



Minimum Evaporating Temp. With:

- 20 K Suction Superheat
- 20 °C Suction Gas Return
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

50 Hz

6MJ-45X

R134a

| Cond °C | Cooling Capacity, kW | | | | | | | | | | | |
|------------|----------------------|-------|-------|-------|-------|--------|--------|--------|--------|--------|------|------|
| | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 | 20.0 | 25.0 |
| 10.0 | 41.90 | 52.50 | 65.40 | | | | | | | | | |
| 15.0 | 39.60 | 49.70 | 62.00 | 76.80 | | | | | | | | |
| 20.0 | 37.30 | 46.90 | 58.70 | 72.80 | 89.40 | | | | | | | |
| 25.0 | 35.00 | 44.20 | 55.40 | 68.70 | 84.50 | 103.00 | 111.00 | | | | | |
| 30.0 | 32.80 | 41.50 | 52.10 | 64.70 | 79.60 | 97.10 | 105.00 | 117.50 | 128.50 | | | |
| 35.0 | 30.60 | 38.80 | 48.80 | 60.70 | 74.70 | 91.20 | 98.50 | 110.50 | 121.00 | 132.50 | | |
| 40.0 | 28.50 | 36.20 | 45.60 | 56.70 | 69.90 | 85.30 | 92.20 | 103.50 | 113.50 | 124.00 | | |
| 45.0 | 26.40 | 33.60 | 42.40 | 52.80 | 65.10 | 79.50 | 85.90 | 96.30 | 105.50 | 115.50 | | |
| 50.0 | 24.40 | 31.10 | 39.30 | 48.90 | 60.30 | 73.70 | 79.70 | 89.30 | 98.00 | 107.50 | | |
| 55.0 | 22.40 | 28.70 | 36.20 | 45.10 | 55.60 | 68.00 | 73.50 | 82.40 | 90.40 | 99.00 | | |
| 60.0 | | 26.30 | 33.20 | 41.30 | 51.00 | 62.30 | 67.40 | 75.50 | 82.90 | 90.80 | | |
| 65.0 | | | 30.20 | 37.60 | 46.40 | 56.70 | 61.30 | 68.70 | 75.40 | 82.60 | | |
| 70.0 | | | 27.30 | 34.00 | 41.90 | 51.10 | 55.30 | 61.90 | 68.00 | 74.50 | | |
| 75.0 | | | | 30.40 | 37.40 | 45.60 | 49.30 | 55.30 | 60.70 | 66.40 | | |
| 80.0 | | | | 26.90 | 33.00 | 40.20 | 43.40 | 48.70 | 53.40 | 58.50 | | |

| Cond °C | Power, kW | | | | | | | | | | | |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 | 20.0 | 25.0 |
| 10.0 | 10.25 | 10.80 | 11.00 | | | | | | | | | |
| 15.0 | 10.90 | 11.65 | 12.15 | 12.25 | | | | | | | | |
| 20.0 | 11.45 | 12.40 | 13.20 | 13.65 | 13.65 | | | | | | | |
| 25.0 | 11.90 | 13.05 | 14.10 | 14.85 | 15.25 | 15.20 | 15.00 | | | | | |
| 30.0 | 12.30 | 13.65 | 14.90 | 15.95 | 16.70 | 17.05 | 17.05 | 16.90 | 16.60 | | | |
| 35.0 | 12.65 | 14.15 | 15.60 | 16.90 | 18.00 | 18.75 | 18.90 | 19.05 | 19.00 | 18.80 | | |
| 40.0 | 13.00 | 14.60 | 16.20 | 17.80 | 19.15 | 20.30 | 20.60 | 21.00 | 21.20 | 21.30 | | |
| 45.0 | 13.40 | 15.05 | 16.80 | 18.60 | 20.20 | 21.70 | 22.20 | 22.80 | 23.20 | 23.50 | | |
| 50.0 | 13.75 | 15.50 | 17.40 | 19.35 | 21.20 | 23.00 | 23.60 | 24.50 | 25.10 | 25.70 | | |
| 55.0 | 14.20 | 16.00 | 17.95 | 20.10 | 22.20 | 24.20 | 25.00 | 26.10 | 26.90 | 27.70 | | |
| 60.0 | | 16.50 | 18.55 | 20.80 | 23.10 | 25.40 | 26.30 | 27.60 | 28.60 | 29.50 | | |
| 65.0 | | | 19.20 | 21.50 | 24.00 | 26.60 | 27.60 | 29.00 | 30.20 | 31.30 | | |
| 70.0 | | | 19.90 | 22.30 | 24.90 | 27.70 | 28.80 | 30.40 | 31.70 | 33.00 | | |
| 75.0 | | | | 23.20 | 25.90 | 28.80 | 30.00 | 31.80 | 33.30 | 34.70 | | |
| 80.0 | | | | 24.10 | 26.90 | 30.00 | 31.20 | 33.20 | 34.80 | 36.40 | | |

50 Hz

6MJ-45X

R134a

| Cond °C | Current at 400 V, A | | | | | | | | | | | |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 | 20.0 | 25.0 |
| 10.0 | 28.57 | 29.11 | 29.32 | | | | | | | | | |
| 15.0 | 29.21 | 29.96 | 30.46 | 30.56 | | | | | | | | |
| 20.0 | 29.76 | 30.72 | 31.49 | 31.94 | 31.94 | | | | | | | |
| 25.0 | 30.25 | 31.39 | 32.43 | 33.22 | 33.63 | 33.52 | 33.30 | | | | | |
| 30.0 | 30.69 | 32.00 | 33.29 | 34.40 | 35.21 | 35.58 | 35.57 | 35.37 | 35.01 | | | |
| 35.0 | 31.09 | 32.56 | 34.08 | 35.51 | 36.71 | 37.54 | 37.74 | 37.87 | 37.81 | 37.56 | | |
| 40.0 | 31.46 | 33.08 | 34.83 | 36.56 | 38.13 | 39.42 | 39.82 | 40.27 | 40.50 | 40.57 | | |
| 45.0 | 31.82 | 33.58 | 35.54 | 37.56 | 39.49 | 41.22 | 41.82 | 42.59 | 43.10 | 43.47 | | |
| 50.0 | 32.19 | 34.08 | 36.23 | 38.52 | 40.81 | 42.96 | 43.75 | 44.83 | 45.63 | 46.30 | | |
| 55.0 | 32.58 | 34.57 | 36.91 | 39.47 | 42.09 | 44.66 | 45.64 | 47.02 | 48.09 | 49.05 | | |
| 60.0 | | 35.09 | 37.61 | 40.41 | 43.36 | 46.33 | 47.48 | 49.17 | 50.50 | 51.75 | | |
| 65.0 | | | 38.32 | 41.36 | 44.62 | 47.98 | 49.31 | 51.28 | 52.88 | 54.40 | | |
| 70.0 | | | 39.07 | 42.33 | 45.90 | 49.63 | 51.13 | 53.39 | 55.23 | 57.03 | | |
| 75.0 | | | | 43.34 | 47.20 | 51.29 | 52.96 | 55.49 | 57.58 | 59.65 | | |
| 80.0 | | | | 44.41 | 48.54 | 52.98 | 54.82 | 57.60 | 59.94 | 62.27 | | |

| Cond °C | Suction Mass Flow, g/s | | | | | | | | | | | |
|------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|
| | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 | 20.0 | 25.0 |
| 10.0 | 203.00 | 255.00 | 319.00 | | | | | | | | | |
| 15.0 | 198.50 | 250.00 | 314.00 | 390.00 | | | | | | | | |
| 20.0 | 194.00 | 245.00 | 308.00 | 383.00 | 474.00 | | | | | | | |
| 25.0 | 189.00 | 240.00 | 302.00 | 376.00 | 465.00 | 571.00 | 619.00 | | | | | |
| 30.0 | 184.50 | 234.00 | 295.00 | 369.00 | 457.00 | 561.00 | 608.00 | 684.00 | 754.00 | | | |
| 35.0 | 179.50 | 229.00 | 289.00 | 361.00 | 448.00 | 551.00 | 597.00 | 672.00 | 741.00 | 815.00 | | |
| 40.0 | 175.00 | 223.00 | 282.00 | 353.00 | 438.00 | 539.00 | 585.00 | 659.00 | 727.00 | 800.00 | | |
| 45.0 | 170.00 | 218.00 | 276.00 | 345.00 | 429.00 | 528.00 | 573.00 | 646.00 | 712.00 | 785.00 | | |
| 50.0 | 165.00 | 212.00 | 269.00 | 337.00 | 419.00 | 516.00 | 560.00 | 632.00 | 697.00 | 768.00 | | |
| 55.0 | 160.50 | 206.00 | 262.00 | 328.00 | 408.00 | 504.00 | 547.00 | 617.00 | 681.00 | 751.00 | | |
| 60.0 | | 201.00 | 255.00 | 320.00 | 398.00 | 491.00 | 533.00 | 602.00 | 665.00 | 734.00 | | |
| 65.0 | | | 248.00 | 311.00 | 387.00 | 478.00 | 519.00 | 586.00 | 648.00 | 716.00 | | |
| 70.0 | | | 241.00 | 302.00 | 376.00 | 464.00 | 505.00 | 570.00 | 631.00 | 697.00 | | |
| 75.0 | | | | 294.00 | 365.00 | 451.00 | 490.00 | 554.00 | 614.00 | 679.00 | | |
| 80.0 | | | | 286.00 | 355.00 | 438.00 | 476.00 | 539.00 | 597.00 | 661.00 | | |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|--|--|
| Number of cylinders | 6 |
| Displacement @ 50 Hz, m ³ /h | 135 |
| Bore/Stroke, mm | 75.7/57.5 |
| Length/Width, mm | 725/547 |
| Height, mm | 450 |
| Net Weight, kg | 223 |
| 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 | 1430 |
| Refrigerant's classification | A1 |

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

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 81.5 |
| Locked Rotor Current, A | 321 |
| Default Enclosure Class | IP 54 (IEC 34) |

ACCESSORIES INCLUDED

| | |
|-------------------------------------|---|
| Oil Pressure Switch (-P) | OPS2 Sensor |
| Mounting Parts | Spring |
| CoreSense Protection (-P) | Motor protection |
| 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 |
| Crankcase Heater | 100 W Internal |
| Sound Attenuation | Sound Shell |
| Digital Modulation | 33-100 % |
| Capacity Control | Capacity Steps 67/33 % |
| Oil Pressure Switch | OPS2 Electronic Switch |
| 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 |