



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return — 20 K Suction Superheat
- 20 K Suction Superheat with add cooling
- Maximum Evaporating Temperature

Suction Superheat 5.0K

Liquid Subcooling 4.0K

Evaporating Temperature, °C

| Cond °C | Cooling Capacity, kW | | | | | | | | | | |
|------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 |
| 10.0 | 22.70 | 29.50 | 37.80 | 47.70 | 59.40 | 73.00 | | | | | |
| 15.0 | 21.50 | 28.10 | 36.10 | 45.70 | 57.00 | 70.20 | 85.40 | | | | |
| 20.0 | 20.20 | 26.60 | 34.30 | 43.50 | 54.40 | 67.10 | 81.80 | 88.30 | 98.70 | | |
| 25.0 | 18.85 | 25.00 | 32.40 | 41.20 | 51.70 | 63.80 | 78.00 | 84.20 | 94.10 | 103.00 | 112.50 |
| 30.0 | 17.40 | 23.30 | 30.30 | 38.80 | 48.70 | 60.40 | 73.90 | 79.80 | 89.40 | 98.00 | 107.00 |
| 35.0 | 15.95 | 21.50 | 28.20 | 36.20 | 45.70 | 56.70 | 69.60 | 75.30 | 84.40 | 92.60 | 101.50 |
| 40.0 | 14.45 | 19.70 | 26.00 | 33.50 | 42.50 | 52.90 | 65.20 | 70.60 | 79.20 | 87.10 | 95.40 |
| 45.0 | 13.00 | 17.90 | 23.80 | 30.80 | 39.20 | 49.00 | 60.60 | 65.70 | 73.90 | 81.30 | 89.20 |
| 50.0 | 11.60 | 16.05 | 21.50 | 28.00 | 35.80 | 45.00 | 55.90 | 60.70 | 68.40 | 75.40 | 82.90 |
| 55.0 | | 14.30 | 19.25 | 25.30 | 32.40 | 41.00 | 51.00 | 55.50 | 62.80 | 69.40 | 76.40 |
| 60.0 | | | 17.05 | 22.50 | 29.00 | 36.90 | 46.20 | 50.30 | 57.10 | 63.20 | 69.80 |
| 65.0 | | | | 19.75 | 25.60 | 32.80 | 41.30 | 45.10 | 51.30 | 57.00 | 63.10 |

| Cond °C | Power, kW | | | | | | | | | | |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 |
| 10.0 | 6.75 | 7.32 | 7.72 | 7.93 | 7.88 | 7.54 | | | | | |
| 15.0 | 7.13 | 7.84 | 8.42 | 8.81 | 8.99 | 8.89 | 8.48 | | | | |
| 20.0 | 7.47 | 8.32 | 9.05 | 9.63 | 10.00 | 10.15 | 10.00 | 9.86 | 9.53 | | |
| 25.0 | 7.77 | 8.74 | 9.63 | 10.40 | 10.95 | 11.35 | 11.45 | 11.40 | 11.25 | 11.05 | 10.70 |
| 30.0 | 8.03 | 9.12 | 10.15 | 11.10 | 11.85 | 12.45 | 12.80 | 12.90 | 12.90 | 12.80 | 12.65 |
| 35.0 | 8.27 | 9.47 | 10.65 | 11.75 | 12.70 | 13.50 | 14.10 | 14.25 | 14.45 | 14.50 | 14.45 |
| 40.0 | 8.48 | 9.79 | 11.10 | 12.35 | 13.50 | 14.50 | 15.30 | 15.60 | 15.90 | 16.10 | 16.25 |
| 45.0 | 8.67 | 10.05 | 11.50 | 12.90 | 14.20 | 15.40 | 16.45 | 16.85 | 17.30 | 17.65 | 17.90 |
| 50.0 | 8.85 | 10.35 | 11.90 | 13.40 | 14.90 | 16.30 | 17.55 | 18.00 | 18.65 | 19.10 | 19.50 |
| 55.0 | | 10.60 | 12.25 | 13.90 | 15.55 | 17.15 | 18.60 | 19.15 | 19.90 | 20.50 | 21.00 |
| 60.0 | | | 12.60 | 14.35 | 16.15 | 17.95 | 19.60 | 20.20 | 21.10 | 21.90 | 22.50 |
| 65.0 | | | | 14.80 | 16.75 | 18.70 | 20.60 | 21.30 | 22.30 | 23.10 | 23.90 |

| Cond °C | Current at 400 V, A | | | | | | | | | | |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 |
| 10.0 | 17.96 | 18.18 | 18.24 | 18.16 | 17.92 | 17.53 | | | | | |
| 15.0 | 18.23 | 18.73 | 19.07 | 19.26 | 19.31 | 19.20 | 18.94 | | | | |
| 20.0 | 18.46 | 19.23 | 19.86 | 20.33 | 20.65 | 20.82 | 20.84 | 20.81 | 20.71 | | |
| 25.0 | 18.64 | 19.70 | 20.60 | 21.36 | 21.96 | 22.41 | 22.71 | 22.78 | 22.85 | 22.87 | 22.85 |
| 30.0 | 18.79 | 20.12 | 21.31 | 22.34 | 23.22 | 23.95 | 24.53 | 24.72 | 24.96 | 25.12 | 25.23 |
| 35.0 | 18.89 | 20.51 | 21.97 | 23.29 | 24.45 | 25.46 | 26.32 | 26.62 | 27.02 | 27.32 | 27.58 |
| 40.0 | 18.96 | 20.86 | 22.60 | 24.19 | 25.63 | 26.92 | 28.06 | 28.48 | 29.05 | 29.49 | 29.88 |
| 45.0 | 18.99 | 21.16 | 23.19 | 25.06 | 26.78 | 28.35 | 29.77 | 30.29 | 31.03 | 31.61 | 32.15 |
| 50.0 | 18.97 | 21.43 | 23.73 | 25.88 | 27.89 | 29.73 | 31.43 | 32.07 | 32.98 | 33.69 | 34.37 |
| 55.0 | | 21.65 | 24.24 | 26.67 | 28.95 | 31.08 | 33.06 | 33.81 | 34.88 | 35.74 | 36.56 |
| 60.0 | | | 24.70 | 27.42 | 29.98 | 32.38 | 34.64 | 35.50 | 36.75 | 37.74 | 38.70 |
| 65.0 | | | | 28.12 | 30.96 | 33.65 | 36.19 | 37.16 | 38.57 | 39.71 | 40.81 |

| Cond °C | Suction Mass Flow, g/s | | | | | | | | | | |
|------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 |
| 10.0 | 113.50 | 145.50 | 184.00 | 229.00 | 281.00 | 342.00 | | | | | |
| 15.0 | 112.00 | 144.00 | 182.00 | 227.00 | 280.00 | 340.00 | 409.00 | | | | |
| 20.0 | 109.00 | 141.50 | 180.00 | 225.00 | 277.00 | 338.00 | 406.00 | 437.00 | 484.00 | | |
| 25.0 | 106.00 | 138.50 | 176.50 | 222.00 | 274.00 | 334.00 | 402.00 | 432.00 | 480.00 | 522.00 | 567.00 |
| 30.0 | 102.50 | 134.50 | 172.50 | 217.00 | 269.00 | 329.00 | 397.00 | 427.00 | 474.00 | 517.00 | 561.00 |
| 35.0 | 98.30 | 130.50 | 168.00 | 212.00 | 264.00 | 323.00 | 390.00 | 420.00 | 467.00 | 509.00 | 554.00 |
| 40.0 | 93.80 | 125.50 | 162.50 | 206.00 | 257.00 | 316.00 | 383.00 | 412.00 | 459.00 | 501.00 | 545.00 |
| 45.0 | 89.10 | 120.00 | 156.50 | 199.50 | 250.00 | 307.00 | 374.00 | 403.00 | 450.00 | 491.00 | 535.00 |
| 50.0 | 84.20 | 114.50 | 150.00 | 192.00 | 241.00 | 298.00 | 364.00 | 393.00 | 439.00 | 480.00 | 524.00 |
| 55.0 | | 108.50 | 143.50 | 184.00 | 232.00 | 288.00 | 352.00 | 381.00 | 427.00 | 467.00 | 511.00 |
| 60.0 | | | 136.00 | 175.50 | 222.00 | 277.00 | 340.00 | 368.00 | 413.00 | 454.00 | 497.00 |
| 65.0 | | | | 166.50 | 211.00 | 265.00 | 327.00 | 354.00 | 399.00 | 439.00 | 482.00 |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|---|--|
| Number of cylinders | 4 |
| Displacement @ 50 Hz, m ³ /h | 70.8 |
| Bore/Stroke, mm | 68.3/55.6 |
| Length/Width, mm | 670/490 |
| Height, mm | 495 |
| Net Weight, kg | 194 |
| Gross Weight, kg | 210 |
| Suction, inch | 2 1/8 |
| Discharge, inch | 1 1/8 |
| Drive Frequency Range, Hz | 25 - 60 |
| 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, dBA | 71 |
| Sound Power, dBA | 82 |
| High Side PS gauge, bar | 32.5 |
| Low Side PS gauge, bar | 22.5 |
| Refrigerant's GWP | 1774 |
| Refrigerant's classification | A1 |

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

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 41 |
| Locked Rotor Current, A | 199 |
| 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 |
| Capacity Control | Capacity Steps 50% |
| Crankcase Heater | 100 W Internal |
| Discharge Temperature Protection | Head PTC sensor |
| 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

| <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 |
| 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 |
| 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 |