



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return
- 20 °C Suction Gas Return with add cooling
- 0 °C Suction Gas Return
- 0 °C Suction Gas Return with add cooling
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

| Cond °C | Cooling Capacity, kW | | | | | | | | | | | |
|------------|----------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| | -45.0 | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 |
| 10.0 | 17.65 | 23.90 | 31.70 | 41.30 | 52.90 | 66.70 | 83.00 | 102.00 | | | | |
| 15.0 | 15.90 | 22.00 | 29.50 | 38.60 | 49.70 | 62.80 | 78.20 | 96.20 | 117.00 | | | |
| 20.0 | 14.10 | 20.00 | 27.20 | 35.90 | 46.30 | 58.70 | 73.30 | 90.40 | 110.00 | 132.50 | 158.50 | |
| 25.0 | 12.25 | 17.90 | 24.80 | 33.00 | 42.80 | 54.50 | 68.20 | 84.40 | 103.00 | 124.50 | 149.00 | 159.50 |
| 30.0 | 10.40 | 15.85 | 22.30 | 30.00 | 39.20 | 50.10 | 63.00 | 78.20 | 95.80 | 116.00 | 139.50 | 149.50 |
| 35.0 | | 13.70 | 19.80 | 27.00 | 35.50 | 45.70 | 57.70 | 71.90 | 88.40 | 107.50 | 129.50 | 139.00 |
| 40.0 | | 11.60 | 17.25 | 23.90 | 31.80 | 41.20 | 52.30 | 65.50 | 80.90 | 98.80 | 119.50 | 128.50 |
| 45.0 | | | 14.75 | 20.80 | 28.00 | 36.60 | 46.80 | 58.90 | 73.20 | 90.00 | 109.50 | 118.00 |
| 50.0 | | | | 17.70 | 24.20 | 31.90 | 41.20 | 52.30 | 65.40 | 81.00 | 99.10 | 107.00 |
| 55.0 | | | | 14.65 | 20.40 | 27.30 | 35.60 | 45.60 | 57.60 | 71.80 | 88.70 | 96.30 |
| 60.0 | | | | | 16.60 | 22.60 | 29.90 | 38.80 | 49.60 | 62.60 | 78.10 | |
| 62.0 | | | | | 15.10 | 20.70 | 27.60 | 36.10 | 46.40 | 58.90 | | |

50 Hz

6MID-40X 100% Loaded

R404A Dew Point

| Cond °C | Power, kW | | | | | | | | | | | |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -45.0 | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 |
| 10.0 | 9.65 | 11.00 | 12.20 | 13.30 | 14.25 | 14.95 | 15.35 | 15.55 | | | | |
| 15.0 | 9.93 | 11.45 | 12.90 | 14.20 | 15.35 | 16.30 | 17.00 | 17.45 | 17.55 | | | |
| 20.0 | 10.15 | 11.85 | 13.50 | 15.00 | 16.40 | 17.60 | 18.60 | 19.30 | 19.70 | 19.80 | 19.50 | |
| 25.0 | 10.25 | 12.15 | 14.00 | 15.75 | 17.40 | 18.85 | 20.10 | 21.10 | 21.80 | 22.20 | 22.30 | 22.20 |
| 30.0 | 10.30 | 12.40 | 14.45 | 16.45 | 18.30 | 20.00 | 21.50 | 22.80 | 23.80 | 24.60 | 24.90 | 25.00 |
| 35.0 | | 12.60 | 14.85 | 17.05 | 19.15 | 21.10 | 22.90 | 24.50 | 25.80 | 26.80 | 27.50 | 27.70 |
| 40.0 | | 12.70 | 15.20 | 17.60 | 19.95 | 22.20 | 24.20 | 26.10 | 27.70 | 29.10 | 30.10 | 30.40 |
| 45.0 | | | 15.40 | 18.05 | 20.70 | 23.10 | 25.50 | 27.60 | 29.50 | 31.20 | 32.60 | 33.00 |
| 50.0 | | | | 18.45 | 21.30 | 24.00 | 26.60 | 29.10 | 31.30 | 33.30 | 35.00 | 35.60 |
| 55.0 | | | | 18.80 | 21.90 | 24.90 | 27.70 | 30.50 | 33.00 | 35.30 | 37.40 | 38.10 |
| 60.0 | | | | | 22.40 | 25.60 | 28.80 | 31.80 | 34.60 | 37.30 | 39.70 | |
| 62.0 | | | | | 22.50 | 25.90 | 29.20 | 32.30 | 35.30 | 38.00 | | |

| Cond °C | Current at 400 V, A | | | | | | | | | | | |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -45.0 | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 |
| 10.0 | 28.62 | 29.75 | 30.90 | 31.99 | 32.97 | 33.75 | 34.27 | 34.45 | | | | |
| 15.0 | 28.86 | 30.17 | 31.54 | 32.87 | 34.12 | 35.19 | 36.03 | 36.57 | 36.72 | | | |
| 20.0 | 29.03 | 30.55 | 32.15 | 33.75 | 35.27 | 36.66 | 37.84 | 38.73 | 39.27 | 39.39 | 39.02 | |
| 25.0 | 29.12 | 30.87 | 32.71 | 34.59 | 36.42 | 38.13 | 39.66 | 40.93 | 41.88 | 42.43 | 42.51 | 42.39 |
| 30.0 | 29.11 | 31.10 | 33.21 | 35.38 | 37.53 | 39.58 | 41.48 | 43.15 | 44.52 | 45.52 | 46.07 | 46.15 |
| 35.0 | | 31.23 | 33.62 | 36.10 | 38.58 | 41.00 | 43.29 | 45.37 | 47.18 | 48.64 | 49.68 | 49.96 |
| 40.0 | | 31.23 | 33.93 | 36.73 | 39.57 | 42.37 | 45.06 | 47.57 | 49.83 | 51.77 | 53.31 | 53.81 |
| 45.0 | | | 34.11 | 37.26 | 40.46 | 43.66 | 46.77 | 49.72 | 52.45 | 54.89 | 56.96 | 57.67 |
| 50.0 | | | | 37.66 | 41.25 | 44.85 | 48.40 | 51.82 | 55.04 | 57.99 | 60.60 | 61.53 |
| 55.0 | | | | 37.92 | 41.91 | 45.94 | 49.94 | 53.83 | 57.56 | 61.04 | 64.21 | 65.37 |
| 60.0 | | | | | 42.42 | 46.89 | 51.36 | 55.75 | 60.00 | 64.03 | 67.77 | |
| 62.0 | | | | | 42.57 | 47.23 | 51.89 | 56.49 | 60.95 | 65.20 | | |

50 Hz

6MID-40X 100% Loaded

R404A Dew Point

| Cond °C | Suction Mass Flow, g/s | | | | | | | | | | | |
|------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| | -45.0 | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 |
| 10.0 | 131.00 | 173.50 | 225.00 | 287.00 | 360.00 | 444.00 | 542.00 | 653.00 | | | | |
| 15.0 | 125.00 | 168.50 | 221.00 | 283.00 | 355.00 | 439.00 | 536.00 | 646.00 | 771.00 | | | |
| 20.0 | 117.50 | 162.50 | 215.00 | 277.00 | 349.00 | 433.00 | 529.00 | 639.00 | 763.00 | 902.00 | 1056.00 | |
| 25.0 | 109.00 | 155.00 | 209.00 | 271.00 | 343.00 | 426.00 | 521.00 | 630.00 | 753.00 | 892.00 | 1046.00 | 1112.00 |
| 30.0 | 99.30 | 147.00 | 201.00 | 263.00 | 335.00 | 417.00 | 512.00 | 620.00 | 742.00 | 880.00 | 1035.00 | 1101.00 |
| 35.0 | | 137.50 | 192.00 | 254.00 | 325.00 | 407.00 | 501.00 | 608.00 | 730.00 | 868.00 | 1022.00 | 1089.00 |
| 40.0 | | 127.00 | 182.00 | 244.00 | 315.00 | 396.00 | 489.00 | 595.00 | 716.00 | 854.00 | 1009.00 | 1076.00 |
| 45.0 | | | 170.50 | 233.00 | 303.00 | 383.00 | 475.00 | 580.00 | 701.00 | 839.00 | 995.00 | 1063.00 |
| 50.0 | | | | 220.00 | 289.00 | 369.00 | 460.00 | 565.00 | 685.00 | 823.00 | 981.00 | 1049.00 |
| 55.0 | | | | 206.00 | 275.00 | 353.00 | 444.00 | 548.00 | 669.00 | 808.00 | 968.00 | 1038.00 |
| 60.0 | | | | | 260.00 | 338.00 | 428.00 | 532.00 | 654.00 | 796.00 | 960.00 | |
| 62.0 | | | | | 254.00 | 332.00 | 422.00 | 527.00 | 649.00 | 793.00 | | |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|--|--|
| Number of cylinders | 6 |
| Displacement @ 50 Hz, m ³ /h | 121 |
| Bore/Stroke, mm | 71.5/57.5 |
| Length/Width, mm | 695/547 |
| Height, mm | 450 |
| Net Weight, kg | 225 |
| Suction, inch | 2 1/8 |
| Discharge, inch | 1 3/8 |
| 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 (LT), dBA | 78 |
| Sound Power (LT), dBA | 89 |
| Sound Power with Sound Shell (LT), dBA | 74 |
| Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed) | -35 / 40 / 20 °C at 50 Hz |
| Sound Pressure @ 1m (MT), dBA | 72 |
| Sound Power (MT), dBA | 83 |
| Sound Power with Sound Shell (MT), dBA | 70 |
| 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 |
| Digital Modulation | 33-100% |
| Refrigerant's GWP | 3922 |
| Refrigerant's classification | A1 |

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

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 71.4 |
| Locked Rotor Current, A | 304 |
| 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 |
| Digital Driver | EC3-D23 |
| Digital Modulation | 33-66% |
| Adapter Kit | For Parallel Operation |
| Additional Cooling | 70 W Vertical Air Flow Fan |
| Crankcase Heater | 100 W Internal |
| Oil Pressure Switch | OPS2 Electronic Switch |
| Sound Attenuation | Sound Shell |
| Mounting Parts | Rubber |
| Discharge Shut-off | Angle valve |
| 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 | YYY | 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 | YYY | Y | 1.73 |
| AWY | 500-550 V / 3~ / 50 Hz | 525 | YYY | 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 | YYY | Y | 2.19 |
| AWX | 380 V / 3~ / 60 Hz | 380 | YYY | Y | 1.20 |
| AWD | 440-480 V / 3~ / 60 Hz | 460 | YYY | Y | 1.00 |