



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return
- 0 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

6MT-35X

R450A Dew Point

| Cond °C | Cooling Capacity, kW | | | | | | | | |
|------------|----------------------|-------|-------|-------|-------|-------|-------|-------|--------|
| | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 |
| 10.0 | 26.70 | 34.30 | 43.80 | 55.40 | | | | | |
| 15.0 | 25.40 | 32.70 | 41.70 | 52.60 | 65.60 | | | | |
| 20.0 | 24.00 | 31.00 | 39.60 | 49.90 | 62.20 | 76.60 | | | |
| 25.0 | 22.70 | 29.30 | 37.50 | 47.20 | 58.80 | 72.40 | 88.20 | | |
| 30.0 | 21.30 | 27.70 | 35.40 | 44.60 | 55.50 | 68.30 | 83.20 | 89.70 | 100.50 |
| 35.0 | 20.00 | 26.10 | 33.30 | 42.00 | 52.20 | 64.20 | 78.20 | 84.30 | 94.20 |
| 40.0 | 18.60 | 24.40 | 31.30 | 39.40 | 49.00 | 60.20 | 73.20 | 79.00 | 88.30 |
| 45.0 | 17.15 | 22.70 | 29.20 | 36.80 | 45.80 | 56.20 | 68.40 | 73.70 | 82.40 |
| 50.0 | 15.70 | 21.00 | 27.20 | 34.30 | 42.60 | 52.30 | 63.60 | 68.60 | 76.60 |
| 55.0 | | 19.30 | 25.10 | 31.80 | 39.50 | 48.40 | 58.80 | 63.40 | 70.90 |
| 60.0 | | 17.55 | 23.00 | 29.20 | 36.30 | 44.60 | 54.20 | 58.40 | 65.20 |
| 65.0 | | | 20.90 | 26.70 | 33.20 | 40.80 | 49.50 | 53.40 | 59.60 |
| 70.0 | | | 18.75 | 24.10 | 30.10 | 37.00 | 44.90 | 48.40 | 54.00 |
| 75.0 | | | | 21.50 | 27.00 | 33.20 | 40.30 | 43.50 | 48.50 |
| 80.0 | | | | 18.90 | 23.90 | 29.40 | 35.80 | 38.50 | 43.10 |
| 85.0 | | | | | 20.70 | 25.60 | 31.20 | 33.70 | 37.60 |

| Cond °C | Power, kW | | | | | | | | |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 |
| 10.0 | 8.05 | 8.43 | 8.61 | 8.58 | | | | | |
| 15.0 | 8.56 | 9.11 | 9.50 | 9.69 | 9.64 | | | | |
| 20.0 | 9.02 | 9.75 | 10.35 | 10.75 | 10.95 | 10.85 | | | |
| 25.0 | 9.44 | 10.35 | 11.10 | 11.75 | 12.15 | 12.35 | 12.30 | | |
| 30.0 | 9.83 | 10.90 | 11.85 | 12.70 | 13.35 | 13.80 | 14.00 | 14.00 | 13.90 |
| 35.0 | 10.15 | 11.40 | 12.55 | 13.60 | 14.45 | 15.15 | 15.60 | 15.75 | 15.80 |
| 40.0 | 10.45 | 11.85 | 13.20 | 14.45 | 15.55 | 16.45 | 17.20 | 17.40 | 17.65 |
| 45.0 | 10.75 | 12.25 | 13.75 | 15.20 | 16.55 | 17.70 | 18.70 | 19.00 | 19.45 |
| 50.0 | 10.95 | 12.65 | 14.30 | 15.95 | 17.45 | 18.85 | 20.10 | 20.60 | 21.10 |
| 55.0 | | 12.95 | 14.80 | 16.60 | 18.35 | 19.95 | 21.50 | 22.00 | 22.80 |
| 60.0 | | 13.20 | 15.20 | 17.20 | 19.15 | 21.00 | 22.70 | 23.40 | 24.30 |
| 65.0 | | | 15.55 | 17.75 | 19.90 | 22.00 | 23.90 | 24.70 | 25.80 |
| 70.0 | | | 15.85 | 18.20 | 20.50 | 22.80 | 25.10 | 25.90 | 27.20 |
| 75.0 | | | | 18.60 | 21.10 | 23.70 | 26.10 | 27.10 | 28.50 |
| 80.0 | | | | 18.95 | 21.70 | 24.40 | 27.10 | 28.10 | 29.70 |
| 85.0 | | | | | 22.10 | 25.00 | 27.90 | 29.10 | 30.80 |

50 Hz

6MT-35X

R450A Dew Point

| Cond °C | Current at 400 V, A | | | | | | | | |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 |
| 10.0 | 22.37 | 22.75 | 22.95 | 22.88 | | | | | |
| 15.0 | 22.84 | 23.41 | 23.83 | 24.02 | 23.91 | | | | |
| 20.0 | 23.29 | 24.05 | 24.69 | 25.14 | 25.34 | 25.20 | | | |
| 25.0 | 23.73 | 24.68 | 25.54 | 26.25 | 26.74 | 26.94 | 26.77 | | |
| 30.0 | 24.14 | 25.27 | 26.36 | 27.33 | 28.12 | 28.65 | 28.86 | 28.83 | 28.67 |
| 35.0 | 24.52 | 25.84 | 27.15 | 28.38 | 29.46 | 30.33 | 30.91 | 31.04 | 31.13 |
| 40.0 | 24.86 | 26.36 | 27.89 | 29.38 | 30.76 | 31.96 | 32.92 | 33.21 | 33.55 |
| 45.0 | 25.16 | 26.84 | 28.59 | 30.34 | 32.02 | 33.55 | 34.88 | 35.33 | 35.92 |
| 50.0 | 25.40 | 27.27 | 29.24 | 31.25 | 33.22 | 35.09 | 36.78 | 37.40 | 38.23 |
| 55.0 | | 27.64 | 29.83 | 32.10 | 34.37 | 36.57 | 38.63 | 39.40 | 40.49 |
| 60.0 | | 27.94 | 30.35 | 32.88 | 35.44 | 37.98 | 40.41 | 41.34 | 42.68 |
| 65.0 | | | 30.80 | 33.59 | 36.45 | 39.31 | 42.12 | 43.21 | 44.79 |
| 70.0 | | | 31.17 | 34.21 | 37.37 | 40.57 | 43.74 | 44.99 | 46.82 |
| 75.0 | | | | 34.75 | 38.20 | 41.74 | 45.28 | 46.69 | 48.77 |
| 80.0 | | | | 35.20 | 38.95 | 42.81 | 46.73 | 48.29 | 50.62 |
| 85.0 | | | | | 39.59 | 43.79 | 48.07 | 49.79 | 52.37 |

| Cond °C | Suction Mass Flow, g/s | | | | | | | | |
|------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 |
| 10.0 | 135.50 | 174.50 | 223.00 | 283.00 | | | | | |
| 15.0 | 133.00 | 172.00 | 220.00 | 279.00 | 349.00 | | | | |
| 20.0 | 131.00 | 169.50 | 217.00 | 274.00 | 343.00 | 425.00 | | | |
| 25.0 | 128.50 | 166.50 | 213.00 | 270.00 | 338.00 | 418.00 | 513.00 | | |
| 30.0 | 126.00 | 164.00 | 210.00 | 266.00 | 332.00 | 411.00 | 504.00 | 545.00 | 612.00 |
| 35.0 | 123.00 | 161.00 | 207.00 | 261.00 | 327.00 | 404.00 | 495.00 | 536.00 | 602.00 |
| 40.0 | 120.00 | 158.00 | 203.00 | 257.00 | 321.00 | 397.00 | 486.00 | 526.00 | 591.00 |
| 45.0 | 116.50 | 154.50 | 199.50 | 253.00 | 315.00 | 390.00 | 478.00 | 517.00 | 581.00 |
| 50.0 | 112.00 | 150.50 | 195.50 | 248.00 | 310.00 | 383.00 | 469.00 | 507.00 | 570.00 |
| 55.0 | | 146.50 | 191.00 | 243.00 | 304.00 | 375.00 | 460.00 | 497.00 | 559.00 |
| 60.0 | | 141.50 | 186.00 | 238.00 | 297.00 | 368.00 | 450.00 | 487.00 | 548.00 |
| 65.0 | | | 181.00 | 232.00 | 291.00 | 360.00 | 441.00 | 477.00 | 537.00 |
| 70.0 | | | 174.50 | 226.00 | 284.00 | 351.00 | 431.00 | 467.00 | 525.00 |
| 75.0 | | | | 219.00 | 276.00 | 343.00 | 421.00 | 456.00 | 514.00 |
| 80.0 | | | | 211.00 | 268.00 | 334.00 | 411.00 | 446.00 | 502.00 |
| 85.0 | | | | | 260.00 | 325.00 | 402.00 | 436.00 | 492.00 |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|--|--|
| Number of cylinders | 6 |
| Displacement @ 50 Hz, m³/h | 135 |
| Bore/Stroke, mm | 75.7/57.5 |
| Length/Width, mm | 725/547 |
| Height, mm | 450 |
| Net Weight, kg | 221 |
| Suction, inch | 2 1/8 |
| Discharge, inch | 1 5/8 |
| Oil Quantity, l | 3.3 |
| Oil type (original charge) | POE RL32-3MAF |
| Oil type (approved oils) | POE RL32-3MAF, POE MOBIL EAL Arctic 22 CC |
| Base mounting (hole dia), mm | 381 x 305 (18) |
| Sound Pressure @ 1m (MT), dBA | 72 |
| Sound Power (MT), dBA | 83 |
| Sound Power with Sound Shell (MT), dBA | 68 |
| Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed) | -10 / 45 / 20 °C at 50 Hz |
| High Side PS gauge, bar | 32.5 |
| Low Side PS gauge, bar | 22.5 |
| Refrigerant's GWP | 605 |
| Refrigerant's classification | A1 |

COMPRESSOR ELECTRICAL DATA (380-420 V / 3~ / 50 Hz)

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 67.3 |
| Locked Rotor Current, A | 255 |
| Default Enclosure Class | IP 54 (IEC 34) |

ACCESSORIES INCLUDED

| | |
|-------------------------------------|---|
| Mounting Parts | Spring |
| CoreSense Protection (-P) | Motor protection |
| Oil Pressure Switch (-P) | OPS2 Sensor |
| Copeland Compressor Electronic (-N) | Oil pressure, motor and discharge line temperature protection; advanced diagnostics features and power measurement |

ACCESSORIES OPTIONAL

| | |
|---------------------------------------|------------------------------|
| Check Valve | For unloaded start operation |
| Mounting Parts | Rubber |
| Adapter Kit | For Parallel Operation |
| Additional Cooling | 70 W Vertical Air Flow Fan |
| Capacity Control | Capacity Steps 67/33 % |
| Oil Pressure Switch | OPS2 Electronic Switch |
| Crankcase Heater | 100 W Internal |
| Sound Attenuation | Sound Shell |
| Digital Modulation | 33-100 % |
| Copeland Compressor Electronic module | Modbus extension module |

MOTOR OPTIONS

| <i>Motor Code</i> | <i>Power Supply</i> | <i>Nominal Voltage, V</i> | <i>Start Connection</i> | <i>DOL Connection</i> | <i>Amps Factor</i> |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| AWM | 380-420 V / 3~ / 50 Hz | 400 | YY/Y | Y | 1.00 |
| EWL | 220-240 V / 3~ / 50 Hz | 230 | Y/DELTA | DELTA | 1.73 |
| EWL | 380-420 V / 3~ / 50 Hz | 400 | | Y | 1.00 |
| EWM | 380-420 V / 3~ / 50 Hz | 400 | Y/DELTA | DELTA | 1.00 |
| AWR | 220-240 V / 3~ / 50 Hz | 230 | YY/Y | Y | 1.73 |
| AWY | 500-550 V / 3~ / 50 Hz | 525 | YY/Y | Y | 0.76 |
| EWK | 220-240 V / 3~ / 60 Hz | 230 | Y/DELTA | DELTA | 2.10 |
| EWK | 380-420 V / 3~ / 60 Hz | 380 | | Y | 1.20 |
| EWD | 440-480 V / 3~ / 60 Hz | 460 | Y/DELTA | DELTA | 1.00 |
| AWC | 208-230 V / 3~ / 60 Hz | 230 | YY/Y | Y | 2.19 |
| AWX | 380 V / 3~ / 60 Hz | 380 | YY/Y | Y | 1.20 |
| AWD | 440-480 V / 3~ / 60 Hz | 460 | YY/Y | Y | 1.00 |