



Minimum Evaporating Temp. With:

- 20 K Suction Superheat
- Maximum Evaporating Temperature

Suction Superheat 11.1K

Liquid Subcooling 8.3K

Evaporating Temperature, °C

| 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 |
| 20.0 | 4.19 | 5.52 | 7.17 | 9.15 | | | | | | | | |
| 25.0 | 3.80 | 5.09 | 6.68 | 8.58 | 10.85 | | | | | | | |
| 30.0 | 3.40 | 4.65 | 6.18 | 8.00 | 10.15 | 12.65 | 13.75 | 15.55 | | | | |
| 35.0 | 3.01 | 4.21 | 5.67 | 7.41 | 9.46 | 11.85 | 12.90 | 14.65 | 16.15 | 17.80 | | |
| 40.0 | 2.61 | 3.77 | 5.16 | 6.82 | 8.78 | 11.05 | 12.05 | 13.70 | 15.15 | 16.70 | 20.20 | 24.00 |
| 45.0 | 2.22 | 3.33 | 4.66 | 6.23 | 8.09 | 10.25 | 11.20 | 12.75 | 14.15 | 15.65 | 18.95 | 22.60 |
| 50.0 | 1.85 | 2.90 | 4.16 | 5.65 | 7.40 | 9.45 | 10.35 | 11.80 | 13.15 | 14.55 | 17.70 | 21.20 |
| 55.0 | 1.50 | 2.48 | 3.67 | 5.07 | 6.72 | 8.64 | 9.50 | 10.90 | 12.15 | 13.50 | 16.45 | 19.85 |
| 60.0 | | 2.08 | 3.19 | 4.50 | 6.04 | 7.85 | 8.66 | 9.96 | 11.15 | 12.40 | 15.25 | 18.45 |
| 65.0 | | | 2.73 | 3.94 | 5.38 | 7.07 | 7.82 | 9.04 | 10.15 | 11.35 | 14.00 | 17.05 |
| 70.0 | | | 2.29 | 3.41 | 4.73 | 6.29 | 6.99 | 8.13 | 9.17 | 10.30 | 12.80 | 15.70 |
| 75.0 | | | | 2.89 | 4.10 | 5.54 | 6.19 | 7.24 | 8.21 | 9.25 | 11.60 | 14.35 |
| 80.0 | | | | 2.39 | 3.49 | 4.81 | 5.40 | 6.37 | 7.26 | 8.24 | 10.45 | 13.05 |

50 Hz

2DC-50

R134a

| 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 |
| 20.0 | 1.40 | 1.48 | 1.53 | 1.54 | | | | | | | | |
| 25.0 | 1.46 | 1.58 | 1.66 | 1.71 | 1.70 | | | | | | | |
| 30.0 | 1.52 | 1.66 | 1.78 | 1.86 | 1.90 | 1.89 | 1.87 | 1.82 | | | | |
| 35.0 | 1.54 | 1.72 | 1.88 | 2.00 | 2.07 | 2.11 | 2.11 | 2.09 | 2.06 | 2.02 | | |
| 40.0 | 1.56 | 1.76 | 1.95 | 2.11 | 2.23 | 2.30 | 2.32 | 2.34 | 2.33 | 2.31 | 2.23 | 2.09 |
| 45.0 | 1.55 | 1.79 | 2.01 | 2.20 | 2.36 | 2.48 | 2.51 | 2.55 | 2.58 | 2.58 | 2.56 | 2.47 |
| 50.0 | 1.54 | 1.80 | 2.05 | 2.27 | 2.47 | 2.63 | 2.68 | 2.75 | 2.80 | 2.83 | 2.85 | 2.82 |
| 55.0 | 1.50 | 1.80 | 2.07 | 2.33 | 2.56 | 2.77 | 2.84 | 2.93 | 3.00 | 3.05 | 3.13 | 3.15 |
| 60.0 | | 1.78 | 2.08 | 2.37 | 2.64 | 2.88 | 2.97 | 3.09 | 3.18 | 3.26 | 3.38 | 3.46 |
| 65.0 | | | 2.08 | 2.40 | 2.70 | 2.98 | 3.08 | 3.23 | 3.34 | 3.44 | 3.61 | 3.74 |
| 70.0 | | | 2.07 | 2.42 | 2.75 | 3.07 | 3.18 | 3.35 | 3.49 | 3.61 | 3.83 | 4.00 |
| 75.0 | | | | 2.42 | 2.79 | 3.13 | 3.27 | 3.46 | 3.61 | 3.76 | 4.02 | 4.25 |
| 80.0 | | | | 2.41 | 2.81 | 3.19 | 3.34 | 3.56 | 3.73 | 3.89 | 4.20 | 4.48 |

| 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 |
| 20.0 | 5.34 | 5.10 | 4.94 | 4.83 | | | | | | | | |
| 25.0 | 5.20 | 5.06 | 5.01 | 5.00 | 4.99 | | | | | | | |
| 30.0 | 5.09 | 5.06 | 5.10 | 5.19 | 5.28 | 5.34 | 5.35 | 5.33 | | | | |
| 35.0 | 5.02 | 5.08 | 5.22 | 5.40 | 5.58 | 5.73 | 5.77 | 5.80 | 5.79 | 5.76 | | |
| 40.0 | 4.97 | 5.12 | 5.34 | 5.61 | 5.88 | 6.10 | 6.17 | 6.25 | 6.29 | 6.29 | 6.17 | 5.86 |
| 45.0 | 4.92 | 5.16 | 5.47 | 5.82 | 6.16 | 6.46 | 6.56 | 6.69 | 6.76 | 6.79 | 6.75 | 6.51 |
| 50.0 | 4.88 | 5.20 | 5.58 | 6.01 | 6.42 | 6.80 | 6.93 | 7.09 | 7.19 | 7.26 | 7.28 | 7.10 |
| 55.0 | 4.83 | 5.22 | 5.68 | 6.17 | 6.65 | 7.09 | 7.25 | 7.45 | 7.58 | 7.68 | 7.76 | 7.64 |
| 60.0 | | 5.22 | 5.74 | 6.30 | 6.85 | 7.35 | 7.52 | 7.76 | 7.92 | 8.05 | 8.18 | 8.10 |
| 65.0 | | | 5.77 | 6.38 | 6.99 | 7.54 | 7.74 | 8.01 | 8.19 | 8.35 | 8.52 | 8.49 |
| 70.0 | | | 5.74 | 6.41 | 7.07 | 7.67 | 7.89 | 8.18 | 8.39 | 8.57 | 8.78 | 8.80 |
| 75.0 | | | | 6.38 | 7.08 | 7.72 | 7.96 | 8.28 | 8.51 | 8.70 | 8.95 | 9.00 |
| 80.0 | | | | 6.26 | 7.01 | 7.69 | 7.94 | 8.28 | 8.53 | 8.74 | 9.02 | 9.10 |

| 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 |
| 20.0 | 23.40 | 30.20 | 38.50 | 48.40 | | | | | | | | |
| 25.0 | 22.00 | 29.00 | 37.30 | 47.10 | 58.40 | | | | | | | |
| 30.0 | 20.60 | 27.60 | 35.90 | 45.70 | 56.90 | 69.70 | 75.40 | 84.30 | | | | |
| 35.0 | 19.05 | 26.10 | 34.40 | 44.10 | 55.30 | 68.00 | 73.60 | 82.40 | 90.30 | 98.60 | | |
| 40.0 | 17.35 | 24.50 | 32.80 | 42.50 | 53.60 | 66.20 | 71.70 | 80.50 | 88.30 | 96.50 | 114.50 | 134.00 |
| 45.0 | 15.50 | 22.70 | 31.10 | 40.70 | 51.70 | 64.20 | 69.70 | 78.40 | 86.10 | 94.30 | 112.00 | 131.50 |
| 50.0 | 13.60 | 20.90 | 29.20 | 38.80 | 49.70 | 62.10 | 67.50 | 76.20 | 83.80 | 92.00 | 109.50 | 129.00 |
| 55.0 | 11.65 | 18.90 | 27.20 | 36.70 | 47.60 | 59.80 | 65.20 | 73.80 | 81.40 | 89.50 | 107.00 | 126.50 |
| 60.0 | | 16.85 | 25.10 | 34.60 | 45.30 | 57.40 | 62.80 | 71.20 | 78.80 | 86.80 | 104.50 | 124.00 |
| 65.0 | | | 22.90 | 32.20 | 42.80 | 54.90 | 60.10 | 68.60 | 76.10 | 84.00 | 101.50 | 121.00 |
| 70.0 | | | 20.60 | 29.80 | 40.30 | 52.20 | 57.40 | 65.70 | 73.20 | 81.10 | 98.50 | 118.00 |
| 75.0 | | | | 27.30 | 37.60 | 49.40 | 54.50 | 62.80 | 70.20 | 78.10 | 95.50 | 115.50 |
| 80.0 | | | | 24.70 | 34.80 | 46.40 | 51.50 | 59.70 | 67.10 | 75.00 | 92.50 | 112.50 |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|---|--|
| Number of cylinders | 2 |
| Displacement @ 50 Hz, m ³ /h | 16.8 |
| Bore/Stroke, mm | 63.6/30.5 |
| Length/Width, mm | 590/330 |
| Height, mm | 470 |
| Net Weight, kg | 132 |
| Gross Weight, kg | 141 |
| Rotalock Discharge, inch | 7/8 |
| Suction, inch | 1 3/8 |
| Drive Frequency Range, Hz | 25 - 60 |
| Oil Quantity, l | 2.3 |
| 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 | 295 x 279 (14) |
| Sound Pressure @ 1m, dBA | 65 |
| Sound Power, dBA | 76 |
| 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 | 9 |
| Locked Rotor Current, A | 55 |
| Default Enclosure Class | IP 54 (IEC 34) |

ACCESSORIES INCLUDED

| | |
|---------------------|-------------|
| Oil Pressure Switch | OPS2 Sensor |
| Mounting Springs | 4 |

ACCESSORIES OPTIONAL

| | |
|---------------------|------------------------------|
| Additional Cooling | 70 W Vertical Air Flow Fan |
| Crankcase Heater | 70 W Internal |
| Enclosure Class | IP 56 |
| Oil Pressure Switch | OPS2 Electronic Switch |
| Unloaded start | Available |
| Deep Oil Sump | Mounted |
| Adapter Kit | For Parallel Operation |
| Check Valve | For unloaded start operation |
| Oil Control System | ALCO Trax-Oil OM3 |

MOTOR OPTIONS

| Motor Code | Power Supply | Nominal Voltage, V | Start Connection | DOL Connection | Amps Factor |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| 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 |
| EWY | 500-550 V / 3~ / 50 Hz | 525 | Y/DELTA | DELTA | 0.76 |
| 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 |
| TWY | 500-550 V / 3~ / 50 Hz | 525 | | DELTA | 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 |
| 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 |