



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

| Cond °C | Cooling Capacity, kW | | | | | | | | |
|------------|----------------------|-------|-------|-------|-------|-------|-------|--------|--------|
| | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 |
| 10.0 | | 27.10 | 35.40 | 45.50 | 57.60 | 71.90 | 88.70 | 108.00 | |
| 15.0 | | | 33.80 | 43.60 | 55.20 | 68.90 | 85.00 | 103.50 | 125.00 |
| 20.0 | | | 32.30 | 41.60 | 52.70 | 65.90 | 81.20 | 99.00 | 119.50 |
| 25.0 | | | | 39.50 | 50.20 | 62.70 | 77.40 | 94.40 | 114.00 |
| 30.0 | | | | 37.40 | 47.60 | 59.50 | 73.50 | 89.70 | 108.50 |
| 35.0 | | | | | 44.90 | 56.20 | 69.50 | 84.90 | 102.50 |
| 40.0 | | | | | | 52.90 | 65.40 | 79.90 | 96.70 |
| 45.0 | | | | | | | 61.20 | 74.90 | 90.80 |
| 50.0 | | | | | | | 57.00 | 69.90 | 84.80 |
| 55.0 | | | | | | | | 64.70 | |
| 59.8 | | | | | | | | | |

50 Hz

6MMD-30X 100% Loaded

R407F Dew Point

| Cond °C | Power, kW | | | | | | | | |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 |
| 10.0 | | 10.40 | 11.55 | 12.60 | 13.55 | 14.35 | 14.95 | 15.25 | |
| 15.0 | | | 12.25 | 13.50 | 14.65 | 15.65 | 16.45 | 17.00 | 17.25 |
| 20.0 | | | 13.00 | 14.45 | 15.80 | 17.00 | 18.05 | 18.85 | 19.35 |
| 25.0 | | | | 15.40 | 17.00 | 18.45 | 19.70 | 20.80 | 21.60 |
| 30.0 | | | | 16.40 | 18.15 | 19.85 | 21.40 | 22.80 | 23.80 |
| 35.0 | | | | | 19.35 | 21.30 | 23.10 | 24.70 | 26.10 |
| 40.0 | | | | | | 22.60 | 24.80 | 26.70 | 28.40 |
| 45.0 | | | | | | | 26.30 | 28.60 | 30.60 |
| 50.0 | | | | | | | 27.80 | 30.40 | 32.80 |
| 55.0 | | | | | | | | 32.00 | |
| 59.8 | | | | | | | | | |

| Cond °C | Current at 400 V, A | | | | | | | | |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 |
| 10.0 | | 25.37 | 26.34 | 27.41 | 28.45 | 29.36 | 30.01 | 30.29 | |
| 15.0 | | | 26.98 | 28.30 | 29.62 | 30.83 | 31.82 | 32.47 | 32.67 |
| 20.0 | | | 27.77 | 29.35 | 30.97 | 32.52 | 33.87 | 34.91 | 35.53 |
| 25.0 | | | | 30.51 | 32.46 | 34.36 | 36.09 | 37.56 | 38.62 |
| 30.0 | | | | 31.71 | 34.00 | 36.28 | 38.43 | 40.33 | 41.88 |
| 35.0 | | | | | 35.55 | 38.23 | 40.82 | 43.18 | 45.22 |
| 40.0 | | | | | | 40.14 | 43.18 | 46.04 | 48.60 |
| 45.0 | | | | | | | 45.47 | 48.84 | 51.94 |
| 50.0 | | | | | | | 47.61 | 51.52 | 55.19 |
| 55.0 | | | | | | | | 54.01 | |
| 59.8 | | | | | | | | | |

50 Hz

6MMD-30X 100% Loaded

R407F Dew Point

| Cond °C | Suction Mass Flow, g/s | | | | | | | | |
|------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 |
| 10.0 | | 114.50 | 150.00 | 193.50 | 246.00 | 309.00 | 384.00 | 471.00 | |
| 15.0 | | | 148.50 | 191.50 | 244.00 | 306.00 | 380.00 | 467.00 | 568.00 |
| 20.0 | | | 146.50 | 189.00 | 241.00 | 303.00 | 376.00 | 462.00 | 563.00 |
| 25.0 | | | | 186.50 | 238.00 | 299.00 | 372.00 | 457.00 | 557.00 |
| 30.0 | | | | 183.50 | 234.00 | 295.00 | 367.00 | 451.00 | 551.00 |
| 35.0 | | | | | 230.00 | 290.00 | 361.00 | 445.00 | 544.00 |
| 40.0 | | | | | | 285.00 | 355.00 | 438.00 | 536.00 |
| 45.0 | | | | | | | 349.00 | 431.00 | 528.00 |
| 50.0 | | | | | | | 342.00 | 423.00 | 520.00 |
| 55.0 | | | | | | | | 415.00 | |
| 59.8 | | | | | | | | | |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|--|--|
| Number of cylinders | 6 |
| Displacement @ 50 Hz, m³/h | 121 |
| Bore/Stroke, mm | 71.5/57.5 |
| Length/Width, mm | 695/547 |
| Height, mm | 450 |
| Net Weight, kg | 221 |
| 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 (MT), dBA | 72 |
| Sound Power (MT), dBA | 83 |
| 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 | 1825 |
| Refrigerant's classification | A1 |

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

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 59.7 |
| Locked Rotor Current, A | 255 |
| Default Enclosure Class | IP 54 (IEC 34) |

ACCESSORIES INCLUDED

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

ACCESSORIES OPTIONAL

| | |
|---------------------------------------|------------------------------|
| Adapter Kit | For Parallel Operation |
| Check Valve | For unloaded start operation |
| Digital Driver | EC3-D23 |
| Digital Modulation | 33-66% |
| 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 |
| Copeland Compressor Electronic module | Modbus extension module |
| Discharge Shut-off | Angle valve |

MOTOR OPTIONS

| Motor Code | Power Supply | Nominal Voltage, V | Start Connection | DOL Connection | Amps Factor |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| 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 |