



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return ASERCOM certified
- 0 °C Suction Gas Return
- Maximum Evaporating Temperature
- 20 K Suction Superheat

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

| Cond<br>°C | Cooling Capacity, kW |       |       |       |       |       |       |       |        |        |
|------------|----------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
|            | -50.0                | -45.0 | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0  | -5.0   |
| 5.0        | 15.70                | 21.00 | 27.70 | 36.10 | 46.30 | 58.60 | 73.30 |       |        |        |
| 10.0       | 14.85                | 20.00 | 26.40 | 34.30 | 44.00 | 55.70 | 69.60 | 86.00 | 105.00 |        |
| 15.0       | 13.95                | 18.90 | 25.00 | 32.60 | 41.70 | 52.80 | 65.90 | 81.40 | 99.40  | 120.00 |
| 20.0       | 12.95                | 17.75 | 23.60 | 30.70 | 39.40 | 49.70 | 62.10 | 76.70 | 93.60  | 113.50 |
| 25.0       |                      | 16.55 | 22.10 | 28.80 | 36.90 | 46.70 | 58.20 | 71.90 | 87.90  | 106.50 |
| 30.0       |                      |       | 20.50 | 26.90 | 34.50 | 43.50 | 54.30 | 67.10 | 82.00  | 99.40  |
| 35.0       |                      |       | 18.90 | 24.80 | 31.90 | 40.30 | 50.30 | 62.20 | 76.10  | 92.30  |
| 40.0       |                      |       |       | 22.70 | 29.30 | 37.10 | 46.30 | 57.30 | 70.10  | 85.20  |
| 45.0       |                      |       |       | 20.50 | 26.60 | 33.70 | 42.20 | 52.20 | 64.10  | 78.00  |
| 50.0       |                      |       |       |       | 23.80 | 30.30 | 38.00 | 47.20 | 58.00  | 70.80  |
| 55.0       |                      |       |       |       | 20.90 | 26.80 | 33.80 | 42.00 | 51.90  | 63.50  |
| 60.0       |                      |       |       |       |       | 23.20 | 29.40 | 36.80 | 45.60  |        |
| 62.0       |                      |       |       |       |       | 21.80 | 27.70 | 34.70 | 43.10  |        |

50 Hz

6MM-30X

R404A Dew Point

| Cond<br>°C | Power, kW |       |       |       |       |       |       |       |       |       |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | -50.0     | -45.0 | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0  |
| 5.0        | 7.93      | 9.19  | 10.35 | 11.40 | 12.30 | 12.95 | 13.45 |       |       |       |
| 10.0       | 8.24      | 9.62  | 10.90 | 12.10 | 13.15 | 14.00 | 14.70 | 15.10 | 15.30 |       |
| 15.0       | 8.53      | 10.05 | 11.50 | 12.85 | 14.05 | 15.10 | 16.00 | 16.65 | 17.05 | 17.15 |
| 20.0       | 8.77      | 10.45 | 12.05 | 13.60 | 15.00 | 16.25 | 17.35 | 18.25 | 18.85 | 19.25 |
| 25.0       |           | 10.75 | 12.55 | 14.30 | 15.90 | 17.40 | 18.70 | 19.85 | 20.70 | 21.40 |
| 30.0       |           |       | 13.00 | 14.90 | 16.75 | 18.50 | 20.10 | 21.40 | 22.60 | 23.50 |
| 35.0       |           |       | 13.30 | 15.45 | 17.55 | 19.50 | 21.30 | 23.00 | 24.50 | 25.70 |
| 40.0       |           |       |       | 15.90 | 18.20 | 20.40 | 22.60 | 24.50 | 26.30 | 27.80 |
| 45.0       |           |       |       | 16.15 | 18.75 | 21.30 | 23.70 | 25.90 | 28.00 | 29.90 |
| 50.0       |           |       |       |       | 19.10 | 21.90 | 24.60 | 27.20 | 29.60 | 31.80 |
| 55.0       |           |       |       |       | 19.25 | 22.40 | 25.40 | 28.30 | 31.10 | 33.70 |
| 60.0       |           |       |       |       |       | 22.60 | 26.00 | 29.20 | 32.40 |       |
| 62.0       |           |       |       |       |       | 22.60 | 26.10 | 29.50 | 32.80 |       |

| Cond<br>°C | Current at 400 V, A |       |       |       |       |       |       |       |       |       |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | -50.0               | -45.0 | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0  |
| 5.0        | 23.15               | 24.23 | 25.35 | 26.41 | 27.28 | 27.85 | 28.00 |       |       |       |
| 10.0       | 23.41               | 24.63 | 25.96 | 27.29 | 28.48 | 29.43 | 30.03 | 30.14 | 29.67 |       |
| 15.0       | 23.65               | 25.02 | 26.55 | 28.14 | 29.65 | 30.98 | 32.01 | 32.63 | 32.72 | 32.16 |
| 20.0       | 23.86               | 25.37 | 27.10 | 28.94 | 30.77 | 32.48 | 33.94 | 35.06 | 35.69 | 35.75 |
| 25.0       |                     | 25.66 | 27.59 | 29.68 | 31.82 | 33.90 | 35.80 | 37.40 | 38.59 | 39.25 |
| 30.0       |                     |       | 28.00 | 30.34 | 32.79 | 35.23 | 37.56 | 39.64 | 41.38 | 42.64 |
| 35.0       |                     |       | 28.31 | 30.89 | 33.65 | 36.46 | 39.20 | 41.77 | 44.05 | 45.91 |
| 40.0       |                     |       |       | 31.33 | 34.39 | 37.56 | 40.72 | 43.77 | 46.58 | 49.03 |
| 45.0       |                     |       |       | 31.63 | 34.99 | 38.51 | 42.09 | 45.60 | 48.95 | 52.00 |
| 50.0       |                     |       |       |       | 35.42 | 39.30 | 43.28 | 47.27 | 51.14 | 54.78 |
| 55.0       |                     |       |       |       | 35.68 | 39.90 | 44.30 | 48.75 | 53.14 | 57.36 |
| 60.0       |                     |       |       |       |       | 40.31 | 45.10 | 50.02 | 54.93 |       |
| 62.0       |                     |       |       |       |       | 40.41 | 45.37 | 50.46 | 55.58 |       |

50 Hz

6MM-30X

R404A Dew Point

| Cond<br>°C | Suction Mass Flow, g/s |        |        |        |        |        |        |        |        |        |
|------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|            | -50.0                  | -45.0  | -40.0  | -35.0  | -30.0  | -25.0  | -20.0  | -15.0  | -10.0  | -5.0   |
| 5.0        | 83.80                  | 112.00 | 148.50 | 193.50 | 249.00 | 317.00 | 399.00 |        |        |        |
| 10.0       | 82.40                  | 111.00 | 147.00 | 191.50 | 247.00 | 313.00 | 394.00 | 489.00 | 602.00 |        |
| 15.0       | 80.40                  | 109.50 | 145.00 | 189.50 | 244.00 | 309.00 | 388.00 | 483.00 | 594.00 | 724.00 |
| 20.0       | 78.00                  | 107.50 | 143.00 | 187.00 | 240.00 | 305.00 | 383.00 | 475.00 | 585.00 | 714.00 |
| 25.0       |                        | 104.50 | 140.50 | 183.50 | 236.00 | 300.00 | 376.00 | 468.00 | 576.00 | 704.00 |
| 30.0       |                        |        | 137.00 | 180.00 | 232.00 | 294.00 | 370.00 | 460.00 | 567.00 | 693.00 |
| 35.0       |                        |        | 133.50 | 176.00 | 227.00 | 288.00 | 362.00 | 451.00 | 556.00 | 682.00 |
| 40.0       |                        |        |        | 171.00 | 221.00 | 281.00 | 354.00 | 441.00 | 545.00 | 670.00 |
| 45.0       |                        |        |        | 165.00 | 214.00 | 274.00 | 345.00 | 431.00 | 534.00 | 657.00 |
| 50.0       |                        |        |        |        | 207.00 | 265.00 | 335.00 | 420.00 | 522.00 | 645.00 |
| 55.0       |                        |        |        |        | 198.50 | 256.00 | 325.00 | 408.00 | 510.00 | 633.00 |
| 60.0       |                        |        |        |        |        | 245.00 | 314.00 | 397.00 | 499.00 |        |
| 62.0       |                        |        |        |        |        | 241.00 | 310.00 | 393.00 | 495.00 |        |

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|  |  |
|--|--|
| Number of cylinders  | 6  |
| Displacement @ 50 Hz, m <sup>3</sup> /h                                    | 121  |
| Bore/Stroke, mm  | 71.5/57.5                                    |
| Length/Width, mm   | 695/547                                      |
| Height, mm   | 450  |
| Net Weight, kg   | 215  |
| 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<br>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:<br>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:<br>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  | 3922   |
| 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

|                                     |  |
|-------------------------------------|--|
| Oil Pressure Switch (-P)            | OPS2 Sensor  |
| CoreSense Protection (-P)           | Motor protection   |
| Mounting Parts                      | Spring   |
| 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                       |
| Digital Modulation                    | 33-100 %                     |
| Additional Cooling                    | 70 W Vertical Air Flow Fan   |
| Capacity Control                      | Capacity Steps 67/33 %       |
| Crankcase Heater                      | 100 W Internal               |
| Oil Pressure Switch                   | OPS2 Electronic Switch       |
| Sound Attenuation                     | Sound Shell                  |
| Adapter Kit                           | For Parallel Operation       |
| Discharge Shut-off                    | Angle valve                  |
| Copeland Compressor Electronic module | Modbus extension module      |

## MOTOR OPTIONS

| <b>Motor Code</b> | <b>Power Supply</b>    | <b>Nominal Voltage, V</b> | <b>Start Connection</b> | <b>DOL Connection</b> | <b>Amps Factor</b> |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| 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               |