 | 0.23 | 0.25 | 0.27 |
| EX2-000    | 0.4            | 0.30                             | 0.35 | 0.39 | 0.43 | 0.47 | 0.51 | 0.23                             | 0.33 | 0.37 | 0.42 | 0.46 | 0.50 | 0.28                             | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 |
| EX2-001    | 0.81           | 0.61                             | 0.70 | 0.79 | 0.88 | 0.96 | 1.04 | 0.59                             | 0.68 | 0.79 | 0.85 | 0.93 | 1.01 | 0.57                             | 0.66 | 0.74 | 0.82 | 0.90 | 0.97 |
| EX2-002    | 1.1            | 0.82                             | 0.95 | 1.06 | 1.18 | 1.30 | 1.40 | 0.81                             | 0.94 | 1.05 | 1.17 | 1.28 | 1.38 | 0.77                             | 0.89 | 0.99 | 1.11 | 1.22 | 1.32 |
| EX2-003    | 2.0            | 1.56                             | 1.79 | 2.00 | 2.24 | 2.45 | 2.65 | 1.52                             | 1.75 | 1.96 | 2.19 | 2.40 | 2.60 | 1.47                             | 1.70 | 1.90 | 2.12 | 2.32 | 2.51 |
| EX2-004    | 2.7            | 2.02                             | 2.33 | 2.61 | 2.92 | 3.19 | 3.45 | 1.98                             | 2.29 | 2.56 | 2.86 | 3.13 | 3.38 | 1.90                             | 2.19 | 2.45 | 2.74 | 3.00 | 3.24 |
| EX2-M00    | 4.3            | 3.22                             | 3.72 | 4.16 | 4.65 | 5.09 | 5.50 | 3.16                             | 3.65 | 4.08 | 4.56 | 5.00 | 5.40 | 3.02                             | 3.49 | 3.90 | 4.36 | 4.78 | 5.16 |

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX2-00X    | 0.23           | 0.15                             | 0.17 | 0.19 | 0.22 | 0.24 | 0.26 | 0.17                             | 0.19 | 0.21 | 0.23 | 0.25 | 0.27 | 0.16                             | 0.18 | 0.20 | 0.22 | 0.24 | 0.25 |
| EX2-000    | 0.4            | 0.27                             | 0.31 | 0.35 | 0.39 | 0.43 | 0.46 | 0.29                             | 0.32 | 0.38 | 0.40 | 0.43 | 0.46 | 0.28                             | 0.31 | 0.35 | 0.38 | 0.41 | 0.44 |
| EX2-001    | 0.81           | 0.54                             | 0.62 | 0.70 | 0.78 | 0.85 | 0.92 | 0.59                             | 0.66 | 0.74 | 0.81 | 0.87 | 0.93 | 0.56                             | 0.63 | 0.70 | 0.77 | 0.83 | 0.89 |
| EX2-002    | 1.1            | 0.74                             | 0.85 | 0.96 | 1.07 | 1.17 | 1.26 | 0.81                             | 0.91 | 1.01 | 1.11 | 1.20 | 1.28 | 0.76                             | 0.85 | 0.95 | 1.04 | 1.12 | 1.20 |
| EX2-003    | 2.0            | 1.41                             | 1.63 | 1.82 | 2.04 | 2.23 | 2.41 | 1.56                             | 1.74 | 1.95 | 2.14 | 2.31 | 2.47 | 1.49                             | 1.67 | 1.86 | 2.04 | 2.20 | 2.36 |
| EX2-004    | 2.7            | 1.81                             | 2.09 | 2.34 | 2.61 | 2.86 | 3.09 | 1.98                             | 2.21 | 2.48 | 2.71 | 2.93 | 3.13 | 1.88                             | 2.10 | 2.35 | 2.57 | 2.78 | 2.97 |
| EX2-M00    | 4.3            | 2.88                             | 3.33 | 3.72 | 4.16 | 4.55 | 4.92 | 3.16                             | 3.53 | 3.95 | 4.33 | 4.67 | 5.00 | 2.99                             | 3.34 | 3.74 | 4.09 | 4.42 | 4.73 |

**R-404A/R-507 Extended Capacities (Tons) - EX2 Series**

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX2-00X    | 0.23           | 0.13                             | 0.15 | 0.17 | 0.19 | 0.21 | 0.22 | 0.13                             | 0.15 | 0.17 | 0.19 | 0.21 | 0.22 | 0.12                             | 0.14 | 0.15 | 0.17 | 0.19 | 0.20 |
| EX2-000    | 0.4            | 0.23                             | 0.27 | 0.30 | 0.33 | 0.36 | 0.39 | 0.22                             | 0.25 | 0.28 | 0.32 | 0.35 | 0.38 | 0.21                             | 0.24 | 0.27 | 0.30 | 0.33 | 0.36 |
| EX2-001    | 0.81           | 0.47                             | 0.54 | 0.61 | 0.68 | 0.74 | 0.80 | 0.46                             | 0.53 | 0.59 | 0.66 | 0.73 | 0.79 | 0.43                             | 0.50 | 0.56 | 0.62 | 0.68 | 0.73 |
| EX2-002    | 1.1            | 0.63                             | 0.73 | 0.81 | 0.91 | 1.00 | 1.08 | 0.52                             | 0.72 | 0.80 | 0.89 | 0.98 | 1.06 | 0.59                             | 0.68 | 0.76 | 0.85 | 0.93 | 1.01 |
| EX2-003    | 2.0            | 1.15                             | 1.33 | 1.48 | 1.66 | 1.82 | 1.96 | 1.12                             | 1.29 | 1.45 | 1.62 | 1.77 | 1.91 | 1.07                             | 1.24 | 1.38 | 1.54 | 1.69 | 1.83 |
| EX2-004    | 2.7            | 1.55                             | 1.79 | 2.00 | 2.24 | 2.45 | 2.65 | 1.52                             | 1.76 | 1.96 | 2.19 | 2.40 | 2.60 | 1.44                             | 1.66 | 1.86 | 2.08 | 2.28 | 2.46 |
| EX2-M00    | 4.3            | 2.47                             | 2.85 | 3.19 | 3.57 | 3.91 | 4.22 | 2.42                             | 2.79 | 3.12 | 3.49 | 3.83 | 4.13 | 2.30                             | 2.66 | 2.97 | 3.32 | 3.64 | 3.93 |

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX2-00X    | 0.23           | 0.12                             | 0.14 | 0.15 | 0.17 | 0.19 | 0.20 | 0.13                             | 0.35 | 0.16 | 0.18 | 0.19 | 0.21 | 0.12                             | 0.13 | 0.15 | 0.16 | 0.18 | 0.19 |
| EX2-000    | 0.4            | 0.20                             | 0.23 | 0.26 | 0.29 | 0.32 | 0.34 | 0.22                             | 0.25 | 0.28 | 0.30 | 0.33 | 0.35 | 0.20                             | 0.22 | 0.25 | 0.27 | 0.30 | 0.32 |
| EX2-001    | 0.81           | 0.41                             | 0.47 | 0.53 | 0.59 | 0.65 | 0.70 | 0.44                             | 0.49 | 0.55 | 0.60 | 0.65 | 0.70 | 0.41                             | 0.46 | 0.51 | 0.56 | 0.61 | 0.65 |
| EX2-002    | 1.1            | 0.55                             | 0.64 | 0.71 | 0.79 | 0.87 | 0.94 | 0.60                             | 0.67 | 0.75 | 0.82 | 0.89 | 0.95 | 0.56                             | 0.63 | 0.70 | 0.77 | 0.83 | 0.89 |
| EX2-003    | 2.0            | 1.01                             | 1.17 | 1.30 | 1.46 | 1.60 | 1.72 | 1.09                             | 1.22 | 1.36 | 1.49 | 1.61 | 1.72 | 1.02                             | 1.14 | 1.28 | 1.40 | 1.51 | 1.61 |
| EX2-004    | 2.7            | 1.38                             | 1.57 | 1.76 | 1.96 | 2.15 | 2.32 | 1.48                             | 1.65 | 1.85 | 2.03 | 2.19 | 2.34 | 1.38                             | 1.54 | 1.73 | 1.89 | 2.04 | 2.18 |
| EX2-M00    | 4.3            | 2.17                             | 2.51 | 2.80 | 3.13 | 3.43 | 3.71 | 2.35                             | 2.63 | 2.94 | 3.22 | 3.48 | 3.72 | 2.19                             | 2.45 | 2.74 | 3.00 | 3.24 | 3.46 |

**R-407C Extended Capacities (Tons) - EX2 Series**

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX2-00X    | 0.23           | 0.17                             | 0.20 | 0.22 | 0.25 | 0.27 | 0.29 | 0.17                             | 0.20 | 0.22 | 0.25 | 0.27 | 0.29 | 0.16                             | 0.18 | 0.21 | 0.23 | 0.25 | 0.27 |
| EX2-000    | 0.4            | 0.30                             | 0.35 | 0.39 | 0.43 | 0.47 | 0.51 | 0.30                             | 0.35 | 0.39 | 0.43 | 0.47 | 0.51 | 0.28                             | 0.32 | 0.36 | 0.40 | 0.44 | 0.48 |
| EX2-001    | 0.81           | 0.61                             | 0.70 | 0.79 | 0.88 | 0.96 | 1.04 | 0.50                             | 0.69 | 0.77 | 0.87 | 0.95 | 1.02 | 0.58                             | 0.67 | 0.75 | 0.84 | 0.92 | 0.99 |
| EX2-002    | 1.1            | 0.83                             | 0.96 | 1.07 | 1.20 | 1.31 | 1.42 | 0.81                             | 0.94 | 1.05 | 1.17 | 1.28 | 1.38 | 0.78                             | 0.90 | 1.01 | 1.13 | 1.23 | 1.33 |
| EX2-003    | 2.0            | 1.51                             | 1.74 | 1.95 | 2.18 | 2.39 | 2.58 | 1.48                             | 1.71 | 1.91 | 2.14 | 2.34 | 2.53 | 1.42                             | 1.64 | 1.83 | 2.05 | 2.25 | 2.43 |
| EX2-004    | 2.7            | 2.04                             | 2.36 | 2.63 | 2.94 | 3.23 | 3.48 | 2.00                             | 2.31 | 2.58 | 2.89 | 3.16 | 3.42 | 1.92                             | 2.22 | 2.48 | 2.77 | 3.14 | 3.28 |
| EX2-M00    | 4.3            | 3.24                             | 3.74 | 4.18 | 4.68 | 5.12 | 5.53 | 3.18                             | 3.67 | 4.11 | 4.59 | 5.03 | 5.43 | 3.06                             | 3.53 | 3.95 | 4.42 | 4.84 | 5.23 |

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX2-00X    | 0.23           | 0.16                             | 0.18 | 0.21 | 0.23 | 0.25 | 0.27 | 0.17                             | 0.19 | 0.21 | 0.23 | 0.25 | 0.27 | 0.16                             | 0.18 | 0.20 | 0.22 | 0.24 | 0.25 |
| EX2-000    | 0.4            | 0.27                             | 0.31 | 0.35 | 0.39 | 0.43 | 0.46 | 0.30                             | 0.34 | 0.38 | 0.41 | 0.44 | 0.47 | 0.28                             | 0.31 | 0.35 | 0.38 | 0.41 | 0.44 |
| EX2-001    | 0.81           | 0.55                             | 0.64 | 0.71 | 0.79 | 0.87 | 0.94 | 0.60                             | 0.67 | 0.75 | 0.82 | 0.89 | 0.95 | 0.57                             | 0.64 | 0.71 | 0.78 | 0.84 | 0.90 |
| EX2-002    | 1.1            | 0.75                             | 0.87 | 0.97 | 1.08 | 1.19 | 1.28 | 0.82                             | 0.92 | 1.03 | 1.12 | 1.21 | 1.30 | 0.78                             | 0.87 | 0.98 | 1.07 | 1.15 | 1.23 |
| EX2-003    | 2.0            | 1.36                             | 1.57 | 1.76 | 1.96 | 2.15 | 2.32 | 1.49                             | 1.67 | 1.86 | 2.04 | 2.20 | 2.36 | 1.42                             | 1.59 | 1.78 | 1.94 | 2.10 | 2.25 |
| EX2-004    | 2.7            | 1.83                             | 2.11 | 2.36 | 2.64 | 2.89 | 3.13 | 2.02                             | 2.26 | 2.53 | 2.77 | 2.99 | 3.19 | 1.91                             | 2.14 | 2.39 | 2.62 | 2.82 | 3.02 |
| EX2-M00    | 4.3            | 2.92                             | 3.37 | 3.77 | 4.21 | 4.82 | 4.99 | 3.21                             | 3.59 | 4.01 | 4.40 | 4.75 | 5.08 | 3.05                             | 3.41 | 3.81 | 4.18 | 4.51 | 4.82 |

**R-502 Extended Capacities (Tons) - EX2 Series**

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX2-000    | 0.4            | 0.21                             | 0.24 | 0.27 | 0.30 | 0.33 | 0.36 | 0.20                             | 0.23 | 0.26 | 0.29 | 0.32 | 0.34 | 0.19                             | 0.22 | 0.25 | 0.27 | 0.30 | 0.32 |
| EX2-001    | 0.81           | 0.42                             | 0.48 | 0.54 | 0.61 | 0.66 | 0.72 | 0.41                             | 0.47 | 0.53 | 0.59 | 0.65 | 0.70 | 0.39                             | 0.46 | 0.50 | 0.56 | 0.62 | 0.67 |
| EX2-002    | 1.1            | 0.56                             | 0.65 | 0.72 | 0.81 | 0.89 | 0.96 | 0.55                             | 0.64 | 0.71 | 0.79 | 0.87 | 0.94 | 0.53                             | 0.61 | 0.68 | 0.75 | 0.84 | 0.91 |
| EX2-003    | 2.0            | 1.03                             | 1.19 | 1.33 | 1.49 | 1.63 | 1.76 | 1.00                             | 1.15 | 1.29 | 1.44 | 1.58 | 1.71 | 0.96                             | 1.11 | 1.24 | 1.39 | 1.52 | 1.64 |
| EX2-004    | 2.7            | 1.39                             | 1.61 | 1.79 | 2.01 | 2.20 | 2.37 | 1.36                             | 1.57 | 1.76 | 1.96 | 2.15 | 2.32 | 1.29                             | 1.49 | 1.67 | 1.86 | 2.04 | 2.20 |
| EX2-M00    | 4.3            | 2.21                             | 2.55 | 2.85 | 3.19 | 3.49 | 3.77 | 2.16                             | 2.49 | 2.79 | 3.12 | 3.42 | 3.69 | 2.06                             | 2.38 | 2.66 | 2.97 | 3.28 | 3.52 |

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            |                | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            |                | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            |                | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX2-000    | 0.4            | 0.18                             | 0.21 | 0.23 | 0.26 | 0.28 | 0.31 | 0.20                             | 0.22 | 0.25 | 0.27 | 0.30 | 0.32 | 0.19                             | 0.21 | 0.24 | 0.26 | 0.28 | 0.30 |
| EX2-001    | 0.81           | 0.37                             | 0.43 | 0.48 | 0.53 | 0.59 | 0.63 | 0.40                             | 0.45 | 0.50 | 0.55 | 0.59 | 0.63 | 0.38                             | 0.42 | 0.48 | 0.52 | 0.56 | 0.60 |
| EX2-002    | 1.1            | 0.50                             | 0.58 | 0.65 | 0.72 | 0.79 | 0.85 | 0.55                             | 0.61 | 0.69 | 0.75 | 0.81 | 0.87 | 0.51                             | 0.57 | 0.64 | 0.70 | 0.75 | 0.81 |
| EX2-003    | 2.0            | 0.91                             | 1.05 | 1.17 | 1.31 | 1.44 | 1.55 | 0.99                             | 1.11 | 1.24 | 1.36 | 1.46 | 1.57 | 0.93                             | 1.04 | 1.16 | 1.27 | 1.38 | 1.47 |
| EX2-004    | 2.7            | 1.23                             | 1.42 | 1.59 | 1.78 | 1.94 | 2.10 | 1.34                             | 1.50 | 1.66 | 1.83 | 1.98 | 2.12 | 1.26                             | 1.41 | 1.58 | 1.73 | 1.86 | 1.99 |
| EX2-M00    | 4.3            | 1.96                             | 2.26 | 2.53 | 2.83 | 3.10 | 3.35 | 2.13                             | 2.38 | 2.56 | 2.92 | 3.15 | 3.37 | 2.00                             | 2.24 | 2.50 | 2.74 | 2.96 | 3.16 |

**R-12 Extended Capacities (kWatts) - EX2 Series**

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |       |       |       |       |       |                                  |       |       |       |       |       |                                  |       |       |       |       |       |
|------------|----------------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|
|            |                | 10°C                             |       |       |       |       |       | 0°C                              |       |       |       |       |       | -10°C                            |       |       |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       |
|            |                | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600   | 700   | 800   | 1000  | 1100  |
| EX2-00X    | 0.23           | 0.50                             | 0.61  | 0.66  | 0.70  | 0.70  | 0.82  | 0.50                             | 0.61  | 0.66  | 0.70  | 0.78  | 0.82  | 0.46                             | 0.56  | 0.61  | 0.65  | 0.73  | 0.76  |
| EX2-000    | 0.4            | 0.85                             | 1.04  | 1.12  | 1.20  | 1.34  | 1.41  | 0.85                             | 1.04  | 1.12  | 1.20  | 1.34  | 1.41  | 0.81                             | 1.00  | 1.08  | 1.15  | 1.29  | 1.35  |
| EX2-001    | 0.81           | 1.73                             | 2.12  | 2.29  | 2.45  | 2.74  | 2.88  | 1.70                             | 2.08  | 2.25  | 2.40  | 2.69  | 2.82  | 1.63                             | 1.99  | 2.15  | 2.30  | 2.57  | 2.70  |
| EX2-002    | 1.1            | 2.37                             | 2.90  | 3.14  | 3.35  | 3.75  | 3.93  | 2.30                             | 2.82  | 3.04  | 3.25  | 3.64  | 3.82  | 2.23                             | 2.73  | 2.95  | 3.15  | 3.53  | 3.70  |
| EX2-003    | 2.0            | 4.28                             | 5.25  | 5.67  | 6.06  | 6.77  | 7.10  | 4.21                             | 5.16  | 5.57  | 5.96  | 6.66  | 6.99  | 4.04                             | 4.94  | 5.34  | 5.71  | 6.38  | 6.69  |
| EX2-004    | 2.7            | 5.77                             | 7.07  | 7.63  | 8.16  | 9.12  | 9.57  | 5.66                             | 6.34  | 7.49  | 8.01  | 8.96  | 9.39  | 5.45                             | 6.68  | 7.21  | 7.71  | 8.62  | 9.04  |
| EX2-M00    | 4.3            | 9.20                             | 11.27 | 12.18 | 13.12 | 14.55 | 15.26 | 9.03                             | 11.06 | 11.94 | 12.77 | 14.27 | 14.97 | 8.67                             | 10.62 | 11.47 | 12.27 | 13.71 | 14.38 |

| Valve Type | Nominal Rating | Evaporator Temperature           |       |       |       |       |       |                                  |       |       |       |       |       |                                  |      |      |       |       |       |
|------------|----------------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|------|------|-------|-------|-------|
|            |                | -20°C                            |       |       |       |       |       | -30°C                            |       |       |       |       |       | -40°C                            |      |      |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |      |      |       |       |       |
|            |                | 400                              | 600   | 700   | 800   | 1000  | 1100  | 600                              | 700   | 800   | 1000  | 1100  | 1200  | 600                              | 700  | 800  | 1000  | 1100  | 1200  |
| EX2-00X    | 0.23           | 0.46                             | 0.56  | 0.61  | 0.65  | 0.73  | 0.76  | 0.50                             | 0.81  | 0.66  | 0.70  | 0.78  | 0.82  | 0.39                             | 0.48 | 0.52 | 0.55  | 0.62  | 0.65  |
| EX2-000    | 0.4            | 0.78                             | 0.95  | 1.03  | 1.10  | 1.23  | 1.29  | 0.85                             | 1.04  | 1.12  | 1.20  | 1.34  | 1.41  | 0.71                             | 0.87 | 0.94 | 1.00  | 1.12  | 1.17  |
| EX2-001    | 0.81           | 1.58                             | 1.91  | 2.06  | 2.20  | 2.46  | 2.58  | 1.70                             | 2.08  | 2.25  | 2.40  | 2.69  | 2.82  | 1.42                             | 1.73 | 1.87 | 2.00  | 2.24  | 2.35  |
| EX2-002    | 1.1            | 2.12                             | 2.60  | 2.81  | 3.00  | 3.36  | 3.52  | 2.34                             | 2.86  | 3.09  | 3.30  | 3.69  | 3.87  | 1.91                             | 2.34 | 2.53 | 2.70  | 3.02  | 3.17  |
| EX2-003    | 2.0            | 3.86                             | 4.73  | 5.10  | 5.46  | 6.10  | 6.40  | 4.25                             | 5.20  | 5.62  | 6.01  | 6.72  | 7.04  | 3.47                             | 4.25 | 4.59 | 4.91  | 5.49  | 5.75  |
| EX2-004    | 2.7            | 5.20                             | 6.37  | 6.88  | 7.36  | 8.23  | 8.63  | 4.96                             | 6.07  | 6.56  | 7.01  | 7.84  | 8.22  | 4.71                             | 5.77 | 6.23 | 6.66  | 7.44  | 7.81  |
| EX2-M00    | 4.3            | 8.28                             | 10.15 | 10.96 | 11.71 | 13.10 | 13.74 | 9.10                             | 11.14 | 12.14 | 12.87 | 14.38 | 15.09 | 7.50                             | 9.19 | 9.93 | 10.61 | 11.87 | 12.45 |

**R-22 Extended Capacities (kWatts) - EX2 Series**

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |       |       |       |       |       |                                  |       |       |       |       |       |                                  |       |       |       |       |       |
|------------|----------------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|
|            |                | 10°C                             |       |       |       |       |       | 0°C                              |       |       |       |       |       | -10°C                            |       |       |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       |
|            |                | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600   | 700   | 800   | 1000  | 1100  |
| EX2-00X    | 0.23           | 0.64                             | 0.78  | 0.84  | 0.90  | 1.01  | 1.06  | 0.64                             | 0.78  | 0.84  | 0.90  | 1.01  | 1.06  | 0.60                             | 0.74  | 0.80  | 0.85  | 0.95  | 1.00  |
| EX2-000    | 0.4            | 1.10                             | 1.34  | 1.45  | 1.55  | 1.74  | 1.82  | 1.10                             | 1.34  | 1.45  | 1.55  | 1.74  | 1.82  | 1.06                             | 1.30  | 1.40  | 1.50  | 1.68  | 1.76  |
| EX2-001    | 0.81           | 2.27                             | 2.77  | 3.00  | 3.20  | 3.58  | 3.76  | 2.23                             | 2.73  | 2.95  | 3.15  | 3.53  | 3.70  | 2.16                             | 2.64  | 2.86  | 3.05  | 3.41  | 3.58  |
| EX2-002    | 1.1            | 3.04                             | 3.73  | 4.03  | 4.31  | 4.81  | 5.05  | 3.01                             | 3.69  | 3.98  | 4.26  | 4.76  | 4.99  | 2.94                             | 3.60  | 3.89  | 4.16  | 4.65  | 4.87  |
| EX2-003    | 2.0            | 5.56                             | 6.81  | 7.35  | 7.86  | 8.79  | 9.22  | 5.49                             | 6.72  | 7.26  | 7.76  | 8.68  | 9.10  | 5.35                             | 6.55  | 7.07  | 7.56  | 8.45  | 8.86  |
| EX2-004    | 2.7            | 7.50                             | 9.19  | 9.93  | 10.81 | 11.87 | 12.45 | 7.43                             | 9.10  | 9.83  | 10.51 | 11.75 | 12.33 | 7.22                             | 8.84  | 9.55  | 10.21 | 11.42 | 11.38 |
| EX2-M00    | 4.3            | 11.97                            | 14.65 | 15.83 | 16.92 | 18.92 | 19.84 | 11.82                            | 14.48 | 15.64 | 16.72 | 18.69 | 19.61 | 11.51                            | 14.09 | 15.22 | 16.27 | 18.19 | 19.08 |

| Valve Type | Nominal Rating | Evaporator Temperature           |       |       |       |       |       |                                  |       |       |       |       |       |                                  |       |       |       |       |       |
|------------|----------------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|
|            |                | -20°C                            |       |       |       |       |       | -30°C                            |       |       |       |       |       | -40°C                            |       |       |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       |
|            |                | 400                              | 600   | 700   | 800   | 1000  | 1100  | 600                              | 700   | 800   | 1000  | 1100  | 1200  | 600                              | 700   | 800   | 1000  | 1100  | 1200  |
| EX2-00X    | 0.23           | 0.60                             | 0.74  | 0.80  | 0.85  | 0.95  | 1.00  | 0.67                             | 0.73  | 0.78  | 0.91  | 0.91  | 0.95  | 0.64                             | 0.69  | 0.74  | 0.82  | 0.86  | 0.90  |
| EX2-000    | 0.4            | 1.03                             | 1.26  | 1.36  | 1.45  | 1.62  | 1.70  | 1.17                             | 1.26  | 1.35  | 1.58  | 1.58  | 1.65  | 1.13                             | 1.22  | 1.31  | 1.46  | 1.53  | 1.60  |
| EX2-001    | 0.81           | 2.12                             | 2.60  | 2.81  | 3.00  | 3.36  | 3.52  | 2.37                             | 2.56  | 2.74  | 3.21  | 3.21  | 3.35  | 2.27                             | 2.45  | 2.62  | 2.92  | 3.07  | 3.20  |
| EX2-002    | 1.1            | 2.87                             | 3.51  | 3.79  | 4.06  | 4.53  | 4.76  | 3.19                             | 3.44  | 3.68  | 4.31  | 4.31  | 4.51  | 3.08                             | 3.33  | 3.56  | 3.98  | 4.17  | 4.36  |
| EX2-003    | 2.0            | 5.20                             | 6.37  | 6.88  | 7.36  | 8.23  | 8.63  | 5.81                             | 6.27  | 6.70  | 7.86  | 7.86  | 8.21  | 5.63                             | 6.08  | 6.50  | 7.27  | 7.62  | 7.96  |
| EX2-004    | 2.7            | 7.04                             | 8.63  | 9.32  | 9.96  | 11.14 | 11.68 | 7.86                             | 8.49  | 9.07  | 10.64 | 10.64 | 11.11 | 7.58                             | 8.18  | 8.75  | 9.78  | 10.26 | 10.71 |
| EX2-M00    | 4.3            | 11.19                            | 13.70 | 14.80 | 15.82 | 17.69 | 18.55 | 12.58                            | 13.54 | 14.47 | 16.97 | 16.97 | 17.72 | 12.11                            | 13.08 | 13.98 | 15.63 | 16.39 | 17.12 |

R-134a Extended Capacities (kWatts) - EX2 Series

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |       |       |       |       |       |                                  |       |       |       |       |       |                                  |       |       |       |       |       |
|------------|----------------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|
|            |                | 10°C                             |       |       |       |       |       | 0°C                              |       |       |       |       |       | -10°C                            |       |       |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       |
|            |                | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600   | 700   | 800   | 1000  | 1100  |
| EX2-00X    | 0.23           | 0.60                             | 0.74  | 0.80  | 0.85  | 0.95  | 1.00  | 0.60                             | 0.74  | 0.80  | 0.85  | 0.95  | 1.00  | 0.57                             | 0.69  | 0.75  | 0.80  | 0.90  | 0.94  |
| EX2-000    | 0.4            | 1.06                             | 1.30  | 1.40  | 1.50  | 1.68  | 1.76  | 1.03                             | 1.26  | 1.36  | 1.45  | 1.62  | 1.70  | 0.99                             | 1.21  | 1.31  | 1.40  | 1.57  | 1.64  |
| EX2-001    | 0.81           | 2.06                             | 2.64  | 2.86  | 3.05  | 3.41  | 3.58  | 2.09                             | 2.56  | 2.76  | 2.95  | 3.30  | 3.46  | 2.02                             | 2.47  | 2.67  | 2.85  | 3.19  | 3.35  |
| EX2-002    | 1.1            | 2.90                             | 3.56  | 3.84  | 4.11  | 4.59  | 4.81  | 2.87                             | 3.51  | 3.79  | 4.06  | 4.53  | 4.76  | 2.73                             | 3.34  | 3.61  | 3.85  | 4.31  | 4.52  |
| EX2-003    | 2.0            | 5.49                             | 6.72  | 7.26  | 7.76  | 8.68  | 9.10  | 5.38                             | 6.59  | 7.12  | 7.61  | 8.51  | 8.92  | 5.20                             | 6.37  | 6.88  | 7.36  | 8.23  | 8.63  |
| EX2-004    | 2.7            | 7.15                             | 8.76  | 9.46  | 10.11 | 11.31 | 11.86 | 7.01                             | 8.58  | 9.27  | 9.91  | 11.08 | 11.62 | 5.73                             | 8.24  | 8.90  | 9.51  | 10.63 | 11.15 |
| EX2-M00    | 4.3            | 11.40                            | 13.96 | 15.08 | 16.12 | 18.02 | 18.90 | 11.19                            | 13.70 | 14.80 | 15.82 | 17.69 | 18.55 | 10.69                            | 13.09 | 14.14 | 15.12 | 16.90 | 17.73 |

| Valve Type | Nominal Rating | Evaporator Temperature           |       |       |       |       |       |                                  |       |       |       |       |       |                                  |       |       |       |       |       |
|------------|----------------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|
|            |                | -20°C                            |       |       |       |       |       | -30°C                            |       |       |       |       |       | -40°C                            |       |       |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       |
|            |                | 400                              | 600   | 700   | 800   | 1000  | 1100  | 600                              | 700   | 800   | 1000  | 1100  | 1200  | 600                              | 700   | 800   | 1000  | 1100  | 1200  |
| EX2-00X    | 0.23           | 0.53                             | 0.65  | 0.70  | 0.75  | 0.84  | 0.88  | 0.60                             | 0.65  | 0.69  | 0.78  | 0.81  | 0.85  | 0.57                             | 0.61  | 0.65  | 0.73  | 0.77  | 0.80  |
| EX2-000    | 0.4            | 0.96                             | 1.17  | 1.26  | 1.35  | 1.51  | 1.59  | 1.03                             | 1.11  | 1.19  | 1.33  | 1.39  | 1.45  | 0.99                             | 1.07  | 1.14  | 1.28  | 1.34  | 1.40  |
| EX2-001    | 0.81           | 1.91                             | 2.34  | 2.53  | 2.70  | 3.02  | 3.17  | 2.09                             | 2.26  | 2.41  | 2.70  | 2.83  | 2.95  | 1.98                             | 2.14  | 2.29  | 2.56  | 2.68  | 2.80  |
| EX2-002    | 1.1            | 2.62                             | 3.21  | 3.47  | 3.70  | 4.14  | 4.34  | 2.87                             | 3.10  | 3.31  | 3.70  | 3.88  | 4.06  | 2.69                             | 2.91  | 3.11  | 3.47  | 3.64  | 3.80  |
| EX2-003    | 2.0            | 4.39                             | 6.11  | 6.60  | 7.06  | 7.89  | 8.28  | 5.52                             | 5.96  | 6.38  | 7.13  | 7.48  | 7.81  | 5.27                             | 5.70  | 6.09  | 6.81  | 7.14  | 7.46  |
| EX2-004    | 2.7            | 6.41                             | 7.85  | 8.48  | 9.06  | 10.13 | 10.63 | 7.01                             | 7.57  | 8.09  | 9.05  | 9.49  | 9.91  | 6.66                             | 7.19  | 7.68  | 8.59  | 9.01  | 9.41  |
| EX2-M00    | 4.3            | 10.20                            | 12.49 | 13.49 | 14.42 | 16.12 | 16.91 | 11.19                            | 12.08 | 12.92 | 14.44 | 15.15 | 15.82 | 10.58                            | 11.43 | 12.22 | 13.66 | 14.33 | 14.97 |

R-404A/507 Extended Capacities (kWatts) - EX2 Series

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |       |       |       |       |       |                                  |       |       |       |       |       |                                  |      |       |       |       |       |
|------------|----------------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|------|-------|-------|-------|-------|
|            |                | 10°C                             |       |       |       |       |       | 0°C                              |       |       |       |       |       | -10°C                            |      |       |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |      |       |       |       |       |
|            |                | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600  | 700   | 800   | 1000  | 1100  |
| EX2-00X    | 0.23           | 0.46                             | 0.56  | 0.61  | 0.65  | 0.73  | 0.76  | 0.46                             | 0.56  | 0.61  | 0.65  | 0.73  | 0.76  | 0.42                             | 0.52 | 0.56  | 0.60  | 0.67  | 0.70  |
| EX2-000    | 0.4            | 0.81                             | 1.00  | 1.08  | 1.15  | 1.29  | 1.35  | 0.78                             | 0.95  | 1.03  | 1.10  | 1.23  | 1.29  | 0.74                             | 0.91 | 0.98  | 1.05  | 1.18  | 1.23  |
| EX2-001    | 0.81           | 1.66                             | 2.04  | 2.20  | 2.35  | 2.63  | 2.76  | 1.63                             | 1.99  | 2.15  | 2.30  | 2.57  | 2.70  | 1.52                             | 1.86 | 2.01  | 2.15  | 2.41  | 2.52  |
| EX2-002    | 1.1            | 2.23                             | 2.73  | 2.95  | 3.15  | 3.53  | 3.70  | 2.19                             | 2.69  | 2.90  | 3.10  | 3.47  | 3.64  | 2.09                             | 2.56 | 2.76  | 2.95  | 3.30  | 3.46  |
| EX2-003    | 2.0            | 4.07                             | 4.39  | 5.39  | 5.76  | 6.44  | 6.75  | 3.96                             | 4.86  | 5.24  | 5.61  | 6.27  | 6.57  | 3.79                             | 4.64 | 5.01  | 5.36  | 5.99  | 6.28  |
| EX2-004    | 2.7            | 5.49                             | 6.72  | 7.26  | 7.76  | 8.68  | 9.10  | 5.38                             | 6.59  | 7.12  | 7.61  | 8.51  | 8.92  | 5.10                             | 6.24 | 6.74  | 7.21  | 8.06  | 8.45  |
| EX2-M00    | 4.3            | 8.74                             | 10.71 | 11.57 | 12.37 | 13.83 | 14.50 | 8.57                             | 10.49 | 11.33 | 12.12 | 13.55 | 14.21 | 8.14                             | 9.97 | 10.77 | 11.51 | 12.87 | 13.50 |

| Valve Type | Nominal Rating | Evaporator Temperature           |      |       |       |       |       |                                  |      |      |       |       |       |                                  |      |      |       |       |       |
|------------|----------------|----------------------------------|------|-------|-------|-------|-------|----------------------------------|------|------|-------|-------|-------|----------------------------------|------|------|-------|-------|-------|
|            |                | -20°C                            |      |       |       |       |       | -30°C                            |      |      |       |       |       | -40°C                            |      |      |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |      |       |       |       |       | Pressure Drop Across Valve (kPa) |      |      |       |       |       | Pressure Drop Across Valve (kPa) |      |      |       |       |       |
|            |                | 400                              | 600  | 700   | 800   | 1000  | 1100  | 600                              | 700  | 800  | 1000  | 1100  | 1200  | 600                              | 700  | 800  | 1000  | 1100  | 1200  |
| EX2-00X    | 0.23           | 0.42                             | 0.52 | 0.56  | 0.60  | 0.67  | 0.70  | 0.46                             | 0.50 | 0.53 | 0.59  | 0.62  | 0.65  | 0.42                             | 0.46 | 0.49 | 0.55  | 0.58  | 0.60  |
| EX2-000    | 0.4            | 0.71                             | 0.87 | 0.94  | 1.00  | 1.12  | 1.17  | 0.78                             | 0.64 | 0.90 | 1.01  | 1.05  | 1.10  | 0.71                             | 0.71 | 0.82 | 0.91  | 0.96  | 1.00  |
| EX2-001    | 0.81           | 1.45                             | 1.78 | 1.92  | 2.05  | 2.29  | 2.41  | 1.56                             | 1.68 | 1.80 | 2.01  | 2.11  | 2.20  | 1.45                             | 1.45 | 1.68 | 1.87  | 1.97  | 2.05  |
| EX2-002    | 1.1            | 1.95                             | 2.38 | 2.58  | 2.75  | 3.08  | 3.23  | 2.12                             | 2.29 | 2.45 | 2.74  | 2.88  | 3.00  | 1.98                             | 1.98 | 2.29 | 2.56  | 2.68  | 2.80  |
| EX2-003    | 2.0            | 3.58                             | 4.38 | 4.73  | 5.06  | 5.65  | 5.93  | 3.86                             | 4.17 | 4.46 | 4.98  | 5.22  | 5.46  | 3.61                             | 3.61 | 4.17 | 4.66  | 4.89  | 6.11  |
| EX2-004    | 2.7            | 4.81                             | 5.90 | 6.37  | 6.81  | 7.61  | 7.98  | 5.24                             | 5.66 | 6.05 | 6.76  | 7.09  | 7.41  | 4.89                             | 4.89 | 5.64 | 6.31  | 6.61  | 6.91  |
| EX2-M00    | 4.3            | 7.68                             | 9.41 | 10.16 | 10.86 | 12.15 | 12.74 | 8.32                             | 8.99 | 9.61 | 10.74 | 11.26 | 11.76 | 7.75                             | 7.75 | 8.95 | 10.01 | 10.50 | 10.96 |

**R-407C Extended Capacities (kWatts) - EX2 Series**

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |       |       |       |       |       |                                  |       |       |       |       |       |                                  |       |       |       |       |       |
|------------|----------------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|
|            |                | 10°C                             |       |       |       |       |       | 0°C                              |       |       |       |       |       | -10°C                            |       |       |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       |
|            |                | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600   | 700   | 800   | 1000  | 1100  | 400                              | 600   | 700   | 800   | 1000  | 1100  |
| EX2-00X    | 0.23           | 0.60                             | 0.74  | 0.80  | 0.85  | 0.95  | 1.0   | 0.60                             | 0.74  | 0.80  | 0.85  | 0.95  | 1.00  | 0.57                             | 0.69  | 0.75  | 0.80  | 0.90  | 0.94  |
| EX2-000    | 0.4            | 1.06                             | 1.30  | 1.40  | 1.50  | 1.65  | 1.75  | 1.06                             | 1.30  | 1.40  | 1.68  | 1.68  | 1.76  | 0.99                             | 1.21  | 1.31  | 1.40  | 1.57  | 1.64  |
| EX2-001    | 0.81           | 2.16                             | 2.64  | 2.86  | 3.05  | 3.41  | 3.58  | 2.12                             | 2.60  | 2.81  | 3.36  | 3.36  | 3.52  | 2.05                             | 2.51  | 2.72  | 2.90  | 3.25  | 3.40  |
| EX2-002    | 1.1            | 2.94                             | 3.60  | 3.89  | 4.16  | 4.65  | 4.87  | 2.87                             | 3.51  | 3.79  | 4.53  | 4.53  | 4.76  | 2.76                             | 3.38  | 3.65  | 3.90  | 4.37  | 4.58  |
| EX2-003    | 2.0            | 5.35                             | 6.55  | 7.07  | 7.56  | 8.45  | 8.86  | 5.24                             | 6.42  | 6.93  | 8.28  | 8.28  | 8.69  | 5.03                             | 6.16  | 6.65  | 7.11  | 7.95  | 8.34  |
| EX2-004    | 2.7            | 7.22                             | 8.84  | 9.55  | 10.21 | 11.42 | 11.98 | 7.08                             | 8.67  | 9.37  | 11.19 | 11.19 | 11.74 | 6.80                             | 8.32  | 8.99  | 9.61  | 10.75 | 11.27 |
| EX2-M00    | 4.3            | 11.47                            | 14.05 | 15.17 | 16.22 | 18.14 | 19.02 | 11.26                            | 13.79 | 14.89 | 17.80 | 17.80 | 18.67 | 10.83                            | 13.27 | 14.33 | 15.32 | 17.13 | 17.96 |

| Valve Type | Nominal Rating | Evaporator Temperature           |       |       |       |       |       |                                  |       |       |       |       |       |                                  |       |       |       |       |       |
|------------|----------------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|
|            |                | -20°C                            |       |       |       |       |       | -30°C                            |       |       |       |       |       | -40°C                            |       |       |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       | Pressure Drop Across Valve (kPa) |       |       |       |       |       |
|            |                | 400                              | 600   | 700   | 800   | 1000  | 1100  | 600                              | 700   | 800   | 1000  | 1100  | 1200  | 600                              | 700   | 800   | 1000  | 1100  | 1200  |
| EX2-00X    | 0.23           | 0.57                             | 0.69  | 0.75  | 0.80  | 0.90  | 0.94  | 0.60                             | 0.65  | 0.69  | 0.78  | 0.81  | 0.85  | 0.57                             | 0.61  | 0.65  | 0.73  | 0.77  | 0.80  |
| EX2-000    | 0.4            | 0.96                             | 1.17  | 1.26  | 1.35  | 1.51  | 1.59  | 1.06                             | 1.15  | 1.23  | 1.37  | 1.44  | 1.50  | 0.99                             | 1.07  | 1.14  | 1.28  | 1.34  | 1.40  |
| EX2-001    | 0.81           | 1.95                             | 2.38  | 2.58  | 2.75  | 3.08  | 3.23  | 2.12                             | 2.29  | 2.45  | 2.74  | 2.88  | 3.00  | 2.02                             | 2.18  | 2.33  | 2.60  | 2.73  | 2.85  |
| EX2-002    | 1.1            | 2.66                             | 3.25  | 3.51  | 3.75  | 4.20  | 4.40  | 2.90                             | 3.14  | 3.35  | 3.75  | 3.93  | 4.11  | 2.76                             | 2.98  | 3.19  | 3.56  | 3.74  | 3.90  |
| EX2-003    | 2.0            | 4.81                             | 5.90  | 6.37  | 6.81  | 7.61  | 7.98  | 5.27                             | 5.70  | 6.09  | 6.81  | 7.14  | 7.46  | 5.03                             | 5.43  | 5.80  | 6.49  | 6.81  | 7.11  |
| EX2-004    | 2.7            | 6.48                             | 7.93  | 8.57  | 9.16  | 10.24 | 10.74 | 7.15                             | 7.72  | 8.26  | 9.23  | 9.68  | 10.11 | 6.76                             | 7.30  | 7.81  | 8.73  | 9.15  | 9.56  |
| EX2-M00    | 4.3            | 10.34                            | 12.66 | 13.67 | 14.62 | 16.34 | 17.14 | 11.36                            | 12.27 | 13.12 | 14.67 | 15.39 | 16.07 | 10.80                            | 11.66 | 12.47 | 13.94 | 14.62 | 15.27 |

**R-502 Extended Capacities (kWatts) - EX2 Series**

Capacities are for EX2 @ 100% duty cycle

| Valve Type | Nominal Rating | Evaporator Temperature           |      |       |       |       |       |                                  |      |       |       |       |       |                                  |      |      |       |       |       |
|------------|----------------|----------------------------------|------|-------|-------|-------|-------|----------------------------------|------|-------|-------|-------|-------|----------------------------------|------|------|-------|-------|-------|
|            |                | 10°C                             |      |       |       |       |       | 0°C                              |      |       |       |       |       | -10°C                            |      |      |       |       |       |
|            |                | Pressure Drop Across Valve (kPa) |      |       |       |       |       | Pressure Drop Across Valve (kPa) |      |       |       |       |       | Pressure Drop Across Valve (kPa) |      |      |       |       |       |
|            |                | 400                              | 600  | 700   | 800   | 1000  | 1100  | 400                              | 600  | 700   | 800   | 1000  | 1100  | 400                              | 600  | 700  | 800   | 1000  | 1100  |
| EX2-00X    | 0.23           | 0.42                             | 0.52 | 0.56  | 0.60  | 0.67  | 0.70  | 0.42                             | 0.52 | 0.56  | 0.60  | 0.67  | 0.70  | 0.39                             | 0.48 | 0.52 | 0.55  | 0.62  | 0.65  |
| EX2-000    | 0.4            | 0.74                             | 0.91 | 0.98  | 1.05  | 1.18  | 1.23  | 0.71                             | 0.87 | 0.94  | 1.00  | 1.00  | 1.17  | 0.67                             | 0.82 | 0.89 | 0.95  | 1.06  | 1.12  |
| EX2-001    | 0.81           | 1.49                             | 1.82 | 1.97  | 2.10  | 2.35  | 2.47  | 1.45                             | 1.78 | 1.92  | 2.05  | 2.05  | 2.41  | 1.38                             | 1.69 | 1.83 | 1.95  | 2.18  | 2.29  |
| EX2-002    | 1.1            | 1.98                             | 2.43 | 2.62  | 2.80  | 3.13  | 3.29  | 1.95                             | 2.38 | 2.58  | 2.75  | 2.75  | 3.23  | 1.88                             | 2.30 | 2.48 | 2.65  | 2.97  | 3.11  |
| EX2-003    | 2.0            | 3.55                             | 4.47 | 4.82  | 5.16  | 5.77  | 6.05  | 3.54                             | 4.34 | 4.68  | 5.01  | 5.01  | 5.87  | 3.40                             | 4.16 | 4.50 | 4.81  | 5.37  | 5.64  |
| EX2-004    | 2.7            | 4.92                             | 6.03 | 6.51  | 6.96  | 7.78  | 8.16  | 4.81                             | 5.90 | 5.37  | 6.81  | 6.81  | 7.98  | 4.57                             | 5.59 | 6.04 | 6.46  | 7.22  | 7.57  |
| EX2-M00    | 4.3            | 7.82                             | 9.58 | 10.35 | 11.06 | 12.37 | 12.97 | 7.65                             | 9.36 | 10.12 | 10.81 | 10.81 | 12.68 | 7.29                             | 8.93 | 9.65 | 10.31 | 11.53 | 12.09 |

| Valve Type | Nominal Rating | Evaporator Temperature           |      |      |      |       |       |                                  |      |      |      |      |       |                                  |      |      |      |      |       |
|------------|----------------|----------------------------------|------|------|------|-------|-------|----------------------------------|------|------|------|------|-------|----------------------------------|------|------|------|------|-------|
|            |                | -20°C                            |      |      |      |       |       | -30°C                            |      |      |      |      |       | -40°C                            |      |      |      |      |       |
|            |                | Pressure Drop Across Valve (kPa) |      |      |      |       |       | Pressure Drop Across Valve (kPa) |      |      |      |      |       | Pressure Drop Across Valve (kPa) |      |      |      |      |       |
|            |                | 400                              | 600  | 700  | 800  | 1000  | 1100  | 600                              | 700  | 800  | 1000 | 1100 | 1200  | 600                              | 700  | 800  | 1000 | 1100 | 1200  |
| EX2-00X    | 0.23           | 0.35                             | 0.43 | 0.47 | 0.50 | 0.56  | 0.59  | 0.93                             | 0.42 | 0.45 | 0.50 | 0.50 | 0.55  | 0.39                             | 0.42 | 0.45 | 0.50 | 0.53 | 0.55  |
| EX2-000    | 0.4            | 0.64                             | 0.78 | 0.84 | 0.90 | 1.01  | 1.06  | 0.71                             | 0.76 | 0.82 | 0.91 | 0.91 | 1.00  | 0.67                             | 0.73 | 0.78 | 0.87 | 0.91 | 0.95  |
| EX2-001    | 0.81           | 1.31                             | 1.60 | 1.73 | 1.85 | 2.07  | 2.17  | 1.42                             | 1.53 | 1.64 | 1.83 | 1.83 | 2.00  | 1.35                             | 1.45 | 1.55 | 1.74 | 1.82 | 1.90  |
| EX2-002    | 1.1            | 1.77                             | 2.17 | 2.34 | 2.50 | 2.80  | 2.94  | 1.95                             | 2.10 | 2.25 | 2.51 | 2.51 | 2.75  | 1.81                             | 1.95 | 2.08 | 2.33 | 2.44 | 2.55  |
| EX2-003    | 2.0            | 3.22                             | 3.95 | 4.26 | 4.56 | 5.09  | 5.34  | 3.50                             | 3.79 | 4.05 | 4.52 | 4.52 | 4.96  | 3.29                             | 3.56 | 3.80 | 4.25 | 4.46 | 4.66  |
| EX2-004    | 2.7            | 4.35                             | 5.33 | 5.76 | 6.16 | 6.88  | 7.22  | 4.74                             | 5.12 | 5.48 | 6.12 | 6.12 | 5.71  | 4.46                             | 4.82 | 5.15 | 5.76 | 6.04 | 6.31  |
| EX2-M00    | 4.3            | 6.94                             | 8.50 | 9.18 | 9.81 | 10.97 | 11.51 | 7.54                             | 8.14 | 8.71 | 9.73 | 9.73 | 10.66 | 7.08                             | 7.65 | 8.18 | 9.14 | 9.59 | 10.01 |

R-22 Extended Capacities (Tons) - EX3 Series

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX3-2000   | 0.32                             | 0.36 | 0.41 | 0.46 | 0.50 | 0.54 | 0.31                             | 0.36 | 0.40 | 0.45 | 0.49 | 0.53 | 0.30                             | 0.35 | 0.39 | 0.44 | 0.48 | 0.52 |
| EX3-3000   | 0.66                             | 0.76 | 0.85 | 0.95 | 1.04 | 1.13 | 0.65                             | 0.75 | 0.84 | 0.94 | 1.03 | 1.12 | 0.64                             | 0.73 | 0.82 | 0.92 | 1.01 | 1.09 |
| EX3-4000   | 1.06                             | 1.23 | 1.37 | 1.54 | 1.68 | 1.82 | 1.05                             | 1.21 | 1.36 | 1.52 | 1.66 | 1.80 | 1.02                             | 1.18 | 1.32 | 1.48 | 1.62 | 1.75 |
| EX3-5000   | 1.72                             | 1.99 | 2.23 | 2.49 | 2.73 | 2.95 | 1.70                             | 1.97 | 2.20 | 2.46 | 2.69 | 2.91 | 1.66                             | 1.92 | 2.14 | 2.40 | 2.62 | 2.84 |
| EX3-6000   | 2.79                             | 3.22 | 3.60 | 4.02 | 4.41 | 4.76 | 2.76                             | 3.18 | 3.56 | 3.98 | 4.36 | 4.71 | 2.68                             | 3.10 | 3.47 | 3.87 | 4.24 | 4.58 |
| EX3-7000   | 3.53                             | 4.08 | 4.56 | 5.10 | 5.59 | 6.04 | 3.49                             | 4.03 | 4.51 | 5.04 | 5.52 | 5.96 | 3.40                             | 3.93 | 4.39 | 4.91 | 5.38 | 5.81 |
| EX3-8000   | 3.94                             | 4.55 | 5.08 | 5.68 | 6.23 | 6.72 | 3.89                             | 4.49 | 5.02 | 5.62 | 6.15 | 6.64 | 3.79                             | 4.38 | 4.89 | 5.47 | 5.99 | 6.47 |
| EX3-9000   | 5.03                             | 5.81 | 6.49 | 7.26 | 7.95 | 8.59 | 4.97                             | 5.74 | 6.42 | 7.17 | 7.86 | 8.49 | 4.84                             | 5.59 | 6.25 | 6.99 | 7.65 | 8.27 |

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX3-2000   | 0.29                             | 0.34 | 0.38 | 0.43 | 0.47 | 0.50 | 0.33                             | 0.37 | 0.41 | 0.45 | 0.49 | 0.52 | 0.32                             | 0.36 | 0.40 | 0.44 | 0.47 | 0.50 |
| EX3-3000   | 0.62                             | 0.71 | 0.80 | 0.89 | 0.98 | 1.05 | 0.69                             | 0.77 | 0.86 | 0.95 | 1.02 | 1.09 | 0.67                             | 0.75 | 0.83 | 0.91 | 0.99 | 1.05 |
| EX3-4000   | 0.99                             | 1.15 | 1.28 | 1.44 | 1.57 | 1.70 | 1.11                             | 1.24 | 1.39 | 1.52 | 1.64 | 1.76 | 1.07                             | 1.20 | 1.34 | 1.47 | 1.59 | 1.70 |
| EX3-5000   | 1.61                             | 1.86 | 2.08 | 2.33 | 2.55 | 2.75 | 1.80                             | 2.01 | 2.25 | 2.47 | 2.67 | 2.85 | 1.74                             | 1.95 | 2.17 | 2.38 | 2.57 | 2.75 |
| EX3-6000   | 2.61                             | 3.01 | 3.36 | 3.76 | 4.12 | 4.45 | 2.91                             | 3.26 | 3.64 | 3.99 | 4.31 | 4.61 | 2.81                             | 3.15 | 3.52 | 3.85 | 4.16 | 4.45 |
| EX3-7000   | 3.30                             | 3.81 | 4.27 | 4.77 | 5.22 | 5.64 | 3.69                             | 4.13 | 4.62 | 5.06 | 5.46 | 5.84 | 3.57                             | 3.99 | 4.46 | 4.88 | 5.27 | 5.64 |
| EX3-8000   | 3.68                             | 4.25 | 4.75 | 5.31 | 5.82 | 6.29 | 4.11                             | 4.60 | 5.14 | 5.63 | 6.09 | 6.51 | 3.97                             | 4.44 | 4.97 | 5.44 | 5.88 | 6.28 |
| EX3-9000   | 4.70                             | 5.43 | 6.07 | 6.78 | 7.43 | 8.03 | 5.26                             | 5.88 | 6.57 | 7.20 | 7.77 | 8.31 | 5.07                             | 5.67 | 6.34 | 6.95 | 7.50 | 8.02 |

| Refrigerant Liquid Correction Factor |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |  |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| Liquid Line Temp, °F                 | 0    | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  | 110  | 120  | 130  | 140  |  |  |
| Capacity Multiplier (R-22)           | 1.54 | 1.49 | 1.43 | 1.38 | 1.33 | 1.27 | 1.22 | 1.17 | 1.11 | 1.06 | 1.00 | 0.94 | 0.89 | 0.83 | 0.77 |  |  |
| Capacity Multiplier (R-134a)         | 1.64 | 1.58 | 1.51 | 1.45 | 1.39 | 1.32 | 1.26 | 1.19 | 1.13 | 1.07 | 1.00 | 0.93 | 0.87 | 0.80 | 0.73 |  |  |
| Capacity Multiplier (R-404A)         | 1.92 | 1.83 | 1.74 | 1.65 | 1.56 | 1.47 | 1.38 | 1.29 | 1.19 | 1.10 | 1.00 | 0.90 | 0.80 | 0.69 | 0.58 |  |  |
| Capacity Multiplier (R-407F)         | 1.68 | 1.62 | 1.55 | 1.48 | 1.42 | 1.35 | 1.28 | 1.21 | 1.14 | 1.07 | 1.00 | 0.93 | 0.85 | 0.78 | 0.70 |  |  |
| Capacity Multiplier (R-507)          | 1.87 | 1.78 | 1.70 | 1.61 | 1.53 | 1.44 | 1.36 | 1.27 | 1.18 | 1.09 | 1.00 | 0.91 | 0.81 | 0.71 | 0.60 |  |  |

R-134a Extended Capacities (Tons) - EX3 Series

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX3-2000   | 0.30                             | 0.34 | 0.38 | 0.43 | 0.47 | 0.51 | 0.29                             | 0.34 | 0.38 | 0.42 | 0.46 | 0.50 | 0.28                             | 0.32 | 0.36 | 0.40 | 0.44 | 0.47 |
| EX3-3000   | 0.62                             | 0.72 | 0.80 | 0.90 | 0.98 | 1.06 | 0.61                             | 0.70 | 0.78 | 0.88 | 0.96 | 1.04 | 0.58                             | 0.67 | 0.75 | 0.84 | 0.92 | 0.99 |
| EX3-4000   | 1.00                             | 1.15 | 1.29 | 1.44 | 1.58 | 1.71 | 0.98                             | 1.13 | 1.26 | 1.41 | 1.55 | 1.67 | 0.93                             | 1.08 | 1.21 | 1.35 | 1.48 | 1.60 |
| EX3-5000   | 1.62                             | 1.87 | 2.09 | 2.34 | 2.56 | 2.77 | 1.59                             | 1.83 | 2.05 | 2.29 | 2.51 | 2.71 | 1.52                             | 1.75 | 1.96 | 2.19 | 2.40 | 2.59 |
| EX3-6000   | 2.62                             | 3.02 | 3.38 | 3.78 | 4.14 | 4.47 | 2.56                             | 2.96 | 3.31 | 3.70 | 4.06 | 4.38 | 2.45                             | 2.83 | 3.17 | 3.54 | 3.88 | 4.19 |
| EX3-7000   | 3.32                             | 3.83 | 4.29 | 4.79 | 5.25 | 5.67 | 3.25                             | 3.75 | 4.20 | 4.69 | 5.14 | 5.55 | 3.11                             | 3.59 | 4.01 | 4.49 | 4.92 | 5.31 |
| EX3-8000   | 3.70                             | 4.27 | 4.78 | 5.34 | 5.85 | 6.32 | 3.62                             | 4.18 | 4.68 | 5.23 | 5.73 | 6.19 | 3.46                             | 4.00 | 4.47 | 5.00 | 5.48 | 5.91 |
| EX3-9000   | 4.73                             | 5.46 | 6.10 | 6.82 | 7.47 | 8.07 | 4.63                             | 5.34 | 5.97 | 6.68 | 7.32 | 7.90 | 4.42                             | 5.11 | 5.71 | 6.39 | 7.00 | 7.56 |

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX3-2000   | 0.26                             | 0.31 | 0.34 | 0.38 | 0.42 | 0.45 | 0.29                             | 0.32 | 0.36 | 0.40 | 0.43 | 0.46 | 0.27                             | 0.31 | 0.34 | 0.38 | 0.41 | 0.43 |
| EX3-3000   | 0.55                             | 0.64 | 0.71 | 0.80 | 0.87 | 0.94 | 0.61                             | 0.68 | 0.76 | 0.83 | 0.90 | 0.96 | 0.57                             | 0.64 | 0.72 | 0.78 | 0.85 | 0.91 |
| EX3-4000   | 0.89                             | 1.03 | 1.15 | 1.28 | 1.41 | 1.52 | 0.98                             | 1.09 | 1.22 | 1.34 | 1.44 | 1.54 | 0.92                             | 1.03 | 1.15 | 1.26 | 1.36 | 1.46 |
| EX3-5000   | 1.45                             | 1.67 | 1.87 | 2.09 | 2.29 | 2.47 | 1.58                             | 1.77 | 1.98 | 2.17 | 2.34 | 2.50 | 1.50                             | 1.67 | 1.87 | 2.05 | 2.21 | 2.37 |
| EX3-6000   | 2.34                             | 2.70 | 3.01 | 3.37 | 3.69 | 3.99 | 2.56                             | 2.86 | 3.20 | 3.50 | 3.78 | 4.05 | 2.42                             | 2.70 | 3.02 | 3.31 | 3.58 | 3.82 |
| EX3-7000   | 2.96                             | 3.42 | 3.82 | 4.27 | 4.68 | 5.06 | 3.24                             | 3.63 | 4.05 | 4.44 | 4.80 | 5.13 | 3.07                             | 3.43 | 3.83 | 4.20 | 4.53 | 4.85 |
| EX3-8000   | 3.30                             | 3.81 | 4.26 | 4.76 | 5.21 | 5.63 | 3.61                             | 4.04 | 4.52 | 4.95 | 5.34 | 5.71 | 3.42                             | 3.82 | 4.27 | 4.68 | 5.05 | 5.40 |
| EX3-9000   | 4.21                             | 4.87 | 5.44 | 6.08 | 6.66 | 7.20 | 4.62                             | 5.16 | 5.77 | 6.32 | 6.83 | 7.30 | 4.36                             | 4.88 | 5.45 | 5.97 | 6.45 | 6.90 |

| Refrigerant Liquid Correction Factor |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |  |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| Liquid Line Temp, °F                 | 0    | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  | 110  | 120  | 130  | 140  |  |  |
| Capacity Multiplier (R-22)           | 1.54 | 1.49 | 1.43 | 1.38 | 1.33 | 1.27 | 1.22 | 1.17 | 1.11 | 1.06 | 1.00 | 0.94 | 0.89 | 0.83 | 0.77 |  |  |
| Capacity Multiplier (R-134a)         | 1.64 | 1.58 | 1.51 | 1.45 | 1.39 | 1.32 | 1.26 | 1.19 | 1.13 | 1.07 | 1.00 | 0.93 | 0.87 | 0.80 | 0.73 |  |  |
| Capacity Multiplier (R-404A)         | 1.92 | 1.83 | 1.74 | 1.65 | 1.56 | 1.47 | 1.38 | 1.29 | 1.19 | 1.10 | 1.00 | 0.90 | 0.80 | 0.69 | 0.58 |  |  |
| Capacity Multiplier (R-407F)         | 1.68 | 1.62 | 1.55 | 1.48 | 1.42 | 1.35 | 1.28 | 1.21 | 1.14 | 1.07 | 1.00 | 0.93 | 0.85 | 0.78 | 0.70 |  |  |
| Capacity Multiplier (R-507)          | 1.87 | 1.78 | 1.70 | 1.61 | 1.53 | 1.44 | 1.36 | 1.27 | 1.18 | 1.09 | 1.00 | 0.91 | 0.81 | 0.71 | 0.60 |  |  |

R-404A Extended Capacities (Tons) - EX3 Series

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX3-2000   | 0.20                             | 0.23 | 0.26 | 0.29 | 0.32 | 0.35 | 0.20                             | 0.23 | 0.26 | 0.29 | 0.31 | 0.34 | 0.19                             | 0.22 | 0.24 | 0.27 | 0.30 | 0.32 |
| EX3-3000   | 0.42                             | 0.49 | 0.55 | 0.61 | 0.67 | 0.72 | 0.41                             | 0.48 | 0.53 | 0.60 | 0.65 | 0.71 | 0.39                             | 0.45 | 0.51 | 0.57 | 0.62 | 0.67 |
| EX3-4000   | 0.68                             | 0.79 | 0.88 | 0.98 | 1.08 | 1.16 | 0.67                             | 0.77 | 0.86 | 0.96 | 1.05 | 1.14 | 0.63                             | 0.73 | 0.82 | 0.91 | 1.00 | 1.08 |
| EX3-5000   | 1.10                             | 1.28 | 1.43 | 1.59 | 1.75 | 1.89 | 1.08                             | 1.25 | 1.39 | 1.56 | 1.71 | 1.84 | 1.03                             | 1.18 | 1.32 | 1.48 | 1.62 | 1.75 |
| EX3-6000   | 1.79                             | 2.06 | 2.30 | 2.58 | 2.82 | 3.05 | 1.74                             | 2.01 | 2.25 | 2.52 | 2.76 | 2.98 | 1.66                             | 1.91 | 2.14 | 2.39 | 2.62 | 2.83 |
| EX3-7000   | 2.26                             | 2.61 | 2.92 | 3.27 | 3.58 | 3.87 | 2.21                             | 2.55 | 2.86 | 3.19 | 3.50 | 3.78 | 2.10                             | 2.43 | 2.71 | 3.03 | 3.32 | 3.59 |
| EX3-8000   | 2.52                             | 2.91 | 3.25 | 3.64 | 3.99 | 4.31 | 2.46                             | 2.85 | 3.18 | 3.56 | 3.90 | 4.21 | 2.34                             | 2.70 | 3.02 | 3.38 | 3.70 | 4.00 |
| EX3-9000   | 3.22                             | 3.72 | 4.16 | 4.65 | 5.09 | 5.50 | 3.15                             | 3.63 | 4.06 | 4.54 | 4.98 | 5.38 | 2.99                             | 3.45 | 3.86 | 4.32 | 4.73 | 5.11 |

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX3-2000   | 0.18                             | 0.20 | 0.23 | 0.26 | 0.28 | 0.30 | 0.19                             | 0.21 | 0.24 | 0.26 | 0.28 | 0.30 | 0.18                             | 0.20 | 0.22 | 0.24 | 0.26 | 0.28 |
| EX3-3000   | 0.37                             | 0.43 | 0.48 | 0.54 | 0.59 | 0.63 | 0.40                             | 0.45 | 0.50 | 0.55 | 0.59 | 0.63 | 0.37                             | 0.42 | 0.47 | 0.51 | 0.55 | 0.59 |
| EX3-4000   | 0.60                             | 0.69 | 0.77 | 0.86 | 0.94 | 1.02 | 0.65                             | 0.72 | 0.81 | 0.88 | 0.95 | 1.02 | 0.60                             | 0.67 | 0.75 | 0.82 | 0.89 | 0.95 |
| EX3-5000   | 0.97                             | 1.12 | 1.25 | 1.40 | 1.53 | 1.65 | 1.05                             | 1.17 | 1.31 | 1.43 | 1.55 | 1.65 | 0.97                             | 1.09 | 1.22 | 1.33 | 1.44 | 1.54 |
| EX3-6000   | 1.56                             | 1.81 | 2.02 | 2.26 | 2.47 | 2.67 | 1.69                             | 1.89 | 2.11 | 2.32 | 2.50 | 2.67 | 1.57                             | 1.76 | 1.97 | 2.15 | 2.33 | 2.49 |
| EX3-7000   | 1.98                             | 2.29 | 2.56 | 2.86 | 3.13 | 3.39 | 2.14                             | 2.40 | 2.68 | 2.94 | 3.17 | 3.39 | 1.99                             | 2.23 | 2.49 | 2.73 | 2.95 | 3.15 |
| EX3-8000   | 2.21                             | 2.55 | 2.85 | 3.19 | 3.49 | 3.77 | 2.39                             | 2.67 | 2.99 | 3.27 | 3.53 | 3.78 | 2.22                             | 2.48 | 2.78 | 3.04 | 3.29 | 3.51 |
| EX3-9000   | 2.82                             | 3.26 | 3.64 | 4.07 | 4.46 | 4.82 | 3.05                             | 3.41 | 3.81 | 4.18 | 4.51 | 4.82 | 2.84                             | 3.17 | 3.55 | 3.89 | 4.20 | 4.49 |

| Refrigerant Liquid Correction Factor |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| Liquid Line Temp, °F                 | 0    | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  | 110  | 120  | 130  | 140  |  |
| Capacity Multiplier (R-22)           | 1.54 | 1.49 | 1.43 | 1.38 | 1.33 | 1.27 | 1.22 | 1.17 | 1.11 | 1.06 | 1.00 | 0.94 | 0.89 | 0.83 | 0.77 |  |
| Capacity Multiplier (R-134a)         | 1.64 | 1.58 | 1.51 | 1.45 | 1.39 | 1.32 | 1.26 | 1.19 | 1.13 | 1.07 | 1.00 | 0.93 | 0.87 | 0.80 | 0.73 |  |
| Capacity Multiplier (R-404A)         | 1.92 | 1.83 | 1.74 | 1.65 | 1.56 | 1.47 | 1.38 | 1.29 | 1.19 | 1.10 | 1.00 | 0.90 | 0.80 | 0.69 | 0.58 |  |
| Capacity Multiplier (R-407F)         | 1.68 | 1.62 | 1.55 | 1.48 | 1.42 | 1.35 | 1.28 | 1.21 | 1.14 | 1.07 | 1.00 | 0.93 | 0.85 | 0.78 | 0.70 |  |
| Capacity Multiplier (R-507)          | 1.87 | 1.78 | 1.70 | 1.61 | 1.53 | 1.44 | 1.36 | 1.27 | 1.18 | 1.09 | 1.00 | 0.91 | 0.81 | 0.71 | 0.60 |  |

R-407F Extended Capacities (Tons) - EX3 Series

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX3-2000   | 0.30                             | 0.35 | 0.39 | 0.43 | 0.47 | 0.51 | 0.30                             | 0.34 | 0.38 | 0.43 | 0.47 | 0.50 | 0.29                             | 0.33 | 0.37 | 0.41 | 0.45 | 0.49 |
| EX3-3000   | 0.63                             | 0.72 | 0.81 | 0.90 | 0.99 | 1.07 | 0.62                             | 0.71 | 0.80 | 0.89 | 0.98 | 1.05 | 0.60                             | 0.69 | 0.77 | 0.86 | 0.95 | 1.02 |
| EX3-4000   | 1.01                             | 1.16 | 1.30 | 1.45 | 1.59 | 1.72 | 0.99                             | 1.15 | 1.28 | 1.43 | 1.57 | 1.70 | 0.96                             | 1.11 | 1.24 | 1.39 | 1.52 | 1.64 |
| EX3-5000   | 1.63                             | 1.89 | 2.11 | 2.36 | 2.58 | 2.79 | 1.61                             | 1.86 | 2.08 | 2.32 | 2.55 | 2.75 | 1.56                             | 1.80 | 2.01 | 2.25 | 2.47 | 2.66 |
| EX3-6000   | 2.64                             | 3.05 | 3.41 | 3.81 | 4.18 | 4.51 | 2.60                             | 3.01 | 3.36 | 3.76 | 4.12 | 4.45 | 2.52                             | 2.91 | 3.26 | 3.64 | 3.99 | 4.31 |
| EX3-7000   | 3.35                             | 3.87 | 4.32 | 4.84 | 5.30 | 5.72 | 3.30                             | 3.81 | 4.26 | 4.77 | 5.22 | 5.64 | 3.20                             | 3.69 | 4.13 | 4.62 | 5.06 | 5.46 |
| EX3-8000   | 3.73                             | 4.31 | 4.82 | 5.39 | 5.90 | 6.37 | 3.68                             | 4.25 | 4.75 | 5.31 | 5.82 | 6.28 | 3.56                             | 4.11 | 4.60 | 5.14 | 5.63 | 6.08 |
| EX3-9000   | 4.77                             | 5.50 | 6.15 | 6.88 | 7.54 | 8.14 | 4.70                             | 5.43 | 6.07 | 6.78 | 7.43 | 8.03 | 4.55                             | 5.25 | 5.87 | 6.57 | 7.19 | 7.77 |

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX3-2000   | 0.28                             | 0.32 | 0.36 | 0.40 | 0.44 | 0.47 | 0.31                             | 0.34 | 0.38 | 0.42 | 0.45 | 0.48 | 0.29                             | 0.33 | 0.37 | 0.40 | 0.43 | 0.46 |
| EX3-3000   | 0.58                             | 0.67 | 0.74 | 0.83 | 0.91 | 0.98 | 0.64                             | 0.71 | 0.80 | 0.87 | 0.94 | 1.01 | 0.61                             | 0.68 | 0.76 | 0.84 | 0.90 | 0.97 |
| EX3-4000   | 0.93                             | 1.07 | 1.20 | 1.34 | 1.47 | 1.58 | 1.03                             | 1.15 | 1.28 | 1.41 | 1.52 | 1.62 | 0.98                             | 1.10 | 1.23 | 1.35 | 1.45 | 1.55 |
| EX3-5000   | 1.50                             | 1.74 | 1.94 | 2.17 | 2.38 | 2.57 | 1.67                             | 1.86 | 2.08 | 2.28 | 2.46 | 2.63 | 1.59                             | 1.78 | 1.99 | 2.18 | 2.36 | 2.52 |
| EX3-6000   | 2.43                             | 2.81 | 3.14 | 3.51 | 3.84 | 4.15 | 2.70                             | 3.01 | 3.37 | 3.69 | 3.99 | 4.26 | 2.58                             | 2.88 | 3.22 | 3.53 | 3.81 | 4.08 |
| EX3-7000   | 3.08                             | 3.56 | 3.98 | 4.45 | 4.87 | 5.26 | 3.42                             | 3.82 | 4.27 | 4.68 | 5.05 | 5.40 | 3.27                             | 3.65 | 4.08 | 4.47 | 4.83 | 5.17 |
| EX3-8000   | 3.43                             | 3.96 | 4.43 | 4.95 | 5.43 | 5.86 | 3.81                             | 4.25 | 4.76 | 5.21 | 5.63 | 6.02 | 3.64                             | 4.07 | 4.55 | 4.98 | 5.38 | 5.75 |
| EX3-9000   | 4.39                             | 5.06 | 5.66 | 6.33 | 6.93 | 7.49 | 4.86                             | 5.44 | 6.08 | 6.66 | 7.19 | 7.69 | 4.65                             | 5.20 | 5.81 | 6.37 | 6.88 | 7.35 |

| Refrigerant Liquid Correction Factor |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |  |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| Liquid Line Temp, °F                 | 0    | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  | 110  | 120  | 130  | 140  |  |  |
| Capacity Multiplier (R-22)           | 1.54 | 1.49 | 1.43 | 1.38 | 1.33 | 1.27 | 1.22 | 1.17 | 1.11 | 1.06 | 1.00 | 0.94 | 0.89 | 0.83 | 0.77 |  |  |
| Capacity Multiplier (R-134a)         | 1.64 | 1.58 | 1.51 | 1.45 | 1.39 | 1.32 | 1.26 | 1.19 | 1.13 | 1.07 | 1.00 | 0.93 | 0.87 | 0.80 | 0.73 |  |  |
| Capacity Multiplier (R-404A)         | 1.92 | 1.83 | 1.74 | 1.65 | 1.56 | 1.47 | 1.38 | 1.29 | 1.19 | 1.10 | 1.00 | 0.90 | 0.80 | 0.69 | 0.58 |  |  |
| Capacity Multiplier (R-407F)         | 1.68 | 1.62 | 1.55 | 1.48 | 1.42 | 1.35 | 1.28 | 1.21 | 1.14 | 1.07 | 1.00 | 0.93 | 0.85 | 0.78 | 0.70 |  |  |
| Capacity Multiplier (R-507)          | 1.87 | 1.78 | 1.70 | 1.61 | 1.53 | 1.44 | 1.36 | 1.27 | 1.18 | 1.09 | 1.00 | 0.91 | 0.81 | 0.71 | 0.60 |  |  |

R-507 Extended Capacities (Tons) - EX3 Series

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 50°F                             |      |      |      |      |      | 40°F                             |      |      |      |      |      | 20°F                             |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  | 60                               | 80   | 100  | 125  | 150  | 175  |
| EX3-2000   | 0.20                             | 0.23 | 0.26 | 0.29 | 0.31 | 0.34 | 0.19                             | 0.22 | 0.25 | 0.28 | 0.31 | 0.33 | 0.18                             | 0.21 | 0.24 | 0.26 | 0.29 | 0.31 |
| EX3-3000   | 0.41                             | 0.48 | 0.53 | 0.60 | 0.65 | 0.71 | 0.40                             | 0.47 | 0.52 | 0.58 | 0.64 | 0.69 | 0.38                             | 0.44 | 0.50 | 0.55 | 0.61 | 0.66 |
| EX3-4000   | 0.67                             | 0.77 | 0.86 | 0.96 | 1.05 | 1.14 | 0.65                             | 0.75 | 0.84 | 0.94 | 1.03 | 1.11 | 0.62                             | 0.71 | 0.80 | 0.89 | 0.98 | 1.06 |
| EX3-5000   | 1.08                             | 1.25 | 1.39 | 1.56 | 1.71 | 1.84 | 1.06                             | 1.22 | 1.36 | 1.52 | 1.67 | 1.80 | 1.00                             | 1.16 | 1.29 | 1.45 | 1.58 | 1.71 |
| EX3-6000   | 1.75                             | 2.02 | 2.25 | 2.52 | 2.76 | 2.98 | 1.71                             | 1.97 | 2.20 | 2.46 | 2.70 | 2.91 | 1.62                             | 1.87 | 2.09 | 2.34 | 2.56 | 2.77 |
| EX3-7000   | 2.22                             | 2.56 | 2.86 | 3.20 | 3.50 | 3.78 | 2.16                             | 2.50 | 2.79 | 3.12 | 3.42 | 3.70 | 2.05                             | 2.37 | 2.65 | 2.96 | 3.25 | 3.51 |
| EX3-8000   | 2.47                             | 2.85 | 3.19 | 3.56 | 3.90 | 4.21 | 2.41                             | 2.78 | 3.11 | 3.48 | 3.81 | 4.12 | 2.29                             | 2.64 | 2.95 | 3.30 | 3.62 | 3.91 |
| EX3-9000   | 3.15                             | 3.64 | 4.07 | 4.55 | 4.98 | 5.38 | 3.08                             | 3.56 | 3.98 | 4.45 | 4.87 | 5.26 | 2.92                             | 3.38 | 3.77 | 4.22 | 4.62 | 4.99 |

| Valve Type | Evaporator Temperature           |      |      |      |      |      |                                  |      |      |      |      |      |                                  |      |      |      |      |      |
|------------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|
|            | 0°F                              |      |      |      |      |      | -20°F                            |      |      |      |      |      | -40°F                            |      |      |      |      |      |
|            | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      | Pressure Drop Across Valve (PSI) |      |      |      |      |      |
|            | 60                               | 80   | 100  | 125  | 150  | 175  | 80                               | 100  | 125  | 150  | 175  | 200  | 80                               | 100  | 125  | 150  | 175  | 200  |
| EX3-2000   | 0.17                             | 0.20 | 0.22 | 0.25 | 0.27 | 0.29 | 0.19                             | 0.21 | 0.23 | 0.26 | 0.28 | 0.29 | 0.17                             | 0.19 | 0.22 | 0.24 | 0.26 | 0.27 |
| EX3-3000   | 0.36                             | 0.42 | 0.47 | 0.52 | 0.57 | 0.62 | 0.39                             | 0.44 | 0.49 | 0.53 | 0.58 | 0.62 | 0.36                             | 0.40 | 0.45 | 0.50 | 0.54 | 0.57 |
| EX3-4000   | 0.58                             | 0.67 | 0.75 | 0.84 | 0.92 | 0.99 | 0.63                             | 0.70 | 0.79 | 0.86 | 0.93 | 0.99 | 0.58                             | 0.65 | 0.73 | 0.80 | 0.86 | 0.92 |
| EX3-5000   | 0.94                             | 1.09 | 1.22 | 1.36 | 1.49 | 1.61 | 1.02                             | 1.14 | 1.27 | 1.39 | 1.51 | 1.61 | 0.95                             | 1.06 | 1.18 | 1.29 | 1.40 | 1.49 |
| EX3-6000   | 1.53                             | 1.76 | 1.97 | 2.20 | 2.41 | 2.61 | 1.65                             | 1.84 | 2.06 | 2.26 | 2.44 | 2.60 | 1.53                             | 1.71 | 1.91 | 2.09 | 2.26 | 2.42 |
| EX3-7000   | 1.93                             | 2.23 | 2.50 | 2.79 | 3.06 | 3.30 | 2.09                             | 2.34 | 2.61 | 2.86 | 3.09 | 3.30 | 1.94                             | 2.17 | 2.42 | 2.66 | 2.87 | 3.07 |
| EX3-8000   | 2.16                             | 2.49 | 2.78 | 3.11 | 3.41 | 3.68 | 2.33                             | 2.60 | 2.91 | 3.19 | 3.44 | 3.68 | 2.16                             | 2.42 | 2.70 | 2.96 | 3.19 | 3.42 |
| EX3-9000   | 2.75                             | 3.18 | 3.55 | 3.97 | 4.35 | 4.70 | 2.97                             | 3.32 | 3.72 | 4.07 | 4.40 | 4.70 | 2.76                             | 3.09 | 3.45 | 3.78 | 4.08 | 4.36 |

| Refrigerant Liquid Correction Factor |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| Liquid Line Temp, °F                 | 0    | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  | 110  | 120  | 130  | 140  |  |
| Capacity Multiplier (R-22)           | 1.54 | 1.49 | 1.43 | 1.38 | 1.33 | 1.27 | 1.22 | 1.17 | 1.11 | 1.06 | 1.00 | 0.94 | 0.89 | 0.83 | 0.77 |  |
| Capacity Multiplier (R-134a)         | 1.64 | 1.58 | 1.51 | 1.45 | 1.39 | 1.32 | 1.26 | 1.19 | 1.13 | 1.07 | 1.00 | 0.93 | 0.87 | 0.80 | 0.73 |  |
| Capacity Multiplier (R-404A)         | 1.92 | 1.83 | 1.74 | 1.65 | 1.56 | 1.47 | 1.38 | 1.29 | 1.19 | 1.10 | 1.00 | 0.90 | 0.80 | 0.69 | 0.58 |  |
| Capacity Multiplier (R-407F)         | 1.68 | 1.62 | 1.55 | 1.48 | 1.42 | 1.35 | 1.28 | 1.21 | 1.14 | 1.07 | 1.00 | 0.93 | 0.85 | 0.78 | 0.70 |  |
| Capacity Multiplier (R-507)          | 1.87 | 1.78 | 1.70 | 1.61 | 1.53 | 1.44 | 1.36 | 1.27 | 1.18 | 1.09 | 1.00 | 0.91 | 0.81 | 0.71 | 0.60 |  |

R-22 Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |                             | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
| EX3-2000   | 30                          | 0.93                         | 1.10  | 1.22  | 1.32  | 1.39  | 1.45  | 1.49  | 1.52  | 1.54  | 1.55  | 1.56  | 1.56  | 1.55  |
| EX3-3000   |                             | 1.93                         | 2.29  | 2.55  | 2.75  | 2.91  | 3.03  | 3.11  | 3.18  | 3.22  | 3.24  | 3.25  | 3.25  | 3.24  |
| EX3-4000   |                             | 3.11                         | 3.69  | 4.11  | 4.43  | 4.68  | 4.87  | 5.01  | 5.11  | 5.18  | 5.22  | 5.23  | 5.23  | 5.21  |
| EX3-5000   |                             | 5.05                         | 5.98  | 6.66  | 7.19  | 7.59  | 7.89  | 8.12  | 8.28  | 8.40  | 8.46  | 8.49  | 8.48  | 8.45  |
| EX3-6000   |                             | 8.16                         | 9.66  | 10.77 | 11.62 | 12.27 | 12.76 | 13.13 | 13.39 | 13.57 | 13.68 | 13.72 | 13.71 | 13.66 |
| EX3-7000   |                             | 10.34                        | 12.25 | 13.66 | 14.73 | 15.55 | 16.18 | 16.65 | 16.98 | 17.21 | 17.34 | 17.40 | 17.39 | 17.33 |
| EX3-8000   |                             | 11.52                        | 13.65 | 15.22 | 16.41 | 17.32 | 18.02 | 18.54 | 18.92 | 19.17 | 19.32 | 19.38 | 19.37 | 19.30 |
| EX3-9000   |                             | 14.72                        | 17.43 | 19.44 | 20.96 | 22.13 | 23.02 | 23.68 | 24.16 | 24.49 | 24.68 | 24.76 | 24.74 | 24.65 |
| EX3-2000   | 25                          | 0.62                         | 0.88  | 1.05  | 1.18  | 1.27  | 1.34  | 1.40  | 1.44  | 1.47  | 1.48  | 1.50  | 1.50  | 1.50  |
| EX3-3000   |                             | 1.30                         | 1.84  | 2.20  | 2.46  | 2.66  | 2.81  | 2.92  | 3.00  | 3.06  | 3.10  | 3.13  | 3.14  | 3.13  |
| EX3-4000   |                             | 2.09                         | 2.96  | 3.54  | 3.96  | 4.27  | 4.52  | 4.70  | 4.83  | 4.93  | 4.99  | 5.03  | 5.04  | 5.04  |
| EX3-5000   |                             | 3.40                         | 4.80  | 5.73  | 6.42  | 6.93  | 7.32  | 7.62  | 7.84  | 7.99  | 8.10  | 8.16  | 8.18  | 8.17  |
| EX3-6000   |                             | 5.49                         | 7.76  | 9.27  | 10.37 | 11.20 | 11.84 | 12.32 | 12.67 | 12.92 | 13.09 | 13.19 | 13.22 | 13.21 |
| EX3-7000   |                             | 6.96                         | 9.84  | 11.76 | 13.15 | 14.21 | 15.01 | 15.62 | 16.07 | 16.38 | 16.60 | 16.72 | 16.77 | 16.75 |
| EX3-8000   |                             | 7.75                         | 10.96 | 13.09 | 14.65 | 15.83 | 16.72 | 17.39 | 17.89 | 18.25 | 18.49 | 18.62 | 18.67 | 18.66 |
| EX3-9000   |                             | 9.90                         | 14.00 | 16.73 | 18.71 | 20.21 | 21.36 | 22.22 | 22.86 | 23.31 | 23.61 | 23.79 | 23.85 | 23.83 |
| EX3-2000   | 20                          | 0.56                         | 0.83  | 1.00  | 1.12  | 1.22  | 1.29  | 1.34  | 1.38  | 1.40  | 1.42  | 1.43  | 1.44  |       |
| EX3-3000   |                             | 1.17                         | 1.73  | 2.09  | 2.35  | 2.54  | 2.69  | 2.80  | 2.88  | 2.94  | 2.97  | 2.99  | 3.00  |       |
| EX3-4000   |                             | 1.88                         | 2.78  | 3.36  | 3.78  | 4.09  | 4.33  | 4.50  | 4.63  | 4.72  | 4.78  | 4.82  | 4.83  |       |
| EX3-5000   |                             | 3.05                         | 4.51  | 5.45  | 6.13  | 6.63  | 7.01  | 7.30  | 7.51  | 7.66  | 7.75  | 7.81  | 7.83  |       |
| EX3-6000   |                             | 4.93                         | 7.29  | 8.81  | 9.90  | 10.72 | 11.34 | 11.80 | 12.14 | 12.38 | 12.54 | 12.62 | 12.65 |       |
| EX3-7000   |                             | 6.26                         | 9.24  | 11.17 | 12.56 | 13.60 | 14.38 | 14.97 | 15.40 | 15.70 | 15.90 | 16.01 | 16.05 |       |
| EX3-8000   |                             | 6.97                         | 10.30 | 12.44 | 13.99 | 15.14 | 16.02 | 16.67 | 17.15 | 17.49 | 17.71 | 17.83 | 17.87 |       |
| EX3-9000   |                             | 8.90                         | 13.15 | 15.89 | 17.87 | 19.34 | 20.46 | 21.29 | 21.90 | 22.34 | 22.62 | 22.78 | 22.83 |       |
| EX3-2000   | 15                          | 0.48                         | 0.76  | 0.94  | 1.06  | 1.15  | 1.22  | 1.27  | 1.31  | 1.34  | 1.35  | 1.36  |       |       |
| EX3-3000   |                             | 1.01                         | 1.60  | 1.96  | 2.22  | 2.41  | 2.55  | 2.66  | 2.74  | 2.79  | 2.83  | 2.84  |       |       |
| EX3-4000   |                             | 1.62                         | 2.57  | 3.16  | 3.57  | 3.88  | 4.11  | 4.28  | 4.40  | 4.49  | 4.55  | 4.58  |       |       |
| EX3-5000   |                             | 2.63                         | 4.17  | 5.12  | 5.79  | 6.29  | 6.66  | 6.94  | 7.14  | 7.28  | 7.37  | 7.42  |       |       |
| EX3-6000   |                             | 4.25                         | 6.74  | 8.28  | 9.37  | 10.17 | 10.77 | 11.22 | 11.55 | 11.77 | 11.92 | 12.00 |       |       |
| EX3-7000   |                             | 5.40                         | 8.55  | 10.50 | 11.88 | 12.90 | 13.66 | 14.23 | 14.64 | 14.93 | 15.11 | 15.21 |       |       |
| EX3-8000   |                             | 6.01                         | 9.52  | 11.69 | 13.23 | 14.37 | 15.22 | 15.85 | 16.31 | 16.63 | 16.83 | 16.95 |       |       |
| EX3-9000   |                             | 7.68                         | 12.16 | 14.94 | 16.90 | 18.35 | 19.44 | 20.24 | 20.83 | 21.24 | 21.50 | 21.65 |       |       |
| EX3-2000   | 10                          | 0.38                         | 0.69  | 0.87  | 0.99  | 1.08  | 1.15  | 1.20  | 1.23  | 1.26  | 1.27  |       |       |       |
| EX3-3000   |                             | 0.80                         | 1.45  | 1.82  | 2.08  | 2.27  | 2.40  | 2.51  | 2.58  | 2.63  | 2.66  |       |       |       |
| EX3-4000   |                             | 1.29                         | 2.33  | 2.93  | 3.34  | 3.64  | 3.87  | 4.03  | 4.15  | 4.23  | 4.29  |       |       |       |
| EX3-5000   |                             | 2.10                         | 3.77  | 4.74  | 5.42  | 5.91  | 6.27  | 6.54  | 6.73  | 6.87  | 6.95  |       |       |       |
| EX3-6000   |                             | 3.39                         | 6.10  | 7.67  | 8.76  | 9.55  | 10.14 | 10.57 | 10.89 | 11.10 | 11.24 |       |       |       |
| EX3-7000   |                             | 4.29                         | 7.74  | 9.73  | 11.11 | 12.11 | 12.86 | 13.41 | 13.80 | 14.08 | 14.25 |       |       |       |
| EX3-8000   |                             | 4.78                         | 8.62  | 10.83 | 12.37 | 13.49 | 14.32 | 14.93 | 15.37 | 15.68 | 15.87 |       |       |       |
| EX3-9000   |                             | 6.11                         | 11.01 | 13.84 | 15.80 | 17.24 | 18.30 | 19.08 | 19.64 | 20.03 | 20.27 |       |       |       |

R-22 Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |                             | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
| EX3-2000   | 60                          | 1.61                         | 1.65  | 1.67  | 1.69  | 1.70  | 1.71  | 1.70  | 1.69  | 1.68  | 1.66  | 1.64  | 1.62  | 1.59  |
| EX3-3000   |                             | 3.36                         | 3.44  | 3.50  | 3.54  | 3.56  | 3.57  | 3.56  | 3.54  | 3.52  | 3.48  | 3.44  | 3.39  | 3.33  |
| EX3-4000   |                             | 5.41                         | 5.54  | 5.63  | 5.69  | 5.72  | 5.74  | 5.73  | 5.70  | 5.66  | 5.60  | 5.53  | 5.45  | 5.36  |
| EX3-5000   |                             | 8.78                         | 8.98  | 9.13  | 9.23  | 9.28  | 9.30  | 9.29  | 9.24  | 9.17  | 9.08  | 8.97  | 8.84  | 8.70  |
| EX3-6000   |                             | 14.19                        | 14.52 | 14.76 | 14.92 | 15.01 | 15.04 | 15.01 | 14.94 | 14.83 | 14.68 | 14.50 | 14.29 | 14.06 |
| EX3-7000   |                             | 17.99                        | 18.41 | 18.71 | 18.92 | 19.03 | 19.07 | 19.04 | 18.95 | 18.80 | 18.62 | 18.39 | 18.12 | 17.83 |
| EX3-8000   |                             | 20.04                        | 20.51 | 20.84 | 21.07 | 21.20 | 21.24 | 21.20 | 21.10 | 20.94 | 20.73 | 20.48 | 20.19 | 19.86 |
| EX3-9000   |                             | 25.60                        | 26.19 | 26.62 | 26.91 | 27.08 | 27.13 | 27.08 | 26.96 | 26.75 | 26.49 | 26.16 | 25.79 | 25.37 |
| EX3-2000   | 55                          | 1.57                         | 1.62  | 1.65  | 1.68  | 1.70  | 1.70  | 1.71  | 1.70  | 1.70  | 1.68  | 1.67  | 1.65  | 1.62  |
| EX3-3000   |                             | 3.28                         | 3.38  | 3.45  | 3.51  | 3.54  | 3.56  | 3.57  | 3.56  | 3.55  | 3.52  | 3.48  | 3.44  | 3.39  |
| EX3-4000   |                             | 5.27                         | 5.43  | 5.56  | 5.64  | 5.70  | 5.73  | 5.74  | 5.73  | 5.70  | 5.66  | 5.60  | 5.53  | 5.46  |
| EX3-5000   |                             | 8.55                         | 8.81  | 9.01  | 9.15  | 9.25  | 9.30  | 9.31  | 9.30  | 9.25  | 9.18  | 9.09  | 8.97  | 8.85  |
| EX3-6000   |                             | 13.82                        | 14.25 | 14.57 | 14.80 | 14.95 | 15.03 | 15.06 | 15.03 | 14.95 | 14.84 | 14.69 | 14.51 | 14.30 |
| EX3-7000   |                             | 17.52                        | 18.06 | 18.47 | 18.76 | 18.96 | 19.06 | 19.09 | 19.06 | 18.96 | 18.82 | 18.63 | 18.40 | 18.14 |
| EX3-8000   |                             | 19.51                        | 20.12 | 20.57 | 20.90 | 21.12 | 21.23 | 21.27 | 21.23 | 21.12 | 20.96 | 20.75 | 20.49 | 20.20 |
| EX3-9000   |                             | 24.93                        | 25.70 | 26.28 | 26.70 | 26.97 | 27.12 | 27.16 | 27.11 | 26.98 | 26.77 | 26.50 | 26.18 | 25.80 |
| EX3-2000   | 50                          | 1.50                         | 1.56  | 1.61  | 1.65  | 1.67  | 1.69  | 1.70  | 1.70  | 1.69  | 1.68  | 1.67  | 1.65  | 1.63  |
| EX3-3000   |                             | 3.14                         | 3.27  | 3.37  | 3.44  | 3.49  | 3.53  | 3.55  | 3.55  | 3.54  | 3.52  | 3.49  | 3.46  | 3.42  |
| EX3-4000   |                             | 5.05                         | 5.26  | 5.42  | 5.53  | 5.62  | 5.67  | 5.70  | 5.71  | 5.70  | 5.67  | 5.62  | 5.56  | 5.50  |
| EX3-5000   |                             | 8.19                         | 8.52  | 8.78  | 8.98  | 9.11  | 9.20  | 9.25  | 9.26  | 9.24  | 9.19  | 9.12  | 9.02  | 8.91  |
| EX3-6000   |                             | 13.23                        | 13.78 | 14.20 | 14.51 | 14.73 | 14.88 | 14.95 | 14.97 | 14.93 | 14.86 | 14.74 | 14.59 | 14.41 |
| EX3-7000   |                             | 16.78                        | 17.47 | 18.00 | 18.40 | 18.68 | 18.86 | 18.96 | 18.98 | 18.94 | 18.84 | 18.69 | 18.50 | 18.27 |
| EX3-8000   |                             | 18.69                        | 19.46 | 20.05 | 20.49 | 20.81 | 21.01 | 21.12 | 21.14 | 21.09 | 20.98 | 20.82 | 20.60 | 20.35 |
| EX3-9000   |                             | 23.88                        | 24.86 | 25.61 | 26.18 | 26.58 | 26.84 | 26.97 | 27.01 | 26.94 | 26.80 | 26.59 | 26.32 | 26.00 |
| EX3-2000   | 45                          | 1.41                         | 1.49  | 1.55  | 1.59  | 1.63  | 1.65  | 1.67  | 1.68  | 1.68  | 1.67  | 1.66  | 1.65  | 1.63  |
| EX3-3000   |                             | 2.95                         | 3.11  | 3.24  | 3.33  | 3.40  | 3.45  | 3.49  | 3.50  | 3.51  | 3.50  | 3.48  | 3.45  | 3.41  |
| EX3-4000   |                             | 4.74                         | 5.00  | 5.21  | 5.36  | 5.48  | 5.56  | 5.61  | 5.63  | 5.64  | 5.62  | 5.59  | 5.55  | 5.49  |
| EX3-5000   |                             | 7.69                         | 8.11  | 8.44  | 8.69  | 8.88  | 9.01  | 9.10  | 9.14  | 9.14  | 9.12  | 9.07  | 9.00  | 8.90  |
| EX3-6000   |                             | 12.43                        | 13.11 | 13.65 | 14.06 | 14.36 | 14.57 | 14.70 | 14.77 | 14.78 | 14.74 | 14.66 | 14.54 | 14.39 |
| EX3-7000   |                             | 15.76                        | 16.63 | 17.31 | 17.82 | 18.21 | 18.48 | 18.65 | 18.73 | 18.75 | 18.70 | 18.59 | 18.44 | 18.25 |
| EX3-8000   |                             | 17.55                        | 18.52 | 19.28 | 19.85 | 20.28 | 20.58 | 20.77 | 20.86 | 20.88 | 20.82 | 20.71 | 20.54 | 20.33 |
| EX3-9000   |                             | 22.42                        | 23.66 | 24.62 | 25.36 | 25.90 | 26.29 | 26.53 | 26.65 | 26.67 | 26.60 | 26.45 | 26.24 | 25.97 |
| EX3-2000   | 40                          | 1.29                         | 1.39  | 1.46  | 1.52  | 1.57  | 1.60  | 1.62  | 1.64  | 1.64  | 1.65  | 1.64  | 1.63  | 1.62  |
| EX3-3000   |                             | 2.69                         | 2.90  | 3.06  | 3.18  | 3.28  | 3.35  | 3.39  | 3.42  | 3.44  | 3.44  | 3.43  | 3.41  | 3.38  |
| EX3-4000   |                             | 4.33                         | 4.67  | 4.92  | 5.12  | 5.27  | 5.38  | 5.46  | 5.51  | 5.53  | 5.53  | 5.52  | 5.48  | 5.44  |
| EX3-5000   |                             | 7.03                         | 7.57  | 7.98  | 8.31  | 8.55  | 8.73  | 8.86  | 8.93  | 8.97  | 8.97  | 8.95  | 8.89  | 8.82  |
| EX3-6000   |                             | 11.36                        | 12.23 | 12.91 | 13.43 | 13.82 | 14.12 | 14.32 | 14.44 | 14.50 | 14.51 | 14.46 | 14.38 | 14.26 |
| EX3-7000   |                             | 14.41                        | 15.51 | 16.37 | 17.03 | 17.53 | 17.90 | 18.15 | 18.31 | 18.39 | 18.40 | 18.34 | 18.23 | 18.08 |
| EX3-8000   |                             | 16.05                        | 17.28 | 18.23 | 18.97 | 19.53 | 19.94 | 20.22 | 20.40 | 20.48 | 20.49 | 20.43 | 20.31 | 20.14 |
| EX3-9000   |                             | 20.50                        | 22.07 | 23.29 | 24.23 | 24.94 | 25.47 | 25.83 | 26.06 | 26.16 | 26.17 | 26.09 | 25.94 | 25.72 |
| EX3-2000   | 35                          | 1.13                         | 1.26  | 1.36  | 1.43  | 1.49  | 1.53  | 1.56  | 1.59  | 1.60  | 1.60  | 1.60  | 1.60  | 1.59  |
| EX3-3000   |                             | 2.37                         | 2.63  | 2.84  | 2.99  | 3.11  | 3.20  | 3.27  | 3.32  | 3.34  | 3.36  | 3.36  | 3.34  | 3.32  |
| EX3-4000   |                             | 3.81                         | 4.24  | 4.56  | 4.82  | 5.01  | 5.16  | 5.26  | 5.33  | 5.38  | 5.40  | 5.40  | 5.38  | 5.35  |
| EX3-5000   |                             | 6.18                         | 6.87  | 7.40  | 7.81  | 8.12  | 8.36  | 8.53  | 8.65  | 8.72  | 8.75  | 8.75  | 8.72  | 8.67  |
| EX3-6000   |                             | 9.99                         | 11.10 | 11.96 | 12.62 | 13.13 | 13.52 | 13.79 | 13.98 | 14.10 | 14.15 | 14.15 | 14.10 | 14.01 |
| EX3-7000   |                             | 12.66                        | 14.08 | 15.17 | 16.01 | 16.65 | 17.14 | 17.49 | 17.73 | 17.88 | 17.94 | 17.94 | 17.88 | 17.77 |
| EX3-8000   |                             | 14.10                        | 15.68 | 16.90 | 17.83 | 18.55 | 19.09 | 19.48 | 19.75 | 19.91 | 19.99 | 19.98 | 19.92 | 19.79 |
| EX3-9000   |                             | 18.01                        | 20.03 | 21.58 | 22.78 | 23.69 | 24.38 | 24.88 | 25.23 | 25.44 | 25.53 | 25.53 | 25.44 | 25.28 |

R-134a Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |                             | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
| EX3-2000   | 60                          | 1.23                         | 1.24  | 1.24  | 1.24  | 1.23  | 1.22  | 1.20  | 1.18  | 1.15  | 1.12  | 1.09  | 1.06  | 1.02  |
| EX3-3000   |                             | 2.56                         | 2.59  | 2.60  | 2.60  | 2.58  | 2.55  | 2.51  | 2.46  | 2.40  | 2.34  | 2.28  | 2.21  | 2.14  |
| EX3-4000   |                             | 4.12                         | 4.17  | 4.18  | 4.17  | 4.14  | 4.10  | 4.03  | 3.95  | 3.87  | 3.77  | 3.66  | 3.55  | 3.44  |
| EX3-5000   |                             | 6.69                         | 6.76  | 6.78  | 6.77  | 6.72  | 6.64  | 6.54  | 6.41  | 6.27  | 6.11  | 5.94  | 5.76  | 5.57  |
| EX3-6000   |                             | 10.81                        | 10.93 | 10.97 | 10.94 | 10.87 | 10.74 | 10.57 | 10.37 | 10.14 | 9.88  | 9.61  | 9.31  | 9.01  |
| EX3-7000   |                             | 13.71                        | 13.86 | 13.91 | 13.88 | 13.78 | 13.62 | 13.40 | 13.15 | 12.86 | 12.53 | 12.18 | 11.81 | 11.43 |
| EX3-8000   |                             | 15.27                        | 15.43 | 15.49 | 15.46 | 15.35 | 15.17 | 14.93 | 14.64 | 14.32 | 13.96 | 13.57 | 13.16 | 12.73 |
| EX3-9000   |                             | 19.50                        | 19.71 | 19.79 | 19.74 | 19.60 | 19.37 | 19.07 | 18.71 | 18.29 | 17.83 | 17.33 | 16.81 | 16.26 |
| EX3-2000   | 55                          | 1.20                         | 1.22  | 1.23  | 1.24  | 1.24  | 1.23  | 1.21  | 1.20  | 1.17  | 1.15  | 1.12  | 1.09  | 1.06  |
| EX3-3000   |                             | 2.50                         | 2.55  | 2.58  | 2.59  | 2.59  | 2.57  | 2.54  | 2.50  | 2.45  | 2.40  | 2.34  | 2.28  | 2.21  |
| EX3-4000   |                             | 4.03                         | 4.11  | 4.15  | 4.17  | 4.16  | 4.13  | 4.08  | 4.02  | 3.95  | 3.86  | 3.77  | 3.67  | 3.56  |
| EX3-5000   |                             | 6.53                         | 6.66  | 6.73  | 6.76  | 6.75  | 6.70  | 6.62  | 6.52  | 6.40  | 6.26  | 6.11  | 5.95  | 5.78  |
| EX3-6000   |                             | 10.56                        | 10.77 | 10.88 | 10.93 | 10.91 | 10.83 | 10.71 | 10.54 | 10.35 | 10.13 | 9.88  | 9.62  | 9.34  |
| EX3-7000   |                             | 13.39                        | 13.65 | 13.80 | 13.86 | 13.83 | 13.73 | 13.58 | 13.37 | 13.12 | 12.84 | 12.53 | 12.19 | 11.84 |
| EX3-8000   |                             | 14.91                        | 15.20 | 15.37 | 15.43 | 15.40 | 15.29 | 15.12 | 14.89 | 14.62 | 14.30 | 13.96 | 13.58 | 13.19 |
| EX3-9000   |                             | 19.04                        | 19.42 | 19.64 | 19.71 | 19.67 | 19.54 | 19.32 | 19.02 | 18.67 | 18.27 | 17.83 | 17.35 | 16.85 |
| EX3-2000   | 50                          | 1.15                         | 1.18  | 1.21  | 1.22  | 1.22  | 1.22  | 1.21  | 1.20  | 1.18  | 1.16  | 1.14  | 1.11  | 1.08  |
| EX3-3000   |                             | 2.40                         | 2.47  | 2.52  | 2.55  | 2.56  | 2.56  | 2.54  | 2.51  | 2.47  | 2.43  | 2.38  | 2.32  | 2.26  |
| EX3-4000   |                             | 3.86                         | 3.98  | 4.06  | 4.10  | 4.12  | 4.11  | 4.08  | 4.04  | 3.98  | 3.91  | 3.83  | 3.74  | 3.64  |
| EX3-5000   |                             | 6.25                         | 6.45  | 6.58  | 6.65  | 6.68  | 6.67  | 6.62  | 6.55  | 6.45  | 6.34  | 6.21  | 6.06  | 5.90  |
| EX3-6000   |                             | 10.11                        | 10.43 | 10.64 | 10.76 | 10.80 | 10.78 | 10.71 | 10.59 | 10.43 | 10.25 | 10.03 | 9.80  | 9.54  |
| EX3-7000   |                             | 12.82                        | 13.23 | 13.49 | 13.64 | 13.70 | 13.67 | 13.58 | 13.43 | 13.23 | 12.99 | 12.72 | 12.42 | 12.10 |
| EX3-8000   |                             | 14.28                        | 14.73 | 15.02 | 15.19 | 15.25 | 15.23 | 15.12 | 14.96 | 14.74 | 14.47 | 14.17 | 13.84 | 13.48 |
| EX3-9000   |                             | 18.24                        | 18.82 | 19.19 | 19.41 | 19.49 | 19.45 | 19.32 | 19.10 | 18.82 | 18.49 | 18.10 | 17.67 | 17.22 |
| EX3-2000   | 45                          | 1.07                         | 1.12  | 1.16  | 1.18  | 1.20  | 1.20  | 1.20  | 1.19  | 1.18  | 1.16  | 1.14  | 1.12  | 1.09  |
| EX3-3000   |                             | 2.24                         | 2.35  | 2.42  | 2.47  | 2.50  | 2.51  | 2.51  | 2.49  | 2.46  | 2.43  | 2.39  | 2.34  | 2.28  |
| EX3-4000   |                             | 3.61                         | 3.78  | 3.90  | 3.98  | 4.02  | 4.04  | 4.03  | 4.01  | 3.96  | 3.91  | 3.84  | 3.76  | 3.68  |
| EX3-5000   |                             | 5.85                         | 6.13  | 6.32  | 6.45  | 6.53  | 6.55  | 6.54  | 6.50  | 6.43  | 6.34  | 6.22  | 6.10  | 5.96  |
| EX3-6000   |                             | 9.46                         | 9.91  | 10.23 | 10.43 | 10.55 | 10.59 | 10.58 | 10.51 | 10.39 | 10.24 | 10.06 | 9.86  | 9.63  |
| EX3-7000   |                             | 11.99                        | 12.56 | 12.97 | 13.23 | 13.38 | 13.43 | 13.41 | 13.32 | 13.18 | 12.99 | 12.76 | 12.50 | 12.22 |
| EX3-8000   |                             | 13.36                        | 14.00 | 14.44 | 14.73 | 14.90 | 14.96 | 14.94 | 14.84 | 14.68 | 14.47 | 14.21 | 13.92 | 13.61 |
| EX3-9000   |                             | 17.06                        | 17.88 | 18.45 | 18.82 | 19.03 | 19.11 | 19.08 | 18.95 | 18.75 | 18.48 | 18.16 | 17.79 | 17.38 |
| EX3-2000   | 40                          | 0.97                         | 1.04  | 1.09  | 1.13  | 1.15  | 1.16  | 1.17  | 1.17  | 1.16  | 1.15  | 1.13  | 1.11  | 1.09  |
| EX3-3000   |                             | 2.03                         | 2.18  | 2.28  | 2.36  | 2.41  | 2.44  | 2.45  | 2.44  | 2.43  | 2.40  | 2.37  | 2.33  | 2.28  |
| EX3-4000   |                             | 3.26                         | 3.50  | 3.67  | 3.79  | 3.87  | 3.92  | 3.93  | 3.93  | 3.90  | 3.86  | 3.81  | 3.74  | 3.67  |
| EX3-5000   |                             | 5.29                         | 5.68  | 5.96  | 6.15  | 6.28  | 6.35  | 6.38  | 6.37  | 6.33  | 6.26  | 6.17  | 6.07  | 5.95  |
| EX3-6000   |                             | 8.56                         | 9.18  | 9.63  | 9.95  | 10.15 | 10.27 | 10.31 | 10.30 | 10.23 | 10.12 | 9.98  | 9.81  | 9.61  |
| EX3-7000   |                             | 10.85                        | 11.65 | 12.22 | 12.61 | 12.87 | 13.02 | 13.08 | 13.06 | 12.97 | 12.83 | 12.65 | 12.44 | 12.19 |
| EX3-8000   |                             | 12.09                        | 12.97 | 13.61 | 14.05 | 14.34 | 14.50 | 14.57 | 14.54 | 14.45 | 14.30 | 14.09 | 13.85 | 13.58 |
| EX3-9000   |                             | 15.44                        | 16.57 | 17.38 | 17.95 | 18.32 | 18.53 | 18.61 | 18.58 | 18.46 | 18.26 | 18.00 | 17.69 | 17.34 |
| EX3-2000   | 35                          | 0.83                         | 0.93  | 1.00  | 1.05  | 1.09  | 1.11  | 1.13  | 1.13  | 1.13  | 1.12  | 1.11  | 1.09  | 1.08  |
| EX3-3000   |                             | 1.74                         | 1.95  | 2.10  | 2.20  | 2.28  | 2.32  | 2.35  | 2.36  | 2.36  | 2.34  | 2.32  | 2.29  | 2.25  |
| EX3-4000   |                             | 2.80                         | 3.13  | 3.37  | 3.54  | 3.66  | 3.74  | 3.78  | 3.80  | 3.80  | 3.77  | 3.73  | 3.68  | 3.62  |
| EX3-5000   |                             | 4.54                         | 5.08  | 5.47  | 5.75  | 5.94  | 6.06  | 6.14  | 6.16  | 6.15  | 6.12  | 6.05  | 5.97  | 5.87  |
| EX3-6000   |                             | 7.35                         | 8.22  | 8.84  | 9.29  | 9.60  | 9.80  | 9.92  | 9.96  | 9.95  | 9.89  | 9.78  | 9.65  | 9.48  |
| EX3-7000   |                             | 9.31                         | 10.42 | 11.21 | 11.78 | 12.18 | 12.43 | 12.58 | 12.63 | 12.62 | 12.54 | 12.40 | 12.23 | 12.03 |
| EX3-8000   |                             | 10.37                        | 11.61 | 12.49 | 13.12 | 13.56 | 13.85 | 14.01 | 14.07 | 14.05 | 13.96 | 13.82 | 13.62 | 13.40 |
| EX3-9000   |                             | 13.25                        | 14.83 | 15.96 | 16.76 | 17.32 | 17.69 | 17.90 | 17.98 | 17.95 | 17.84 | 17.65 | 17.40 | 17.11 |

R-134a Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |                             | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
| EX3-2000   | 30                          | 0.64                         | 0.79  | 0.89  | 0.96  | 1.01  | 1.04  | 1.06  | 1.08  | 1.08  | 1.08  | 1.07  | 1.06  | 1.05  |
| EX3-3000   |                             | 1.34                         | 1.64  | 1.85  | 2.00  | 2.11  | 2.18  | 2.23  | 2.25  | 2.26  | 2.26  | 2.25  | 2.22  | 2.19  |
| EX3-4000   |                             | 2.15                         | 2.64  | 2.98  | 3.22  | 3.39  | 3.51  | 3.58  | 3.63  | 3.64  | 3.64  | 3.61  | 3.58  | 3.53  |
| EX3-5000   |                             | 3.49                         | 4.29  | 4.83  | 5.22  | 5.49  | 5.68  | 5.81  | 5.88  | 5.91  | 5.90  | 5.86  | 5.80  | 5.72  |
| EX3-6000   |                             | 5.64                         | 6.93  | 7.81  | 8.44  | 8.88  | 9.19  | 9.39  | 9.50  | 9.55  | 9.54  | 9.48  | 9.38  | 9.25  |
| EX3-7000   |                             | 7.16                         | 8.79  | 9.90  | 10.70 | 11.26 | 11.65 | 11.91 | 12.05 | 12.11 | 12.09 | 12.02 | 11.89 | 11.73 |
| EX3-8000   |                             | 7.97                         | 9.79  | 11.03 | 11.92 | 12.55 | 12.98 | 13.26 | 13.42 | 13.49 | 13.47 | 13.38 | 13.25 | 13.06 |
| EX3-9000   |                             | 10.18                        | 12.50 | 14.09 | 15.22 | 16.02 | 16.58 | 16.94 | 17.15 | 17.23 | 17.20 | 17.10 | 16.92 | 16.69 |
| EX3-2000   | 25                          | 0.30                         | 0.58  | 0.73  | 0.83  | 0.90  | 0.95  | 0.99  | 1.01  | 1.02  | 1.03  | 1.03  | 1.02  | 1.01  |
| EX3-3000   |                             | 0.64                         | 1.21  | 1.53  | 1.74  | 1.89  | 1.99  | 2.07  | 2.11  | 2.14  | 2.15  | 2.15  | 2.13  | 2.11  |
| EX3-4000   |                             | 1.03                         | 1.95  | 2.46  | 2.80  | 3.04  | 3.21  | 3.32  | 3.40  | 3.44  | 3.46  | 3.45  | 3.43  | 3.40  |
| EX3-5000   |                             | 1.66                         | 3.16  | 3.98  | 4.54  | 4.92  | 5.20  | 5.39  | 5.51  | 5.58  | 5.61  | 5.60  | 5.57  | 5.51  |
| EX3-6000   |                             | 2.69                         | 5.11  | 6.44  | 7.33  | 7.96  | 8.40  | 8.71  | 8.91  | 9.02  | 9.07  | 9.06  | 9.00  | 8.91  |
| EX3-7000   |                             | 3.41                         | 6.48  | 8.17  | 9.30  | 10.10 | 10.66 | 11.05 | 11.30 | 11.44 | 11.50 | 11.48 | 11.41 | 11.30 |
| EX3-8000   |                             | 3.80                         | 7.21  | 9.09  | 10.36 | 11.25 | 11.87 | 12.30 | 12.58 | 12.74 | 12.81 | 12.79 | 12.71 | 12.59 |
| EX3-9000   |                             | 4.85                         | 9.21  | 11.62 | 13.23 | 14.36 | 15.16 | 15.72 | 16.07 | 16.28 | 16.36 | 16.34 | 16.24 | 16.08 |
| EX3-2000   | 20                          |                              | 0.16  | 0.51  | 0.67  | 0.77  | 0.84  | 0.89  | 0.93  | 0.95  | 0.96  | 0.97  | 0.97  | 0.96  |
| EX3-3000   |                             |                              | 0.34  | 1.06  | 1.39  | 1.61  | 1.76  | 1.86  | 1.94  | 1.98  | 2.01  | 2.02  | 2.02  | 2.01  |
| EX3-4000   |                             |                              | 0.54  | 1.70  | 2.24  | 2.59  | 2.83  | 3.00  | 3.11  | 3.19  | 3.23  | 3.25  | 3.25  | 3.23  |
| EX3-5000   |                             |                              | 0.88  | 2.76  | 3.63  | 4.20  | 4.59  | 4.86  | 5.05  | 5.17  | 5.24  | 5.27  | 5.27  | 5.24  |
| EX3-6000   |                             |                              | 1.43  | 4.46  | 5.87  | 6.78  | 7.42  | 7.86  | 8.16  | 8.36  | 8.48  | 8.52  | 8.52  | 8.47  |
| EX3-7000   |                             |                              | 1.81  | 5.66  | 7.44  | 8.60  | 9.40  | 9.97  | 10.35 | 10.60 | 10.75 | 10.81 | 10.80 | 10.74 |
| EX3-8000   |                             |                              | 2.01  | 6.30  | 8.29  | 9.58  | 10.47 | 11.10 | 11.53 | 11.81 | 11.97 | 12.04 | 12.03 | 11.96 |
| EX3-9000   |                             |                              | 2.57  | 8.05  | 10.58 | 12.24 | 13.38 | 14.18 | 14.73 | 15.09 | 15.29 | 15.38 | 15.36 | 15.27 |
| EX3-2000   | 15                          |                              |       |       | 0.41  | 0.59  | 0.70  | 0.77  | 0.82  | 0.86  | 0.88  | 0.89  | 0.90  | 0.90  |
| EX3-3000   |                             |                              |       |       | 0.87  | 1.23  | 1.46  | 1.61  | 1.72  | 1.79  | 1.84  | 1.86  | 1.88  | 1.88  |
| EX3-4000   |                             |                              |       |       | 1.40  | 1.98  | 2.34  | 2.59  | 2.76  | 2.88  | 2.96  | 3.00  | 3.02  | 3.02  |
| EX3-5000   |                             |                              |       |       | 2.26  | 3.21  | 3.80  | 4.20  | 4.48  | 4.67  | 4.79  | 4.86  | 4.89  | 4.89  |
| EX3-6000   |                             |                              |       |       | 3.66  | 5.19  | 6.15  | 6.80  | 7.24  | 7.55  | 7.75  | 7.86  | 7.91  | 7.91  |
| EX3-7000   |                             |                              |       |       | 4.64  | 6.59  | 7.79  | 8.62  | 9.18  | 9.57  | 9.82  | 9.97  | 10.03 | 10.03 |
| EX3-8000   |                             |                              |       |       | 5.17  | 7.34  | 8.68  | 9.60  | 10.23 | 10.66 | 10.94 | 11.11 | 11.18 | 11.17 |
| EX3-9000   |                             |                              |       |       | 6.60  | 9.37  | 11.09 | 12.26 | 13.07 | 13.62 | 13.98 | 14.19 | 14.28 | 14.27 |
| EX3-2000   | 10                          |                              |       |       |       | 0.29  | 0.50  | 0.61  | 0.69  | 0.74  | 0.78  | 0.80  | 0.81  | 0.82  |
| EX3-3000   |                             |                              |       |       |       | 0.61  | 1.04  | 1.28  | 1.44  | 1.55  | 1.63  | 1.67  | 1.70  | 1.71  |
| EX3-4000   |                             |                              |       |       |       | 0.98  | 1.67  | 2.06  | 2.32  | 2.50  | 2.62  | 2.69  | 2.74  | 2.76  |
| EX3-5000   |                             |                              |       |       |       | 1.59  | 2.72  | 3.35  | 3.76  | 4.05  | 4.24  | 4.37  | 4.44  | 4.47  |
| EX3-6000   |                             |                              |       |       |       | 2.57  | 4.39  | 5.41  | 6.08  | 6.54  | 6.86  | 7.06  | 7.18  | 7.23  |
| EX3-7000   |                             |                              |       |       |       | 3.26  | 5.57  | 6.86  | 7.72  | 8.30  | 8.69  | 8.95  | 9.10  | 9.17  |
| EX3-8000   |                             |                              |       |       |       | 3.64  | 6.20  | 7.64  | 8.59  | 9.24  | 9.68  | 9.97  | 10.14 | 10.22 |
| EX3-9000   |                             |                              |       |       |       | 4.64  | 7.92  | 9.76  | 10.98 | 11.81 | 12.37 | 12.74 | 12.95 | 13.05 |

R-404A Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |                             | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
| EX3-2000   | 60                          | 0.87                         | 0.87  | 0.87  | 0.86  | 0.85  | 0.83  | 0.80  | 0.78  | 0.75  | 0.71  | 0.68  | 0.64  | 0.60  |
| EX3-3000   |                             | 1.82                         | 1.82  | 1.82  | 1.80  | 1.77  | 1.73  | 1.68  | 1.62  | 1.56  | 1.49  | 1.42  | 1.34  | 1.26  |
| EX3-4000   |                             | 2.92                         | 2.94  | 2.93  | 2.89  | 2.84  | 2.78  | 2.70  | 2.61  | 2.51  | 2.40  | 2.28  | 2.16  | 2.03  |
| EX3-5000   |                             | 4.74                         | 4.76  | 4.74  | 4.69  | 4.61  | 4.51  | 4.38  | 4.23  | 4.07  | 3.89  | 3.70  | 3.50  | 3.29  |
| EX3-6000   |                             | 7.66                         | 7.70  | 7.67  | 7.59  | 7.46  | 7.28  | 7.08  | 6.84  | 6.57  | 6.28  | 5.98  | 5.65  | 5.32  |
| EX3-7000   |                             | 9.71                         | 9.76  | 9.72  | 9.62  | 9.46  | 9.24  | 8.97  | 8.67  | 8.33  | 7.97  | 7.58  | 7.17  | 6.74  |
| EX3-8000   |                             | 10.81                        | 10.87 | 10.83 | 10.72 | 10.53 | 10.29 | 10.00 | 9.66  | 9.28  | 8.88  | 8.44  | 7.99  | 7.51  |
| EX3-9000   |                             | 13.81                        | 13.88 | 13.84 | 13.69 | 13.45 | 13.14 | 12.77 | 12.34 | 11.86 | 11.34 | 10.78 | 10.20 | 9.60  |
| EX3-2000   | 55                          | 0.93                         | 0.94  | 0.95  | 0.94  | 0.94  | 0.92  | 0.90  | 0.88  | 0.85  | 0.83  | 0.79  | 0.76  | 0.72  |
| EX3-3000   |                             | 1.94                         | 1.97  | 1.98  | 1.97  | 1.96  | 1.93  | 1.89  | 1.84  | 1.79  | 1.73  | 1.66  | 1.59  | 1.51  |
| EX3-4000   |                             | 3.11                         | 3.16  | 3.18  | 3.18  | 3.15  | 3.10  | 3.04  | 2.96  | 2.87  | 2.78  | 2.67  | 2.55  | 2.44  |
| EX3-5000   |                             | 5.05                         | 5.13  | 5.16  | 5.15  | 5.10  | 5.03  | 4.93  | 4.80  | 4.66  | 4.50  | 4.33  | 4.14  | 3.95  |
| EX3-6000   |                             | 8.17                         | 8.29  | 8.34  | 8.32  | 8.25  | 8.13  | 7.97  | 7.77  | 7.53  | 7.28  | 7.00  | 6.70  | 6.38  |
| EX3-7000   |                             | 10.35                        | 10.51 | 10.58 | 10.56 | 10.46 | 10.31 | 10.10 | 9.85  | 9.55  | 9.23  | 8.87  | 8.49  | 8.09  |
| EX3-8000   |                             | 11.53                        | 11.71 | 11.78 | 11.76 | 11.65 | 11.48 | 11.25 | 10.97 | 10.64 | 10.28 | 9.88  | 9.46  | 9.02  |
| EX3-9000   |                             | 14.73                        | 14.96 | 15.05 | 15.02 | 14.89 | 14.67 | 14.37 | 14.01 | 13.59 | 13.13 | 12.62 | 12.08 | 11.52 |
| EX3-2000   | 50                          | 1.00                         | 1.03  | 1.04  | 1.04  | 1.04  | 1.03  | 1.01  | 0.99  | 0.97  | 0.94  | 0.91  | 0.88  | 0.85  |
| EX3-3000   |                             | 2.10                         | 2.14  | 2.17  | 2.18  | 2.17  | 2.15  | 2.12  | 2.08  | 2.03  | 1.97  | 1.91  | 1.84  | 1.77  |
| EX3-4000   |                             | 3.37                         | 3.45  | 3.49  | 3.50  | 3.49  | 3.46  | 3.41  | 3.34  | 3.26  | 3.17  | 3.07  | 2.96  | 2.85  |
| EX3-5000   |                             | 5.47                         | 5.59  | 5.66  | 5.68  | 5.66  | 5.61  | 5.53  | 5.42  | 5.29  | 5.14  | 4.98  | 4.81  | 4.62  |
| EX3-6000   |                             | 8.84                         | 9.04  | 9.15  | 9.18  | 9.15  | 9.07  | 8.94  | 8.76  | 8.55  | 8.32  | 8.05  | 7.77  | 7.47  |
| EX3-7000   |                             | 11.21                        | 11.46 | 11.60 | 11.64 | 11.61 | 11.50 | 11.33 | 11.11 | 10.85 | 10.54 | 10.21 | 9.85  | 9.47  |
| EX3-8000   |                             | 12.49                        | 12.77 | 12.92 | 12.97 | 12.93 | 12.81 | 12.62 | 12.38 | 12.08 | 11.74 | 11.37 | 10.97 | 10.55 |
| EX3-9000   |                             | 15.95                        | 16.31 | 16.51 | 16.57 | 16.51 | 16.36 | 16.12 | 15.81 | 15.43 | 15.00 | 14.53 | 14.02 | 13.47 |
| EX3-2000   | 45                          | 0.94                         | 0.98  | 1.01  | 1.03  | 1.03  | 1.03  | 1.01  | 1.00  | 0.98  | 0.95  | 0.92  | 0.89  |       |
| EX3-3000   |                             | 1.97                         | 2.05  | 2.11  | 2.15  | 2.16  | 2.16  | 2.15  | 2.12  | 2.08  | 2.04  | 1.99  | 1.93  | 1.87  |
| EX3-4000   |                             | 3.17                         | 3.31  | 3.40  | 3.45  | 3.48  | 3.47  | 3.45  | 3.41  | 3.35  | 3.28  | 3.20  | 3.11  | 3.01  |
| EX3-5000   |                             | 5.14                         | 5.36  | 5.51  | 5.60  | 5.64  | 5.63  | 5.60  | 5.53  | 5.44  | 5.32  | 5.19  | 5.04  | 4.88  |
| EX3-6000   |                             | 8.31                         | 8.67  | 8.90  | 9.05  | 9.11  | 9.11  | 9.05  | 8.94  | 8.79  | 8.60  | 8.39  | 8.15  | 7.89  |
| EX3-7000   |                             | 10.54                        | 10.99 | 11.29 | 11.47 | 11.55 | 11.55 | 11.47 | 11.34 | 11.15 | 10.91 | 10.64 | 10.33 | 10.00 |
| EX3-8000   |                             | 11.74                        | 12.24 | 12.58 | 12.78 | 12.87 | 12.86 | 12.78 | 12.63 | 12.41 | 12.15 | 11.85 | 11.51 | 11.14 |
| EX3-9000   |                             | 15.00                        | 15.63 | 16.06 | 16.32 | 16.44 | 16.43 | 16.33 | 16.13 | 15.86 | 15.52 | 15.14 | 14.70 | 14.23 |
| EX3-2000   | 40                          | 0.90                         | 0.96  | 1.00  | 1.03  | 1.05  | 1.05  | 1.06  | 1.05  | 1.04  | 1.02  | 1.00  | 0.98  | 0.95  |
| EX3-3000   |                             | 1.89                         | 2.01  | 2.10  | 2.15  | 2.19  | 2.21  | 2.21  | 2.19  | 2.17  | 2.13  | 2.09  | 2.04  | 1.99  |
| EX3-4000   |                             | 3.04                         | 3.23  | 3.37  | 3.47  | 3.52  | 3.55  | 3.55  | 3.53  | 3.49  | 3.43  | 3.37  | 3.29  | 3.20  |
| EX3-5000   |                             | 4.93                         | 5.24  | 5.47  | 5.62  | 5.71  | 5.75  | 5.76  | 5.72  | 5.66  | 5.57  | 5.46  | 5.33  | 5.19  |
| EX3-6000   |                             | 7.97                         | 8.48  | 8.84  | 9.08  | 9.23  | 9.30  | 9.30  | 9.25  | 9.15  | 9.00  | 8.83  | 8.62  | 8.39  |
| EX3-7000   |                             | 10.11                        | 10.75 | 11.21 | 11.52 | 11.71 | 11.80 | 11.80 | 11.73 | 11.60 | 11.42 | 11.19 | 10.93 | 10.64 |
| EX3-8000   |                             | 11.26                        | 11.98 | 12.49 | 12.83 | 13.04 | 13.14 | 13.14 | 13.06 | 12.92 | 12.72 | 12.46 | 12.17 | 11.85 |
| EX3-9000   |                             | 14.38                        | 15.30 | 15.95 | 16.39 | 16.66 | 16.78 | 16.79 | 16.69 | 16.50 | 16.24 | 15.92 | 15.55 | 15.13 |
| EX3-2000   | 35                          | 0.83                         | 0.91  | 0.97  | 1.01  | 1.04  | 1.06  | 1.06  | 1.07  | 1.06  | 1.05  | 1.03  | 1.01  | 0.99  |
| EX3-3000   |                             | 1.74                         | 1.90  | 2.03  | 2.11  | 2.17  | 2.21  | 2.23  | 2.23  | 2.22  | 2.19  | 2.16  | 2.12  | 2.07  |
| EX3-4000   |                             | 2.79                         | 3.06  | 3.26  | 3.40  | 3.49  | 3.55  | 3.58  | 3.58  | 3.56  | 3.53  | 3.47  | 3.41  | 3.33  |
| EX3-5000   |                             | 4.53                         | 4.97  | 5.29  | 5.51  | 5.67  | 5.76  | 5.81  | 5.81  | 5.78  | 5.72  | 5.63  | 5.53  | 5.41  |
| EX3-6000   |                             | 7.32                         | 8.03  | 8.55  | 8.91  | 9.16  | 9.31  | 9.39  | 9.39  | 9.34  | 9.25  | 9.11  | 8.94  | 8.74  |
| EX3-7000   |                             | 9.28                         | 10.18 | 10.84 | 11.30 | 11.62 | 11.81 | 11.90 | 11.91 | 11.85 | 11.72 | 11.55 | 11.33 | 11.08 |
| EX3-8000   |                             | 10.34                        | 11.34 | 12.07 | 12.59 | 12.94 | 13.15 | 13.26 | 13.27 | 13.20 | 13.06 | 12.86 | 12.62 | 12.34 |
| EX3-9000   |                             | 13.21                        | 14.49 | 15.42 | 16.08 | 16.53 | 16.80 | 16.93 | 16.95 | 16.86 | 16.68 | 16.43 | 16.12 | 15.77 |

R-404A Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |                             | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
| EX3-2000   | 30                          | 0.71                         | 0.83  | 0.91  | 0.97  | 1.01  | 1.04  | 1.05  | 1.06  | 1.06  | 1.06  | 1.05  | 1.03  | 1.02  |
| EX3-3000   |                             | 1.49                         | 1.73  | 1.90  | 2.02  | 2.11  | 2.17  | 2.21  | 2.22  | 2.23  | 2.21  | 2.19  | 2.16  | 2.12  |
| EX3-4000   |                             | 2.39                         | 2.78  | 3.05  | 3.25  | 3.39  | 3.49  | 3.55  | 3.58  | 3.58  | 3.56  | 3.53  | 3.48  | 3.42  |
| EX3-5000   |                             | 3.88                         | 4.50  | 4.95  | 5.27  | 5.50  | 5.66  | 5.75  | 5.80  | 5.81  | 5.78  | 5.72  | 5.64  | 5.54  |
| EX3-6000   |                             | 6.27                         | 7.28  | 8.00  | 8.52  | 8.89  | 9.15  | 9.30  | 9.38  | 9.39  | 9.34  | 9.25  | 9.12  | 8.95  |
| EX3-7000   |                             | 7.95                         | 9.23  | 10.15 | 10.81 | 11.28 | 11.60 | 11.79 | 11.89 | 11.90 | 11.84 | 11.73 | 11.56 | 11.35 |
| EX3-8000   |                             | 8.86                         | 10.28 | 11.30 | 12.04 | 12.56 | 12.92 | 13.14 | 13.24 | 13.26 | 13.19 | 13.06 | 12.88 | 12.65 |
| EX3-9000   |                             | 11.31                        | 13.14 | 14.44 | 15.38 | 16.05 | 16.50 | 16.78 | 16.92 | 16.93 | 16.85 | 16.68 | 16.45 | 16.15 |
| EX3-2000   | 25                          | 0.52                         | 0.70  | 0.81  | 0.90  | 0.96  | 1.00  | 1.03  | 1.04  | 1.05  | 1.05  | 1.05  | 1.04  | 1.02  |
| EX3-3000   |                             | 1.09                         | 1.45  | 1.70  | 1.87  | 2.00  | 2.09  | 2.15  | 2.18  | 2.20  | 2.20  | 2.19  | 2.17  | 2.14  |
| EX3-4000   |                             | 1.75                         | 2.34  | 2.73  | 3.01  | 3.21  | 3.35  | 3.45  | 3.51  | 3.54  | 3.54  | 3.53  | 3.49  | 3.45  |
| EX3-5000   |                             | 2.83                         | 3.79  | 4.43  | 4.88  | 5.21  | 5.44  | 5.60  | 5.69  | 5.74  | 5.75  | 5.72  | 5.67  | 5.59  |
| EX3-6000   |                             | 4.58                         | 6.13  | 7.17  | 7.90  | 8.42  | 8.79  | 9.05  | 9.20  | 9.28  | 9.29  | 9.25  | 9.16  | 9.04  |
| EX3-7000   |                             | 5.81                         | 7.78  | 9.09  | 10.01 | 10.68 | 11.15 | 11.47 | 11.67 | 11.77 | 11.78 | 11.73 | 11.62 | 11.46 |
| EX3-8000   |                             | 6.47                         | 8.66  | 10.12 | 11.15 | 11.89 | 12.42 | 12.78 | 13.00 | 13.11 | 13.12 | 13.06 | 12.94 | 12.76 |
| EX3-9000   |                             | 8.26                         | 11.07 | 12.93 | 14.25 | 15.19 | 15.87 | 16.32 | 16.60 | 16.74 | 16.76 | 16.69 | 16.53 | 16.31 |
| EX3-2000   | 20                          |                              | 0.49  | 0.67  | 0.79  | 0.88  | 0.94  | 0.98  | 1.01  | 1.02  | 1.03  | 1.03  | 1.03  | 1.02  |
| EX3-3000   |                             |                              | 1.02  | 1.41  | 1.65  | 1.83  | 1.96  | 2.04  | 2.10  | 2.14  | 2.16  | 2.16  | 2.15  | 2.13  |
| EX3-4000   |                             |                              | 1.64  | 2.26  | 2.66  | 2.94  | 3.15  | 3.29  | 3.38  | 3.44  | 3.47  | 3.48  | 3.46  | 3.43  |
| EX3-5000   |                             |                              | 2.67  | 3.67  | 4.32  | 4.77  | 5.10  | 5.33  | 5.49  | 5.58  | 5.63  | 5.64  | 5.62  | 5.57  |
| EX3-6000   |                             |                              | 4.31  | 5.93  | 6.98  | 7.72  | 8.25  | 8.62  | 8.87  | 9.03  | 9.11  | 9.12  | 9.08  | 9.00  |
| EX3-7000   |                             |                              | 5.47  | 7.52  | 8.85  | 9.79  | 10.46 | 10.93 | 11.25 | 11.45 | 11.55 | 11.56 | 11.51 | 11.41 |
| EX3-8000   |                             |                              | 6.09  | 8.37  | 9.86  | 10.90 | 11.65 | 12.17 | 12.53 | 12.75 | 12.86 | 12.88 | 12.83 | 12.71 |
| EX3-9000   |                             |                              | 7.78  | 10.70 | 12.59 | 13.92 | 14.88 | 15.55 | 16.00 | 16.29 | 16.43 | 16.45 | 16.38 | 16.23 |
| EX3-2000   | 15                          |                              |       | 0.45  | 0.64  | 0.76  | 0.85  | 0.91  | 0.95  | 0.98  | 1.00  | 1.00  | 1.01  | 1.00  |
| EX3-3000   |                             |                              |       | 0.94  | 1.34  | 1.59  | 1.77  | 1.90  | 1.98  | 2.04  | 2.08  | 2.10  | 2.10  | 2.10  |
| EX3-4000   |                             |                              |       | 1.51  | 2.16  | 2.57  | 2.85  | 3.05  | 3.19  | 3.29  | 3.35  | 3.38  | 3.38  | 3.37  |
| EX3-5000   |                             |                              |       | 2.45  | 3.50  | 4.16  | 4.62  | 4.95  | 5.18  | 5.33  | 5.43  | 5.48  | 5.49  | 5.47  |
| EX3-6000   |                             |                              |       | 3.96  | 5.65  | 6.72  | 7.47  | 8.00  | 8.37  | 8.62  | 8.78  | 8.86  | 8.87  | 8.84  |
| EX3-7000   |                             |                              |       | 5.02  | 7.17  | 8.53  | 9.47  | 10.14 | 10.62 | 10.93 | 11.13 | 11.23 | 11.25 | 11.21 |
| EX3-8000   |                             |                              |       | 5.60  | 7.98  | 9.50  | 10.55 | 11.30 | 11.82 | 12.18 | 12.40 | 12.51 | 12.53 | 12.48 |
| EX3-9000   |                             |                              |       | 7.15  | 10.20 | 12.13 | 13.48 | 14.43 | 15.10 | 15.56 | 15.84 | 15.98 | 16.01 | 15.94 |
| EX3-2000   | 10                          |                              |       |       | 0.40  | 0.60  | 0.73  | 0.81  | 0.87  | 0.91  | 0.94  | 0.96  | 0.97  | 0.97  |
| EX3-3000   |                             |                              |       |       | 0.83  | 1.26  | 1.52  | 1.70  | 1.82  | 1.91  | 1.97  | 2.01  | 2.02  | 2.03  |
| EX3-4000   |                             |                              |       |       | 1.34  | 2.02  | 2.44  | 2.73  | 2.93  | 3.07  | 3.17  | 3.23  | 3.26  | 3.26  |
| EX3-5000   |                             |                              |       |       | 2.17  | 3.28  | 3.96  | 4.42  | 4.75  | 4.98  | 5.14  | 5.23  | 5.28  | 5.29  |
| EX3-6000   |                             |                              |       |       | 3.51  | 5.31  | 6.40  | 7.15  | 7.68  | 8.05  | 8.30  | 8.46  | 8.54  | 8.56  |
| EX3-7000   |                             |                              |       |       | 4.46  | 6.73  | 8.12  | 9.07  | 9.74  | 10.21 | 10.53 | 10.73 | 10.83 | 10.85 |
| EX3-8000   |                             |                              |       |       | 4.96  | 7.49  | 9.04  | 10.10 | 10.85 | 11.38 | 11.73 | 11.95 | 12.06 | 12.09 |
| EX3-9000   |                             |                              |       |       | 6.34  | 9.57  | 11.55 | 12.90 | 13.86 | 14.53 | 14.98 | 15.26 | 15.41 | 15.44 |

R-407F Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature |                   | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|------------------------|-------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | Dew Point (°C)         | Bubble Point (°C) | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
|            |                        |                   |                              |       |       |       |       |       |       |       |       |       |       |       |       |
| EX3-2000   | 63.5                   | 60                | 1.65                         | 1.67  | 1.69  | 1.69  | 1.69  | 1.68  | 1.66  | 1.64  | 1.61  | 1.58  | 1.55  | 1.51  | 1.47  |
| EX3-3000   |                        |                   | 3.45                         | 3.50  | 3.53  | 3.53  | 3.52  | 3.50  | 3.47  | 3.42  | 3.37  | 3.30  | 3.23  | 3.15  | 3.07  |
| EX3-4000   |                        |                   | 5.55                         | 5.63  | 5.67  | 5.68  | 5.67  | 5.63  | 5.58  | 5.50  | 5.41  | 5.31  | 5.20  | 5.07  | 4.94  |
| EX3-5000   |                        |                   | 9.00                         | 9.13  | 9.19  | 9.21  | 9.19  | 9.13  | 9.04  | 8.92  | 8.78  | 8.61  | 8.43  | 8.23  | 8.01  |
| EX3-6000   |                        |                   | 14.56                        | 14.76 | 14.87 | 14.91 | 14.87 | 14.78 | 14.63 | 14.43 | 14.20 | 13.93 | 13.63 | 13.31 | 12.96 |
| EX3-7000   |                        |                   | 18.46                        | 18.71 | 18.86 | 18.90 | 18.85 | 18.73 | 18.54 | 18.30 | 18.00 | 17.66 | 17.28 | 16.87 | 16.43 |
| EX3-8000   |                        |                   | 20.56                        | 20.84 | 21.00 | 21.05 | 21.00 | 20.86 | 20.65 | 20.38 | 20.05 | 19.67 | 19.25 | 18.79 | 18.30 |
| EX3-9000   |                        |                   | 26.27                        | 26.63 | 26.83 | 26.89 | 26.83 | 26.65 | 26.39 | 26.04 | 25.61 | 25.13 | 24.59 | 24.00 | 23.38 |
| EX3-2000   | 58.5                   | 55                | 1.67                         | 1.70  | 1.72  | 1.74  | 1.74  | 1.74  | 1.72  | 1.71  | 1.68  | 1.66  | 1.63  | 1.59  | 1.56  |
| EX3-3000   |                        |                   | 3.49                         | 3.56  | 3.60  | 3.63  | 3.64  | 3.63  | 3.60  | 3.57  | 3.52  | 3.47  | 3.40  | 3.33  | 3.26  |
| EX3-4000   |                        |                   | 5.61                         | 5.72  | 5.80  | 5.84  | 5.85  | 5.83  | 5.79  | 5.74  | 5.66  | 5.57  | 5.47  | 5.36  | 5.24  |
| EX3-5000   |                        |                   | 9.10                         | 9.28  | 9.40  | 9.47  | 9.48  | 9.46  | 9.40  | 9.30  | 9.18  | 9.04  | 8.87  | 8.69  | 8.49  |
| EX3-6000   |                        |                   | 14.72                        | 15.01 | 15.21 | 15.31 | 15.34 | 15.30 | 15.20 | 15.05 | 14.86 | 14.62 | 14.35 | 14.06 | 13.74 |
| EX3-7000   |                        |                   | 18.66                        | 19.04 | 19.28 | 19.41 | 19.45 | 19.40 | 19.27 | 19.08 | 18.83 | 18.54 | 18.20 | 17.82 | 17.42 |
| EX3-8000   |                        |                   | 20.78                        | 21.20 | 21.47 | 21.62 | 21.66 | 21.60 | 21.47 | 21.25 | 20.98 | 20.65 | 20.27 | 19.85 | 19.40 |
| EX3-9000   |                        |                   | 26.55                        | 27.09 | 27.44 | 27.63 | 27.68 | 27.60 | 27.43 | 27.15 | 26.80 | 26.38 | 25.89 | 25.36 | 24.78 |
| EX3-2000   | 54                     | 50                | 1.65                         | 1.70  | 1.73  | 1.75  | 1.77  | 1.77  | 1.76  | 1.75  | 1.73  | 1.71  | 1.69  | 1.66  | 1.62  |
| EX3-3000   |                        |                   | 3.46                         | 3.56  | 3.62  | 3.67  | 3.69  | 3.70  | 3.69  | 3.66  | 3.63  | 3.58  | 3.52  | 3.46  | 3.39  |
| EX3-4000   |                        |                   | 5.56                         | 5.72  | 5.83  | 5.90  | 5.94  | 5.94  | 5.93  | 5.89  | 5.83  | 5.76  | 5.67  | 5.56  | 5.45  |
| EX3-5000   |                        |                   | 9.02                         | 9.27  | 9.45  | 9.57  | 9.63  | 9.64  | 9.61  | 9.55  | 9.45  | 9.33  | 9.19  | 9.02  | 8.84  |
| EX3-6000   |                        |                   | 14.59                        | 15.00 | 15.29 | 15.48 | 15.58 | 15.60 | 15.55 | 15.45 | 15.29 | 15.10 | 14.86 | 14.60 | 14.31 |
| EX3-7000   |                        |                   | 18.50                        | 19.02 | 19.39 | 19.62 | 19.75 | 19.77 | 19.72 | 19.58 | 19.39 | 19.14 | 18.84 | 18.51 | 18.14 |
| EX3-8000   |                        |                   | 20.61                        | 21.18 | 21.59 | 21.85 | 21.99 | 22.02 | 21.96 | 21.81 | 21.59 | 21.32 | 20.99 | 20.61 | 20.20 |
| EX3-9000   |                        |                   | 26.33                        | 27.06 | 27.59 | 27.92 | 28.10 | 28.14 | 28.05 | 27.87 | 27.59 | 27.24 | 26.81 | 26.34 | 25.81 |
| EX3-2000   | 49                     | 45                | 1.61                         | 1.67  | 1.72  | 1.75  | 1.77  | 1.78  | 1.78  | 1.77  | 1.76  | 1.74  | 1.72  | 1.70  | 1.67  |
| EX3-3000   |                        |                   | 3.37                         | 3.49  | 3.59  | 3.65  | 3.70  | 3.72  | 3.72  | 3.71  | 3.68  | 3.65  | 3.60  | 3.54  | 3.48  |
| EX3-4000   |                        |                   | 5.41                         | 5.62  | 5.77  | 5.88  | 5.94  | 5.98  | 5.98  | 5.96  | 5.92  | 5.86  | 5.79  | 5.70  | 5.60  |
| EX3-5000   |                        |                   | 8.78                         | 9.11  | 9.36  | 9.53  | 9.64  | 9.69  | 9.70  | 9.67  | 9.60  | 9.51  | 9.39  | 9.24  | 9.08  |
| EX3-6000   |                        |                   | 14.20                        | 14.74 | 15.14 | 15.41 | 15.59 | 15.68 | 15.70 | 15.64 | 15.54 | 15.38 | 15.18 | 14.95 | 14.69 |
| EX3-7000   |                        |                   | 18.00                        | 18.68 | 19.19 | 19.54 | 19.77 | 19.88 | 19.90 | 19.83 | 19.70 | 19.50 | 19.25 | 18.96 | 18.62 |
| EX3-8000   |                        |                   | 20.04                        | 20.81 | 21.37 | 21.76 | 22.01 | 22.14 | 22.16 | 22.09 | 21.94 | 21.72 | 21.44 | 21.11 | 20.74 |
| EX3-9000   |                        |                   | 25.61                        | 26.59 | 27.31 | 27.81 | 28.13 | 28.29 | 28.31 | 28.22 | 28.03 | 27.75 | 27.39 | 26.97 | 26.50 |
| EX3-2000   | 44                     | 40                | 1.53                         | 1.61  | 1.67  | 1.72  | 1.75  | 1.77  | 1.77  | 1.78  | 1.77  | 1.76  | 1.74  | 1.72  | 1.69  |
| EX3-3000   |                        |                   | 3.20                         | 3.37  | 3.50  | 3.59  | 3.65  | 3.69  | 3.71  | 3.71  | 3.70  | 3.67  | 3.63  | 3.59  | 3.53  |
| EX3-4000   |                        |                   | 5.15                         | 5.42  | 5.62  | 5.77  | 5.87  | 5.93  | 5.97  | 5.97  | 5.95  | 5.90  | 5.84  | 5.77  | 5.68  |
| EX3-5000   |                        |                   | 8.36                         | 8.79  | 9.12  | 9.36  | 9.52  | 9.62  | 9.67  | 9.68  | 9.64  | 9.58  | 9.48  | 9.36  | 9.21  |
| EX3-6000   |                        |                   | 13.52                        | 14.22 | 14.75 | 15.14 | 15.40 | 15.57 | 15.65 | 15.66 | 15.60 | 15.49 | 15.33 | 15.13 | 14.91 |
| EX3-7000   |                        |                   | 17.14                        | 18.03 | 18.70 | 19.19 | 19.53 | 19.74 | 19.84 | 19.85 | 19.78 | 19.64 | 19.44 | 19.19 | 18.90 |
| EX3-8000   |                        |                   | 19.09                        | 20.08 | 20.82 | 21.37 | 21.75 | 21.98 | 22.10 | 22.11 | 22.03 | 21.87 | 21.65 | 21.37 | 21.04 |
| EX3-9000   |                        |                   | 24.39                        | 25.65 | 26.61 | 27.30 | 27.79 | 28.09 | 28.23 | 28.24 | 28.14 | 27.94 | 27.66 | 27.30 | 26.89 |
| EX3-2000   | 39.5                   | 35                | 1.42                         | 1.52  | 1.60  | 1.66  | 1.70  | 1.73  | 1.75  | 1.76  | 1.76  | 1.75  | 1.74  | 1.72  | 1.70  |
| EX3-3000   |                        |                   | 2.97                         | 3.19  | 3.35  | 3.47  | 3.56  | 3.62  | 3.66  | 3.67  | 3.67  | 3.66  | 3.63  | 3.59  | 3.55  |
| EX3-4000   |                        |                   | 4.78                         | 5.12  | 5.39  | 5.58  | 5.72  | 5.82  | 5.88  | 5.91  | 5.91  | 5.88  | 5.84  | 5.78  | 5.70  |
| EX3-5000   |                        |                   | 7.75                         | 8.31  | 8.73  | 9.05  | 9.28  | 9.44  | 9.54  | 9.58  | 9.58  | 9.54  | 9.47  | 9.37  | 9.25  |
| EX3-6000   |                        |                   | 12.54                        | 13.44 | 14.13 | 14.64 | 15.01 | 15.27 | 15.42 | 15.50 | 15.49 | 15.43 | 15.32 | 15.16 | 14.97 |
| EX3-7000   |                        |                   | 15.89                        | 17.04 | 17.91 | 18.56 | 19.04 | 19.36 | 19.56 | 19.64 | 19.64 | 19.57 | 19.42 | 19.22 | 18.97 |
| EX3-8000   |                        |                   | 17.70                        | 18.98 | 19.95 | 20.67 | 21.20 | 21.56 | 21.78 | 21.88 | 21.88 | 21.79 | 21.63 | 21.40 | 21.13 |
| EX3-9000   |                        |                   | 22.62                        | 24.25 | 25.49 | 26.41 | 27.09 | 27.55 | 27.83 | 27.95 | 27.95 | 27.84 | 27.63 | 27.35 | 27.00 |

R-407F Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature |                   | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|------------------------|-------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | Dew Point (°C)         | Bubble Point (°C) | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
| EX3-2000   | 34.5                   | 30                | 1.27                         | 1.40  | 1.50  | 1.58  | 1.64  | 1.68  | 1.70  | 1.72  | 1.73  | 1.73  | 1.72  | 1.70  | 1.69  |
| EX3-3000   |                        |                   | 2.65                         | 2.93  | 3.14  | 3.30  | 3.42  | 3.50  | 3.56  | 3.59  | 3.61  | 3.61  | 3.59  | 3.56  | 3.53  |
| EX3-4000   |                        |                   | 4.27                         | 4.72  | 5.05  | 5.31  | 5.50  | 5.63  | 5.73  | 5.78  | 5.80  | 5.80  | 5.78  | 5.73  | 5.67  |
| EX3-5000   |                        |                   | 6.92                         | 7.65  | 8.20  | 8.61  | 8.92  | 9.14  | 9.29  | 9.38  | 9.41  | 9.41  | 9.37  | 9.29  | 9.20  |
| EX3-6000   |                        |                   | 11.19                        | 12.37 | 13.26 | 13.93 | 14.43 | 14.78 | 15.02 | 15.17 | 15.23 | 15.22 | 15.15 | 15.04 | 14.88 |
| EX3-7000   |                        |                   | 14.19                        | 15.68 | 16.81 | 17.66 | 18.29 | 18.74 | 19.05 | 19.23 | 19.31 | 19.30 | 19.21 | 19.06 | 18.86 |
| EX3-8000   |                        |                   | 15.80                        | 17.47 | 18.72 | 19.67 | 20.37 | 20.87 | 21.21 | 21.41 | 21.50 | 21.49 | 21.39 | 21.23 | 21.01 |
| EX3-9000   |                        |                   | 20.19                        | 22.32 | 23.92 | 25.13 | 26.02 | 26.67 | 27.10 | 27.36 | 27.47 | 27.46 | 27.33 | 27.12 | 26.84 |
| EX3-2000   | 30                     | 25                | 1.06                         | 1.24  | 1.37  | 1.47  | 1.55  | 1.60  | 1.64  | 1.66  | 1.68  | 1.68  | 1.68  | 1.68  | 1.66  |
| EX3-3000   |                        |                   | 2.22                         | 2.59  | 2.87  | 3.08  | 3.23  | 3.34  | 3.42  | 3.48  | 3.51  | 3.52  | 3.52  | 3.50  | 3.47  |
| EX3-4000   |                        |                   | 3.57                         | 4.17  | 4.62  | 4.95  | 5.19  | 5.38  | 5.51  | 5.59  | 5.64  | 5.66  | 5.66  | 5.63  | 5.59  |
| EX3-5000   |                        |                   | 5.79                         | 6.77  | 7.49  | 8.02  | 8.43  | 8.72  | 8.93  | 9.07  | 9.15  | 9.19  | 9.18  | 9.13  | 9.06  |
| EX3-6000   |                        |                   | 9.36                         | 10.95 | 12.11 | 12.98 | 13.63 | 14.11 | 14.45 | 14.68 | 14.81 | 14.86 | 14.84 | 14.77 | 14.65 |
| EX3-7000   |                        |                   | 11.87                        | 13.88 | 15.35 | 16.45 | 17.28 | 17.89 | 18.32 | 18.61 | 18.77 | 18.84 | 18.82 | 18.73 | 18.58 |
| EX3-8000   |                        |                   | 13.22                        | 15.46 | 17.10 | 18.32 | 19.24 | 19.92 | 20.40 | 20.72 | 20.91 | 20.98 | 20.96 | 20.86 | 20.69 |
| EX3-9000   |                        |                   | 16.89                        | 19.75 | 21.84 | 23.41 | 24.59 | 25.45 | 26.07 | 26.47 | 26.71 | 26.81 | 26.78 | 26.65 | 26.44 |
| EX3-2000   | 25                     | 20                | 0.76                         | 1.02  | 1.20  | 1.33  | 1.43  | 1.50  | 1.55  | 1.59  | 1.61  | 1.63  | 1.63  | 1.63  | 1.62  |
| EX3-3000   |                        |                   | 1.59                         | 2.14  | 2.52  | 2.79  | 2.99  | 3.14  | 3.25  | 3.32  | 3.37  | 3.40  | 3.41  | 3.41  | 3.39  |
| EX3-4000   |                        |                   | 2.55                         | 3.45  | 4.05  | 4.48  | 4.80  | 5.05  | 5.22  | 5.34  | 5.42  | 5.47  | 5.49  | 5.48  | 5.45  |
| EX3-5000   |                        |                   | 4.14                         | 5.59  | 6.56  | 7.27  | 7.79  | 8.18  | 8.47  | 8.67  | 8.80  | 8.87  | 8.90  | 8.89  | 8.84  |
| EX3-6000   |                        |                   | 6.70                         | 9.04  | 10.61 | 11.76 | 12.61 | 13.24 | 13.70 | 14.02 | 14.23 | 14.35 | 14.39 | 14.37 | 14.30 |
| EX3-7000   |                        |                   | 8.49                         | 11.46 | 13.46 | 14.90 | 15.98 | 16.78 | 17.36 | 17.77 | 18.04 | 18.20 | 18.25 | 18.22 | 18.13 |
| EX3-8000   |                        |                   | 9.46                         | 12.76 | 14.99 | 16.60 | 17.80 | 18.69 | 19.34 | 19.80 | 20.10 | 20.26 | 20.32 | 20.29 | 20.19 |
| EX3-9000   |                        |                   | 12.08                        | 16.31 | 19.15 | 21.21 | 22.74 | 23.88 | 24.71 | 25.29 | 25.68 | 25.89 | 25.97 | 25.93 | 25.79 |
| EX3-2000   | 20                     | 15                |                              |       | 0.98  | 1.16  | 1.28  | 1.38  | 1.45  | 1.50  | 1.53  | 1.55  | 1.57  | 1.57  | 1.57  |
| EX3-3000   |                        |                   |                              |       | 2.04  | 2.42  | 2.68  | 2.88  | 3.02  | 3.13  | 3.20  | 3.25  | 3.27  | 3.28  | 3.27  |
| EX3-4000   |                        |                   |                              |       | 3.29  | 3.88  | 4.31  | 4.63  | 4.86  | 5.03  | 5.15  | 5.22  | 5.26  | 5.28  | 5.27  |
| EX3-5000   |                        |                   |                              |       | 5.33  | 6.30  | 6.99  | 7.51  | 7.88  | 8.16  | 8.35  | 8.47  | 8.54  | 8.56  | 8.54  |
| EX3-6000   |                        |                   |                              |       | 8.63  | 10.19 | 11.31 | 12.14 | 12.75 | 13.19 | 13.50 | 13.70 | 13.81 | 13.84 | 13.81 |
| EX3-7000   |                        |                   |                              |       | 10.94 | 12.92 | 14.34 | 15.39 | 16.17 | 16.73 | 17.12 | 17.37 | 17.50 | 17.55 | 17.51 |
| EX3-8000   |                        |                   |                              |       | 12.18 | 14.39 | 15.97 | 17.14 | 18.01 | 18.63 | 19.06 | 19.34 | 19.49 | 19.54 | 19.50 |
| EX3-9000   |                        |                   |                              |       | 15.56 | 18.38 | 20.41 | 21.90 | 23.00 | 23.80 | 24.35 | 24.71 | 24.91 | 24.97 | 24.92 |
| EX3-2000   | 15.5                   | 10                |                              |       |       | 0.92  | 1.10  | 1.22  | 1.31  | 1.38  | 1.43  | 1.46  | 1.48  | 1.49  | 1.50  |
| EX3-3000   |                        |                   |                              |       |       | 1.93  | 2.29  | 2.56  | 2.75  | 2.89  | 2.99  | 3.06  | 3.10  | 3.12  | 3.13  |
| EX3-4000   |                        |                   |                              |       |       | 3.10  | 3.69  | 4.11  | 4.42  | 4.64  | 4.80  | 4.92  | 4.99  | 5.02  | 5.03  |
| EX3-5000   |                        |                   |                              |       |       | 5.02  | 5.99  | 6.67  | 7.17  | 7.53  | 7.79  | 7.97  | 8.09  | 8.15  | 8.16  |
| EX3-6000   |                        |                   |                              |       |       | 8.12  | 9.68  | 10.79 | 11.59 | 12.18 | 12.61 | 12.90 | 13.08 | 13.18 | 13.20 |
| EX3-7000   |                        |                   |                              |       |       | 10.30 | 12.27 | 13.68 | 14.70 | 15.45 | 15.98 | 16.35 | 16.58 | 16.71 | 16.74 |
| EX3-8000   |                        |                   |                              |       |       | 11.47 | 13.67 | 15.23 | 16.37 | 17.20 | 17.80 | 18.21 | 18.47 | 18.61 | 18.64 |
| EX3-9000   |                        |                   |                              |       |       | 14.65 | 17.47 | 19.46 | 20.92 | 21.98 | 22.74 | 23.27 | 23.60 | 23.77 | 23.82 |

R-507 Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |                             | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
| EX3-2000   | 60                          | 0.83                         | 0.84  | 0.83  | 0.82  | 0.81  | 0.79  | 0.77  | 0.74  | 0.71  | 0.68  | 0.64  | 0.60  | 0.57  |
| EX3-3000   |                             | 1.74                         | 1.75  | 1.74  | 1.72  | 1.69  | 1.65  | 1.60  | 1.54  | 1.48  | 1.41  | 1.34  | 1.26  | 1.18  |
| EX3-4000   |                             | 2.81                         | 2.82  | 2.81  | 2.77  | 2.72  | 2.66  | 2.58  | 2.48  | 2.38  | 2.27  | 2.16  | 2.03  | 1.90  |
| EX3-5000   |                             | 4.55                         | 4.57  | 4.55  | 4.50  | 4.41  | 4.31  | 4.18  | 4.03  | 3.86  | 3.69  | 3.49  | 3.30  | 3.09  |
| EX3-6000   |                             | 7.36                         | 7.39  | 7.36  | 7.27  | 7.14  | 6.96  | 6.75  | 6.51  | 6.24  | 5.96  | 5.65  | 5.33  | 4.99  |
| EX3-7000   |                             | 9.33                         | 9.37  | 9.33  | 9.22  | 9.05  | 8.83  | 8.56  | 8.26  | 7.92  | 7.55  | 7.16  | 6.76  | 6.33  |
| EX3-8000   |                             | 10.39                        | 10.43 | 10.39 | 10.27 | 10.08 | 9.83  | 9.54  | 9.20  | 8.82  | 8.41  | 7.98  | 7.52  | 7.05  |
| EX3-9000   |                             | 13.27                        | 13.33 | 13.27 | 13.12 | 12.88 | 12.56 | 12.18 | 11.75 | 11.27 | 10.75 | 10.19 | 9.61  | 9.01  |
| EX3-2000   | 55                          | 0.90                         | 0.91  | 0.92  | 0.91  | 0.91  | 0.89  | 0.87  | 0.85  | 0.82  | 0.79  | 0.76  | 0.73  | 0.69  |
| EX3-3000   |                             | 1.88                         | 1.91  | 1.92  | 1.91  | 1.89  | 1.86  | 1.83  | 1.78  | 1.72  | 1.66  | 1.59  | 1.52  | 1.45  |
| EX3-4000   |                             | 3.02                         | 3.07  | 3.09  | 3.08  | 3.05  | 3.00  | 2.94  | 2.86  | 2.77  | 2.67  | 2.56  | 2.45  | 2.33  |
| EX3-5000   |                             | 4.90                         | 4.98  | 5.00  | 4.99  | 4.94  | 4.86  | 4.76  | 4.64  | 4.49  | 4.33  | 4.16  | 3.97  | 3.78  |
| EX3-6000   |                             | 7.93                         | 8.04  | 8.09  | 8.07  | 7.99  | 7.86  | 7.70  | 7.50  | 7.26  | 7.00  | 6.72  | 6.43  | 6.11  |
| EX3-7000   |                             | 10.05                        | 10.20 | 10.26 | 10.23 | 10.13 | 9.97  | 9.76  | 9.50  | 9.21  | 8.88  | 8.53  | 8.15  | 7.75  |
| EX3-8000   |                             | 11.19                        | 11.36 | 11.42 | 11.39 | 11.28 | 11.11 | 10.87 | 10.59 | 10.26 | 9.89  | 9.50  | 9.07  | 8.63  |
| EX3-9000   |                             | 14.30                        | 14.51 | 14.59 | 14.55 | 14.41 | 14.19 | 13.89 | 13.52 | 13.10 | 12.64 | 12.13 | 11.59 | 11.02 |
| EX3-2000   | 50                          | 0.93                         | 0.95  | 0.97  | 0.97  | 0.97  | 0.96  | 0.95  | 0.93  | 0.91  | 0.89  | 0.86  | 0.83  | 0.79  |
| EX3-3000   |                             | 1.94                         | 1.99  | 2.02  | 2.04  | 2.03  | 2.02  | 1.99  | 1.95  | 1.90  | 1.85  | 1.79  | 1.73  | 1.66  |
| EX3-4000   |                             | 3.12                         | 3.21  | 3.25  | 3.27  | 3.27  | 3.24  | 3.20  | 3.14  | 3.06  | 2.98  | 2.88  | 2.78  | 2.67  |
| EX3-5000   |                             | 5.06                         | 5.20  | 5.28  | 5.31  | 5.30  | 5.26  | 5.19  | 5.09  | 4.97  | 4.83  | 4.67  | 4.51  | 4.33  |
| EX3-6000   |                             | 8.18                         | 8.40  | 8.53  | 8.59  | 8.57  | 8.50  | 8.38  | 8.23  | 8.03  | 7.81  | 7.56  | 7.28  | 6.99  |
| EX3-7000   |                             | 10.38                        | 10.66 | 10.82 | 10.89 | 10.87 | 10.78 | 10.63 | 10.43 | 10.18 | 9.90  | 9.58  | 9.24  | 8.87  |
| EX3-8000   |                             | 11.56                        | 11.87 | 12.05 | 12.13 | 12.11 | 12.01 | 11.84 | 11.62 | 11.34 | 11.02 | 10.67 | 10.29 | 9.88  |
| EX3-9000   |                             | 14.76                        | 15.16 | 15.39 | 15.49 | 15.46 | 15.34 | 15.13 | 14.84 | 14.49 | 14.08 | 13.63 | 13.14 | 12.62 |
| EX3-2000   | 45                          | 0.93                         | 0.96  | 0.99  | 1.01  | 1.01  | 1.01  | 1.00  | 0.99  | 0.97  | 0.95  | 0.93  | 0.90  | 0.87  |
| EX3-3000   |                             | 1.93                         | 2.02  | 2.07  | 2.10  | 2.12  | 2.12  | 2.10  | 2.07  | 2.04  | 1.99  | 1.94  | 1.88  | 1.82  |
| EX3-4000   |                             | 3.11                         | 3.24  | 3.33  | 3.38  | 3.41  | 3.40  | 3.38  | 3.34  | 3.28  | 3.21  | 3.12  | 3.03  | 2.93  |
| EX3-5000   |                             | 5.05                         | 5.26  | 5.40  | 5.49  | 5.52  | 5.52  | 5.48  | 5.41  | 5.32  | 5.20  | 5.07  | 4.92  | 4.75  |
| EX3-6000   |                             | 8.16                         | 8.50  | 8.73  | 8.87  | 8.93  | 8.92  | 8.86  | 8.75  | 8.59  | 8.41  | 8.19  | 7.95  | 7.69  |
| EX3-7000   |                             | 10.34                        | 10.78 | 11.07 | 11.25 | 11.32 | 11.31 | 11.23 | 11.09 | 10.90 | 10.66 | 10.39 | 10.08 | 9.75  |
| EX3-8000   |                             | 11.52                        | 12.01 | 12.33 | 12.53 | 12.61 | 12.60 | 12.51 | 12.35 | 12.14 | 11.87 | 11.57 | 11.23 | 10.86 |
| EX3-9000   |                             | 14.72                        | 15.34 | 15.75 | 16.00 | 16.11 | 16.09 | 15.98 | 15.78 | 15.50 | 15.17 | 14.78 | 14.34 | 13.87 |
| EX3-2000   | 40                          | 0.89                         | 0.95  | 0.99  | 1.01  | 1.03  | 1.04  | 1.04  | 1.03  | 1.02  | 1.00  | 0.98  | 0.96  | 0.93  |
| EX3-3000   |                             | 1.86                         | 1.98  | 2.06  | 2.12  | 2.15  | 2.17  | 2.17  | 2.15  | 2.13  | 2.09  | 2.05  | 2.00  | 1.95  |
| EX3-4000   |                             | 2.99                         | 3.18  | 3.32  | 3.41  | 3.46  | 3.49  | 3.49  | 3.47  | 3.42  | 3.37  | 3.30  | 3.22  | 3.13  |
| EX3-5000   |                             | 4.86                         | 5.16  | 5.38  | 5.53  | 5.62  | 5.66  | 5.65  | 5.62  | 5.55  | 5.46  | 5.35  | 5.22  | 5.08  |
| EX3-6000   |                             | 7.85                         | 8.35  | 8.70  | 8.94  | 9.08  | 9.14  | 9.14  | 9.08  | 8.98  | 8.83  | 8.65  | 8.45  | 8.21  |
| EX3-7000   |                             | 9.95                         | 10.58 | 11.03 | 11.33 | 11.51 | 11.59 | 11.59 | 11.52 | 11.39 | 11.20 | 10.97 | 10.71 | 10.41 |
| EX3-8000   |                             | 11.09                        | 11.79 | 12.28 | 12.62 | 12.82 | 12.91 | 12.91 | 12.83 | 12.68 | 12.48 | 12.22 | 11.93 | 11.60 |
| EX3-9000   |                             | 14.16                        | 15.06 | 15.69 | 16.12 | 16.38 | 16.50 | 16.49 | 16.39 | 16.20 | 15.94 | 15.61 | 15.24 | 14.82 |
| EX3-2000   | 35                          | 0.82                         | 0.90  | 0.96  | 1.00  | 1.02  | 1.04  | 1.05  | 1.05  | 1.04  | 1.03  | 1.02  | 1.00  | 0.97  |
| EX3-3000   |                             | 1.71                         | 1.88  | 2.00  | 2.08  | 2.14  | 2.18  | 2.19  | 2.19  | 2.18  | 2.16  | 2.12  | 2.08  | 2.04  |
| EX3-4000   |                             | 2.76                         | 3.02  | 3.22  | 3.35  | 3.45  | 3.50  | 3.53  | 3.53  | 3.51  | 3.47  | 3.42  | 3.35  | 3.28  |
| EX3-5000   |                             | 4.47                         | 4.90  | 5.22  | 5.44  | 5.59  | 5.68  | 5.72  | 5.72  | 5.69  | 5.63  | 5.54  | 5.44  | 5.31  |
| EX3-6000   |                             | 7.23                         | 7.93  | 8.43  | 8.79  | 9.03  | 9.18  | 9.25  | 9.25  | 9.20  | 9.10  | 8.96  | 8.79  | 8.59  |
| EX3-7000   |                             | 9.17                         | 10.05 | 10.69 | 11.15 | 11.46 | 11.64 | 11.73 | 11.73 | 11.67 | 11.54 | 11.36 | 11.14 | 10.89 |
| EX3-8000   |                             | 10.21                        | 11.20 | 11.91 | 12.42 | 12.76 | 12.97 | 13.06 | 13.07 | 12.99 | 12.85 | 12.66 | 12.41 | 12.13 |
| EX3-9000   |                             | 13.05                        | 14.30 | 15.21 | 15.86 | 16.30 | 16.56 | 16.69 | 16.69 | 16.60 | 16.42 | 16.17 | 15.86 | 15.50 |

R-507 Extended Capacities (kWatts) - EX3 Series

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |                             | 15                           | 10    | 5     | 0     | -5    | -10   | -15   | -20   | -25   | -30   | -35   | -40   | -45   |
| EX3-2000   | 30                          | 0.70                         | 0.82  | 0.90  | 0.96  | 1.00  | 1.02  | 1.04  | 1.05  | 1.05  | 1.05  | 1.03  | 1.02  | 1.00  |
| EX3-3000   |                             | 1.47                         | 1.71  | 1.88  | 2.00  | 2.09  | 2.14  | 2.18  | 2.20  | 2.20  | 2.19  | 2.16  | 2.13  | 2.09  |
| EX3-4000   |                             | 2.37                         | 2.75  | 3.02  | 3.22  | 3.35  | 3.45  | 3.50  | 3.53  | 3.53  | 3.52  | 3.48  | 3.43  | 3.37  |
| EX3-5000   |                             | 3.85                         | 4.46  | 4.90  | 5.21  | 5.44  | 5.59  | 5.68  | 5.73  | 5.73  | 5.70  | 5.64  | 5.56  | 5.46  |
| EX3-6000   |                             | 6.22                         | 7.21  | 7.92  | 8.43  | 8.79  | 9.04  | 9.19  | 9.26  | 9.27  | 9.22  | 9.12  | 8.99  | 8.83  |
| EX3-7000   |                             | 7.88                         | 9.14  | 10.04 | 10.69 | 11.15 | 11.46 | 11.65 | 11.74 | 11.75 | 11.69 | 11.57 | 11.40 | 11.19 |
| EX3-8000   |                             | 8.78                         | 10.18 | 11.18 | 11.91 | 12.42 | 12.77 | 12.98 | 13.08 | 13.09 | 13.02 | 12.89 | 12.70 | 12.46 |
| EX3-9000   |                             | 11.22                        | 13.01 | 14.29 | 15.21 | 15.86 | 16.31 | 16.58 | 16.71 | 16.72 | 16.63 | 16.46 | 16.22 | 15.92 |
| EX3-2000   | 25                          | 0.52                         | 0.69  | 0.81  | 0.89  | 0.95  | 0.99  | 1.02  | 1.03  | 1.04  | 1.04  | 1.04  | 1.03  | 1.01  |
| EX3-3000   |                             | 1.08                         | 1.45  | 1.69  | 1.86  | 1.98  | 2.07  | 2.12  | 2.16  | 2.18  | 2.18  | 2.17  | 2.15  | 2.12  |
| EX3-4000   |                             | 1.74                         | 2.33  | 2.71  | 2.99  | 3.18  | 3.32  | 3.42  | 3.47  | 3.50  | 3.51  | 3.49  | 3.45  | 3.41  |
| EX3-5000   |                             | 2.83                         | 3.77  | 4.40  | 4.84  | 5.16  | 5.39  | 5.54  | 5.63  | 5.68  | 5.69  | 5.66  | 5.60  | 5.52  |
| EX3-6000   |                             | 4.57                         | 6.10  | 7.11  | 7.83  | 8.35  | 8.71  | 8.96  | 9.11  | 9.18  | 9.19  | 9.15  | 9.06  | 8.93  |
| EX3-7000   |                             | 5.80                         | 7.73  | 9.02  | 9.93  | 10.58 | 11.05 | 11.36 | 11.55 | 11.64 | 11.66 | 11.60 | 11.48 | 11.32 |
| EX3-8000   |                             | 6.46                         | 8.61  | 10.04 | 11.06 | 11.79 | 12.30 | 12.65 | 12.87 | 12.97 | 12.98 | 12.92 | 12.79 | 12.61 |
| EX3-9000   |                             | 8.25                         | 11.00 | 12.83 | 14.12 | 15.06 | 15.71 | 16.16 | 16.43 | 16.57 | 16.58 | 16.50 | 16.34 | 16.11 |
| EX3-2000   | 20                          |                              | 0.49  | 0.67  | 0.79  | 0.87  | 0.93  | 0.97  | 1.00  | 1.01  | 1.02  | 1.02  | 1.02  | 1.01  |
| EX3-3000   |                             |                              | 1.03  | 1.40  | 1.65  | 1.82  | 1.94  | 2.03  | 2.09  | 2.12  | 2.14  | 2.14  | 2.13  | 2.11  |
| EX3-4000   |                             |                              | 1.65  | 2.25  | 2.65  | 2.92  | 3.12  | 3.26  | 3.36  | 3.41  | 3.44  | 3.45  | 3.43  | 3.40  |
| EX3-5000   |                             |                              | 2.67  | 3.65  | 4.29  | 4.74  | 5.06  | 5.29  | 5.44  | 5.54  | 5.58  | 5.59  | 5.56  | 5.51  |
| EX3-6000   |                             |                              | 4.32  | 5.91  | 6.94  | 7.67  | 8.18  | 8.55  | 8.80  | 8.95  | 9.03  | 9.04  | 8.99  | 8.91  |
| EX3-7000   |                             |                              | 5.48  | 7.49  | 8.80  | 9.72  | 10.38 | 10.84 | 11.16 | 11.35 | 11.44 | 11.46 | 11.41 | 11.30 |
| EX3-8000   |                             |                              | 6.11  | 8.34  | 9.80  | 10.83 | 11.56 | 12.08 | 12.43 | 12.64 | 12.75 | 12.76 | 12.70 | 12.58 |
| EX3-9000   |                             |                              | 7.80  | 10.66 | 12.52 | 13.83 | 14.77 | 15.43 | 15.87 | 16.15 | 16.28 | 16.30 | 16.23 | 16.07 |
| EX3-2000   | 15                          |                              |       | 0.45  | 0.64  | 0.76  | 0.84  | 0.90  | 0.94  | 0.97  | 0.99  | 1.00  | 1.00  | 0.99  |
| EX3-3000   |                             |                              |       | 0.95  | 1.34  | 1.59  | 1.76  | 1.89  | 1.97  | 2.03  | 2.07  | 2.08  | 2.09  | 2.08  |
| EX3-4000   |                             |                              |       | 1.52  | 2.15  | 2.56  | 2.84  | 3.03  | 3.17  | 3.27  | 3.33  | 3.35  | 3.36  | 3.34  |
| EX3-5000   |                             |                              |       | 2.47  | 3.49  | 4.14  | 4.60  | 4.92  | 5.15  | 5.30  | 5.39  | 5.44  | 5.45  | 5.42  |
| EX3-6000   |                             |                              |       | 3.99  | 5.65  | 6.70  | 7.43  | 7.95  | 8.32  | 8.57  | 8.72  | 8.79  | 8.81  | 8.77  |
| EX3-7000   |                             |                              |       | 5.06  | 7.16  | 8.50  | 9.42  | 10.09 | 10.55 | 10.86 | 11.05 | 11.15 | 11.17 | 11.12 |
| EX3-8000   |                             |                              |       | 5.64  | 7.98  | 9.46  | 10.50 | 11.23 | 11.75 | 12.10 | 12.31 | 12.42 | 12.44 | 12.38 |
| EX3-9000   |                             |                              |       | 7.20  | 10.19 | 12.09 | 13.41 | 14.35 | 15.01 | 15.45 | 15.73 | 15.86 | 15.89 | 15.82 |
| EX3-2000   | 10                          |                              |       |       | 0.40  | 0.60  | 0.72  | 0.81  | 0.87  | 0.91  | 0.94  | 0.95  | 0.96  | 0.96  |
| EX3-3000   |                             |                              |       |       | 0.85  | 1.26  | 1.52  | 1.69  | 1.81  | 1.90  | 1.96  | 2.00  | 2.01  | 2.02  |
| EX3-4000   |                             |                              |       |       | 1.36  | 2.03  | 2.44  | 2.72  | 2.92  | 3.06  | 3.15  | 3.21  | 3.24  | 3.24  |
| EX3-5000   |                             |                              |       |       | 2.21  | 3.29  | 3.95  | 4.41  | 4.73  | 4.96  | 5.11  | 5.20  | 5.25  | 5.26  |
| EX3-6000   |                             |                              |       |       | 3.57  | 5.32  | 6.39  | 7.13  | 7.65  | 8.02  | 8.26  | 8.41  | 8.49  | 8.51  |
| EX3-7000   |                             |                              |       |       | 4.52  | 6.74  | 8.10  | 9.04  | 9.70  | 10.17 | 10.48 | 10.67 | 10.77 | 10.79 |
| EX3-8000   |                             |                              |       |       | 5.04  | 7.51  | 9.03  | 10.07 | 10.81 | 11.32 | 11.67 | 11.88 | 11.99 | 12.01 |
| EX3-9000   |                             |                              |       |       | 6.44  | 9.59  | 11.53 | 12.87 | 13.81 | 14.47 | 14.91 | 15.18 | 15.32 | 15.34 |

**R-410A Extended Capacities (Tons) - EX4-8 Series, as expansion and liquid injection valves**

The following tables provide the capacity of valves at different conditions considering 20 psi pressure drop through liquid line:

| Valve Type | Condensing Temperature (°F) | Evaporating Temperature (°F) |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                             | 60                           | 50  | 40  | 30  | 20  | 10  | 0   | -10 | -20 | -30 | -40 | -50 |
| EX4        | 140                         | 5                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |                             | 15                           | 15  | 16  | 16  | 16  | 16  | 16  | 16  | 15  | 15  | 15  | 15  |
| EX6        |                             | 36                           | 37  | 38  | 38  | 38  | 38  | 38  | 38  | 37  | 37  | 36  | 35  |
| EX7        |                             | 99                           | 102 | 104 | 105 | 105 | 105 | 105 | 104 | 103 | 101 | 99  | 97  |
| EX8        |                             | 265                          | 271 | 277 | 279 | 281 | 281 | 280 | 277 | 274 | 269 | 264 | 258 |
| EX4        | 130                         | 5                            | 5   | 5   | 5   | 6   | 6   | 6   | 6   | 5   | 5   | 5   | 5   |
| EX5        |                             | 15                           | 16  | 16  | 16  | 17  | 17  | 17  | 17  | 16  | 16  | 16  | 16  |
| EX6        |                             | 37                           | 38  | 39  | 40  | 40  | 40  | 40  | 40  | 40  | 39  | 39  | 38  |
| EX7        |                             | 101                          | 105 | 107 | 109 | 110 | 110 | 111 | 110 | 109 | 108 | 106 | 104 |
| EX8        |                             | 269                          | 279 | 285 | 292 | 293 | 295 | 296 | 294 | 291 | 288 | 283 | 277 |
| EX4        | 120                         | 5                            | 5   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   |
| EX5        |                             | 15                           | 16  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 17  |
| EX6        |                             | 37                           | 39  | 40  | 41  | 42  | 42  | 42  | 42  | 42  | 42  | 41  | 40  |
| EX7        |                             | 101                          | 106 | 110 | 112 | 114 | 115 | 116 | 116 | 116 | 114 | 113 | 111 |
| EX8        |                             | 270                          | 283 | 293 | 299 | 305 | 308 | 309 | 310 | 309 | 305 | 301 | 297 |
| EX4        | 110                         | 5                            | 5   | 5   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   |
| EX5        |                             | 15                           | 15  | 16  | 17  | 17  | 17  | 18  | 18  | 18  | 17  | 17  | 17  |
| EX6        |                             | 35                           | 37  | 39  | 40  | 42  | 42  | 43  | 43  | 43  | 42  | 42  | 41  |
| EX7        |                             | 96                           | 102 | 107 | 111 | 114 | 115 | 117 | 118 | 117 | 116 | 115 | 113 |
| EX8        |                             | 257                          | 273 | 286 | 297 | 305 | 308 | 313 | 314 | 313 | 309 | 308 | 303 |
| EX4        | 100                         | 5                            | 5   | 5   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   |
| EX5        |                             | 14                           | 15  | 16  | 17  | 17  | 17  | 18  | 18  | 18  | 18  | 18  | 18  |
| EX6        |                             | 33                           | 36  | 38  | 40  | 41  | 42  | 43  | 43  | 43  | 43  | 43  | 42  |
| EX7        |                             | 90                           | 98  | 105 | 110 | 113 | 116 | 118 | 119 | 119 | 118 | 118 | 116 |
| EX8        |                             | 240                          | 261 | 281 | 294 | 301 | 308 | 315 | 316 | 316 | 315 | 316 | 311 |
| EX4        | 90                          | 4                            | 4   | 5   | 5   | 5   | 6   | 6   | 6   | 6   | 6   | 6   | 6   |
| EX5        |                             | 12                           | 13  | 15  | 16  | 16  | 17  | 17  | 18  | 18  | 18  | 18  | 18  |
| EX6        |                             | 28                           | 33  | 36  | 38  | 40  | 41  | 42  | 42  | 43  | 43  | 43  | 43  |
| EX7        |                             | 78                           | 89  | 98  | 104 | 109 | 112 | 116 | 116 | 118 | 118 | 118 | 117 |
| EX8        |                             | 207                          | 239 | 260 | 277 | 290 | 300 | 308 | 311 | 314 | 314 | 315 | 313 |
| EX4        | 80                          | 3                            | 4   | 4   | 5   | 5   | 5   | 6   | 6   | 6   | 6   | 6   | 6   |
| EX5        |                             | 9                            | 12  | 13  | 15  | 15  | 16  | 17  | 17  | 17  | 17  | 17  | 17  |
| EX6        |                             | 22                           | 28  | 32  | 35  | 37  | 39  | 40  | 41  | 42  | 42  | 42  | 42  |
| EX7        |                             | 61                           | 77  | 87  | 97  | 103 | 107 | 111 | 113 | 114 | 116 | 115 | 114 |
| EX8        |                             | 163                          | 204 | 233 | 257 | 274 | 286 | 297 | 300 | 305 | 309 | 308 | 305 |
| EX4        | 70                          | 2                            | 3   | 4   | 4   | 5   | 5   | 5   | 5   | 6   | 6   | 6   | 6   |
| EX5        |                             | 5                            | 9   | 11  | 13  | 14  | 15  | 16  | 16  | 17  | 17  | 17  | 17  |
| EX6        |                             | 11                           | 21  | 27  | 31  | 34  | 37  | 39  | 39  | 40  | 41  | 41  | 41  |
| EX7        |                             | 31                           | 59  | 75  | 86  | 94  | 101 | 106 | 108 | 111 | 112 | 114 | 113 |
| EX8        |                             | 84                           | 157 | 201 | 230 | 251 | 270 | 284 | 289 | 295 | 300 | 303 | 301 |
| EX4        | 60                          | -                            | 1   | 3   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |                             | -                            | 4   | 8   | 11  | 13  | 14  | 15  | 15  | 16  | 16  | 16  | 16  |
| EX6        |                             | -                            | 10  | 20  | 26  | 30  | 33  | 36  | 37  | 38  | 39  | 40  | 39  |
| EX7        |                             | -                            | 27  | 56  | 72  | 84  | 92  | 98  | 102 | 105 | 108 | 109 | 109 |
| EX8        |                             | -                            | 72  | 150 | 192 | 224 | 245 | 262 | 273 | 281 | 287 | 291 | 290 |
| EX4        | 50                          | -                            | -   | 1   | 3   | 3   | 4   | 4   | 5   | 5   | 5   | 5   | 5   |
| EX5        |                             | -                            | -   | 3   | 8   | 10  | 12  | 14  | 14  | 15  | 15  | 16  | 16  |
| EX6        |                             | -                            | -   | 8   | 19  | 25  | 29  | 33  | 35  | 36  | 37  | 38  | 38  |
| EX7        |                             | -                            | -   | 21  | 53  | 69  | 80  | 90  | 95  | 99  | 102 | 104 | 104 |
| EX8        |                             | -                            | -   | 57  | 143 | 185 | 214 | 239 | 254 | 265 | 272 | 278 | 277 |

**R-407C Extended Capacities (Tons) - EX4-8 Series, as expansion and liquid injection valves**

The following tables provide the capacity of valves at different conditions considering 20 psi pressure drop through liquid line:

| Valve Type | Condensing Temperature<br>Bubble Point (°F) | Evaporating Temperature (°F) |     |     |     |     |     |     |     |
|------------|---|------------------------------|-----|-----|-----|-----|-----|-----|-----|
|            |   | 60                           | 50  | 40  | 30  | 20  | 10  | 0   | -10 |
| EX4        | 140   | 5                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |   | 14                           | 15  | 15  | 15  | 15  | 15  | 14  | 14  |
| EX6        |   | 34                           | 35  | 35  | 35  | 35  | 35  | 34  | 33  |
| EX7        |   | 95                           | 97  | 97  | 97  | 96  | 95  | 94  | 92  |
| EX8        |   | 253                          | 257 | 258 | 259 | 256 | 255 | 250 | 244 |
| EX4        | 130   | 5                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |   | 15                           | 15  | 15  | 15  | 15  | 15  | 15  | 14  |
| EX6        |   | 35                           | 35  | 36  | 36  | 36  | 35  | 35  | 34  |
| EX7        |   | 95                           | 96  | 98  | 98  | 98  | 97  | 96  | 94  |
| EX8        |   | 253                          | 257 | 261 | 261 | 261 | 260 | 256 | 252 |
| EX4        | 120   | 5                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |   | 14                           | 15  | 15  | 15  | 15  | 15  | 15  | 15  |
| EX6        |   | 34                           | 35  | 36  | 36  | 36  | 36  | 36  | 36  |
| EX7        |   | 93                           | 96  | 99  | 99  | 99  | 100 | 99  | 98  |
| EX8        |   | 249                          | 256 | 264 | 265 | 265 | 266 | 264 | 261 |
| EX4        | 110   | 4                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |   | 14                           | 14  | 15  | 15  | 15  | 15  | 15  | 15  |
| EX6        |   | 33                           | 34  | 35  | 35  | 36  | 36  | 36  | 35  |
| EX7        |   | 90                           | 93  | 96  | 97  | 99  | 99  | 99  | 98  |
| EX8        |   | 239                          | 248 | 255 | 260 | 263 | 264 | 263 | 260 |
| EX4        | 100   | 4                            | 4   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |   | 13                           | 14  | 14  | 15  | 15  | 15  | 15  | 15  |
| EX6        |   | 30                           | 32  | 34  | 35  | 35  | 36  | 36  | 36  |
| EX7        |   | 84                           | 89  | 94  | 96  | 98  | 9   | 99  | 98  |
| EX8        |   | 224                          | 239 | 250 | 256 | 260 | 263 | 254 | 262 |
| EX4        | 90  | 4                            | 4   | 4   | 5   | 5   | 5   | 5   | 5   |
| EX5        |   | 11                           | 13  | 13  | 14  | 14  | 15  | 15  | 15  |
| EX6        |   | 27                           | 30  | 32  | 33  | 34  | 35  | 35  | 35  |
| EX7        |   | 75                           | 83  | 87  | 92  | 94  | 96  | 97  | 96  |
| EX8        |   | 201                          | 220 | 233 | 244 | 250 | 256 | 259 | 257 |
| EX4        | 80  | 3                            | 4   | 4   | 4   | 4   | 5   | 5   | 5   |
| EX5        |   | 10                           | 11  | 12  | 13  | 13  | 14  | 14  | 14  |
| EX6        |   | 23                           | 26  | 29  | 31  | 32  | 33  | 34  | 34  |
| EX7        |   | 63                           | 73  | 80  | 85  | 88  | 91  | 93  | 93  |
| EX8        |   | 169                          | 193 | 212 | 227 | 235 | 243 | 247 | 248 |
| EX4        | 70  | 2                            | 3   | 4   | 4   | 4   | 4   | 4   | 4   |
| EX5        |   | 7                            | 9   | 11  | 12  | 13  | 13  | 14  | 14  |
| EX6        |   | 17                           | 22  | 26  | 28  | 30  | 31  | 32  | 33  |
| EX7        |   | 47                           | 61  | 71  | 77  | 83  | 87  | 89  | 90  |
| EX8        |   | 125                          | 164 | 190 | 206 | 220 | 231 | 236 | 239 |
| EX4        | 60  | 0                            | 2   | 3   | 3   | 4   | 4   | 4   | 4   |
| EX5        |   | 2                            | 7   | 9   | 10  | 11  | 12  | 13  | 13  |
| EX6        |   | 4                            | 16  | 21  | 24  | 27  | 29  | 30  | 31  |
| EX7        |   | 10                           | 43  | 58  | 67  | 74  | 79  | 82  | 85  |
| EX8        |   | 26                           | 115 | 154 | 179 | 197 | 211 | 219 | 225 |
| EX4        | 50  | -                            | -   | 2   | 3   | 3   | 4   | 4   | 4   |
| EX5        |   | -                            | -   | 6   | 8   | 10  | 11  | 12  | 12  |
| EX6        |   | -                            | -   | 15  | 20  | 23  | 26  | 27  | 29  |
| EX7        |   | -                            | -   | 40  | 55  | 64  | 70  | 75  | 79  |
| EX8        |   | --                           | -   | 107 | 146 | 170 | 187 | 201 | 210 |

**R-22 Extended Capacities (Tons) - EX4-8 Series, as expansion and liquid injection valves**

The following tables provide the capacity of valves at different conditions considering 20 psi pressure drop through liquid line:

| Valve Type | Condensing Temperature (°F) | Evaporating Temperature (°F) |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                             | 60                           | 50  | 40  | 30  | 20  | 10  | 0   | -10 | -20 | -30 | -40 | -50 |
| EX4        | 140                         | 5                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |                             | 15                           | 15  | 15  | 16  | 16  | 16  | 16  | 15  | 15  | 15  | 15  | 15  |
| EX6        |                             | 35                           | 36  | 37  | 37  | 38  | 38  | 37  | 37  | 37  | 36  | 36  | 35  |
| EX7        |                             | 97                           | 100 | 101 | 102 | 103 | 104 | 103 | 102 | 102 | 100 | 98  | 96  |
| EX8        |                             | 260                          | 266 | 270 | 273 | 275 | 276 | 272 | 271 | 266 | 262 | 262 | 257 |
| EX4        | 130                         | 5                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |                             | 14                           | 15  | 15  | 15  | 16  | 16  | 16  | 15  | 15  | 15  | 15  | 15  |
| EX6        |                             | 34                           | 35  | 36  | 37  | 37  | 37  | 37  | 37  | 37  | 37  | 36  | 36  |
| EX7        |                             | 94                           | 97  | 100 | 101 | 102 | 103 | 102 | 102 | 101 | 101 | 99  | 98  |
| EX8        |                             | 251                          | 258 | 266 | 270 | 273 | 274 | 273 | 273 | 270 | 268 | 264 | 260 |
| EX4        | 120                         | 4                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |                             | 14                           | 14  | 15  | 15  | 15  | 15  | 16  | 15  | 15  | 15  | 15  | 15  |
| EX6        |                             | 33                           | 34  | 35  | 36  | 37  | 37  | 37  | 37  | 37  | 37  | 37  | 36  |
| EX7        |                             | 90                           | 94  | 97  | 99  | 100 | 102 | 103 | 102 | 102 | 101 | 100 | 99  |
| EX8        |                             | 240                          | 250 | 259 | 264 | 268 | 272 | 274 | 272 | 271 | 270 | 268 | 263 |
| EX4        | 110                         | 4                            | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |                             | 12                           | 13  | 14  | 14  | 15  | 15  | 15  | 15  | 15  | 15  | 15  | 15  |
| EX6        |                             | 30                           | 32  | 34  | 34  | 35  | 36  | 36  | 36  | 37  | 36  | 36  | 36  |
| EX7        |                             | 82                           | 88  | 92  | 95  | 98  | 99  | 100 | 100 | 101 | 99  | 99  | 98  |
| EX8        |                             | 219                          | 234 | 246 | 253 | 260 | 263 | 266 | 266 | 268 | 265 | 263 | 261 |
| EX4        | 100                         | 4                            | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |                             | 11                           | 12  | 13  | 14  | 14  | 15  | 15  | 15  | 15  | 15  | 15  | 15  |
| EX6        |                             | 27                           | 29  | 31  | 33  | 34  | 35  | 35  | 36  | 36  | 36  | 35  | 35  |
| EX7        |                             | 74                           | 81  | 87  | 91  | 93  | 96  | 97  | 98  | 98  | 98  | 98  | 97  |
| EX8        |                             | 197                          | 216 | 231 | 242 | 249 | 256 | 259 | 263 | 263 | 262 | 260 | 258 |
| EX4        | 90                          | 3                            | 4   | 4   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX5        |                             | 9                            | 11  | 12  | 13  | 13  | 14  | 14  | 14  | 14  | 14  | 14  | 14  |
| EX6        |                             | 22                           | 26  | 29  | 31  | 32  | 33  | 34  | 34  | 35  | 35  | 35  | 34  |
| EX7        |                             | 61                           | 71  | 78  | 84  | 87  | 91  | 93  | 94  | 95  | 95  | 95  | 94  |
| EX8        |                             | 163                          | 190 | 209 | 224 | 233 | 242 | 249 | 251 | 255 | 254 | 253 | 251 |
| EX4        | 80                          | 2                            | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 5   | 5   |
| EX5        |                             | 7                            | 9   | 10  | 11  | 12  | 13  | 13  | 14  | 14  | 14  | 14  | 14  |
| EX6        |                             | 16                           | 21  | 25  | 27  | 29  | 30  | 32  | 33  | 33  | 33  | 33  | 33  |
| EX7        |                             | 44                           | 58  | 68  | 75  | 81  | 84  | 87  | 89  | 90  | 91  | 91  | 91  |
| EX8        |                             | 117                          | 156 | 182 | 201 | 215 | 224 | 233 | 239 | 240 | 243 | 243 | 241 |
| EX4        | 70                          | -                            | 2   | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   |
| EX5        |                             | -                            | 6   | 8   | 10  | 11  | 12  | 12  | 13  | 13  | 13  | 13  | 13  |
| EX6        |                             | -                            | 15  | 20  | 24  | 26  | 28  | 30  | 31  | 31  | 32  | 32  | 32  |
| EX7        |                             | -                            | 40  | 55  | 65  | 72  | 77  | 81  | 84  | 85  | 87  | 88  | 87  |
| EX8        |                             | -                            | 108 | 147 | 173 | 191 | 205 | 217 | 224 | 227 | 231 | 234 | 233 |
| EX4        | 60                          | -                            | -   | 2   | 3   | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 4   |
| EX5        |                             | -                            | -   | 6   | 8   | 9   | 10  | 11  | 12  | 12  | 12  | 12  | 12  |
| EX6        |                             | -                            | -   | 13  | 19  | 22  | 25  | 27  | 28  | 29  | 29  | 30  | 30  |
| EX7        |                             | -                            | -   | 36  | 51  | 61  | 68  | 74  | 76  | 79  | 81  | 82  | 82  |
| EX8        |                             | -                            | -   | 97  | 137 | 163 | 182 | 196 | 204 | 211 | 216 | 219 | 219 |
| EX4        | 50                          | -                            | -   | -   | 2   | 2   | 3   | 3   | 3   | 4   | 4   | 4   | 4   |
| EX5        |                             | -                            | -   | -   | 5   | 7   | 9   | 10  | 11  | 11  | 11  | 12  | 12  |
| EX6        |                             | -                            | -   | -   | 11  | 17  | 21  | 23  | 25  | 26  | 27  | 28  | 28  |
| EX7        |                             | -                            | -   | -   | 31  | 47  | 57  | 65  | 69  | 73  | 74  | 76  | 77  |
| EX8        |                             | -                            | -   | -   | 83  | 126 | 152 | 172 | 185 | 194 | 199 | 203 | 206 |

**R-134a Extended Capacities (Tons) - EX4-8 Series, as expansion and liquid injection valves**

The following tables provide the capacity of valves at different conditions considering 20 psi pressure drop through liquid line:

| Valve Type | Condensing Temperature (°F) | Evaporating Temperature (°F) |     |     |     |     |     |     |     |     |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                             | 60                           | 50  | 40  | 30  | 20  | 10  | 0   | -10 | -20 |
| EX4        | 140                         | 4                            | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   |
| EX5        |                             | 11                           | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 10  |
| EX6        |                             | 27                           | 27  | 27  | 27  | 27  | 26  | 26  | 25  | 25  |
| EX7        |                             | 74                           | 75  | 75  | 75  | 73  | 73  | 71  | 69  | 68  |
| EX8        |                             | 197                          | 200 | 200 | 199 | 196 | 194 | 190 | 185 | 181 |
| EX4        | 130                         | 4                            | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   |
| EX5        |                             | 11                           | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 10  |
| EX6        |                             | 26                           | 26  | 27  | 27  | 27  | 27  | 26  | 26  | 25  |
| EX7        |                             | 72                           | 73  | 74  | 74  | 73  | 73  | 72  | 70  | 69  |
| EX8        |                             | 191                          | 194 | 198 | 197 | 196 | 194 | 192 | 187 | 183 |
| EX4        | 120                         | 3                            | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   |
| EX5        |                             | 10                           | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  |
| EX6        |                             | 25                           | 26  | 26  | 27  | 27  | 27  | 26  | 26  | 25  |
| EX7        |                             | 68                           | 71  | 73  | 73  | 73  | 73  | 72  | 71  | 70  |
| EX8        |                             | 182                          | 188 | 194 | 196 | 195 | 195 | 193 | 189 | 186 |
| EX4        | 110                         | 3                            | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 3   |
| EX5        |                             | 10                           | 10  | 11  | 11  | 11  | 11  | 11  | 11  | 11  |
| EX6        |                             | 23                           | 24  | 25  | 26  | 26  | 26  | 26  | 26  | 25  |
| EX7        |                             | 63                           | 65  | 69  | 70  | 71  | 71  | 71  | 70  | 69  |
| EX8        |                             | 168                          | 176 | 183 | 187 | 189 | 191 | 189 | 188 | 184 |
| EX4        | 100                         | 3                            | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | 9                            | 9   | 10  | 10  | 10  | 11  | 11  | 11  | 10  |
| EX6        |                             | 20                           | 22  | 24  | 24  | 25  | 25  | 25  | 25  | 25  |
| EX7        |                             | 56                           | 60  | 65  | 67  | 69  | 69  | 69  | 69  | 68  |
| EX8        |                             | 149                          | 161 | 173 | 178 | 183 | 184 | 185 | 184 | 182 |
| EX4        | 90                          | 2                            | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | 7                            | 8   | 9   | 9   | 10  | 10  | 10  | 10  | 10  |
| EX6        |                             | 16                           | 19  | 21  | 22  | 23  | 24  | 24  | 24  | 24  |
| EX7        |                             | 44                           | 52  | 58  | 61  | 64  | 66  | 66  | 66  | 66  |
| EX8        |                             | 118                          | 139 | 153 | 163 | 170 | 175 | 177 | 176 | 177 |
| EX4        | 80                          | 1                            | 2   | 2   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | 4                            | 6   | 7   | 8   | 9   | 9   | 9   | 10  | 10  |
| EX6        |                             | 10                           | 15  | 18  | 20  | 21  | 22  | 23  | 23  | 23  |
| EX7        |                             | 27                           | 40  | 49  | 54  | 58  | 60  | 62  | 62  | 63  |
| EX8        |                             | 72                           | 107 | 130 | 144 | 154 | 160 | 165 | 166 | 167 |
| EX4        | 70                          | -                            | 1   | 2   | 2   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | -                            | 3   | 6   | 7   | 8   | 8   | 9   | 9   | 9   |
| EX6        |                             | -                            | 8   | 13  | 16  | 18  | 20  | 21  | 21  | 22  |
| EX7        |                             | -                            | 22  | 37  | 45  | 50  | 54  | 57  | 59  | 59  |
| EX8        |                             | -                            | 58  | 98  | 120 | 134 | 145 | 152 | 156 | 158 |
| EX4        | 60                          | -                            | -   | 1   | 2   | 2   | 2   | 3   | 3   | 3   |
| EX5        |                             | -                            | -   | 2   | 5   | 6   | 7   | 8   | 8   | 8   |
| EX6        |                             | -                            | -   | 5   | 12  | 15  | 17  | 18  | 19  | 20  |
| EX7        |                             | -                            | -   | 14  | 32  | 40  | 46  | 50  | 52  | 53  |
| EX8        |                             | -                            | -   | 38  | 84  | 107 | 122 | 133 | 139 | 143 |
| EX4        | 50                          | -                            | -   | -   | -   | 1   | 2   | 2   | 2   | 2   |
| EX5        |                             | -                            | -   | -   | -   | 4   | 5   | 6   | 7   | 7   |
| EX6        |                             | -                            | -   | -   | -   | 9   | 13  | 15  | 16  | 17  |
| EX7        |                             | -                            | -   | -   | -   | 26  | 36  | 42  | 45  | 48  |
| EX8        |                             | -                            | -   | -   | -   | 69  | 95  | 111 | 120 | 128 |

**R-404A/R-507 Extended Capacities (Tons) - EX4-8 Series, as expansion and liquid injection valves**

The following tables provide the capacity of valves at different conditions considering 20 psi pressure drop through liquid line:

| Valve Type | Condensing Temperature (°F) | Evaporating Temperature (°F) |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                             | 60                           | 50  | 40  | 30  | 20  | 10  | 0   | -10 | -20 | -30 | -40 | -50 |
| EX4        | 130                         | 3                            | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 2   | 2   | 2   |
| EX5        |                             | 9                            | 9   | 9   | 9   | 9   | 9   | 8   | 8   | 8   | 8   | 7   | 7   |
| EX6        |                             | 21                           | 21  | 22  | 21  | 21  | 21  | 20  | 20  | 19  | 18  | 17  | 16  |
| EX7        |                             | 58                           | 59  | 59  | 58  | 58  | 57  | 56  | 54  | 52  | 50  | 48  | 45  |
| EX8        |                             | 153                          | 156 | 157 | 156 | 154 | 152 | 148 | 143 | 139 | 133 | 127 | 120 |
| EX4        | 120                         | 3                            | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | 9                            | 9   | 9   | 10  | 9   | 9   | 9   | 9   | 9   | 9   | 8   | 8   |
| EX6        |                             | 22                           | 22  | 23  | 23  | 23  | 23  | 22  | 22  | 21  | 20  | 20  | 19  |
| EX7        |                             | 59                           | 61  | 62  | 63  | 62  | 62  | 61  | 60  | 58  | 56  | 54  | 52  |
| EX8        |                             | 158                          | 162 | 165 | 168 | 166 | 165 | 163 | 169 | 165 | 149 | 144 | 138 |
| EX4        | 110                         | 3                            | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | 9                            | 9   | 10  | 10  | 10  | 10  | 10  | 9   | 9   | 9   | 9   | 8   |
| EX6        |                             | 21                           | 22  | 23  | 23  | 23  | 23  | 23  | 23  | 22  | 22  | 21  | 20  |
| EX7        |                             | 58                           | 60  | 63  | 63  | 64  | 64  | 63  | 62  | 61  | 59  | 58  | 56  |
| EX8        |                             | 153                          | 161 | 167 | 168 | 170 | 171 | 168 | 165 | 163 | 158 | 154 | 148 |
| EX4        | 100                         | 3                            | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | 8                            | 9   | 9   | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 9   | 9   |
| EX6        |                             | 20                           | 21  | 23  | 23  | 24  | 24  | 24  | 24  | 23  | 23  | 22  | 22  |
| EX7        |                             | 54                           | 59  | 62  | 64  | 65  | 66  | 66  | 66  | 64  | 63  | 62  | 59  |
| EX8        |                             | 145                          | 156 | 165 | 171 | 174 | 175 | 176 | 173 | 171 | 168 | 164 | 158 |
| EX4        | 90                          | 2                            | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | 7                            | 8   | 9   | 9   | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 9   |
| EX6        |                             | 17                           | 20  | 21  | 23  | 23  | 24  | 24  | 24  | 24  | 23  | 23  | 23  |
| EX7        |                             | 48                           | 54  | 58  | 62  | 64  | 65  | 66  | 66  | 66  | 64  | 63  | 62  |
| EX8        |                             | 127                          | 144 | 156 | 164 | 170 | 173 | 176 | 176 | 175 | 171 | 169 | 165 |
| EX4        | 80                          | 2                            | 2   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | 6                            | 7   | 8   | 9   | 9   | 10  | 10  | 10  | 10  | 10  | 10  | 9   |
| EX6        |                             | 13                           | 17  | 19  | 21  | 22  | 23  | 23  | 24  | 24  | 23  | 23  | 23  |
| EX7        |                             | 37                           | 46  | 53  | 58  | 61  | 63  | 64  | 65  | 65  | 64  | 63  | 62  |
| EX8        |                             | 98                           | 124 | 142 | 154 | 162 | 168 | 171 | 173 | 172 | 171 | 169 | 166 |
| EX4        | 70                          | 1                            | 2   | 2   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | 2                            | 5   | 7   | 8   | 9   | 9   | 9   | 10  | 10  | 10  | 10  | 10  |
| EX6        |                             | 6                            | 13  | 17  | 19  | 21  | 22  | 23  | 23  | 24  | 23  | 23  | 23  |
| EX7        |                             | 16                           | 35  | 46  | 52  | 57  | 60  | 62  | 64  | 64  | 64  | 64  | 63  |
| EX8        |                             | 42                           | 94  | 122 | 138 | 152 | 160 | 166 | 170 | 172 | 170 | 170 | 168 |
| EX4        | 60                          | -                            | 1   | 2   | 2   | 2   | 3   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | -                            | 2   | 5   | 7   | 8   | 8   | 9   | 9   | 9   | 9   | 9   | 9   |
| EX6        |                             | -                            | 4   | 12  | 16  | 18  | 20  | 21  | 22  | 22  | 22  | 23  | 22  |
| EX7        |                             | -                            | 11  | 33  | 43  | 50  | 55  | 58  | 60  | 61  | 62  | 62  | 61  |
| EX8        |                             | -                            | 30  | 89  | 116 | 133 | 146 | 155 | 159 | 163 | 164 | 165 | 162 |
| EX4        | 50                          | -                            | -   | -   | 2   | 2   | 2   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX5        |                             | -                            | -   | -   | 5   | 6   | 7   | 8   | 9   | 9   | 9   | 9   | 9   |
| EX6        |                             | -                            | -   | -   | 11  | 15  | 18  | 19  | 20  | 21  | 21  | 22  | 22  |
| EX7        |                             | -                            | -   | -   | 31  | 42  | 48  | 53  | 56  | 58  | 59  | 60  | 59  |
| EX8        |                             | -                            | -   | -   | 82  | 111 | 128 | 142 | 149 | 154 | 157 | 160 | 158 |
| EX4        | 40                          | -                            | -   | -   | -   | 1   | 2   | 2   | 2   | 3   | 3   | 3   | 3   |
| EX5        |                             | -                            | -   | -   | -   | 4   | 6   | 7   | 8   | 8   | 8   | 8   | 9   |
| EX6        |                             | -                            | -   | -   | -   | 10  | 14  | 17  | 18  | 19  | 20  | 20  | 21  |
| EX7        |                             | -                            | -   | -   | -   | 27  | 38  | 46  | 50  | 53  | 55  | 56  | 56  |
| EX8        |                             | -                            | -   | -   | -   | 72  | 102 | 122 | 133 | 142 | 146 | 149 | 150 |

**R-23 Extended Capacities (Tons) - EX4-8 Series, as expansion and liquid injection valves**

The following tables provide the capacity of valves at different conditions considering 20 psi pressure drop through liquid line:

| Valve Type | Condensing Temperature (°F) | Evaporating Temperature (°F) |     |     |     |     |      |      |      |      |      |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|------|------|------|------|------|
|            |                             | -50                          | -60 | -70 | -80 | -90 | -100 | -110 | -120 | -130 | -140 |
| EX4        | 0                           | 5                            | 5   | 5   | 5   | 5   | 5    | 5    | 5    | 5    | 5    |
| EX5        |                             | 14                           | 15  | 15  | 16  | 16  | 16   | 16   | 16   | 16   | 16   |
| EX6        |                             | 33                           | 35  | 36  | 38  | 38  | 39   | 39   | 39   | 39   | 38   |
| EX4        | -10                         | 4                            | 4   | 5   | 5   | 5   | 5    | 5    | 5    | 5    | 5    |
| EX5        |                             | 12                           | 13  | 14  | 15  | 15  | 15   | 16   | 15   | 16   | 15   |
| EX6        |                             | 29                           | 32  | 34  | 35  | 36  | 37   | 37   | 37   | 37   | 37   |
| EX4        | -20                         | 3                            | 4   | 4   | 4   | 5   | 5    | 5    | 5    | 5    | 5    |
| EX5        |                             | 10                           | 12  | 13  | 14  | 14  | 15   | 15   | 15   | 15   | 15   |
| EX6        |                             | 24                           | 28  | 31  | 33  | 34  | 35   | 36   | 36   | 36   | 36   |
| EX4        | -30                         | 2                            | 3   | 4   | 4   | 4   | 4    | 5    | 5    | 5    | 5    |
| EX5        |                             | 7                            | 9   | 11  | 12  | 13  | 13   | 14   | 14   | 14   | 14   |
| EX6        |                             | 17                           | 23  | 26  | 29  | 31  | 32   | 33   | 33   | 33   | 34   |
| EX4        | -40                         | -                            | 2   | 3   | 3   | 4   | 4    | 4    | 4    | 4    | 4    |
| EX5        |                             | -                            | 6   | 9   | 10  | 11  | 12   | 12   | 13   | 13   | 13   |
| EX6        |                             | -                            | 16  | 21  | 25  | 27  | 29   | 30   | 31   | 31   | 31   |
| EX4        | -50                         | -                            | -   | 2   | 3   | 3   | 3    | 4    | 4    | 4    | 4    |
| EX5        |                             | -                            | -   | 5   | 8   | 9   | 10   | 11   | 11   | 12   | 12   |
| EX6        |                             | -                            | -   | 13  | 19  | 23  | 25   | 26   | 27   | 28   | 28   |

**R-124 Extended Capacities (Tons) - EX4-8 Series, as expansion and liquid injection valves**

The following tables provide the capacity of valves at different conditions considering 20 psi pressure drop through liquid line:

| Valve Type | Condensing Temperature (°F) | Evaporating Temperature (°F) |    |    |    |    |
|------------|-----------------------------|------------------------------|----|----|----|----|
|            |                             | 80                           | 70 | 60 | 50 | 40 |
| EX4        | 210                         | 2                            | 2  | 2  | 2  | 2  |
| EX5        |                             | 6                            | 6  | 6  | 5  | 5  |
| EX6        |                             | 15                           | 14 | 13 | 13 | 12 |
| EX4        | 200                         | 2                            | 2  | 2  | 2  | 2  |
| EX5        |                             | 7                            | 6  | 6  | 6  | 6  |
| EX6        |                             | 16                           | 15 | 15 | 14 | 14 |
| EX4        | 190                         | 2                            | 2  | 2  | 2  | 2  |
| EX5        |                             | 7                            | 7  | 7  | 7  | 6  |
| EX6        |                             | 17                           | 17 | 17 | 16 | 15 |
| EX4        | 180                         | 3                            | 2  | 2  | 2  | 2  |
| EX5        |                             | 8                            | 8  | 7  | 7  | 7  |
| EX6        |                             | 18                           | 18 | 18 | 17 | 17 |
| EX4        | 170                         | 3                            | 3  | 2  | 2  | 2  |
| EX5        |                             | 8                            | 8  | 8  | 7  | 7  |
| EX6        |                             | 18                           | 18 | 18 | 18 | 17 |
| EX4        | 160                         | 3                            | 3  | 3  | 3  | 3  |
| EX5        |                             | 8                            | 8  | 8  | 8  | 8  |
| EX6        |                             | 18                           | 19 | 19 | 18 | 18 |
| EX4        | 150                         | 2                            | 2  | 3  | 3  | 3  |
| EX5        |                             | 7                            | 8  | 8  | 8  | 8  |
| EX6        |                             | 18                           | 18 | 18 | 18 | 18 |

**R-744 Extended Capacities (Tons) - EX4-8 Series, as expansion and liquid injection valves**

The following tables provide the capacity of valves at different conditions considering 20 psi pressure drop through liquid line:

| Valve Type | Condensing Temperature (°F) | Evaporating Temperature (°F) |     |     |     |     |     |     |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|-----|-----|
|            |                             | 10                           | 0   | -10 | -20 | -30 | -40 | -50 |
| EX4        | 30                          | 6                            | 7   | 8   | 9   | 10  | 10  | 10  |
| EX5        |                             | 18                           | 22  | 25  | 27  | 29  | 30  | 31  |
| EX6        |                             | 43                           | 53  | 60  | 65  | 70  | 73  | 75  |
| EX7        |                             | 117                          | 145 | 165 | 179 | 191 | 200 | 206 |
| EX8        |                             | 312                          | 388 | 439 | 479 | 510 | 534 | 549 |
| EX4        | 20                          | -                            | 6   | 7   | 8   | 9   | 9   | 10  |
| EX5        |                             | -                            | 18  | 22  | 25  | 27  | 29  | 30  |
| EX6        |                             | -                            | 43  | 53  | 60  | 65  | 69  | 72  |
| EX7        |                             | -                            | 119 | 145 | 164 | 178 | 189 | 197 |
| EX8        |                             | -                            | 319 | 387 | 437 | 476 | 506 | 526 |
| EX4        | 10                          | -                            | -   | 6   | 7   | 8   | 9   | 9   |
| EX5        |                             | -                            | -   | 18  | 22  | 25  | 27  | 29  |
| EX6        |                             | -                            | -   | 43  | 53  | 60  | 65  | 68  |
| EX7        |                             | -                            | -   | 119 | 145 | 163 | 178 | 187 |
| EX8        |                             | -                            | -   | 318 | 386 | 436 | 474 | 500 |
| EX4        | 0                           | -                            | -   | -   | 6   | 7   | 8   | 9   |
| EX5        |                             | -                            | -   | -   | 17  | 21  | 24  | 26  |
| EX6        |                             | -                            | -   | -   | 41  | 51  | 58  | 63  |
| EX7        |                             | -                            | -   | -   | 114 | 140 | 159 | 172 |
| EX8        |                             | -                            | -   | -   | 303 | 373 | 423 | 458 |
| EX4        | -10                         | -                            | -   | -   | -   | 5   | 7   | 8   |
| EX5        |                             | -                            | -   | -   | -   | 17  | 20  | 23  |
| EX6        |                             | -                            | -   | -   | -   | 40  | 49  | 55  |
| EX7        |                             | -                            | -   | -   | -   | 109 | 134 | 152 |
| EX8        |                             | -                            | -   | -   | -   | 290 | 359 | 405 |
| EX4        | -20                         | -                            | -   | -   | -   | 3   | 5   | 6   |
| EX5        |                             | -                            | -   | -   | -   | 19  | 16  | 20  |
| EX6        |                             | -                            | -   | -   | -   | 22  | 38  | 47  |
| EX7        |                             | -                            | -   | -   | -   | 61  | 104 | 129 |
| EX8        |                             | -                            | -   | -   | -   | 163 | 278 | 344 |
| EX4        | -30                         | -                            | -   | -   | -   | -   | 3   | 5   |
| EX5        |                             | -                            | -   | -   | -   | -   | 8   | 15  |
| EX6        |                             | -                            | -   | -   | -   | -   | 19  | 35  |
| EX7        |                             | -                            | -   | -   | -   | -   | 53  | 96  |
| EX8        |                             | -                            | -   | -   | -   | -   | 142 | 257 |

**EX4-8 Nominal capacities (Tons) - as hot gas bypass regulator**

| Valve Type | R-22/R-407C | R-134a | R-404A/R-507 |
|------------|-------------|--------|--------------|
| EX4        | 1.4         | 1.0    | 1.3          |
| EX5        | 4.5         | 3.1    | 4.3          |
| EX6        | 10.5        | 7.3    | 10.1         |
| EX7        | 37.3        | 26.0   | 35.7         |
| EX8        | 113.0       | 79.0   | 108.5        |

The nominal capacity is based on the following conditions:

| Refrigerant                 | Evaporating Temperature | Condensing Temperature | Subcooling |
|-----------------------------|-------------------------|------------------------|------------|
| R-22, R-134a, R-404A, R-507 | +40°F                   | +100°F                 | 2°F        |
| R-407C                      | +40°F bubble point      | +100°F dew point       | 2°F        |

**Remarks:** Note 1: Bi-flow versions are not released for hot gas bypass applications.  
 Note 2: EX4, EX5, EX6, EX7 and EX8 must be installed with motor downward in hot gas line applications.  
 This insures the valve life expectancy.

**Extended Capacities (Tons) - EX4-8 Series**

| Valve Type | Liquid / Condensing Temperature°F                                   | R-22 / R-407C | R-134a | R-404A / R-507 |
|------------|---|---------------|--------|----------------|
| EX4        | 140 bubble point for all refrigerants<br>(147 dew point for R-407C) | 2             | 1      | 2              |
| EX5        |   | 7             | 5      | 6              |
| EX6        |   | 15            | 11     | 13             |
| EX7        |   | 54            | 38     | 46             |
| EX8        |   | 165           | 117    | 139            |
| EX4        | 130 bubble point for all refrigerants<br>(138 dew point for R-407C) | 2             | 1      | 2              |
| EX5        |   | 6             | 4      | 5              |
| EX6        |   | 14            | 10     | 12             |
| EX7        |   | 49            | 35     | 44             |
| EX8        |   | 150           | 106    | 132            |
| EX4        | 120 bubble point for all refrigerants<br>(128 dew point for R-407C) | 2             | 1      | 2              |
| EX5        |   | 6             | 4      | 5              |
| EX6        |   | 13            | 9      | 12             |
| EX7        |   | 45            | 32     | 41             |
| EX8        |   | 138           | 97     | 126            |
| EX4        | 110 bubble point for all refrigerants<br>(119 dew point for R-407C) | 2             | 1      | 1              |
| EX5        |   | 5             | 3      | 5              |
| EX6        |   | 12            | 8      | 11             |
| EX7        |   | 41            | 29     | 38             |
| EX8        |   | 124           | 87     | 117            |

**EX6-8 Nominal capacities (Tons) - as suction pressure regulator (evaporator or crankcase)**

| Valve Type | R-407C | R-22 | R-134a | R-404A |
|------------|--------|------|--------|--------|
| EX6        | 1.1    | 1.1  | 0.9    | 1.0    |
| EX7        | 3.8    | 4.0  | 3.0    | 3.5    |
| EX8        | 11.5   | 12.2 | 9.2    | 10.5   |

The nominal capacity is based on the following conditions:

| Refrigerant          | Evaporating Temperature | Condensing Temperature | Subcooling | Pressure Drop |
|----------------------|-------------------------|------------------------|------------|---------------|
| R-22, R-134a, R-404A | +40°F                   | +100°F                 | 2°F        | 2 psid        |
| R-407C               | +40°F bubble point      | +100°F dew point       | 2°F        | 2 psid        |

**Remarks:** Bi-flow versions are not released for use below -40°F.  
 EX6, EX7 and EX8 must be installed with motor downward in suction line applications.  
 This insures the valve life expectancy.

Multiply above nominal capacities by following factors to obtain capacities at different pressure drops:

| ΔP, psid          | 1.5  | 2.0  | 3.0  | 4.5  |
|-------------------|------|------|------|------|
| Correction factor | 0.82 | 1.00 | 1.15 | 1.41 |

**Example:** EX6 provides 1 ton at 2.0 psid pressure drop with R-404A: 4 psi pressure drop.

**R-22 Extended Capacities (Tons) - EX6-8 Series, suction pressure regulator duty**

| Valve Type | Condensing Temperature °F | Evaporating Temperature °F |    |    |    |    |   |     |     |     |     |
|------------|---------------------------|----------------------------|----|----|----|----|---|-----|-----|-----|-----|
|            |                           | 50                         | 40 | 30 | 20 | 10 | 0 | -10 | -20 | -30 | -40 |
| EX6        | 140                       | 1                          | 1  | 1  | 1  | 1  | 1 | 1   | 0   | 0   | 0   |
| EX7        |                           | 4                          | 3  | 3  | 3  | 2  | 2 | 2   | 1   | 1   |     |
| EX8        |                           | 11                         | 10 | 9  | 8  | 7  | 6 | 5   | 4   | 3   |     |
| EX6        | 130                       | 1                          | 1  | 1  | 1  | 1  | 1 | 1   | 0   | 0   | 0   |
| EX7        |                           | 4                          | 3  | 3  | 3  | 3  | 2 | 2   | 2   | 1   | 1   |
| EX8        |                           | 12                         | 11 | 10 | 8  | 8  | 7 | 6   | 5   | 4   | 4   |
| EX6        | 120                       | 1                          | 1  | 1  | 1  | 1  | 1 | 1   | 0   | 0   | 0   |
| EX7        |                           | 4                          | 4  | 3  | 3  | 3  | 2 | 2   | 2   | 1   | 1   |
| EX8        |                           | 12                         | 11 | 10 | 9  | 8  | 7 | 6   | 5   | 4   | 4   |
| EX6        | 110                       | 1                          | 1  | 1  | 1  | 1  | 1 | 1   | 1   | 0   | 0   |
| EX7        |                           | 4                          | 4  | 3  | 3  | 3  | 2 | 2   | 2   | 2   | 1   |
| EX8        |                           | 13                         | 12 | 11 | 9  | 8  | 7 | 6   | 6   | 5   | 4   |
| EX6        | 100                       | 1                          | 1  | 1  | 1  | 1  | 1 | 1   | 1   | 0   | 0   |
| EX7        |                           | 4                          | 4  | 4  | 3  | 3  | 3 | 2   | 2   | 2   | 1   |
| EX8        |                           | 14                         | 12 | 11 | 10 | 9  | 8 | 7   | 6   | 5   | 4   |

**R-407C Extended Capacities (Tons) - EX6-8 Series, suction pressure regulator duty**

| Valve Type | Condensing Temperature Bubble Point °F | Evaporating Temperature °F |    |    |    |    |
|------------|--|----------------------------|----|----|----|----|
|            |  | 50                         | 40 | 30 | 20 | 10 |
| EX6        | 140                                    | 1                          | 1  | 1  | 1  | 1  |
| EX7        |  | 3                          | 3  | 3  | 2  | 2  |
| EX8        |  | 10                         | 9  | 8  | 7  | 6  |
| EX6        | 130                                    | 1                          | 1  | 1  | 1  | 1  |
| EX7        |  | 4                          | 3  | 3  | 2  | 2  |
| EX8        |  | 11                         | 9  | 8  | 7  | 7  |
| EX6        | 120                                    | 1                          | 1  | 1  | 1  | 1  |
| EX7        |  | 4                          | 3  | 3  | 3  | 2  |
| EX8        |  | 12                         | 10 | 9  | 8  | 7  |
| EX6        | 110                                    | 1                          | 1  | 1  | 1  | 1  |
| EX7        |  | 4                          | 4  | 3  | 3  | 2  |
| EX8        |  | 12                         | 11 | 10 | 8  | 8  |
| EX6        | 100                                    | 1                          | 1  | 1  | 1  | 1  |
| EX7        |  | 4                          | 4  | 3  | 3  | 3  |
| EX8        |  | 13                         | 11 | 10 | 9  | 8  |

**R-134a Extended Capacities (Tons) - EX6-8 Series, suction pressure regulator duty**

| Valve Type | Condensing Temperature °F | Evaporating Temperature °F |    |    |    |    |
|------------|---------------------------|----------------------------|----|----|----|----|
|            |                           | 50                         | 40 | 30 | 20 | 10 |
| EX6        | 140                       | 1                          | 1  | 1  | 1  | 0  |
| EX7        |                           | 3                          | 2  | 2  | 2  | 2  |
| EX8        |                           | 8                          | 7  | 6  | 5  | 5  |
| EX6        | 130                       | 1                          | 1  | 1  | 1  | 0  |
| EX7        |                           | 3                          | 3  | 2  | 2  | 2  |
| EX8        |                           | 9                          | 8  | 7  | 6  | 5  |
| EX6        | 120                       | 1                          | 1  | 1  | 1  | 1  |
| EX7        |                           | 3                          | 3  | 2  | 2  | 2  |
| EX8        |                           | 9                          | 8  | 7  | 6  | 5  |
| EX6        | 110                       | 1                          | 1  | 1  | 1  | 1  |
| EX7        |                           | 3                          | 3  | 3  | 2  | 2  |
| EX8        |                           | 10                         | 9  | 8  | 7  | 6  |
| EX6        | 100                       | 1                          | 1  | 1  | 1  | 1  |
| EX7        |                           | 3                          | 3  | 3  | 2  | 2  |
| EX8        |                           | 11                         | 9  | 8  | 7  | 6  |

**R-404A/R-507 Extended Capacities (Tons) - EX6-8 Series, suction pressure regulator duty**

| Valve Type | Condensing Temperature °F | Evaporating Temperature °F |    |    |    |    |   |     |     |     |     |
|------------|---------------------------|----------------------------|----|----|----|----|---|-----|-----|-----|-----|
|            |                           | 50                         | 40 | 30 | 20 | 10 | 0 | -10 | -20 | -30 | -40 |
| EX6        | 140                       | 1                          | 1  | 1  | 0  | 0  | 0 | 0   | 0   | 0   | 0   |
| EX7        |                           | 3                          | 2  | 2  | 2  | 2  | 1 | 1   | 1   | 1   | 1   |
| EX8        |                           | 8                          | 7  | 6  | 5  | 5  | 4 | 3   | 3   | 2   | 2   |
| EX6        | 130                       | 1                          | 1  | 1  | 1  | 1  | 0 | 0   | 0   | 0   | 0   |
| EX7        |                           | 3                          | 3  | 2  | 2  | 2  | 2 | 1   | 1   | 1   | 1   |
| EX8        |                           | 9                          | 8  | 7  | 6  | 5  | 5 | 4   | 3   | 3   | 2   |
| EX6        | 120                       | 1                          | 1  | 1  | 1  | 1  | 0 | 0   | 0   | 0   | 0   |
| EX7        |                           | 3                          | 3  | 3  | 2  | 2  | 2 | 1   | 1   | 1   | 1   |
| EX8        |                           | 10                         | 9  | 8  | 7  | 6  | 5 | 4   | 4   | 3   | 3   |
| EX6        | 110                       | 1                          | 1  | 1  | 1  | 1  | 1 | 0   | 0   | 0   | 0   |
| EX7        |                           | 4                          | 3  | 3  | 2  | 2  | 2 | 2   | 1   | 1   | 1   |
| EX8        |                           | 11                         | 10 | 9  | 8  | 7  | 6 | 5   | 4   | 4   | 3   |
| EX6        | 100                       | 1                          | 1  | 1  | 1  | 1  | 1 | 1   | 0   | 0   | 0   |
| EX7        |                           | 4                          | 3  | 3  | 3  | 2  | 2 | 2   | 2   | 1   | 1   |
| EX8        |                           | 12                         | 11 | 9  | 8  | 7  | 6 | 5   | 5   | 4   | 3   |

**EX5-8 Nominal capacities (Tons) - as condensing pressure regulator and liquid duty**

| Valve Type | R-407C | R-22 | R-134a | R-404A |
|------------|--------|------|--------|--------|
| EX5        | 5      | 6    | 5      | 4      |
| EX6        | 12     | 13   | 12     | 9      |
| EX7        | 44     | 46   | 43     | 31     |
| EX8        | 133    | 140  | 131    | 93     |

| Refrigerant          | Evaporating Temperature | Condensing Temperature | Subcooling | Pressure Drop |
|----------------------|-------------------------|------------------------|------------|---------------|
| R-22, R-134a, R-404A | +40°F                   | +100°F                 | 2°F        | 5 psid        |
| R-407C               | +40°F dew point         | +100°F bubble          | 2°F        | 5 psid        |

Multiply above nominal capacities by following factors to obtain capacities at different pressure drops.

| ΔP, psid          | 2.0  | 3.0  | 5.0  |
|-------------------|------|------|------|
| Correction factor | 0.65 | 0.76 | 1.00 |

**R-22 Extended Capacities (Tons) - EX5-8 Series, condensing pressure regulator and liquid duty**

| Valve Type | Condensing Temperature °F | Evaporating Temperature °F |     |     |     |     |     |     |     |     |     |
|------------|---------------------------|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                           | 50                         | 40  | 30  | 20  | 10  | 0   | -10 | -20 | -30 | -40 |
| EX5        | 140                       | 4                          | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   |
| EX6        |                           | 10                         | 10  | 10  | 10  | 10  | 9   | 9   | 9   | 9   | 9   |
| EX7        |                           | 36                         | 36  | 35  | 35  | 34  | 33  | 33  | 32  | 31  | 31  |
| EX8        |                           | 111                        | 109 | 107 | 105 | 104 | 102 | 100 | 98  | 96  | 94  |
| EX5        | 130                       | 5                          | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   |
| EX6        |                           | 11                         | 11  | 11  | 10  | 10  | 10  | 10  | 10  | 10  | 9   |
| EX7        |                           | 39                         | 38  | 38  | 37  | 37  | 36  | 35  | 35  | 34  | 33  |
| EX8        |                           | 118                        | 116 | 115 | 113 | 111 | 109 | 107 | 105 | 103 | 101 |
| EX5        | 120                       | 5                          | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   |
| EX6        |                           | 12                         | 12  | 11  | 11  | 11  | 11  | 11  | 10  | 10  | 10  |
| EX7        |                           | 42                         | 41  | 41  | 40  | 39  | 39  | 38  | 37  | 37  | 36  |
| EX8        |                           | 126                        | 125 | 123 | 121 | 119 | 117 | 115 | 113 | 111 | 109 |
| EX5        | 110                       | 5                          | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX6        |                           | 12                         | 12  | 12  | 12  | 12  | 12  | 11  | 11  | 11  | 11  |
| EX7        |                           | 44                         | 43  | 43  | 42  | 42  | 41  | 40  | 40  | 39  | 38  |
| EX8        |                           | 133                        | 132 | 130 | 128 | 126 | 124 | 122 | 120 | 118 | 116 |
| EX5        | 100                       | 6                          | 6   | 6   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX6        |                           | 13                         | 13  | 13  | 13  | 12  | 12  | 12  | 12  | 12  | 11  |
| EX7        |                           | 47                         | 46  | 46  | 45  | 44  | 44  | 43  | 42  | 41  | 41  |
| EX8        |                           | 142                        | 140 | 138 | 136 | 134 | 132 | 130 | 128 | 126 | 124 |

**R-134a Extended Capacities (Tons) - EX5-8 Series,  
condensing pressure regulator and liquid duty**

| Valve Type | Condensing Temperature °F | Evaporating Temperature °F |     |     |     |
|------------|---------------------------|----------------------------|-----|-----|-----|
|            |                           | 50                         | 40  | 30  | 20  |
| EX5        | 140                       | 4                          | 4   | 4   | 4   |
| EX6        |                           | 9                          | 9   | 9   | 8   |
| EX7        |                           | 33                         | 32  | 31  | 30  |
| EX8        |                           | 100                        | 98  | 95  | 92  |
| EX5        | 130                       | 4                          | 4   | 4   | 4   |
| EX6        |                           | 10                         | 10  | 9   | 9   |
| EX7        |                           | 36                         | 35  | 34  | 33  |
| EX8        |                           | 108                        | 105 | 102 | 99  |
| EX5        | 120                       | 5                          | 5   | 4   | 4   |
| EX6        |                           | 11                         | 11  | 10  | 10  |
| EX7        |                           | 39                         | 38  | 37  | 36  |
| EX8        |                           | 117                        | 115 | 112 | 108 |
| EX5        | 110                       | 5                          | 5   | 5   | 5   |
| EX6        |                           | 12                         | 11  | 11  | 11  |
| EX7        |                           | 41                         | 40  | 39  | 38  |
| EX8        |                           | 125                        | 122 | 119 | 116 |
| EX5        | 100                       | 5                          | 5   | 5   | 5   |
| EX6        |                           | 12                         | 12  | 12  | 12  |
| EX7        |                           | 44                         | 43  | 42  | 41  |
| EX8        |                           | 134                        | 131 | 128 | 125 |

**R-1404A/R-507 Extended Capacities (Tons) - EX5-8 Series,  
condensing pressure regulator and liquid duty**

| Valve Type | Condensing Temperature °F | Evaporating Temperature °F |    |    |    |    |    |     |     |     |     |
|------------|---------------------------|----------------------------|----|----|----|----|----|-----|-----|-----|-----|
|            |                           | 50                         | 40 | 30 | 20 | 10 | 0  | -10 | -20 | -30 | -40 |
| EX5        | 140                       | 2                          | 2  | 2  | 2  | 2  | 2  | 2   | 2   | 2   | 2   |
| EX6        |                           | 5                          | 5  | 5  | 5  | 5  | 4  | 4   | 4   | 4   | 4   |
| EX7        |                           | 19                         | 19 | 18 | 17 | 17 | 16 | 15  | 14  | 13  | 13  |
| EX8        |                           | 59                         | 57 | 55 | 52 | 50 | 48 | 45  | 43  | 41  | 38  |
| EX5        | 130                       | 3                          | 3  | 3  | 2  | 2  | 2  | 2   | 2   | 2   | 2   |
| EX6        |                           | 6                          | 6  | 6  | 6  | 5  | 5  | 5   | 5   | 5   | 4   |
| EX7        |                           | 22                         | 22 | 21 | 20 | 19 | 19 | 18  | 17  | 16  | 15  |
| EX8        |                           | 68                         | 66 | 63 | 61 | 59 | 56 | 54  | 52  | 49  | 47  |
| EX5        | 120                       | 3                          | 3  | 3  | 3  | 3  | 3  | 3   | 2   | 2   | 2   |
| EX6        |                           | 7                          | 7  | 7  | 7  | 6  | 6  | 6   | 6   | 5   | 5   |
| EX7        |                           | 26                         | 25 | 24 | 23 | 23 | 22 | 21  | 20  | 19  | 19  |
| EX8        |                           | 78                         | 76 | 73 | 71 | 69 | 66 | 64  | 61  | 59  | 56  |
| EX5        | 110                       | 3                          | 3  | 3  | 3  | 3  | 3  | 3   | 3   | 3   | 3   |
| EX6        |                           | 8                          | 8  | 8  | 7  | 7  | 7  | 7   | 6   | 6   | 6   |
| EX7        |                           | 28                         | 28 | 27 | 26 | 25 | 24 | 23  | 23  | 22  | 21  |
| EX8        |                           | 86                         | 84 | 81 | 79 | 77 | 74 | 71  | 69  | 66  | 64  |
| EX5        | 100                       | 4                          | 4  | 4  | 4  | 3  | 3  | 3   | 3   | 3   | 3   |
| EX6        |                           | 9                          | 9  | 8  | 8  | 8  | 8  | 7   | 7   | 7   | 7   |
| EX7        |                           | 31                         | 31 | 30 | 29 | 28 | 27 | 26  | 26  | 25  | 24  |
| EX8        |                           | 95                         | 93 | 91 | 88 | 86 | 83 | 80  | 78  | 75  | 73  |

**R-407C Extended Capacities (Tons) - EX5-8 Series, condensing pressure regulator and liquid duty**

| Valve Type | Condensing Temperature Dew Point °F | Evaporating Temperature °F |     |     |     |
|------------|-------------------------------------|----------------------------|-----|-----|-----|
|            |                                     | 50                         | 40  | 30  | 20  |
| EX5        | 140                                 | 4                          | 4   | 4   | 4   |
| EX6        |                                     | 9                          | 9   | 9   | 8   |
| EX7        |                                     | 32                         | 32  | 31  | 30  |
| EX8        |                                     | 98                         | 96  | 94  | 91  |
| EX5        | 130                                 | 4                          | 4   | 4   | 4   |
| EX6        |                                     | 10                         | 10  | 9   | 9   |
| EX7        |                                     | 35                         | 34  | 34  | 33  |
| EX8        |                                     | 106                        | 105 | 102 | 100 |
| EX5        | 120                                 | 5                          | 5   | 4   | 4   |
| EX6        |                                     | 11                         | 11  | 10  | 10  |
| EX7        |                                     | 38                         | 38  | 37  | 36  |
| EX8        |                                     | 117                        | 115 | 112 | 110 |
| EX5        | 110                                 | 5                          | 5   | 5   | 5   |
| EX6        |                                     | 12                         | 11  | 11  | 11  |
| EX7        |                                     | 41                         | 40  | 40  | 39  |
| EX8        |                                     | 125                        | 123 | 120 | 118 |
| EX5        | 100                                 | 5                          | 5   | 5   | 5   |
| EX6        |                                     | 12                         | 12  | 12  | 12  |
| EX7        |                                     | 44                         | 44  | 43  | 42  |
| EX8        |                                     | 135                        | 133 | 130 | 128 |

**EX6-8 Nominal capacities (Tons) - for hot gas flow such as heat reclaim application**

| Valve Type | R-22 / R-407C | R-404A / R-507 |
|------------|---------------|----------------|
| EX6        | 3.1           | 2.8            |
| EX7        | 11.1          | 10.2           |
| EX8        | 33.8          | 30.7           |

The nominal capacity is based on the following conditions:

| Refrigerant         | Evaporating temperature | Condensing temperature | Subcooling | Pressure Drop | Isentropic Efficiency |
|---------------------|-------------------------|------------------------|------------|---------------|-----------------------|
| R-22, R-404A, R-507 | +40°F                   | +100°F                 | 2°F        | 2 psid        | 80%                   |
| R-407C              | +40°F bubble point      | +100°F dew point       | 2°F        | 2 psid        | 80%                   |

**Remarks:** Bi-flow versions are not released for hot gas flow applications.  
 EX6, EX7 and EX8 must be installed with motor downward in suction line applications.  
 This insures the valve life expectancy.

**R-22/R-407C Extended Capacities (Tons) - EX6-8 Series,  
hot gas flow such as heat reclaim application**

| Valve Type | Condensing Temperature °F | Pressure Drop psi | Evaporating Temperature °F |      |      |      |      |      |      |      |      |      |      |      |
|------------|---------------------------|-------------------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|
|            |                           |                   | 60                         | 50   | 40   | 30   | 20   | 10   | 0    | -10  | -20  | -30  | -40  | -50  |
| EX6        | 140                       | 1.5               | 1.6                        | 1.5  | 1.5  | 1.5  | 1.4  | 1.4  | 1.3  | 1.3  | 1.2  | 1.2  | 1.2  | 1.1  |
| EX7        |                           |                   | 5.6                        | 5.5  | 5.3  | 5.2  | 5.0  | 4.9  | 4.7  | 4.6  | 4.4  | 4.3  | 4.1  | 4.0  |
| EX8        |                           |                   | 17.0                       | 16.6 | 16.2 | 15.7 | 15.3 | 14.8 | 14.4 | 13.9 | 13.4 | 13.0 | 12.5 | 12.0 |
| EX6        |                           | 7                 | 3.4                        | 3.3  | 3.3  | 3.2  | 3.1  | 3.0  | 2.9  | 2.8  | 2.7  | 2.6  | 2.5  | 2.4  |
| EX7        |                           |                   | 12.2                       | 11.9 | 11.6 | 11.3 | 10.9 | 10.6 | 10.3 | 10.0 | 9.6  | 9.3  | 9.0  | 8.6  |
| EX8        |                           |                   | 37.0                       | 36.1 | 35.2 | 34.2 | 33.3 | 32.3 | 31.3 | 30.3 | 29.3 | 28.2 | 27.2 | 26.2 |
| EX6        |                           | 14                | 4.8                        | 4.7  | 4.5  | 4.4  | 4.3  | 4.2  | 4.0  | 3.9  | 3.8  | 3.7  | 3.5  | 3.4  |
| EX7        |                           |                   | 17.3                       | 16.9 | 16.4 | 16.0 | 15.6 | 15.1 | 14.6 | 14.2 | 13.7 | 13.2 | 12.7 | 12.3 |
| EX8        |                           |                   | 52.5                       | 51.3 | 49.9 | 48.6 | 47.3 | 45.9 | 44.5 | 43.0 | 41.6 | 40.2 | 38.7 | 37.3 |
| EX6        | 120                       | 1.5               | 1.5                        | 1.5  | 1.5  | 1.4  | 1.4  | 1.4  | 1.3  | 1.3  | 1.2  | 1.2  | 1.2  | 1.1  |
| EX7        |                           |                   | 5.5                        | 5.3  | 5.2  | 5.1  | 4.9  | 4.8  | 4.7  | 4.5  | 4.4  | 4.3  | 4.1  | 4.0  |
| EX8        |                           |                   | 16.6                       | 16.2 | 15.8 | 15.4 | 15.0 | 14.6 | 14.2 | 13.8 | 13.4 | 12.9 | 12.5 | 12.1 |
| EX6        |                           | 7                 | 3.3                        | 3.3  | 3.2  | 3.1  | 3.0  | 2.9  | 2.9  | 2.8  | 2.7  | 2.6  | 2.5  | 2.4  |
| EX7        |                           |                   | 11.8                       | 11.6 | 11.3 | 11.0 | 10.7 | 10.4 | 10.1 | 9.9  | 9.6  | 9.3  | 8.9  | 8.6  |
| EX8        |                           |                   | 35.9                       | 35.1 | 34.3 | 33.5 | 32.6 | 31.7 | 30.8 | 29.9 | 29.0 | 28.1 | 27.2 | 26.2 |
| EX6        |                           | 14                | 4.6                        | 4.5  | 4.4  | 4.3  | 4.2  | 4.1  | 4.0  | 3.9  | 3.7  | 3.6  | 3.5  | 3.4  |
| EX7        |                           |                   | 16.8                       | 16.4 | 16.0 | 15.6 | 15.2 | 14.8 | 14.4 | 14.0 | 13.5 | 13.1 | 12.7 | 12.3 |
| EX8        |                           |                   | 50.9                       | 49.7 | 48.6 | 47.4 | 46.2 | 44.9 | 43.7 | 42.4 | 41.1 | 39.8 | 38.5 | 37.2 |
| EX6        | 100                       | 1.5               | 1.5                        | 1.4  | 1.4  | 1.4  | 1.3  | 1.3  | 1.3  | 1.2  | 1.2  | 1.2  | 1.1  | 1.1  |
| EX7        |                           |                   | 5.2                        | 5.1  | 5.0  | 4.9  | 4.7  | 4.6  | 4.5  | 4.4  | 4.3  | 4.1  | 4.0  | 3.9  |
| EX8        |                           |                   | 15.8                       | 15.4 | 15.1 | 14.7 | 14.4 | 14.0 | 13.7 | 13.3 | 12.9 | 12.5 | 12.2 | 11.8 |
| EX6        |                           | 7                 | 3.2                        | 3.1  | 3.0  | 3.0  | 2.9  | 2.8  | 2.7  | 2.7  | 2.6  | 2.5  | 2.4  | 2.4  |
| EX7        |                           |                   | 11.2                       | 11.0 | 10.7 | 10.5 | 10.2 | 10.0 | 9.7  | 9.5  | 9.2  | 8.9  | 8.7  | 8.4  |
| EX8        |                           |                   | 34.1                       | 33.4 | 32.6 | 31.9 | 31.1 | 30.4 | 29.6 | 28.8 | 28.0 | 27.1 | 26.3 | 25.5 |
| EX6        |                           | 14                | 4.4                        | 4.3  | 4.2  | 4.1  | 4.0  | 3.9  | 3.8  | 3.7  | 3.6  | 3.5  | 3.4  | 3.3  |
| EX7        |                           |                   | 15.8                       | 15.5 | 15.2 | 14.8 | 14.5 | 14.1 | 13.7 | 13.4 | 13.0 | 12.6 | 12.2 | 11.8 |
| EX8        |                           |                   | 48.0                       | 47.0 | 46.0 | 45.0 | 43.9 | 42.8 | 41.7 | 40.6 | 39.5 | 38.3 | 37.2 | 36.0 |
| EX6        | 80                        | 1.5               | 1.4                        | 1.3  | 1.3  | 1.3  | 1.2  | 1.2  | 1.2  | 1.2  | 1.1  | 1.1  | 1.1  | 1.0  |
| EX7        |                           |                   | 4.8                        | 4.7  | 4.6  | 4.5  | 4.4  | 4.3  | 4.2  | 4.1  | 4.0  | 3.9  | 3.8  | 3.7  |
| EX8        |                           |                   | 14.7                       | 14.4 | 14.1 | 13.8 | 13.5 | 13.2 | 12.8 | 12.5 | 12.2 | 11.9 | 11.5 | 11.2 |
| EX6        |                           | 7                 | 2.9                        | 2.9  | 2.8  | 2.8  | 2.7  | 2.6  | 2.6  | 2.5  | 2.4  | 2.4  | 2.3  | 2.2  |
| EX7        |                           |                   | 10.4                       | 10.2 | 10.0 | 9.8  | 9.6  | 9.3  | 9.1  | 8.9  | 8.6  | 8.4  | 8.2  | 7.9  |
| EX8        |                           |                   | 31.6                       | 31.0 | 30.4 | 29.7 | 29.0 | 28.4 | 27.7 | 27.0 | 26.3 | 25.6 | 24.8 | 24.1 |
| EX6        |                           | 14                | 4.0                        | 4.0  | 3.9  | 3.8  | 3.7  | 3.6  | 3.5  | 3.4  | 3.4  | 3.3  | 3.2  | 3.1  |
| EX7        |                           |                   | 14.6                       | 14.3 | 14.0 | 13.7 | 13.4 | 13.1 | 12.8 | 12.5 | 12.1 | 11.8 | 11.5 | 11.1 |
| EX8        |                           |                   | 44.3                       | 43.4 | 42.6 | 41.7 | 40.7 | 39.8 | 38.8 | 37.9 | 36.9 | 35.9 | 34.8 | 33.8 |

**R-404A/R-507 Extended Capacities (Tons) - EX6-8 Series,  
hot gas flow such a heat reclaim applications**

| Valve Type | Condensing Temperature °F | Pressure Drop psi | Evaporating Temperature °F |      |      |      |      |      |      |      |      |      |      |      |
|------------|---------------------------|-------------------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|
|            |                           |                   | 60                         | 50   | 40   | 30   | 20   | 10   | 0    | -10  | -20  | -30  | -40  | -50  |
| EX6        | 140                       | 1.5               | 1.2                        | 1.1  | 1.1  | 1.0  | 1.0  | 0.9  | 0.9  | 0.8  | 0.8  | 0.7  | 0.7  | 0.6  |
| EX7        |                           |                   | 4.2                        | 4.1  | 3.9  | 3.7  | 3.5  | 3.3  | 3.2  | 3.0  | 2.8  | 2.6  | 2.4  | 2.2  |
| EX8        |                           |                   | 12.8                       | 12.3 | 11.8 | 11.3 | 10.7 | 10.1 | 9.6  | 9.0  | 8.4  | 7.8  | 7.2  | 6.6  |
| EX6        |                           | 7                 | 2.6                        | 2.5  | 2.4  | 2.3  | 2.2  | 2.0  | 1.9  | 1.8  | 1.7  | 1.6  | 1.4  | 1.3  |
| EX7        |                           |                   | 9.2                        | 8.8  | 8.4  | 8.1  | 7.7  | 7.3  | 6.8  | 6.4  | 6.0  | 5.6  | 5.2  | 4.7  |
| EX8        |                           |                   | 27.8                       | 26.7 | 25.6 | 24.5 | 23.3 | 22.0 | 20.8 | 19.5 | 18.2 | 16.9 | 15.6 | 14.4 |
| EX6        |                           | 14                | 3.6                        | 3.4  | 3.3  | 3.2  | 3.0  | 2.8  | 2.7  | 2.5  | 2.4  | 2.2  | 2.0  | 1.9  |
| EX7        |                           |                   | 13.0                       | 12.5 | 12.0 | 11.4 | 10.9 | 10.3 | 9.7  | 9.1  | 8.5  | 7.9  | 7.3  | 6.7  |
| EX8        |                           |                   | 39.4                       | 37.9 | 36.3 | 34.7 | 33.0 | 31.3 | 29.5 | 27.7 | 25.9 | 24.1 | 22.2 | 20.4 |
| EX6        | 120                       | 1.5               | 1.3                        | 1.3  | 1.2  | 1.2  | 1.1  | 1.1  | 1.0  | 1.0  | 0.9  | 0.9  | 0.8  | 0.8  |
| EX7        |                           |                   | 4.6                        | 4.5  | 4.3  | 4.2  | 4.0  | 3.8  | 3.7  | 3.5  | 3.3  | 3.2  | 3.0  | 2.8  |
| EX8        |                           |                   | 14.0                       | 13.6 | 13.1 | 12.7 | 12.2 | 11.7 | 11.2 | 10.7 | 10.1 | 9.6  | 9.1  | 8.5  |
| EX6        |                           | 7                 | 2.8                        | 2.7  | 2.6  | 2.5  | 2.4  | 2.3  | 2.2  | 2.1  | 2.0  | 1.9  | 1.8  | 1.7  |
| EX7        |                           |                   | 10.0                       | 9.7  | 9.4  | 9.0  | 8.7  | 8.3  | 8.0  | 7.6  | 7.2  | 6.9  | 6.5  | 6.1  |
| EX8        |                           |                   | 30.4                       | 29.5 | 28.5 | 27.5 | 26.4 | 25.4 | 24.3 | 23.1 | 22.0 | 20.9 | 19.7 | 18.6 |
| EX6        |                           | 14                | 3.9                        | 3.8  | 3.7  | 3.5  | 3.4  | 3.3  | 3.1  | 3.0  | 2.8  | 2.7  | 2.5  | 2.4  |
| EX7        |                           |                   | 14.1                       | 13.7 | 13.3 | 12.8 | 12.3 | 11.8 | 11.3 | 10.8 | 10.3 | 9.7  | 9.2  | 8.7  |
| EX8        |                           |                   | 43.0                       | 41.7 | 40.3 | 38.9 | 37.4 | 35.9 | 34.4 | 32.8 | 31.2 | 29.6 | 28.0 | 26.3 |
| EX6        | 100                       | 1.5               | 1.3                        | 1.3  | 1.2  | 1.2  | 1.2  | 1.1  | 1.1  | 1.1  | 1.0  | 1.0  | 0.9  | 0.9  |
| EX7        |                           |                   | 4.7                        | 4.6  | 4.4  | 4.3  | 4.2  | 4.0  | 3.9  | 3.7  | 3.6  | 3.4  | 3.3  | 3.1  |
| EX8        |                           |                   | 14.2                       | 13.9 | 13.5 | 13.1 | 12.7 | 12.2 | 11.8 | 11.4 | 10.9 | 10.4 | 10.0 | 9.5  |
| EX6        |                           | 7                 | 2.9                        | 2.8  | 2.7  | 2.6  | 2.5  | 2.5  | 2.4  | 2.3  | 2.2  | 2.1  | 2.0  | 1.9  |
| EX7        |                           |                   | 10.1                       | 9.9  | 9.6  | 9.3  | 9.0  | 8.7  | 8.4  | 8.1  | 7.8  | 7.4  | 7.1  | 6.8  |
| EX8        |                           |                   | 30.8                       | 30.0 | 29.2 | 28.3 | 27.4 | 26.5 | 25.5 | 24.6 | 23.6 | 22.6 | 21.6 | 20.6 |
| EX6        |                           | 14                | 4.0                        | 3.9  | 3.7  | 3.6  | 3.5  | 3.4  | 3.3  | 3.2  | 3.0  | 2.9  | 2.8  | 2.6  |
| EX7        |                           |                   | 14.3                       | 13.9 | 13.5 | 13.1 | 12.7 | 12.3 | 11.9 | 11.4 | 11.0 | 10.5 | 10.0 | 9.6  |
| EX8        |                           |                   | 43.5                       | 42.3 | 41.2 | 39.9 | 38.7 | 37.4 | 36.1 | 34.7 | 33.3 | 31.9 | 30.5 | 29.1 |
| EX6        | 80                        | 1.5               | 1.3                        | 1.3  | 1.2  | 1.2  | 1.2  | 1.1  | 1.1  | 1.1  | 1.0  | 1.0  | 0.9  | 0.9  |
| EX7        |                           |                   | 4.6                        | 4.5  | 4.4  | 4.2  | 4.1  | 4.0  | 3.9  | 3.8  | 3.6  | 3.5  | 3.4  | 3.2  |
| EX8        |                           |                   | 13.9                       | 13.6 | 13.3 | 12.9 | 12.6 | 12.2 | 11.8 | 11.4 | 11.0 | 10.6 | 10.2 | 9.8  |
| EX6        |                           | 7                 | 2.8                        | 2.7  | 2.6  | 2.6  | 2.5  | 2.4  | 2.4  | 2.3  | 2.2  | 2.1  | 2.0  | 2.0  |
| EX7        |                           |                   | 9.9                        | 9.6  | 9.4  | 9.2  | 8.9  | 8.7  | 8.4  | 8.1  | 7.8  | 7.6  | 7.3  | 7.0  |
| EX8        |                           |                   | 30.0                       | 29.3 | 28.6 | 27.8 | 27.1 | 26.3 | 25.5 | 24.7 | 23.8 | 22.9 | 22.1 | 21.2 |
| EX6        |                           | 14                | 3.8                        | 3.7  | 3.7  | 3.6  | 3.5  | 3.4  | 3.3  | 3.2  | 3.0  | 2.9  | 2.8  | 2.7  |
| EX7        |                           |                   | 13.9                       | 13.5 | 13.2 | 12.9 | 12.5 | 12.2 | 11.8 | 11.4 | 11.0 | 10.6 | 10.2 | 9.8  |
| EX8        |                           |                   | 42.1                       | 41.1 | 40.1 | 39.1 | 38.0 | 36.9 | 35.8 | 34.7 | 33.5 | 32.3 | 31.1 | 29.8 |

**R-404A/R-507 Extended Capacities (kWatts) EX4-8 Series,  
as expansion and liquid injection valves**

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                             | +15                          | 10+ | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX4        | +60                         | 9                            | 9   | 9   | 9   | 9   | 9   | 9   | 8   | 8   | 8   | 7   | 7   | 6   |
| EX5        |                             | 28                           | 28  | 28  | 28  | 28  | 27  | 26  | 25  | 24  | 23  | 22  | 21  | 20  |
| EX6        |                             | 68                           | 68  | 68  | 67  | 66  | 65  | 63  | 61  | 58  | 56  | 33  | 50  | 47  |
| EX7        |                             | 186                          | 187 | 186 | 184 | 181 | 177 | 172 | 166 | 160 | 153 | 145 | 137 | 129 |
| EX8        |                             | 495                          | 498 | 496 | 491 | 482 | 471 | 458 | 443 | 425 | 407 | 387 | 366 | 344 |
| EX4        | +55                         | 10                           | 10  | 10  | 10  | 10  | 10  | 10  | 9   | 9   | 9   | 8   | 8   | 8   |
| EX5        |                             | 30                           | 31  | 31  | 31  | 30  | 30  | 29  | 29  | 28  | 27  | 26  | 25  | 23  |
| EX6        |                             | 72                           | 73  | 74  | 74  | 73  | 72  | 70  | 69  | 67  | 64  | 62  | 59  | 56  |
| EX7        |                             | 198                          | 201 | 202 | 202 | 200 | 197 | 193 | 188 | 182 | 176 | 169 | 162 | 154 |
| EX8        |                             | 527                          | 535 | 538 | 537 | 533 | 525 | 514 | 501 | 486 | 470 | 451 | 432 | 411 |
| EX4        | +50                         | 10                           | 10  | 11  | 11  | 11  | 11  | 10  | 10  | 10  | 10  | 9   | 9   | 9   |
| EX5        |                             | 31                           | 32  | 32  | 32  | 32  | 32  | 32  | 31  | 30  | 30  | 29  | 28  | 27  |
| EX6        |                             | 74                           | 76  | 77  | 78  | 78  | 77  | 76  | 75  | 73  | 71  | 69  | 66  | 64  |
| EX7        |                             | 203                          | 208 | 211 | 213 | 219 | 211 | 208 | 204 | 200 | 194 | 188 | 181 | 174 |
| EX8        |                             | 541                          | 555 | 564 | 567 | 567 | 562 | 555 | 545 | 532 | 518 | 501 | 484 | 465 |
| EX4        | +45                         | 10                           | 10  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 10  | 10  | 10  | 9   |
| EX5        |                             | 31                           | 32  | 33  | 33  | 33  | 33  | 33  | 33  | 32  | 32  | 31  | 30  | 29  |
| EX6        |                             | 74                           | 77  | 79  | 80  | 80  | 80  | 80  | 79  | 78  | 76  | 74  | 72  | 69  |
| EX7        |                             | 201                          | 210 | 215 | 219 | 220 | 220 | 219 | 216 | 212 | 208 | 202 | 196 | 190 |
| EX8        |                             | 537                          | 559 | 574 | 583 | 587 | 586 | 582 | 575 | 566 | 553 | 539 | 524 | 506 |
| EX4        | +40                         | 10                           | 10  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 10  | 10  |
| EX5        |                             | 29                           | 31  | 33  | 33  | 34  | 34  | 34  | 34  | 34  | 33  | 32  | 32  | 31  |
| EX6        |                             | 71                           | 75  | 78  | 80  | 81  | 82  | 82  | 81  | 81  | 79  | 78  | 76  | 74  |
| EX7        |                             | 193                          | 205 | 214 | 219 | 223 | 225 | 225 | 223 | 221 | 217 | 213 | 208 | 202 |
| EX8        |                             | 515                          | 547 | 570 | 585 | 594 | 598 | 598 | 595 | 588 | 578 | 567 | 553 | 538 |
| EX4        | +35                         | 9                            | 10  | 10  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  |
| EX5        |                             | 27                           | 30  | 31  | 33  | 34  | 34  | 34  | 34  | 34  | 34  | 33  | 33  | 32  |
| EX6        |                             | 65                           | 71  | 75  | 79  | 81  | 82  | 83  | 83  | 82  | 81  | 80  | 79  | 77  |
| EX7        |                             | 178                          | 195 | 207 | 215 | 221 | 225 | 226 | 226 | 225 | 223 | 219 | 215 | 210 |
| EX8        |                             | 474                          | 519 | 551 | 574 | 590 | 599 | 603 | 604 | 600 | 594 | 585 | 573 | 560 |
| EX4        | +30                         | 8                            | 9   | 10  | 10  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  |
| EX5        |                             | 23                           | 27  | 30  | 31  | 33  | 34  | 34  | 34  | 34  | 34  | 34  | 33  | 33  |
| EX6        |                             | 56                           | 65  | 71  | 75  | 78  | 81  | 82  | 83  | 83  | 82  | 81  | 80  | 79  |
| EX7        |                             | 153                          | 177 | 194 | 206 | 215 | 221 | 224 | 226 | 226 | 225 | 223 | 219 | 215 |
| EX8        |                             | 409                          | 472 | 517 | 550 | 573 | 588 | 598 | 603 | 603 | 600 | 593 | 584 | 573 |

**R-404A/R-507 Extended Capacities (kWatts) EX4-8 Series,  
as expansion and liquid injection valves**

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                             | +15                          | 10+ | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX4        | +25                         | 6                            | 8   | 9   | 10  | 10  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  |
| EX5        |                             | 17                           | 23  | 27  | 29  | 31  | 32  | 33  | 34  | 34  | 34  | 34  | 34  | 33  |
| EX6        |                             | 42                           | 55  | 64  | 70  | 74  | 78  | 80  | 81  | 82  | 82  | 81  | 80  | 79  |
| EX7        |                             | 114                          | 150 | 174 | 191 | 204 | 213 | 218 | 222 | 224 | 224 | 223 | 220 | 217 |
| EX8        |                             | 305                          | 400 | 465 | 510 | 543 | 566 | 582 | 592 | 596 | 597 | 593 | 587 | 579 |
| EX4        | +20                         | 1                            | 5   | 7   | 8   | 9   | 10  | 10  | 11  | 11  | 11  | 11  | 11  | 11  |
| EX5        |                             | 3                            | 16  | 22  | 26  | 28  | 30  | 32  | 33  | 33  | 33  | 33  | 33  | 33  |
| EX6        |                             | 8                            | 40  | 53  | 62  | 68  | 73  | 76  | 78  | 80  | 80  | 80  | 80  | 79  |
| EX7        |                             | 21                           | 108 | 146 | 170 | 187 | 200 | 208 | 214 | 218 | 219 | 220 | 218 | 216 |
| EX8        |                             | 56                           | 289 | 388 | 453 | 499 | 532 | 555 | 571 | 580 | 585 | 585 | 582 | 576 |
| EX4        | +15                         |                              |     | 5   | 7   | 8   | 9   | 10  | 10  | 10  | 11  | 11  | 11  | 11  |
| EX5        |                             |                              |     | 15  | 21  | 25  | 28  | 29  | 31  | 32  | 32  | 32  | 33  | 32  |
| EX6        |                             |                              |     | 37  | 51  | 60  | 66  | 71  | 74  | 76  | 77  | 78  | 78  | 78  |
| EX7        |                             |                              |     | 101 | 139 | 164 | 181 | 194 | 202 | 208 | 212 | 213 | 214 | 213 |
| EX8        |                             |                              |     | 268 | 371 | 437 | 484 | 516 | 540 | 555 | 564 | 569 | 569 | 566 |
| EX4        | +10                         |                              |     |     | 5   | 7   | 8   | 9   | 9   | 10  | 10  | 10  | 10  | 10  |
| EX5        |                             |                              |     |     | 14  | 20  | 24  | 26  | 28  | 30  | 31  | 31  | 31  | 31  |
| EX6        |                             |                              |     |     | 33  | 48  | 57  | 64  | 68  | 71  | 73  | 75  | 75  | 75  |
| EX7        |                             |                              |     |     | 91  | 131 | 156 | 174 | 186 | 195 | 201 | 204 | 206 | 206 |
| EX8        |                             |                              |     |     | 242 | 350 | 417 | 464 | 496 | 519 | 535 | 544 | 548 | 549 |

**R-22 Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves**

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                             | +15                          | +10 | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX4        | +20                         |                              | 6   | 9   | 10  | 12  | 13  | 13  | 14  | 14  | 15  | 15  | 15  | 15  |
| EX5        |                             |                              | 18  | 26  | 32  | 36  | 39  | 41  | 42  | 44  | 45  | 45  | 45  | 46  |
| EX6        |                             |                              | 43  | 63  | 76  | 85  | 93  | 98  | 102 | 105 | 107 | 108 | 109 | 109 |
| EX7        |                             |                              | 117 | 173 | 209 | 235 | 254 | 269 | 280 | 288 | 294 | 298 | 300 | 300 |
| EX8        |                             |                              | 312 | 461 | 557 | 627 | 678 | 718 | 747 | 768 | 784 | 793 | 799 | 801 |
| EX4        | +15                         |                              |     | 5   | 8   | 10  | 11  | 12  | 13  | 13  | 14  | 14  | 14  | 14  |
| EX5        |                             |                              |     | 15  | 24  | 30  | 34  | 37  | 39  | 40  | 42  | 42  | 43  | 43  |
| EX6        |                             |                              |     | 37  | 58  | 71  | 81  | 88  | 93  | 97  | 100 | 102 | 103 | 104 |
| EX7        |                             |                              |     | 101 | 160 | 196 | 222 | 241 | 256 | 266 | 274 | 279 | 283 | 285 |
| EX8        |                             |                              |     | 269 | 426 | 524 | 593 | 644 | 682 | 710 | 731 | 745 | 754 | 759 |
| EX4        | +10                         |                              |     |     | 4   | 7   | 9   | 10  | 11  | 12  | 13  | 13  | 13  | 13  |
| EX5        |                             |                              |     |     | 12  | 22  | 28  | 31  | 34  | 36  | 38  | 39  | 40  | 40  |
| EX6        |                             |                              |     |     | 29  | 53  | 66  | 76  | 82  | 87  | 91  | 94  | 96  | 97  |
| EX7        |                             |                              |     |     | 80  | 145 | 182 | 208 | 227 | 241 | 251 | 258 | 263 | 267 |
| EX8        |                             |                              |     |     | 214 | 386 | 485 | 554 | 604 | 642 | 669 | 689 | 702 | 711 |

R-134a Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves

| Valve Type | Condensing Temperature °C | Extended capacity (kW) Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|---------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                           | +15   | +10 | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX4        | +60                       | 13  | 13  | 13  | 13  | 13  | 13  | 12  | 12  | 12  | 12  | 11  | 11  | 11  |
| EX5        |                           | 39  | 39  | 39  | 39  | 39  | 39  | 38  | 37  | 36  | 35  | 34  | 33  | 32  |
| EX6        |                           | 93  | 94  | 94  | 94  | 93  | 92  | 90  | 89  | 87  | 84  | 82  | 79  | 77  |
| EX7        |                           | 255   | 257 | 258 | 257 | 255 | 252 | 248 | 243 | 237 | 231 | 224 | 217 | 210 |
| EX8        |                           | 679   | 686 | 688 | 686 | 680 | 672 | 661 | 648 | 633 | 616 | 598 | 580 | 560 |
| EX4        | +55                       | 12  | 13  | 13  | 13  | 13  | 13  | 13  | 12  | 12  | 12  | 12  | 11  | 11  |
| EX5        |                           | 38  | 39  | 39  | 39  | 39  | 39  | 38  | 38  | 37  | 36  | 35  | 34  | 33  |
| EX6        |                           | 91  | 92  | 93  | 94  | 93  | 93  | 92  | 90  | 88  | 86  | 84  | 82  | 80  |
| EX7        |                           | 249   | 253 | 256 | 257 | 256 | 254 | 251 | 247 | 242 | 237 | 231 | 225 | 218 |
| EX8        |                           | 663   | 676 | 683 | 685 | 683 | 678 | 670 | 659 | 647 | 632 | 616 | 599 | 582 |
| EX4        | +50                       | 12  | 12  | 13  | 13  | 13  | 13  | 13  | 12  | 12  | 12  | 12  | 12  | 11  |
| EX5        |                           | 36  | 38  | 38  | 39  | 39  | 39  | 38  | 38  | 37  | 37  | 36  | 35  | 34  |
| EX6        |                           | 87  | 90  | 91  | 92  | 93  | 92  | 92  | 91  | 89  | 88  | 86  | 84  | 81  |
| EX7        |                           | 238   | 246 | 250 | 253 | 254 | 253 | 251 | 249 | 245 | 240 | 235 | 229 | 223 |
| EX8        |                           | 636   | 655 | 668 | 675 | 677 | 676 | 671 | 663 | 653 | 640 | 627 | 611 | 595 |
| EX4        | +45                       | 11  | 12  | 12  | 12  | 12  | 13  | 12  | 12  | 12  | 12  | 12  | 12  | 11  |
| EX5        |                           | 34  | 36  | 37  | 38  | 38  | 38  | 38  | 38  | 37  | 37  | 36  | 35  | 35  |
| EX6        |                           | 81  | 85  | 88  | 90  | 91  | 91  | 91  | 90  | 89  | 88  | 86  | 84  | 82  |
| EX7        |                           | 223   | 234 | 241 | 246 | 248 | 249 | 249 | 247 | 244 | 240 | 236 | 231 | 226 |
| EX8        |                           | 595   | 623 | 642 | 655 | 662 | 664 | 663 | 658 | 651 | 641 | 629 | 616 | 602 |
| EX4        | +40                       | 10  | 11  | 11  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 11  |
| EX5        |                           | 31  | 33  | 35  | 36  | 37  | 37  | 37  | 37  | 37  | 36  | 36  | 35  | 34  |
| EX6        |                           | 74  | 79  | 83  | 85  | 87  | 88  | 89  | 88  | 88  | 87  | 85  | 84  | 82  |
| EX7        |                           | 202   | 217 | 227 | 234 | 239 | 242 | 243 | 242 | 240 | 238 | 234 | 230 | 225 |
| EX8        |                           | 539   | 578 | 606 | 625 | 638 | 645 | 647 | 646 | 641 | 634 | 625 | 614 | 601 |
| EX4        | +35                       | 9   | 10  | 10  | 11  | 11  | 12  | 12  | 12  | 12  | 12  | 12  | 11  | 11  |
| EX5        |                           | 27  | 30  | 32  | 34  | 35  | 35  | 36  | 36  | 36  | 36  | 35  | 35  | 34  |
| EX6        |                           | 63  | 71  | 76  | 80  | 83  | 84  | 85  | 86  | 85  | 85  | 84  | 83  | 81  |
| EX7        |                           | 173   | 194 | 209 | 219 | 226 | 231 | 234 | 235 | 234 | 232 | 230 | 227 | 223 |
| EX8        |                           | 463   | 517 | 556 | 584 | 604 | 616 | 623 | 625 | 624 | 620 | 613 | 604 | 594 |
| EX4        | +30                       | 7   | 8   | 9   | 10  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  | 11  |
| EX5        |                           | 20  | 25  | 28  | 30  | 32  | 33  | 34  | 34  | 34  | 34  | 34  | 34  | 33  |
| EX6        |                           | 49  | 60  | 67  | 73  | 76  | 79  | 81  | 82  | 82  | 82  | 81  | 80  | 79  |
| EX7        |                           | 133   | 164 | 184 | 199 | 210 | 217 | 221 | 224 | 225 | 224 | 223 | 221 | 217 |
| EX8        |                           | 356   | 436 | 492 | 534 | 559 | 578 | 590 | 597 | 600 | 599 | 595 | 588 | 580 |
| EX4        | +25                       | 3   | 6   | 8   | 9   | 9   | 10  | 10  | 11  | 11  | 11  | 11  | 11  | 11  |
| EX5        |                           | 10  | 18  | 23  | 26  | 29  | 30  | 31  | 32  | 33  | 33  | 33  | 32  | 32  |
| EX6        |                           | 23  | 121 | 152 | 137 | 188 | 198 | 206 | 210 | 213 | 214 | 213 | 212 | 210 |
| EX7        |                           | 63  | 121 | 152 | 173 | 188 | 198 | 206 | 210 | 213 | 214 | 213 | 212 | 210 |
| EX8        |                           | 169   | 322 | 406 | 462 | 501 | 529 | 548 | 560 | 567 | 570 | 569 | 565 | 559 |
| EX4        | +20                       |   | 2   | 5   | 7   | 8   | 9   | 9   | 10  | 10  | 10  | 10  | 10  | 10  |
| EX5        |                           |   | 5   | 16  | 21  | 25  | 27  | 28  | 29  | 30  | 31  | 31  | 31  | 31  |
| EX6        |                           |   | 12  | 38  | 51  | 58  | 64  | 68  | 70  | 72  | 73  | 73  | 73  | 73  |
| EX7        |                           |   | 34  | 105 | 139 | 160 | 175 | 186 | 193 | 197 | 200 | 201 | 201 | 199 |
| EX8        |                           |   | 90  | 281 | 370 | 427 | 467 | 495 | 514 | 526 | 533 | 536 | 535 | 532 |
| EX4        | +15                       |   |     |     | 4   | 6   | 7   | 8   | 9   | 9   | 9   | 9   | 9   | 9   |
| EX5        |                           |   |     |     | 13  | 19  | 22  | 25  | 26  | 27  | 28  | 28  | 29  | 29  |
| EX6        |                           |   |     |     | 32  | 45  | 53  | 59  | 62  | 65  | 67  | 68  | 68  | 68  |
| EX7        |                           |   |     |     | 87  | 123 | 145 | 161 | 171 | 178 | 183 | 186 | 187 | 187 |
| EX8        |                           |   |     |     | 231 | 328 | 388 | 428 | 456 | 475 | 488 | 495 | 498 | 498 |
| EX4        | +10                       |   |     |     |     | 3   | 5   | 6   | 7   | 8   | 8   | 9   | 9   | 9   |
| EX5        |                           |   |     |     |     | 9   | 16  | 20  | 22  | 24  | 25  | 26  | 26  | 26  |
| EX6        |                           |   |     |     |     | 22  | 38  | 47  | 52  | 56  | 59  | 61  | 62  | 62  |
| EX7        |                           |   |     |     |     | 61  | 104 | 128 | 144 | 155 | 162 | 167 | 170 | 171 |
| EX8        |                           |   |     |     |     | 162 | 277 | 341 | 384 | 413 | 432 | 445 | 452 | 455 |

R-407C Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves

| Valve Type | Condensing Temperature °C |              | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|---------------------------|--------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            | Dew Point                 | Bubble Point | +15                          | +10 | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX4        | +64                       | +60          | 16                           | 17  | 17  | 17  | 17  | 17  | 16  | 16  | 16  | 15  | 15  | 15  | 14  |
| EX5        |                           |              | 50                           | 51  | 51  | 51  | 51  | 50  | 50  | 49  | 48  | 47  | 46  | 45  | 43  |
| EX6        |                           |              | 119                          | 120 | 121 | 121 | 121 | 119 | 118 | 116 | 114 | 112 | 109 | 106 | 103 |
| EX7        |                           |              | 328                          | 332 | 333 | 333 | 332 | 329 | 325 | 320 | 314 | 308 | 301 | 293 | 285 |
| EX8        |                           |              | 874                          | 884 | 889 | 889 | 885 | 877 | 867 | 854 | 838 | 821 | 802 | 781 | 759 |
| EX4        | +59                       | +55          | 17                           | 17  | 17  | 17  | 17  | 17  | 17  | 16  | 16  | 16  | 15  | 15  |     |
| EX5        |                           |              | 50                           | 51  | 52  | 52  | 52  | 52  | 51  | 51  | 50  | 49  | 48  | 47  | 46  |
| EX6        |                           |              | 120                          | 122 | 123 | 124 | 124 | 123 | 122 | 121 | 119 | 117 | 114 | 112 | 109 |
| EX7        |                           |              | 330                          | 336 | 339 | 341 | 341 | 339 | 336 | 332 | 328 | 322 | 315 | 308 | 301 |
| EX8        |                           |              | 879                          | 895 | 904 | 909 | 908 | 904 | 897 | 886 | 873 | 858 | 840 | 821 | 801 |
| EX4        | +54                       | +50          | 16                           | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 16  | 16  | 16  |     |
| EX5        |                           |              | 50                           | 51  | 52  | 52  | 53  | 53  | 52  | 52  | 51  | 51  | 50  | 49  | 48  |
| EX6        |                           |              | 118                          | 121 | 123 | 125 | 125 | 125 | 125 | 123 | 122 | 120 | 118 | 116 | 113 |
| EX7        |                           |              | 326                          | 334 | 340 | 343 | 345 | 345 | 343 | 340 | 336 | 331 | 325 | 319 | 312 |
| EX8        |                           |              | 869                          | 891 | 906 | 915 | 919 | 919 | 914 | 907 | 896 | 883 | 868 | 851 | 832 |
| EX4        | +50                       | +45          | 16                           | 16  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 16  | 16  |     |
| EX5        |                           |              | 48                           | 50  | 51  | 52  | 53  | 53  | 53  | 52  | 52  | 51  | 51  | 50  | 49  |
| EX6        |                           |              | 115                          | 119 | 122 | 124 | 125 | 125 | 125 | 125 | 124 | 122 | 120 | 118 | 116 |
| EX7        |                           |              | 316                          | 327 | 336 | 341 | 344 | 346 | 345 | 344 | 341 | 337 | 332 | 326 | 320 |
| EX8        |                           |              | 843                          | 873 | 894 | 909 | 918 | 921 | 920 | 916 | 908 | 897 | 884 | 869 | 853 |
| EX4        | +45                       | +40          | 15                           | 16  | 16  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 16  |     |
| EX5        |                           |              | 46                           | 48  | 50  | 51  | 52  | 52  | 52  | 52  | 52  | 52  | 51  | 50  | 49  |
| EX6        |                           |              | 109                          | 114 | 118 | 121 | 123 | 124 | 125 | 125 | 124 | 123 | 121 | 120 | 118 |
| EX7        |                           |              | 300                          | 315 | 326 | 334 | 339 | 342 | 344 | 343 | 341 | 338 | 334 | 330 | 324 |
| EX8        |                           |              | 801                          | 840 | 870 | 891 | 905 | 913 | 916 | 915 | 910 | 902 | 891 | 878 | 864 |
| EX4        | +40                       | +35          | 14                           | 15  | 16  | 16  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 16  |     |
| EX5        |                           |              | 42                           | 45  | 48  | 49  | 50  | 51  | 52  | 52  | 52  | 51  | 51  | 50  | 50  |
| EX6        |                           |              | 101                          | 108 | 113 | 117 | 120 | 122 | 123 | 123 | 123 | 122 | 121 | 120 | 118 |
| EX7        |                           |              | 278                          | 297 | 312 | 323 | 330 | 335 | 338 | 339 | 338 | 337 | 334 | 330 | 325 |
| EX8        |                           |              | 742                          | 793 | 832 | 860 | 880 | 894 | 901 | 904 | 902 | 897 | 889 | 879 | 866 |

R-407C Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves

| Valve Type | Condensing Temperature°C |              | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|--------------------------|--------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            | Dew Point                | Bubble Point | +15                          | +10 | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX4        | +35                      | +30          | 12                           | 14  | 15  | 15  | 16  | 16  | 16  | 17  | 17  | 17  | 17  | 16  | 16  |
| EX5        |                          |              | 38                           | 42  | 45  | 47  | 48  | 49  | 50  | 51  | 51  | 51  | 50  | 50  | 49  |
| EX6        |                          |              | 90                           | 99  | 106 | 111 | 115 | 118 | 119 | 120 | 121 | 120 | 120 | 119 | 117 |
| EX7        |                          |              | 248                          | 273 | 292 | 306 | 317 | 324 | 329 | 331 | 332 | 331 | 329 | 326 | 323 |
| EX8        |                          |              | 661                          | 729 | 779 | 817 | 844 | 864 | 876 | 883 | 885 | 884 | 878 | 870 | 860 |
| EX4        | +30                      | +25          | 10                           | 12  | 13  | 14  | 15  | 15  | 16  | 16  | 16  | 16  | 16  | 16  | 16  |
| EX5        |                          |              | 32                           | 37  | 41  | 44  | 46  | 47  | 48  | 49  | 49  | 49  | 49  | 49  | 48  |
| EX6        |                          |              | 75                           | 88  | 97  | 103 | 108 | 112 | 115 | 116 | 117 | 117 | 117 | 116 | 115 |
| EX7        |                          |              | 207                          | 241 | 266 | 285 | 299 | 309 | 316 | 320 | 322 | 323 | 322 | 320 | 317 |
| EX8        |                          |              | 552                          | 644 | 710 | 760 | 796 | 823 | 841 | 853 | 860 | 861 | 859 | 854 | 846 |
| EX4        | +26                      | +20          | 7                            | 10  | 12  | 13  | 14  | 14  | 15  | 15  | 16  | 16  | 16  | 16  | 15  |
| EX5        |                          |              | 23                           | 30  | 36  | 39  | 42  | 44  | 46  | 47  | 47  | 48  | 48  | 48  | 47  |
| EX6        |                          |              | 54                           | 72  | 85  | 94  | 100 | 105 | 108 | 111 | 112 | 113 | 113 | 113 | 112 |
| EX7        |                          |              | 148                          | 199 | 233 | 258 | 276 | 289 | 299 | 305 | 309 | 312 | 312 | 311 | 309 |
| EX8        |                          |              | 395                          | 530 | 621 | 687 | 735 | 770 | 796 | 814 | 825 | 831 | 832 | 829 | 824 |
| EX4        | +21                      | +15          |                              | 7   | 9   | 11  | 12  | 13  | 14  | 14  | 15  | 15  | 15  | 15  | 15  |
| EX5        |                          |              |                              | 21  | 29  | 34  | 38  | 40  | 42  | 44  | 45  | 45  | 46  | 46  | 46  |
| EX6        |                          |              |                              | 50  | 69  | 81  | 90  | 96  | 101 | 104 | 106 | 108 | 108 | 108 | 108 |
| EX7        |                          |              |                              | 137 | 189 | 223 | 247 | 265 | 277 | 287 | 293 | 297 | 299 | 299 | 298 |
| EX8        |                          |              |                              | 365 | 503 | 594 | 658 | 705 | 740 | 764 | 781 | 791 | 796 | 796 | 795 |
| EX4        | +16                      | +10          |                              |     | 6   | 9   | 11  | 12  | 13  | 13  | 14  | 14  | 14  | 14  | 14  |
| EX5        |                          |              |                              |     | 19  | 27  | 32  | 36  | 38  | 40  | 42  | 43  | 43  | 43  | 43  |
| EX6        |                          |              |                              |     | 45  | 64  | 76  | 85  | 91  | 96  | 99  | 101 | 103 | 103 | 103 |
| EX7        |                          |              |                              |     | 123 | 176 | 210 | 234 | 251 | 264 | 273 | 279 | 282 | 282 | 284 |
| EX8        |                          |              |                              |     | 329 | 470 | 561 | 624 | 670 | 704 | 727 | 743 | 753 | 753 | 758 |

**R-410A Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves**

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |     |     |     |     |      |      |      |      |      |      |      |      |
|------------|---------------------------|------------------------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
|            |                           | +15                          | +10 | +5  | 0   | -5  | -10  | -15  | -20  | 18   | -30  | -35  | -40  | -45  |
| EX4        | +30                       | 13                           | 15  | 16  | 17  | 18  | 19   | 20   | 20   | 20   | 20   | 20   | 20   | 20   |
| EX5        |                           | 38                           | 44  | 49  | 52  | 55  | 57   | 59   | 60   | 61   | 61   | 61   | 61   | 61   |
| EX6        |                           | 93                           | 107 | 118 | 126 | 133 | 138  | 142  | 145  | 147  | 148  | 148  | 148  | 147  |
| EX7        |                           | 255                          | 294 | 325 | 348 | 366 | 380  | 390  | 398  | 403  | 406  | 407  | 406  | 405  |
| EX8        |                           | 680                          | 786 | 866 | 928 | 976 | 1013 | 1041 | 1061 | 1075 | 1083 | 1086 | 1084 | 1079 |
| EX4        | +25                       | 10                           | 13  | 15  | 16  | 17  | 18   | 19   | 19   | 20   | 20   | 20   | 20   | 20   |
| EX5        |                           | 29                           | 38  | 44  | 48  | 52  | 54   | 56   | 58   | 59   | 60   | 60   | 60   | 60   |
| EX6        |                           | 71                           | 91  | 106 | 117 | 125 | 131  | 136  | 140  | 143  | 144  | 145  | 146  | 145  |
| EX7        |                           | 195                          | 251 | 291 | 321 | 344 | 361  | 375  | 385  | 392  | 397  | 399  | 400  | 399  |
| EX8        |                           | 520                          | 669 | 775 | 855 | 916 | 964  | 1000 | 1027 | 1046 | 1058 | 1065 | 1067 | 1065 |
| EX4        | +20                       | 4                            | 9   | 12  | 14  | 16  | 17   | 18   | 18   | 19   | 19   | 19   | 20   | 20   |
| EX5        |                           | 13                           | 28  | 37  | 43  | 47  | 51   | 53   | 55   | 57   | 58   | 58   | 59   | 59   |
| EX6        |                           | 31                           | 68  | 89  | 103 | 114 | 122  | 129  | 133  | 137  | 139  | 141  | 142  | 142  |
| EX7        |                           | 84                           | 188 | 244 | 284 | 314 | 337  | 354  | 367  | 377  | 383  | 388  | 390  | 390  |
| EX8        |                           | 225                          | 501 | 652 | 758 | 837 | 898  | 944  | 979  | 1005 | 1023 | 1034 | 1040 | 1042 |
| EX4        | +15                       |                              | 3   | 9   | 12  | 14  | 15   | 16   | 17   | 18   | 18   | 19   | 19   | 19   |
| EX5        |                           |                              | 10  | 27  | 36  | 42  | 46   | 49   | 52   | 54   | 55   | 56   | 57   | 57   |
| EX6        |                           |                              | 23  | 65  | 86  | 100 | 111  | 119  | 125  | 130  | 133  | 135  | 137  | 137  |
| EX7        |                           |                              | 64  | 178 | 236 | 276 | 305  | 327  | 344  | 357  | 366  | 372  | 376  | 378  |
| EX8        |                           |                              | 172 | 475 | 629 | 735 | 813  | 873  | 917  | 951  | 976  | 992  | 1003 | 1008 |
| EX4        | +10                       |                              |     | 1   | 8   | 11  | 13   | 15   | 16   | 17   | 17   | 18   | 18   | 18   |
| EX5        |                           |                              |     | 4   | 25  | 34  | 40   | 44   | 47   | 50   | 52   | 53   | 54   | 55   |
| EX6        |                           |                              |     | 10  | 60  | 82  | 96   | 107  | 115  | 121  | 125  | 128  | 130  | 132  |
| EX7        |                           |                              |     | 28  | 166 | 225 | 265  | 294  | 315  | 332  | 344  | 352  | 358  | 362  |
| EX8        |                           |                              |     | 76  | 443 | 600 | 706  | 783  | 841  | 885  | 917  | 940  | 956  | 965  |

R-410A Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |     |      |      |      |      |      |      |      |      |      |      |      |
|------------|---------------------------|------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|
|            |                           | +15                          | +10 | +5   | 0    | -5   | -10  | -15  | -20  | 18   | -30  | -35  | -40  | -45  |
| EX4        | +60                       | 17                           | 17  | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 17   | 17   | 17   |
| EX5        |                           | 51                           | 52  | 53   | 54   | 54   | 54   | 54   | 54   | 53   | 53   | 52   | 51   | 50   |
| EX6        |                           | 123                          | 126 | 129  | 130  | 131  | 131  | 131  | 130  | 129  | 127  | 125  | 123  | 120  |
| EX7        |                           | 339                          | 348 | 354  | 358  | 360  | 361  | 360  | 358  | 354  | 350  | 344  | 338  | 331  |
| EX8        |                           | -                            | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| EX4        | +55                       | 18                           | 18  | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 19   | 18   | 18   |
| EX5        |                           | 53                           | 55  | 56   | 57   | 57   | 58   | 58   | 58   | 57   | 57   | 56   | 55   | 54   |
| EX6        |                           | 127                          | 132 | 135  | 137  | 138  | 139  | 139  | 139  | 138  | 137  | 135  | 133  | 131  |
| EX7        |                           | 350                          | 362 | 370  | 377  | 381  | 383  | 383  | 382  | 380  | 377  | 372  | 366  | 360  |
| EX8        |                           | 935                          | 965 | 988  | 1005 | 1016 | 1021 | 1023 | 1020 | 1014 | 1005 | 992  | 978  | 961  |
| EX4        | +50                       | 18                           | 18  | 19   | 19   | 20   | 20   | 20   | 20   | 20   | 20   | 20   | 19   | 19   |
| EX5        |                           | 53                           | 55  | 57   | 58   | 59   | 60   | 60   | 60   | 60   | 59   | 59   | 58   | 57   |
| EX6        |                           | 128                          | 133 | 137  | 140  | 142  | 144  | 145  | 145  | 144  | 143  | 142  | 140  | 138  |
| EX7        |                           | 351                          | 366 | 377  | 386  | 392  | 396  | 398  | 398  | 397  | 394  | 391  | 386  | 380  |
| EX8        |                           | 936                          | 975 | 1006 | 1029 | 1045 | 1056 | 1061 | 1062 | 1059 | 1052 | 1043 | 1030 | 1015 |
| EX4        | +45                       | 17                           | 18  | 19   | 19   | 20   | 20   | 20   | 20   | 20   | 20   | 20   | 20   | 20   |
| EX5        |                           | 52                           | 54  | 57   | 58   | 60   | 60   | 61   | 61   | 61   | 61   | 61   | 60   | 59   |
| EX6        |                           | 124                          | 131 | 136  | 141  | 144  | 146  | 147  | 148  | 148  | 147  | 146  | 145  | 143  |
| EX7        |                           | 342                          | 361 | 375  | 387  | 395  | 401  | 405  | 407  | 407  | 405  | 403  | 399  | 394  |
| EX8        |                           | 913                          | 962 | 1001 | 1031 | 1054 | 1070 | 1080 | 1085 | 1085 | 1082 | 1075 | 1064 | 1052 |
| EX4        | +40                       | 16                           | 17  | 18   | 19   | 20   | 20   | 20   | 21   | 21   | 21   | 21   | 20   | 20   |
| EX5        |                           | 49                           | 52  | 55   | 57   | 59   | 60   | 61   | 62   | 62   | 62   | 62   | 61   | 61   |
| EX6        |                           | 118                          | 126 | 133  | 138  | 142  | 145  | 147  | 149  | 149  | 149  | 149  | 148  | 146  |
| EX7        |                           | 324                          | 348 | 366  | 381  | 392  | 400  | 406  | 409  | 411  | 411  | 409  | 406  | 402  |
| EX8        |                           | 864                          | 927 | 977  | 1015 | 1045 | 1067 | 1082 | 1091 | 1095 | 1095 | 1091 | 1084 | 1073 |
| EX4        | +35                       | 15                           | 16  | 18   | 18   | 19   | 20   | 20   | 20   | 21   | 21   | 21   | 20   | 20   |
| EX5        |                           | 45                           | 49  | 53   | 55   | 58   | 59   | 60   | 61   | 62   | 62   | 62   | 62   | 61   |
| EX6        |                           | 108                          | 118 | 127  | 134  | 139  | 143  | 146  | 148  | 149  | 149  | 149  | 149  | 148  |
| EX7        |                           | 296                          | 326 | 349  | 368  | 382  | 393  | 401  | 406  | 409  | 411  | 410  | 409  | 406  |
| EX8        |                           | 789                          | 869 | 932  | 981  | 1019 | 1048 | 1069 | 1083 | 1092 | 1095 | 1095 | 1090 | 1082 |

R-22 Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves

| Valve Type | Condensing Temperature (°C) | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                             | +15                          | +10 | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX4        | +60                         | 17                           | 17  | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 17  | 17  | 17  | 17  |
| EX5        |                             | 51                           | 52  | 53  | 54  | 54  | 54  | 54  | 54  | 53  | 53  | 52  | 52  | 51  |
| EX6        |                             | 123                          | 126 | 128 | 129 | 130 | 130 | 130 | 129 | 128 | 127 | 126 | 124 | 122 |
| EX7        |                             | 337                          | 345 | 351 | 355 | 357 | 358 | 357 | 356 | 353 | 350 | 345 | 340 | 335 |
| EX8        |                             | 900                          | 921 | 936 | 946 | 952 | 954 | 953 | 948 | 941 | 932 | 921 | 908 | 893 |
| EX4        | +55                         | 16                           | 17  | 17  | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 17  | 17  | 17  |
| EX5        |                             | 50                           | 51  | 52  | 53  | 54  | 54  | 54  | 54  | 54  | 53  | 53  | 52  | 52  |
| EX6        |                             | 119                          | 123 | 126 | 128 | 129 | 130 | 130 | 130 | 129 | 128 | 127 | 126 | 124 |
| EX7        |                             | 328                          | 339 | 346 | 352 | 355 | 357 | 358 | 357 | 356 | 353 | 350 | 345 | 340 |
| EX8        |                             | 876                          | 903 | 923 | 938 | 948 | 953 | 955 | 953 | 949 | 941 | 932 | 921 | 908 |
| EX4        | +50                         | 16                           | 16  | 17  | 17  | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 17  | 17  |
| EX5        |                             | 48                           | 50  | 51  | 52  | 53  | 54  | 54  | 54  | 54  | 54  | 53  | 53  | 52  |
| EX6        |                             | 114                          | 119 | 123 | 125 | 127 | 129 | 129 | 129 | 129 | 128 | 127 | 126 | 125 |
| EX7        |                             | 314                          | 327 | 337 | 345 | 350 | 354 | 355 | 356 | 355 | 353 | 351 | 347 | 343 |
| EX8        |                             | 838                          | 873 | 899 | 919 | 933 | 943 | 948 | 949 | 947 | 942 | 935 | 925 | 914 |
| EX4        | +45                         | 15                           | 16  | 16  | 17  | 17  | 17  | 17  | 18  | 18  | 18  | 17  | 17  | 17  |
| EX5        |                             | 45                           | 47  | 49  | 51  | 52  | 52  | 53  | 53  | 53  | 53  | 53  | 52  | 52  |
| EX6        |                             | 107                          | 113 | 118 | 121 | 124 | 126 | 127 | 128 | 128 | 127 | 127 | 126 | 124 |
| EX7        |                             | 295                          | 311 | 324 | 334 | 341 | 346 | 349 | 351 | 351 | 350 | 348 | 346 | 342 |
| EX8        |                             | 787                          | 830 | 864 | 890 | 909 | 923 | 932 | 936 | 937 | 934 | 929 | 922 | 912 |
| EX4        | +40                         | 13                           | 15  | 15  | 16  | 16  | 17  | 17  | 17  | 17  | 17  | 17  | 17  | 17  |
| EX5        |                             | 41                           | 44  | 46  | 48  | 50  | 51  | 52  | 52  | 52  | 52  | 52  | 52  | 51  |
| EX6        |                             | 98                           | 106 | 111 | 116 | 119 | 122 | 124 | 125 | 125 | 125 | 125 | 124 | 123 |
| EX7        |                             | 270                          | 290 | 306 | 319 | 328 | 335 | 340 | 343 | 345 | 345 | 344 | 342 | 339 |
| EX8        |                             | 719                          | 774 | 817 | 850 | 875 | 894 | 907 | 915 | 919 | 919 | 916 | 911 | 903 |
| EX4        | +35                         | 12                           | 13  | 14  | 15  | 16  | 16  | 16  | 17  | 17  | 17  | 17  | 17  | 17  |
| EX5        |                             | 36                           | 40  | 43  | 45  | 47  | 49  | 50  | 50  | 51  | 51  | 51  | 51  | 50  |
| EX6        |                             | 86                           | 96  | 103 | 109 | 113 | 117 | 119 | 121 | 122 | 122 | 122 | 122 | 121 |
| EX7        |                             | 237                          | 264 | 284 | 300 | 312 | 321 | 327 | 332 | 335 | 336 | 336 | 335 | 333 |
| EX8        |                             | 632                          | 703 | 757 | 799 | 831 | 856 | 873 | 885 | 893 | 896 | 896 | 893 | 888 |
| EX4        | +30                         | 10                           | 11  | 13  | 14  | 15  | 15  | 16  | 16  | 16  | 16  | 16  | 16  | 16  |
| EX5        |                             | 29                           | 35  | 39  | 42  | 44  | 46  | 47  | 48  | 49  | 49  | 49  | 49  | 49  |
| EX6        |                             | 70                           | 83  | 93  | 100 | 106 | 110 | 113 | 116 | 117 | 118 | 118 | 118 | 118 |
| EX7        |                             | 194                          | 229 | 256 | 276 | 291 | 303 | 312 | 318 | 322 | 325 | 326 | 326 | 324 |
| EX8        |                             | 516                          | 611 | 682 | 735 | 776 | 808 | 831 | 848 | 859 | 866 | 869 | 868 | 865 |
| EX4        | +25                         | 7                            | 9   | 11  | 12  | 13  | 14  | 15  | 15  | 15  | 16  | 16  | 16  | 16  |
| EX5        |                             | 20                           | 28  | 33  | 37  | 40  | 43  | 44  | 46  | 46  | 47  | 47  | 48  | 48  |
| EX6        |                             | 47                           | 67  | 80  | 90  | 97  | 102 | 106 | 109 | 112 | 113 | 114 | 114 | 114 |
| EX7        |                             | 130                          | 184 | 220 | 246 | 266 | 281 | 292 | 301 | 307 | 311 | 313 | 314 | 314 |
| EX8        |                             | 347                          | 491 | 587 | 656 | 709 | 749 | 779 | 802 | 818 | 829 | 835 | 837 | 836 |

R-124 Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |     |     |     |     |    |    |
|------------|---------------------------|------------------------------|-----|-----|-----|-----|----|----|
|            |                           | +30                          | +25 | +20 | +15 | +10 | +5 | 0  |
| EX4        | +100                      | 7                            | 7   | 7   | 6   | 6   | 6  | 5  |
| EX5        |                           | 22                           | 21  | 20  | 19  | 18  | 17 | 16 |
| EX6        |                           | 53                           | 51  | 49  | 47  | 44  | 42 | 39 |
| EX4        | +95                       | 8                            | 8   | 7   | 7   | 7   | 7  | 6  |
| EX5        |                           | 24                           | 23  | 23  | 22  | 21  | 20 | 19 |
| EX6        |                           | 57                           | 56  | 54  | 52  | 50  | 47 | 45 |
| EX4        | +90                       | 8                            | 8   | 8   | 8   | 7   | 7  | 7  |
| EX5        |                           | 25                           | 25  | 24  | 24  | 23  | 22 | 21 |
| EX6        |                           | 61                           | 59  | 58  | 56  | 54  | 52 | 50 |
| EX4        | +85                       | 9                            | 9   | 8   | 8   | 8   | 8  | 7  |
| EX5        |                           | 26                           | 26  | 25  | 25  | 24  | 23 | 23 |
| EX6        |                           | 63                           | 62  | 61  | 60  | 58  | 56 | 54 |
| EX4        | +80                       | 9                            | 9   | 9   | 8   | 8   | 8  | 8  |
| EX5        |                           | 27                           | 27  | 26  | 26  | 25  | 25 | 24 |
| EX6        |                           | 64                           | 63  | 63  | 62  | 61  | 59 | 57 |
| EX4        | +75                       | 9                            | 9   | 9   | 9   | 9   | 8  | 8  |
| EX5        |                           | 27                           | 27  | 27  | 26  | 26  | 25 | 25 |
| EX6        |                           | 64                           | 64  | 64  | 63  | 62  | 61 | 60 |
| EX4        | +70                       | 9                            | 9   | 9   | 9   | 9   | 9  | 8  |
| EX5        |                           | 26                           | 26  | 27  | 27  | 26  | 26 | 25 |
| EX6        |                           | 62                           | 63  | 64  | 63  | 63  | 62 | 61 |
| EX4        | +65                       | 8                            | 8   | 9   | 9   | 9   | 9  | 8  |
| EX5        |                           | 25                           | 26  | 26  | 26  | 26  | 26 | 26 |
| EX6        |                           | 60                           | 61  | 62  | 63  | 63  | 62 | 62 |
| EX4        | +60                       | 8                            | 8   | 8   | 8   | 8   | 8  | 8  |
| EX5        |                           | 23                           | 24  | 25  | 26  | 26  | 26 | 26 |
| EX6        |                           | 56                           | 58  | 60  | 61  | 62  | 62 | 61 |

R-23 Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |      |
|------------|---------------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|            |                           | -45                          | -50 | -55 | -60 | -65 | -70 | -75 | -80 | -85 | -90 | -95 | -100 |
| EX4        | -10                       | 17                           | 18  | 19  | 19  | 19  | 19  | 19  | 19  | 19  | 19  | 19  | 18   |
| EX5        |                           | 53                           | 55  | 56  | 57  | 58  | 58  | 58  | 58  | 58  | 57  | 57  | 56   |
| EX6        |                           | 127                          | 132 | 135 | 138 | 139 | 140 | 140 | 140 | 139 | 138 | 137 | 135  |
| EX4        | -15                       | 16                           | 17  | 18  | 18  | 19  | 19  | 19  | 19  | 19  | 19  | 18  | 18   |
| EX5        |                           | 50                           | 52  | 54  | 55  | 56  | 57  | 57  | 57  | 57  | 57  | 56  | 55   |
| EX6        |                           | 119                          | 125 | 130 | 133 | 135 | 137 | 137 | 137 | 137 | 136 | 135 | 134  |
| EX4        | -20                       | 15                           | 16  | 17  | 17  | 18  | 18  | 18  | 18  | 18  | 18  | 18  | 18   |
| EX5        |                           | 45                           | 48  | 51  | 53  | 54  | 55  | 55  | 55  | 55  | 55  | 55  | 54   |
| EX6        |                           | 109                          | 117 | 122 | 127 | 130 | 132 | 133 | 134 | 133 | 133 | 132 | 131  |
| EX4        | -25                       | 13                           | 14  | 15  | 16  | 17  | 17  | 17  | 18  | 18  | 18  | 18  | 17   |
| EX5        |                           | 40                           | 44  | 47  | 49  | 51  | 52  | 53  | 53  | 53  | 53  | 53  | 53   |
| EX6        |                           | 96                           | 106 | 113 | 118 | 122 | 125 | 127 | 128 | 129 | 128 | 128 | 127  |
| EX4        | -30                       | 11                           | 13  | 14  | 15  | 16  | 16  | 16  | 17  | 17  | 17  | 17  | 17   |
| EX5        |                           | 33                           | 38  | 42  | 45  | 47  | 49  | 50  | 51  | 51  | 51  | 51  | 51   |
| EX6        |                           | 78                           | 92  | 101 | 108 | 114 | 117 | 120 | 122 | 122 | 123 | 123 | 122  |
| EX4        | -35                       | 7                            | 10  | 12  | 13  | 14  | 15  | 15  | 16  | 16  | 16  | 16  | 16   |
| EX5        |                           | 22                           | 30  | 36  | 40  | 43  | 45  | 46  | 47  | 48  | 48  | 48  | 48   |
| EX6        |                           | 53                           | 73  | 86  | 96  | 103 | 108 | 111 | 114 | 115 | 116 | 116 | 116  |
| EX4        | -40                       |                              | 6   | 9   | 11  | 12  | 13  | 14  | 14  | 15  | 15  | 15  | 15   |
| EX5        |                           |                              | 19  | 28  | 33  | 37  | 40  | 42  | 43  | 44  | 45  | 45  | 45   |
| EX6        |                           |                              | 46  | 67  | 80  | 90  | 96  | 101 | 104 | 106 | 108 | 108 | 108  |
| EX4        | -45                       |                              |     | 5   | 8   | 10  | 11  | 12  | 13  | 13  | 13  | 14  | 14   |
| EX5        |                           |                              |     | 15  | 25  | 30  | 34  | 37  | 39  | 40  | 41  | 41  | 41   |
| EX6        |                           |                              |     | 37  | 60  | 73  | 82  | 88  | 93  | 96  | 98  | 99  | 100  |

R-744 Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |     |     |     |      |      |      |      |      |      |      |      |      |
|------------|---------------------------|------------------------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
|            |                           | +8                           | +5  | 0   | -5  | -10  | -15  | -20  | -25  | -30  | -35  | -40  | -45  | -50  |
| EX4        | +10                       | 5                            | 12  | 18  | 22  | 26   | 29   | 31   | 33   | 34   | 35   | 36   | 37   | 38   |
| EX5        |                           | 15                           | 36  | 55  | 68  | 79   | 87   | 94   | 99   | 104  | 108  | 110  | 113  | 114  |
| EX6        |                           | 36                           | 86  | 132 | 164 | 189  | 208  | 225  | 238  | 249  | 257  | 264  | 269  | 273  |
| EX7        |                           | 99                           | 237 | 362 | 450 | 518  | 572  | 617  | 653  | 683  | 707  | 726  | 740  | 750  |
| EX8        |                           | -                            | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| EX4        | +5                        |                              |     | 12  | 19  | 23   | 27   | 29   | 32   | 33   | 35   | 36   | 37   | 38   |
| EX5        |                           |                              |     | 37  | 57  | 71   | 81   | 90   | 96   | 102  | 106  | 110  | 113  | 115  |
| EX6        |                           |                              |     | 89  | 137 | 170  | 195  | 215  | 231  | 244  | 254  | 263  | 269  | 274  |
| EX7        |                           |                              |     | 244 | 376 | 466  | 535  | 589  | 634  | 670  | 699  | 722  | 739  | 753  |
| EX8        |                           |                              |     | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| EX4        | 0                         |                              |     |     | 12  | 19   | 24   | 27   | 30   | 32   | 34   | 35   | 36   | 37   |
| EX5        |                           |                              |     |     | 38  | 58   | 72   | 83   | 91   | 98   | 103  | 107  | 111  | 113  |
| EX6        |                           |                              |     |     | 90  | 139  | 173  | 198  | 218  | 234  | 247  | 257  | 265  | 271  |
| EX7        |                           |                              |     |     | 247 | 383  | 475  | 544  | 598  | 642  | 677  | 705  | 727  | 744  |
| EX8        |                           |                              |     |     | 659 | 1023 | 1267 | 1452 | 1598 | 1715 | 1809 | 1883 | 1942 | 1987 |
| EX4        | -5                        |                              |     |     |     | 12   | 19   | 24   | 27   | 30   | 32   | 34   | 35   | 36   |
| EX5        |                           |                              |     |     |     | 97   | 59   | 73   | 83   | 91   | 98   | 103  | 107  | 110  |
| EX6        |                           |                              |     |     |     | 89   | 140  | 174  | 199  | 219  | 234  | 247  | 257  | 264  |
| EX7        |                           |                              |     |     |     | 245  | 385  | 477  | 547  | 601  | 644  | 678  | 705  | 725  |
| EX8        |                           |                              |     |     |     | 654  | 1028 | 1275 | 1460 | 1604 | 1718 | 1809 | 1881 | 1937 |
| EX4        | -10                       |                              |     |     |     |      | 12   | 19   | 24   | 27   | 30   | 32   | 34   | 35   |
| EX5        |                           |                              |     |     |     |      | 36   | 58   | 72   | 83   | 91   | 97   | 102  | 106  |
| EX6        |                           |                              |     |     |     |      | 87   | 139  | 173  | 198  | 217  | 233  | 245  | 254  |
| EX7        |                           |                              |     |     |     |      | 239  | 382  | 475  | 544  | 597  | 639  | 671  | 697  |
| EX8        |                           |                              |     |     |     |      | 639  | 1021 | 1269 | 1452 | 1594 | 1705 | 1793 | 1861 |
| EX4        | -15                       |                              |     |     |     |      |      | 11   | 19   | 23   | 27   | 29   | 31   | 33   |
| EX5        |                           |                              |     |     |     |      |      | 35   | 57   | 71   | 82   | 89   | 96   | 100  |
| EX6        |                           |                              |     |     |     |      |      | 84   | 137  | 171  | 195  | 214  | 229  | 240  |
| EX7        |                           |                              |     |     |     |      |      | 229  | 376  | 468  | 536  | 588  | 628  | 660  |
| EX8        |                           |                              |     |     |     |      |      | 613  | 1003 | 1250 | 1431 | 1570 | 1677 | 1761 |

R-744 Extended Capacities (kWatts) EX4-8 Series, as expansion and liquid injection valves

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |    |   |    |     |     |     |     |     |      |      |      |      |
|------------|---------------------------|------------------------------|----|---|----|-----|-----|-----|-----|-----|------|------|------|------|
|            |                           | +8                           | +5 | 0 | -5 | -10 | -15 | -20 | -25 | -30 | -35  | -40  | -45  | -50  |
| EX4        | -20                       |                              |    |   |    |     |     |     | 11  | 18  | 23   | 26   | 29   | 31   |
| EX5        |                           |                              |    |   |    |     |     |     | 33  | 56  | 70   | 80   | 87   | 93   |
| EX6        |                           |                              |    |   |    |     |     |     | 79  | 133 | 166  | 191  | 209  | 223  |
| EX7        |                           |                              |    |   |    |     |     |     | 216 | 365 | 457  | 523  | 574  | 613  |
| EX8        |                           |                              |    |   |    |     |     |     | 576 | 974 | 1220 | 1398 | 1532 | 1636 |
| EX4        | -25                       |                              |    |   |    |     |     |     | 10  | 18  | 22   | 25   | 28   |      |
| EX5        |                           |                              |    |   |    |     |     |     | 30  | 53  | 67   | 77   | 85   |      |
| EX6        |                           |                              |    |   |    |     |     |     | 72  | 128 | 161  | 185  | 202  |      |
| EX7        |                           |                              |    |   |    |     |     |     | 198 | 350 | 442  | 507  | 556  |      |
| EX8        |                           |                              |    |   |    |     |     |     | 528 | 935 | 1179 | 1353 | 1483 |      |
| EX4        | -30                       |                              |    |   |    |     |     |     |     | 9   | 17   | 21   | 24   |      |
| EX5        |                           |                              |    |   |    |     |     |     |     | 27  | 51   | 64   | 74   |      |
| EX6        |                           |                              |    |   |    |     |     |     |     | 64  | 121  | 154  | 177  |      |
| EX7        |                           |                              |    |   |    |     |     |     |     | 175 | 332  | 423  | 486  |      |
| EX8        |                           |                              |    |   |    |     |     |     |     | 466 | 887  | 1129 | 1298 |      |
| EX4        | -35                       |                              |    |   |    |     |     |     |     |     | 7    | 16   | 20   |      |
| EX5        |                           |                              |    |   |    |     |     |     |     |     | 22   | 47   | 61   |      |
| EX6        |                           |                              |    |   |    |     |     |     |     |     | 53   | 113  | 146  |      |
| EX7        |                           |                              |    |   |    |     |     |     |     |     | 145  | 310  | 400  |      |
| EX8        |                           |                              |    |   |    |     |     |     |     |     | 386  | 828  | 1068 |      |
| EX4        | -40                       |                              |    |   |    |     |     |     |     |     |      | 5    | 14   |      |
| EX5        |                           |                              |    |   |    |     |     |     |     |     |      | 16   | 43   |      |
| EX6        |                           |                              |    |   |    |     |     |     |     |     |      | 37   | 103  |      |
| EX7        |                           |                              |    |   |    |     |     |     |     |     |      | 103  | 284  |      |
| EX8        |                           |                              |    |   |    |     |     |     |     |     |      | 275  | 759  |      |

### R-407 Extended Capacities (EXV)

As Expansion Valve The Following Correction Factors (kt) Related To Evaporating And Condensing Temperatures Apply

| Liquid temperature °C | Correction factors for EXV Evaporating temperature °C |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       | +20   | +15  | +10  | +5   | 0    | -5   | -10  | -15  | -20  | -25  | -30  | -35  | -40  | -45  |
| +65                   | 1.51  | 1.53 | 1.55 | 1.58 | 1.61 | 1.64 | 1.68 | 1.71 | 1.75 | 1.80 | 1.85 | 1.90 | 1.96 | 2.02 |
| +60                   | 1.35  | 1.37 | 1.39 | 1.41 | 1.43 | 1.46 | 1.49 | 1.52 | 1.55 | 1.59 | 1.63 | 1.67 | 1.71 | 1.76 |
| +55                   | 1.23  | 1.25 | 1.26 | 1.28 | 1.30 | 1.32 | 1.35 | 1.37 | 1.40 | 1.43 | 1.46 | 1.50 | 1.53 | 1.57 |
| +50                   | 1.14  | 1.15 | 1.16 | 1.18 | 1.20 | 1.22 | 1.24 | 1.26 | 1.28 | 1.31 | 1.33 | 1.36 | 1.39 | 1.43 |
| +45                   | 1.06  | 1.07 | 1.08 | 1.10 | 1.11 | 1.13 | 1.14 | 1.16 | 1.18 | 1.20 | 1.23 | 1.25 | 1.28 | 1.31 |
| +40                   | 0.99  | 1.00 | 1.01 | 1.02 | 1.04 | 1.05 | 1.07 | 1.08 | 1.10 | 1.12 | 1.14 | 1.16 | 1.18 | 1.21 |
| +35                   | 0.93  | 0.94 | 0.95 | 0.96 | 0.97 | 0.99 | 1.00 | 1.01 | 1.03 | 1.05 | 1.06 | 1.08 | 1.10 | 1.13 |
| +30                   | 0.88  | 0.89 | 0.90 | 0.91 | 0.92 | 0.93 | 0.94 | 0.95 | 0.97 | 0.98 | 1.00 | 1.02 | 1.03 | 1.05 |
| +25                   | 0.83  | 0.84 | 0.85 | 0.86 | 0.87 | 0.88 | 0.89 | 0.90 | 0.91 | 0.93 | 0.94 | 0.96 | 0.97 | 0.99 |
| +20                   | 0.79  | 0.80 | 0.81 | 0.82 | 0.82 | 0.83 | 0.84 | 0.85 | 0.87 | 0.88 | 0.89 | 0.91 | 0.92 | 0.94 |
| +15                   | 0.76  | 0.76 | 0.77 | 0.78 | 0.78 | 0.79 | 0.80 | 0.81 | 0.82 | 0.83 | 0.85 | 0.86 | 0.87 | 0.89 |
| +10                   | 0.72  | 0.73 | 0.74 | 0.74 | 0.75 | 0.76 | 0.77 | 0.77 | 0.78 | 0.79 | 0.81 | 0.82 | 0.83 | 0.84 |
| +5                    | 0.69  | 0.70 | 0.70 | 0.71 | 0.72 | 0.72 | 0.73 | 0.74 | 0.75 | 0.76 | 0.77 | 0.78 | 0.79 | 0.80 |
| 0                     | 0.66  | 0.67 | 0.68 | 0.68 | 0.69 | 0.69 | 0.70 | 0.71 | 0.72 | 0.73 | 0.73 | 0.74 | 0.75 | 0.77 |
| -5                    | 0.64  | 0.64 | 0.65 | 0.65 | 0.66 | 0.67 | 0.67 | 0.68 | 0.69 | 0.70 | 0.70 | 0.71 | 0.72 | 0.73 |
| -10                   | 0.62  | 0.62 | 0.62 | 0.63 | 0.63 | 0.64 | 0.65 | 0.65 | 0.66 | 0.67 | 0.68 | 0.68 | 0.69 | 0.70 |

### For Applications As Expansion Valve The Following Correction Factors (kΔp) Related To The Pressure Drop At Valve Apply

| Correction factors for EXVs |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| ΔP (bar)                    | 1    | 1.5  | 2    | 2.5  | 3    | 3.5  | 4    | 4.5  | 5    | 5.5  | 6    | 6.5  | 7    | 7.5  |
| kΔP                         | 3.51 | 2.87 | 2.48 | 2.22 | 2.03 | 1.88 | 1.76 | 1.66 | 1.57 | 1.5  | 1.43 | 1.38 | 1.33 | 1.28 |
| ΔP (bar)                    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   |
| kΔP                         | 1.24 | 1.17 | 1.11 | 1.06 | 1.01 | 0.97 | 0.94 | 0.91 | 0.88 | 0.85 | 0.83 | 0.81 | 0.79 | 0.77 |

### Application Hot Gas Bypass - Nominal Capacities (kW)

| Valve Type | Kv, m3/h | R22 / R407C | R134a | R404A / R507 |
|------------|----------|-------------|-------|--------------|
| EX4        | 0.21     | 4.9         | 3.4   | 4.6          |
| EX5        | 0.68     | 16          | 11    | 15           |
| EX6        | 1.57     | 37          | 26    | 35           |
| EX7        | 5.58     | 131         | 92    | 126          |
| EX8        | 16.95    | 399         | 278   | 382          |

The nominal capacity (Qn) is based on the following conditions:

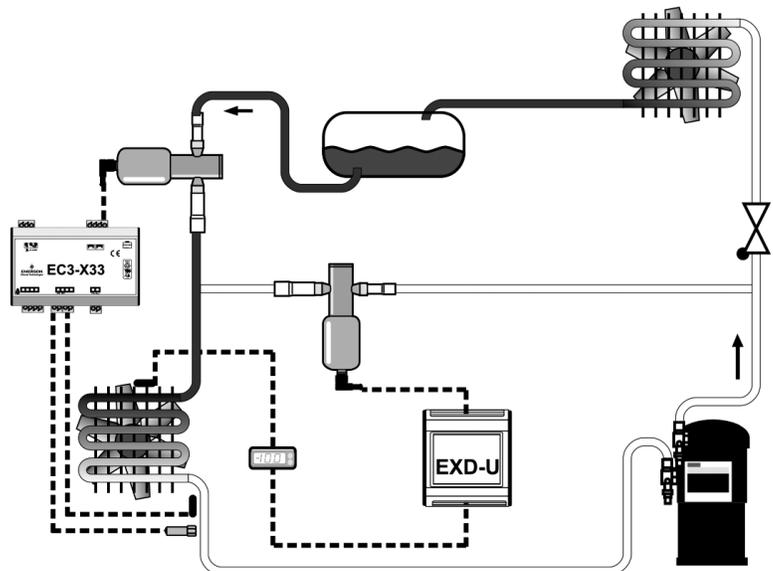
| Refrigerant             | Evaporating temperature | Condensing temperature               | Subcooling |
|-------------------------|-------------------------|--------------------------------------|------------|
| R407C                   | +4°C (dew point)        | +38°C bubble point / +43°C dew point | 1K         |
| R22, R134a, R404A, R507 | +4°C                    | +38°C                                | 1K         |

For other operating conditions use Excel-based Selection Tool (download from [www.emersonclimate.eu](http://www.emersonclimate.eu)) or use the following quick selection tables.

Biflow versions are not released for hot gas bypass applications. EX4 .. EX8 must be installed with motor downward in hot gas line applications. This ensures the valve life expectancy. Install a check valve on main hot gas line just after branch to Control Valve.

# EX Extended Capacity Tables

| Valve type | Extended Capacity kW |       |              | Condensing Temperature °C  |
|------------|----------------------|-------|--------------|--|
|            | R22 / R407C          | R134a | R404A / R507 |  |
| EX4        | 7                    | 4.9   | 5.8          | 60 bubble point for all refrigerants<br>(64 dew point for R407C) |
| EX5        | 23                   | 16    | 19           |  |
| EX6        | 54                   | 38    | 45           |  |
| EX7        | 191                  | 135   | 161          |  |
| EX8        | 581                  | 411   | 488          |  |
| EX4        | 6.1                  | 4.3   | 5.5          | 50 bubble point for all refrigerants<br>(54 dew point for R407C) |
| EX5        | 20                   | 14    | 18           |  |
| EX6        | 46                   | 32    | 41           |  |
| EX7        | 163                  | 115   | 147          |  |
| EX8        | 495                  | 348   | 447          |  |
| EX4        | 4.9                  | 3.7   | 4.9          | 40 bubble point for all refrigerants<br>(45 dew point for R407C) |
| EX5        | 16                   | 12    | 16           |  |
| EX6        | 38                   | 27    | 36           |  |
| EX7        | 136                  | 95    | 130          |  |
| EX8        | 414                  | 289   | 394          |  |
| EX4        | 4.3                  | 2.8   | 4            | 30 bubble point for all refrigerants<br>(35 dew point for R407C) |
| EX5        | 14                   | 9     | 13           |  |
| EX6        | 32                   | 22    | 31           |  |
| EX7        | 112                  | 78    | 111          |  |
| EX8        | 340                  | 236   | 336          |  |



**Application Suction Pressure Regulation  
(Evaporating or Crankcase Pressure) - Nominal Capacities (kW)**

| Valve Type | Kv, m3/h | R407C | R22 | R134a | R404A |
|------------|----------|-------|-----|-------|-------|
| EX6        | 1.57     | 3.9   | 4.1 | 3.1   | 3.5   |
| EX7        | 5.58     | 14    | 15  | 11    | 13    |
| EX8        | 16.95    | 42    | 45  | 34    | 38    |

The nominal capacity (Qn) is based on the following conditions:

| Refrigerant       | Evaporating temperature | Condensing temperature                  | Subcooling | Pressure Drop |
|-------------------|-------------------------|---|------------|---------------|
| R407C             | +4°C (dew point)        | +38°C bubble point /<br>+43°C dew point | 1K         | 0.15 bar      |
| R22, R134a, R404A | +4°C                    | +38°C                                   | 1K         | 0.15 bar      |

For other operating conditions use Excel-based Selection Tool (download from [www.emersonclimate.eu](http://www.emersonclimate.eu)) or use the following quick selection tables.

For biflow versions attention should be paid to the temperature range TS -40°C to +80°C ! The EX6 .. EX8 must be installed with motor downward in suction line applications. This ensures the valve life expectancy.

Example:

The EX6 provides 3.5 kW at 0.15 bar pressure drop with R404A or 3.5\*1.41=4.9 kW at 0.3 bar pressure drop.

**Typical Order Package**

- 1) Valve EX6, EX7 or EX8 Plug and cable assembly EXV-M60
- 2) Controller Kit EXD-U00 Part No. 808 038

Multiply above nominal capacities by following factors to obtain capacities at different pressure drops:

| ΔP, bar           | 0.10 | 0.15 | 0.20 | 0.30 |
|-------------------|------|------|------|------|
| Correction factor | 0.82 | 1.00 | 1.15 | 1.41 |

**R-134a Extended Capacities (kWatts) EX6-8 Series**

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |    |    |     |     |
|------------|---------------------------|------------------------------|----|----|-----|-----|
|            |                           | +10                          | +5 | 0  | -10 | -20 |
| EX6        | +60                       | 3                            | 2  | 2  | 2   | 1   |
| EX7        |                           | 10                           | 9  | 8  | 6   | 4   |
| EX8        |                           | 30                           | 27 | 24 | 18  | 13  |
| EX6        | +50                       | 3                            | 3  | 2  | 2   | 1   |
| EX7        |                           | 11                           | 10 | 9  | 7   | 5   |
| EX8        |                           | 34                           | 30 | 27 | 21  | 15  |
| EX6        | +40                       | 3                            | 3  | 3  | 2   | 2   |
| EX7        |                           | 12                           | 11 | 10 | 8   | 6   |
| EX8        |                           | 38                           | 34 | 30 | 23  | 17  |
| EX6        | +30                       | 4                            | 3  | 3  | 2   | 2   |
| EX7        |                           | 14                           | 12 | 11 | 8   | 6   |
| EX8        |                           | 41                           | 37 | 33 | 26  | 19  |
| EX6        | +20                       | 4                            | 4  | 3  | 3   | 2   |
| EX7        |                           | 15                           | 13 | 12 | 9   | 7   |
| EX8        |                           | 45                           | 40 | 36 | 28  | 21  |

R-22 Extended Capacities (kWatts) EX6-8 Series

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |    |    |     |     |     |     |
|------------|---------------------------|------------------------------|----|----|-----|-----|-----|-----|
|            |                           | +10                          | +5 | 0  | -10 | -20 | -30 | -40 |
| EX6        | +60                       | 4                            | 3  | 3  | 3   | 2   | 2   | 1   |
| EX7        |                           | 13                           | 12 | 11 | 9   | 7   | 5   | 4   |
| EX8        |                           | 41                           | 37 | 34 | 27  | 22  | 17  | 12  |
| EX6        | +50                       | 4                            | 4  | 3  | 3   | 2   | 2   | 1   |
| EX7        |                           | 15                           | 13 | 12 | 10  | 8   | 6   | 5   |
| EX8        |                           | 45                           | 41 | 37 | 30  | 24  | 19  | 14  |
| EX6        | +40                       | 5                            | 4  | 4  | 3   | 2   | 2   | 1   |
| EX7        |                           | 16                           | 15 | 13 | 11  | 9   | 7   | 5   |
| EX8        |                           | 49                           | 45 | 41 | 33  | 27  | 21  | 15  |
| EX6        | +30                       | 5                            | 4  | 4  | 3   | 3   | 2   | 2   |
| EX7        |                           | 17                           | 16 | 14 | 12  | 9   | 7   | 5   |
| EX8        |                           | 53                           | 48 | 44 | 36  | 29  | 22  | 16  |
| EX6        | +20                       | 5                            | 5  | 4  | 4   | 3   | 2   | 2   |
| EX7        |                           | 19                           | 17 | 15 | 13  | 10  | 8   | 6   |
| EX8        |                           | 56                           | 52 | 47 | 39  | 31  | 24  | 18  |

**R-404A/R-507 Extended Capacities (kWatts) EX6-8 Series,  
Application Suction Pressure Regulation (Evaporating or Crankcase Pressure)**

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |    |    |     |     |     |
|------------|---------------------------|------------------------------|----|----|-----|-----|-----|
|            |                           | +10                          | +5 | 0  | -20 | -30 | -40 |
| EX6        | +60                       | 3                            | 2  | 2  | 1   | 1   | 1   |
| EX7        |                           | 9                            | 8  | 8  | 4   | 3   | 2   |
| EX8        |                           | 29                           | 26 | 23 | 13  | 10  | 7   |
| EX6        | +50                       | 3                            | 3  | 3  | 2   | 1   | 1   |
| EX7        |                           | 12                           | 11 | 9  | 6   | 4   | 3   |
| EX8        |                           | 36                           | 32 | 29 | 18  | 13  | 9   |
| EX6        | +40                       | 4                            | 3  | 3  | 2   | 1   | 1   |
| EX7        |                           | 14                           | 12 | 11 | 7   | 5   | 4   |
| EX8        |                           | 42                           | 38 | 34 | 21  | 16  | 12  |
| EX6        | +30                       | 4                            | 4  | 4  | 2   | 2   | 1   |
| EX7        |                           | 16                           | 14 | 13 | 8   | 6   | 5   |
| EX8        |                           | 48                           | 43 | 39 | 25  | 19  | 14  |
| EX6        | +20                       | 5                            | 4  | 4  | 3   | 2   | 1   |
| EX7        |                           | 17                           | 16 | 14 | 9   | 7   | 5   |
| EX8        |                           | 53                           | 48 | 44 | 28  | 21  | 16  |

**R-407C Extended Capacities (kWatts) EX6-8 Series, Application Suction Pressure Regulation  
(Evaporating or Crankcase Pressure)**

| Valve Type | Condensing Temperature |                 | Evaporating Temperature (°C) |    |    |     |     |
|------------|------------------------|-----------------|------------------------------|----|----|-----|-----|
|            | Dew point °C           | Bubble point °C | +10                          | +5 | 0  | -10 | -20 |
| EX6        | +64                    | +60             | 3                            | 3  | 3  | 2   | 2   |
| EX7        |                        |                 | 12                           | 11 | 10 | 8   | 6   |
| EX8        |                        |                 | 36                           | 33 | 29 | 23  | 18  |
| EX6        | +54                    | +50             | 4                            | 3  | 3  | 2   | 2   |
| EX7        |                        |                 | 14                           | 12 | 11 | 9   | 7   |
| EX8        |                        |                 | 41                           | 37 | 34 | 27  | 21  |
| EX6        | +45                    | +40             | 4                            | 4  | 3  | 3   | 2   |
| EX7        |                        |                 | 15                           | 14 | 12 | 10  | 8   |
| EX8        |                        |                 | 46                           | 42 | 38 | 30  | 23  |
| EX6        | +35                    | +30             | 5                            | 4  | 4  | 3   | 2   |
| EX7        |                        |                 | 17                           | 15 | 14 | 11  | 9   |
| EX8        |                        |                 | 51                           | 46 | 41 | 33  | 26  |
| EX6        | +26                    | +20             | 5                            | 5  | 4  | 3   | 3   |
| EX7        |                        |                 | 18                           | 16 | 15 | 12  | 9   |
| EX8        |                        |                 | 55                           | 50 | 45 | 36  | 28  |

**Application Condensing Pressure Regulation and Liquid Duty - Nominal Capacities (kW)**

| Valve Type | Kv, m3/h | R407C | R22 | R134a | R404A |
|------------|----------|-------|-----|-------|-------|
| EX5        | 0.68     | 18    | 20  | 18    | 13    |
| EX6        | 1.57     | 43    | 46  | 42    | 30    |
| EX7        | 5.58     | 153   | 162 | 151   | 106   |
| EX8        | 16.95    | 463   | 491 | 458   | 323   |

The nominal capacity (Qn) is based on the following conditions:

| Refrigerant       | Evaporating temperature | Condensing temperature                  | Subcooling | Pressure Drop |
|-------------------|-------------------------|---|------------|---------------|
| R407C             | +4°C (dew point)        | +38°C bubble point /<br>+43°C dew point | 1K         | 0.35 bar      |
| R22, R134a, R404A | +4°C                    | +38°C                                   | 1K         | 0.35 bar      |

Multiply above nominal capacities by following factors to obtain capacities at different pressure drops:

| ΔP, bar           | 0.15 | 0.20 | 0.35 |
|-------------------|------|------|------|
| Correction factor | 0.65 | 0.76 | 1.00 |

Example:

The EX6 provides 30kW at 0.35bar pressure drop with R404A or  $30 \times 0.76 = 22.8$  kW at 0.2 bar pressure drop.

**R-134a Extended Capacities (kWatts) EX5-8 Series**

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |     |     |     |
|------------|---------------------------|------------------------------|-----|-----|-----|
|            |                           | +10                          | 0   | -10 | -20 |
| EX5        | +60                       | 14                           | 13  | 13  | 12  |
| EX6        |                           | 32                           | 31  | 29  | 27  |
| EX7        |                           | 115                          | 109 | 104 | 98  |
| EX8        |                           | 350                          | 332 | 315 | 296 |
| EX5        | +50                       | 16                           | 15  | 15  | 14  |
| EX6        |                           | 37                           | 36  | 34  | 32  |
| EX7        |                           | 133                          | 127 | 121 | 115 |
| EX8        |                           | 405                          | 387 | 369 | 350 |
| EX5        | +30                       | 18                           | 18  | 17  | 16  |
| EX6        |                           | 42                           | 41  | 39  | 37  |
| EX7        |                           | 151                          | 145 | 139 | 133 |
| EX8        |                           | 458                          | 440 | 422 | 403 |
| EX5        | +40                       | 20                           | 20  | 19  | 18  |
| EX6        |                           | 47                           | 46  | 44  | 42  |
| EX7        |                           | 168                          | 162 | 156 | 150 |
| EX8        |                           | 512                          | 493 | 474 | 455 |
| EX5        | +20                       | 22                           | 22  | 21  | 20  |
| EX6        |                           | 52                           | 51  | 49  | 47  |
| EX7        |                           | 186                          | 180 | 173 | 167 |
| EX8        |                           | 564                          | 546 | 526 | 507 |

**R-22 Extended Capacities (kWatts) EX5-8 Series, as expansion and liquid injection valves**

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |     |     |     |     |     |
|------------|---------------------------|------------------------------|-----|-----|-----|-----|-----|
|            |                           | +10                          | 0   | -10 | -20 | -30 | -40 |
| EX5        | +60                       | 15                           | 15  | 15  | 14  | 14  | 13  |
| EX6        |                           | 36                           | 35  | 34  | 33  | 32  | 30  |
| EX7        |                           | 128                          | 124 | 120 | 116 | 112 | 108 |
| EX8        |                           | 387                          | 377 | 365 | 353 | 341 | 328 |
| EX5        | +50                       | 17                           | 17  | 16  | 17  | 16  | 15  |
| EX6        |                           | 41                           | 40  | 36  | 39  | 36  | 35  |
| EX7        |                           | 144                          | 141 | 129 | 137 | 129 | 124 |
| EX8        |                           | 439                          | 428 | 391 | 416 | 391 | 377 |
| EX5        | +30                       | 19                           | 19  | 19  | 18  | 17  | 17  |
| EX6        |                           | 45                           | 44  | 43  | 42  | 41  | 39  |
| EX7        |                           | 161                          | 157 | 153 | 149 | 145 | 140 |
| EX8        |                           | 488                          | 477 | 465 | 453 | 439 | 426 |
| EX5        | +40                       | 21                           | 21  | 20  | 20  | 19  | 19  |
| EX6        |                           | 50                           | 49  | 48  | 46  | 45  | 44  |
| EX7        |                           | 177                          | 173 | 169 | 165 | 160 | 156 |
| EX8        |                           | 536                          | 525 | 513 | 500 | 486 | 472 |
| EX5        | +20                       | 23                           | 23  | 22  | 22  | 21  | 21  |
| EX6        |                           | 54                           | 53  | 52  | 51  | 49  | 48  |
| EX7        |                           | 192                          | 188 | 184 | 180 | 175 | 171 |
| EX8        |                           | 584                          | 572 | 560 | 547 | 533 | 519 |

**R-404A/R-507 Extended Capacities (kWatts) EX5-8 Series,  
Application Condensing Pressure Regulation and Liquid Duty**

| Valve Type | Condensing Temperature °C | Evaporating Temperature (°C) |     |     |     |     |     |
|------------|---------------------------|------------------------------|-----|-----|-----|-----|-----|
|            |                           | +10                          | 0   | -10 | -20 | -30 | -40 |
| EX5        | +60                       | 8                            | 8   | 7   | 6   | 6   | 5   |
| EX6        |                           | 19                           | 17  | 16  | 15  | 13  | 12  |
| EX7        |                           | 66                           | 62  | 58  | 53  | 48  | 43  |
| EX8        |                           | 202                          | 189 | 175 | 160 | 146 | 130 |
| EX5        | +50                       | 11                           | 10  | 9   | 9   | 8   | 8   |
| EX6        |                           | 24                           | 23  | 22  | 20  | 19  | 17  |
| EX7        |                           | 87                           | 82  | 78  | 73  | 67  | 62  |
| EX8        |                           | 264                          | 250 | 236 | 220 | 205 | 189 |
| EX5        | +30                       | 13                           | 12  | 12  | 11  | 10  | 10  |
| EX6        |                           | 30                           | 28  | 27  | 26  | 24  | 23  |
| EX7        |                           | 106                          | 101 | 96  | 91  | 85  | 80  |
| EX8        |                           | 321                          | 306 | 291 | 276 | 260 | 243 |
| EX5        | +40                       | 15                           | 14  | 14  | 13  | 12  | 12  |
| EX6        |                           | 35                           | 33  | 32  | 30  | 29  | 27  |
| EX7        |                           | 123                          | 119 | 114 | 108 | 103 | 97  |
| EX8        |                           | 375                          | 360 | 345 | 329 | 312 | 295 |
| EX5        | +20                       | 17                           | 16  | 16  | 15  | 14  | 14  |
| EX6        |                           | 40                           | 38  | 37  | 35  | 34  | 32  |
| EX7        |                           | 141                          | 136 | 131 | 125 | 120 | 114 |
| EX8        |                           | 427                          | 412 | 397 | 380 | 363 | 346 |

**R-407C Extended Capacities (kWatts) EX5-8 Series,  
Application Condensing Pressure Regulation and Liquid Duty**

| Valve Type | Condensing Temperature |              | Evaporating Temperature (°C) |     |     |     |
|------------|------------------------|--------------|------------------------------|-----|-----|-----|
|            | Dew Point °C           | Dew Point °C | +10                          | 0   | -10 | -20 |
| EX5        | +64                    | +60          | 14                           | 13  | 12  | 12  |
| EX6        |                        |              | 32                           | 30  | 29  | 28  |
| EX7        |                        |              | 112                          | 108 | 103 | 98  |
| EX8        |                        |              | 340                          | 327 | 313 | 298 |
| EX5        | +54                    | +50          | 16                           | 15  | 15  | 14  |
| EX6        |                        |              | 37                           | 36  | 35  | 33  |
| EX7        |                        |              | 132                          | 128 | 123 | 118 |
| EX8        |                        |              | 402                          | 388 | 373 | 358 |
| EX5        | +45                    | +30          | 18                           | 18  | 17  | 17  |
| EX6        |                        |              | 43                           | 41  | 40  | 38  |
| EX7        |                        |              | 152                          | 147 | 142 | 137 |
| EX8        |                        |              | 460                          | 446 | 431 | 415 |
| EX5        | +35                    | +40          | 21                           | 20  | 19  | 19  |
| EX6        |                        |              | 48                           | 47  | 45  | 44  |
| EX7        |                        |              | 170                          | 166 | 160 | 155 |
| EX8        |                        |              | 517                          | 503 | 487 | 471 |
| EX5        | +26                    | +20          | 23                           | 22  | 22  | 21  |
| EX6        |                        |              | 53                           | 52  | 50  | 49  |
| EX7        |                        |              | 189                          | 184 | 179 | 173 |
| EX8        |                        |              | 573                          | 558 | 543 | 526 |

**Application Hot Gas Flow such as Heat Reclaim Application - Nominal Capacities (kW)**

| Valve Type | Kv, m3/h | R22 / R407C | R134a | R404A / R507 | R410A |
|------------|----------|-------------|-------|--------------|-------|
| EX6        | 1.57     | 11          | 9     | 10           | 13    |
| EX7        | 5.58     | 39          | 33    | 36           | 47    |
| EX8        | 16.95    | 119         | 101   | 108          | 144   |

The nominal capacity (Qn) is based on the following conditions:

| Refrigerant                | Evaporating temperature | Condensing temperature                  | Subcooling | Pressure Drop | Isentropic Efficiency |
|----------------------------|-------------------------|---|------------|---------------|-----------------------|
| R407C                      | +4°C (dew point)        | +38°C bubble point /<br>+43°C dew point | 1K         | 0.35 bar      | 80%                   |
| R22, R134a,<br>R404A, R507 | +4°C                    | +38°C                                   | 1K         | 0.35 bar      | 80%                   |

For other conditions see following tables.

Valves must be installed with motor downward in hot gas line applications. This ensures the valve life expectancy. Bi-flow versions are not released for hot gas flow applications.

R-134a Extended Capacities (kWatts) EX6-8 Series

| Valve Type | Condensing Temperature °C | Pressure Drop bar | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|---------------------------|-------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                           |                   | +15                          | +10 | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX6        | +60                       | 0.1               | 5                            | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 3   |
| EX7        |                           |                   | 16                           | 16  | 16  | 15  | 15  | 14  | 14  | 13  | 13  | 12  | 12  | 11  | 10  |
| EX8        |                           |                   | 50                           | 49  | 47  | 46  | 44  | 43  | 41  | 40  | 38  | 37  | 35  | 33  | 32  |
| EX6        |                           | 0.5               | 10                           | 10  | 10  | 9   | 9   | 9   | 8   | 8   | 8   | 7   | 7   | 7   | 6   |
| EX7        |                           |                   | 36                           | 35  | 34  | 33  | 32  | 31  | 30  | 29  | 28  | 26  | 25  | 24  | 23  |
| EX8        |                           |                   | 110                          | 107 | 104 | 101 | 97  | 94  | 91  | 87  | 84  | 80  | 77  | 74  | 70  |
| EX6        |                           | 1.0               | 14                           | 14  | 13  | 13  | 12  | 12  | 12  | 11  | 11  | 10  | 10  | 9   | 9   |
| EX7        |                           |                   | 50                           | 49  | 47  | 46  | 44  | 43  | 41  | 40  | 38  | 37  | 35  | 34  | 32  |
| EX8        |                           |                   | 152                          | 148 | 144 | 139 | 135 | 130 | 126 | 121 | 116 | 112 | 107 | 102 | 97  |
| EX6        | +50                       | 0.1               | 5                            | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 3   |
| EX7        |                           |                   | 16                           | 16  | 15  | 15  | 14  | 14  | 14  | 13  | 13  | 12  | 12  | 11  | 11  |
| EX8        |                           |                   | 49                           | 48  | 47  | 45  | 44  | 43  | 41  | 40  | 39  | 37  | 36  | 35  | 33  |
| EX6        |                           | 0.5               | 10                           | 10  | 9   | 9   | 9   | 9   | 8   | 8   | 8   | 8   | 7   | 7   | 7   |
| EX7        |                           |                   | 35                           | 35  | 34  | 33  | 32  | 31  | 30  | 29  | 28  | 27  | 26  | 25  | 24  |
| EX8        |                           |                   | 108                          | 105 | 102 | 99  | 97  | 94  | 91  | 88  | 85  | 82  | 79  | 76  | 73  |
| EX6        |                           | 1.0               | 14                           | 13  | 13  | 13  | 12  | 12  | 12  | 11  | 11  | 10  | 10  | 10  | 9   |
| EX7        |                           |                   | 49                           | 48  | 46  | 45  | 44  | 43  | 41  | 40  | 39  | 37  | 36  | 34  | 33  |
| EX8        |                           |                   | 148                          | 145 | 141 | 137 | 133 | 129 | 125 | 121 | 117 | 113 | 109 | 105 | 100 |
| EX6        | +40                       | 0.1               | 4                            | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 3   |
| EX7        |                           |                   | 16                           | 15  | 15  | 14  | 14  | 14  | 13  | 13  | 13  | 12  | 12  | 11  | 11  |
| EX8        |                           |                   | 47                           | 46  | 45  | 44  | 43  | 42  | 40  | 39  | 38  | 37  | 36  | 34  | 33  |
| EX6        |                           | 0.5               | 10                           | 9   | 9   | 9   | 9   | 8   | 8   | 8   | 8   | 7   | 7   | 7   | 7   |
| EX7        |                           |                   | 34                           | 33  | 32  | 32  | 31  | 30  | 29  | 28  | 27  | 26  | 26  | 25  | 24  |
| EX8        |                           |                   | 103                          | 100 | 98  | 96  | 93  | 91  | 88  | 86  | 83  | 80  | 78  | 75  | 73  |
| EX6        |                           | 1.0               | 13                           | 13  | 12  | 12  | 12  | 12  | 11  | 11  | 11  | 10  | 10  | 10  | 9   |
| EX7        |                           |                   | 46                           | 45  | 44  | 43  | 42  | 41  | 40  | 39  | 38  | 36  | 35  | 34  | 33  |
| EX8        |                           |                   | 141                          | 138 | 134 | 131 | 128 | 124 | 121 | 117 | 114 | 110 | 107 | 103 | 100 |
| EX6        | +30                       | 0.1               | 4                            | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 3   | 3   | 3   |
| EX7        |                           |                   | 15                           | 14  | 14  | 14  | 13  | 13  | 13  | 12  | 12  | 12  | 11  | 11  | 11  |
| EX8        |                           |                   | 44                           | 43  | 42  | 42  | 41  | 40  | 39  | 38  | 37  | 35  | 34  | 33  | 32  |
| EX6        |                           | 0.5               | 9                            | 9   | 9   | 8   | 8   | 8   | 8   | 8   | 7   | 7   | 7   | 7   | 6   |
| EX7        |                           |                   | 32                           | 31  | 30  | 30  | 29  | 28  | 28  | 27  | 26  | 25  | 25  | 24  | 23  |
| EX8        |                           |                   | 96                           | 94  | 92  | 90  | 88  | 86  | 84  | 81  | 79  | 77  | 75  | 72  | 70  |
| EX6        |                           | 1.0               | 12                           | 12  | 12  | 11  | 11  | 11  | 11  | 10  | 10  | 10  | 9   | 9   | 9   |
| EX7        |                           |                   | 43                           | 42  | 41  | 40  | 39  | 38  | 37  | 36  | 35  | 34  | 33  | 32  | 31  |
| EX8        |                           |                   | 130                          | 128 | 125 | 122 | 119 | 117 | 114 | 111 | 108 | 105 | 102 | 98  | 95  |

**R-22/R-407C Extended Capacities (kWatts) EX5-8 Series,  
Application Hot Gas Flow such as Heat Reclaim Application**

| Valve Type | Condensing Temperature °C | Pressure Drop bar | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |   |
|------------|---------------------------|-------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
|            |                           |                   | +15                          | +10 | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |   |
| EX6        | +60                       | 0.1               | 6                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 4 |
| EX7        |                           |                   | 20                           | 19  | 19  | 18  | 18  | 17  | 17  | 16  | 16  | 15  | 15  | 14  | 14  |   |
| EX8        |                           |                   | 59                           | 58  | 57  | 55  | 54  | 53  | 51  | 50  | 48  | 47  | 45  | 44  | 42  |   |
| EX6        |                           | 0.5               | 12                           | 12  | 12  | 11  | 11  | 11  | 10  | 10  | 10  | 10  | 9   | 9   | 9   |   |
| EX7        |                           |                   | 43                           | 42  | 41  | 40  | 39  | 38  | 37  | 36  | 35  | 34  | 33  | 32  | 31  |   |
| EX8        |                           |                   | 131                          | 129 | 126 | 123 | 119 | 116 | 113 | 110 | 107 | 103 | 100 | 97  | 94  |   |
| EX6        |                           | 1.0               | 17                           | 17  | 16  | 16  | 15  | 15  | 15  | 14  | 14  | 13  | 13  | 13  | 12  |   |
| EX7        |                           |                   | 60                           | 59  | 58  | 56  | 55  | 53  | 52  | 51  | 49  | 48  | 46  | 45  | 43  |   |
| EX8        |                           |                   | 183                          | 179 | 175 | 171 | 167 | 162 | 158 | 154 | 149 | 145 | 140 | 135 | 131 |   |
| EX6        | +50                       | 0.1               | 5                            | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 4   |   |
| EX7        |                           |                   | 19                           | 19  | 18  | 18  | 17  | 17  | 17  | 16  | 16  | 15  | 15  | 14  | 14  |   |
| EX8        |                           |                   | 58                           | 57  | 56  | 54  | 53  | 52  | 51  | 49  | 48  | 47  | 45  | 44  | 42  |   |
| EX6        |                           | 0.5               | 12                           | 12  | 11  | 11  | 11  | 11  | 10  | 10  | 10  | 10  | 9   | 9   | 9   |   |
| EX7        |                           |                   | 42                           | 41  | 40  | 40  | 39  | 38  | 37  | 36  | 35  | 34  | 33  | 32  | 31  |   |
| EX8        |                           |                   | 128                          | 126 | 123 | 120 | 117 | 115 | 112 | 109 | 106 | 103 | 100 | 97  | 94  |   |
| EX6        |                           | 1.0               | 17                           | 16  | 16  | 15  | 15  | 15  | 14  | 14  | 14  | 13  | 13  | 13  | 12  |   |
| EX7        |                           |                   | 59                           | 57  | 56  | 55  | 54  | 52  | 51  | 50  | 49  | 47  | 46  | 44  | 43  |   |
| EX8        |                           |                   | 178                          | 175 | 171 | 167 | 163 | 159 | 155 | 151 | 147 | 143 | 139 | 135 | 131 |   |
| EX6        | +40                       | 0.1               | 5                            | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 4   |   |
| EX7        |                           |                   | 18                           | 18  | 18  | 17  | 17  | 16  | 16  | 16  | 15  | 15  | 15  | 14  | 14  |   |
| EX8        |                           |                   | 56                           | 55  | 54  | 52  | 51  | 50  | 49  | 48  | 47  | 45  | 44  | 43  | 42  |   |
| EX6        |                           | 0.5               | 11                           | 11  | 11  | 11  | 10  | 10  | 10  | 10  | 9   | 9   | 9   | 9   | 8   |   |
| EX7        |                           |                   | 40                           | 40  | 39  | 38  | 37  | 36  | 35  | 35  | 34  | 33  | 32  | 31  | 30  |   |
| EX8        |                           |                   | 123                          | 120 | 118 | 115 | 113 | 110 | 108 | 105 | 103 | 100 | 97  | 94  | 92  |   |
| EX6        |                           | 1.0               | 16                           | 15  | 15  | 15  | 14  | 14  | 14  | 14  | 13  | 13  | 12  | 12  | 12  |   |
| EX7        |                           |                   | 56                           | 55  | 54  | 53  | 52  | 50  | 49  | 48  | 47  | 46  | 44  | 43  | 42  |   |
| EX8        |                           |                   | 170                          | 167 | 163 | 160 | 157 | 153 | 149 | 146 | 142 | 139 | 135 | 131 | 127 |   |
| EX6        | +30                       | 0.1               | 5                            | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   |   |
| EX7        |                           |                   | 17                           | 17  | 17  | 16  | 16  | 16  | 15  | 15  | 15  | 14  | 14  | 14  | 13  |   |
| EX8        |                           |                   | 53                           | 52  | 51  | 50  | 49  | 48  | 46  | 45  | 44  | 43  | 42  | 41  | 40  |   |
| EX6        |                           | 0.5               | 11                           | 10  | 10  | 10  | 10  | 10  | 9   | 9   | 9   | 9   | 9   | 8   | 8   |   |
| EX7        |                           |                   | 38                           | 37  | 37  | 36  | 35  | 34  | 34  | 33  | 32  | 31  | 30  | 30  | 29  |   |
| EX8        |                           |                   | 115                          | 113 | 111 | 109 | 107 | 104 | 102 | 100 | 97  | 95  | 93  | 90  | 88  |   |
| EX6        |                           | 1.0               | 15                           | 14  | 14  | 14  | 14  | 13  | 13  | 13  | 12  | 12  | 12  | 12  | 11  |   |
| EX7        |                           |                   | 52                           | 51  | 50  | 49  | 48  | 47  | 46  | 45  | 44  | 43  | 42  | 41  | 40  |   |
| EX8        |                           |                   | 159                          | 156 | 153 | 150 | 147 | 144 | 141 | 138 | 134 | 131 | 128 | 124 | 121 |   |

\* Condensing temperatures R407C:

The relation between bubble points and dew points is as follows:

|                 |              |
|-----------------|--------------|
| Bubble point °C | Dew point °C |
| +60             | +64          |
| +50             | +54          |
| +40             | +45          |
| +30             | +35          |

**R-404A Extended Capacities (kWatts) EX5-8 Series,  
Application Hot Gas Flow such as Heat Reclaim Application**

| Valve Type | Condensing Temperature °C | Pressure Drop bar | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|---------------------------|-------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                           |                   | +15                          | +10 | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX6        | +60                       | 0.1               | 4                            | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 3   | 3   | 3   | 2   | 2   |
| EX7        |                           |                   | 15                           | 14  | 14  | 13  | 13  | 12  | 11  | 11  | 10  | 10  | 9   | 8   | 8   |
| EX8        |                           |                   | 45                           | 43  | 42  | 40  | 38  | 36  | 35  | 33  | 31  | 29  | 27  | 25  | 23  |
| EX6        |                           | 0.5               | 9                            | 9   | 8   | 8   | 8   | 7   | 7   | 7   | 6   | 6   | 6   | 5   | 5   |
| EX7        |                           |                   | 32                           | 31  | 30  | 29  | 28  | 26  | 25  | 24  | 22  | 21  | 20  | 18  | 17  |
| EX8        |                           |                   | 99                           | 95  | 92  | 88  | 84  | 80  | 76  | 72  | 68  | 64  | 60  | 56  | 52  |
| EX6        |                           | 1.0               | 13                           | 12  | 12  | 11  | 11  | 10  | 10  | 9   | 9   | 8   | 8   | 7   | 7   |
| EX7        |                           |                   | 45                           | 44  | 42  | 40  | 39  | 37  | 35  | 33  | 31  | 29  | 27  | 26  | 24  |
| EX8        |                           |                   | 137                          | 132 | 127 | 122 | 117 | 112 | 106 | 101 | 95  | 89  | 84  | 78  | 72  |
| EX6        | +50                       | 0.1               | 5                            | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 3   | 3   |
| EX7        |                           |                   | 16                           | 16  | 15  | 15  | 14  | 14  | 13  | 13  | 12  | 11  | 11  | 10  | 10  |
| EX8        |                           |                   | 49                           | 47  | 46  | 44  | 43  | 41  | 40  | 38  | 36  | 35  | 33  | 31  | 30  |
| EX6        |                           | 0.5               | 10                           | 10  | 9   | 9   | 9   | 8   | 8   | 8   | 7   | 7   | 7   | 6   | 6   |
| EX7        |                           |                   | 35                           | 34  | 33  | 32  | 31  | 30  | 29  | 28  | 26  | 25  | 24  | 23  | 22  |
| EX8        |                           |                   | 107                          | 104 | 101 | 98  | 95  | 91  | 88  | 84  | 80  | 77  | 73  | 69  | 65  |
| EX6        |                           | 1.0               | 14                           | 13  | 13  | 13  | 12  | 12  | 11  | 11  | 10  | 10  | 9   | 9   | 8   |
| EX7        |                           |                   | 49                           | 48  | 46  | 45  | 43  | 42  | 40  | 38  | 37  | 35  | 33  | 32  | 30  |
| EX8        |                           |                   | 149                          | 145 | 141 | 136 | 131 | 127 | 122 | 117 | 112 | 107 | 102 | 96  | 91  |
| EX6        | +40                       | 0.1               | 5                            | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 3   |
| EX7        |                           |                   | 16                           | 16  | 16  | 15  | 15  | 14  | 14  | 13  | 13  | 12  | 12  | 11  | 11  |
| EX8        |                           |                   | 50                           | 49  | 47  | 46  | 45  | 43  | 42  | 40  | 39  | 37  | 36  | 34  | 33  |
| EX6        |                           | 0.5               | 10                           | 10  | 10  | 9   | 9   | 9   | 9   | 8   | 8   | 8   | 7   | 7   | 7   |
| EX7        |                           |                   | 36                           | 35  | 34  | 33  | 32  | 31  | 30  | 29  | 28  | 27  | 26  | 25  | 24  |
| EX8        |                           |                   | 109                          | 107 | 104 | 101 | 98  | 95  | 92  | 89  | 86  | 83  | 79  | 76  | 73  |
| EX6        |                           | 1.0               | 14                           | 14  | 13  | 13  | 13  | 12  | 12  | 11  | 11  | 11  | 10  | 10  | 9   |
| EX7        |                           |                   | 50                           | 49  | 48  | 46  | 45  | 44  | 42  | 41  | 39  | 38  | 36  | 35  | 33  |
| EX8        |                           |                   | 152                          | 148 | 144 | 140 | 136 | 132 | 128 | 124 | 119 | 115 | 110 | 105 | 101 |
| EX6        | +30                       | 0.1               | 5                            | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 3   |
| EX7        |                           |                   | 16                           | 16  | 15  | 15  | 15  | 14  | 14  | 13  | 13  | 13  | 12  | 12  | 11  |
| EX8        |                           |                   | 49                           | 48  | 47  | 46  | 45  | 43  | 42  | 41  | 40  | 38  | 37  | 36  | 34  |
| EX6        |                           | 0.5               | 10                           | 10  | 10  | 9   | 9   | 9   | 9   | 8   | 8   | 8   | 8   | 7   | 7   |
| EX7        |                           |                   | 35                           | 35  | 34  | 33  | 32  | 31  | 31  | 30  | 29  | 28  | 27  | 26  | 25  |
| EX8        |                           |                   | 108                          | 105 | 103 | 101 | 98  | 95  | 93  | 90  | 87  | 84  | 81  | 78  | 76  |
| EX6        |                           | 1.0               | 14                           | 13  | 13  | 13  | 13  | 12  | 12  | 12  | 11  | 11  | 10  | 10  | 10  |
| EX7        |                           |                   | 49                           | 48  | 47  | 46  | 45  | 43  | 42  | 41  | 40  | 38  | 37  | 36  | 34  |
| EX8        |                           |                   | 149                          | 146 | 142 | 139 | 135 | 132 | 128 | 124 | 120 | 117 | 113 | 109 | 104 |

**R-410A Extended Capacities (kWatts) EX 5-8 Series,  
Application Hot Gas Flow such as Heat Reclaim Application**

| Valve Type | Condensing Temperature °C | Pressure Drop bar | Evaporating Temperature (°C) |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|---------------------------|-------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|            |                           |                   | +15                          | +10 | +5  | 0   | -5  | -10 | -15 | -20 | -25 | -30 | -35 | -40 | -45 |
| EX6        | +60                       | 0.1               | 6                            | 6   | 6   | 6   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 4   |
| EX7        |                           |                   | 21                           | 21  | 20  | 20  | 19  | 19  | 18  | 18  | 17  | 16  | 16  | 15  | 15  |
| EX8        |                           |                   | 64                           | 63  | 62  | 60  | 58  | 57  | 55  | 53  | 52  | 50  | 48  | 46  | 44  |
| EX6        |                           | 0.5               | 13                           | 13  | 13  | 12  | 12  | 12  | 11  | 11  | 11  | 10  | 10  | 10  | 9   |
| EX7        |                           |                   | 47                           | 46  | 45  | 44  | 43  | 41  | 40  | 39  | 38  | 36  | 35  | 34  | 32  |
| EX8        |                           |                   | 143                          | 140 | 137 | 133 | 130 | 126 | 122 | 118 | 115 | 111 | 107 | 103 | 99  |
| EX6        |                           | 1.0               | 19                           | 18  | 18  | 17  | 17  | 16  | 16  | 15  | 15  | 14  | 14  | 13  | 13  |
| EX7        |                           |                   | 66                           | 64  | 63  | 61  | 60  | 58  | 56  | 55  | 53  | 51  | 49  | 47  | 46  |
| EX8        |                           |                   | 200                          | 196 | 191 | 186 | 182 | 177 | 171 | 166 | 161 | 155 | 150 | 144 | 138 |
| EX6        | +50                       | 0.1               | 6                            | 6   | 6   | 6   | 6   | 6   | 5   | 5   | 5   | 5   | 5   | 5   | 4   |
| EX7        |                           |                   | 22                           | 22  | 21  | 21  | 20  | 20  | 19  | 19  | 18  | 18  | 17  | 17  | 16  |
| EX8        |                           |                   | 67                           | 66  | 65  | 63  | 62  | 60  | 59  | 57  | 55  | 54  | 52  | 50  | 48  |
| EX6        |                           | 0.5               | 14                           | 14  | 13  | 13  | 13  | 12  | 12  | 12  | 11  | 11  | 11  | 10  | 10  |
| EX7        |                           |                   | 49                           | 48  | 47  | 46  | 45  | 44  | 43  | 42  | 40  | 39  | 38  | 37  | 35  |
| EX8        |                           |                   | 149                          | 146 | 143 | 140 | 137 | 133 | 130 | 126 | 123 | 119 | 115 | 111 | 108 |
| EX6        |                           | 1.0               | 19                           | 19  | 19  | 18  | 18  | 17  | 17  | 16  | 16  | 15  | 15  | 14  | 14  |
| EX7        |                           |                   | 69                           | 67  | 66  | 64  | 63  | 61  | 60  | 58  | 57  | 55  | 53  | 51  | 50  |
| EX8        |                           |                   | 209                          | 204 | 200 | 196 | 191 | 186 | 182 | 177 | 172 | 167 | 161 | 156 | 151 |
| EX6        | +40                       | 0.1               | 6                            | 6   | 6   | 6   | 6   | 6   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX7        |                           |                   | 22                           | 22  | 21  | 21  | 20  | 20  | 19  | 19  | 18  | 18  | 17  | 17  | 16  |
| EX8        |                           |                   | 67                           | 66  | 65  | 63  | 62  | 60  | 59  | 58  | 56  | 54  | 53  | 51  | 50  |
| EX6        |                           | 0.5               | 14                           | 13  | 13  | 13  | 13  | 12  | 12  | 12  | 11  | 11  | 11  | 11  | 10  |
| EX7        |                           |                   | 49                           | 48  | 47  | 46  | 45  | 44  | 43  | 42  | 41  | 40  | 39  | 37  | 36  |
| EX8        |                           |                   | 148                          | 146 | 143 | 140 | 137 | 134 | 131 | 127 | 124 | 121 | 117 | 114 | 110 |
| EX6        |                           | 1.0               | 19                           | 19  | 18  | 18  | 18  | 17  | 17  | 16  | 16  | 16  | 15  | 15  | 14  |
| EX7        |                           |                   | 68                           | 67  | 66  | 64  | 63  | 61  | 60  | 59  | 57  | 55  | 54  | 52  | 51  |
| EX8        |                           |                   | 207                          | 203 | 199 | 195 | 191 | 187 | 182 | 178 | 173 | 168 | 164 | 159 | 154 |
| EX6        | +30                       | 0.1               | 6                            | 6   | 6   | 6   | 6   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   |
| EX7        |                           |                   | 21                           | 21  | 21  | 20  | 20  | 19  | 19  | 19  | 18  | 18  | 17  | 17  | 16  |
| EX8        |                           |                   | 65                           | 64  | 63  | 61  | 60  | 59  | 58  | 56  | 55  | 53  | 52  | 51  | 49  |
| EX6        |                           | 0.5               | 13                           | 13  | 13  | 13  | 12  | 12  | 12  | 12  | 11  | 11  | 11  | 10  | 10  |
| EX7        |                           |                   | 47                           | 46  | 45  | 45  | 44  | 43  | 42  | 41  | 40  | 39  | 38  | 37  | 36  |
| EX8        |                           |                   | 143                          | 141 | 138 | 135 | 133 | 130 | 127 | 124 | 121 | 118 | 115 | 112 | 109 |
| EX6        |                           | 1.0               | 18                           | 18  | 18  | 17  | 17  | 17  | 16  | 16  | 16  | 15  | 15  | 14  | 14  |
| EX7        |                           |                   | 65                           | 64  | 63  | 62  | 61  | 60  | 58  | 57  | 56  | 54  | 53  | 51  | 50  |
| EX8        |                           |                   | 199                          | 195 | 192 | 188 | 185 | 181 | 177 | 173 | 169 | 165 | 160 | 156 | 152 |