



Minimum Evaporating Temp. With:

— 20 K Suction Superheat
 — 20 °C Suction Gas Return
 — 0 °C Suction Gas Return
— Maximum Evaporating Temperature

Suction Return Temperature 18.3°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 | 5.0 | 7.0 | 10.0 | 12.5 |
| 10.0 | 8.95 | 11.75 | 15.25 | 19.60 | 24.80 | 31.10 | 38.40 | | | | | | |
| 15.0 | 8.43 | 11.15 | 14.55 | 18.75 | 23.80 | 29.70 | 36.70 | 44.90 | | | | | |
| 20.0 | 7.90 | 10.55 | 13.85 | 17.85 | 22.60 | 28.30 | 35.00 | 42.80 | 51.80 | 62.00 | | | |
| 25.0 | | 9.95 | 13.10 | 16.90 | 21.50 | 26.90 | 33.20 | 40.60 | 49.10 | 58.90 | 63.10 | 69.90 | 76.00 |
| 30.0 | | 9.31 | 12.35 | 15.95 | 20.30 | 25.40 | 31.40 | 38.40 | 46.40 | 55.60 | 59.70 | 66.20 | 71.90 |
| 35.0 | | | 11.55 | 14.95 | 19.00 | 23.80 | 29.50 | 36.00 | 43.60 | 52.40 | 56.20 | 62.30 | 67.70 |
| 40.0 | | | | 13.95 | 17.75 | 22.20 | 27.50 | 33.70 | 40.80 | 49.00 | 52.60 | 58.30 | 63.50 |
| 45.0 | | | | 12.90 | 16.45 | 20.60 | 25.50 | 31.20 | 37.90 | 45.50 | 48.90 | 54.30 | 59.10 |
| 50.0 | | | | | 15.15 | 18.95 | 23.50 | 28.80 | 34.90 | 42.00 | 45.20 | 50.20 | 54.70 |
| 55.0 | | | | | 13.80 | 17.30 | 21.40 | 26.20 | 31.90 | 38.50 | 41.40 | | |
| 60.0 | | | | | | 15.60 | 19.30 | 23.70 | 28.80 | | | | |
| 62.0 | | | | | | 14.90 | 18.45 | 22.70 | 27.60 | | | | |

| Cond °C | Power, kW | | | | | | | | | | | | |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 |
| 10.0 | 3.93 | 4.36 | 4.74 | 5.04 | 5.23 | 5.30 | 5.20 | | | | | | |
| 15.0 | 4.10 | 4.61 | 5.08 | 5.50 | 5.82 | 6.03 | 6.10 | 5.99 | | | | | |
| 20.0 | 4.27 | 4.85 | 5.41 | 5.92 | 6.37 | 6.71 | 6.94 | 7.01 | 6.90 | 6.58 | | | |
| 25.0 | | 5.06 | 5.70 | 6.31 | 6.87 | 7.35 | 7.72 | 7.96 | 8.03 | 7.92 | 7.81 | 7.59 | 7.33 |
| 30.0 | | 5.26 | 5.97 | 6.67 | 7.33 | 7.94 | 8.45 | 8.84 | 9.09 | 9.17 | 9.15 | 9.05 | 8.91 |
| 35.0 | | | 6.21 | 7.00 | 7.76 | 8.48 | 9.12 | 9.67 | 10.10 | 10.35 | 10.40 | 10.45 | 10.40 |
| 40.0 | | | | 7.29 | 8.15 | 8.97 | 9.75 | 10.45 | 11.00 | 11.45 | 11.60 | 11.75 | 11.80 |
| 45.0 | | | | 7.56 | 8.50 | 9.43 | 10.30 | 11.15 | 11.85 | 12.50 | 12.70 | 12.95 | 13.15 |
| 50.0 | | | | | 8.81 | 9.83 | 10.85 | 11.80 | 12.65 | 13.45 | 13.70 | 14.10 | 14.35 |
| 55.0 | | | | | 9.09 | 10.20 | 11.30 | 12.40 | 13.40 | 14.35 | 14.70 | | |
| 60.0 | | | | | | 10.50 | 11.75 | 12.90 | 14.05 | | | | |
| 62.0 | | | | | | 10.65 | 11.90 | 13.10 | 14.30 | | | | |

| 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 | 5.0 | 7.0 | 10.0 | 12.5 |
| 10.0 | 11.19 | 11.59 | 11.97 | 12.29 | 12.50 | 12.56 | 12.42 | | | | | | |
| 15.0 | 11.34 | 11.82 | 12.30 | 12.75 | 13.12 | 13.35 | 13.42 | 13.27 | | | | | |
| 20.0 | 11.50 | 12.05 | 12.63 | 13.20 | 13.72 | 14.13 | 14.40 | 14.48 | 14.32 | 13.89 | | | |
| 25.0 | | 12.28 | 12.95 | 13.64 | 14.30 | 14.88 | 15.35 | 15.65 | 15.75 | 15.59 | 15.45 | 15.14 | 14.79 |
| 30.0 | | 12.49 | 13.25 | 14.06 | 14.86 | 15.61 | 16.27 | 16.79 | 17.13 | 17.25 | 17.23 | 17.10 | 16.91 |
| 35.0 | | | 13.54 | 14.45 | 15.39 | 16.30 | 17.15 | 17.89 | 18.47 | 18.86 | 18.95 | 19.00 | 18.97 |
| 40.0 | | | | 14.82 | 15.89 | 16.96 | 17.99 | 18.94 | 19.76 | 20.41 | 20.61 | 20.84 | 20.96 |
| 45.0 | | | | 15.15 | 16.35 | 17.57 | 18.78 | 19.94 | 20.99 | 21.90 | 22.21 | 22.62 | 22.89 |
| 50.0 | | | | | 16.76 | 18.14 | 19.53 | 20.88 | 22.16 | 23.33 | 23.75 | 24.32 | 24.75 |
| 55.0 | | | | | 17.13 | 18.65 | 20.21 | 21.76 | 23.27 | 24.68 | 25.21 | | |
| 60.0 | | | | | | 19.10 | 20.83 | 22.58 | 24.30 | | | | |
| 62.0 | | | | | | 19.27 | 21.06 | 22.88 | 24.69 | | | | |

| 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 | 5.0 | 7.0 | 10.0 | 12.5 |
| 10.0 | 41.20 | 54.20 | 70.60 | 91.00 | 116.00 | 145.50 | 181.00 | | | | | | |
| 15.0 | 40.20 | 53.40 | 69.80 | 90.10 | 114.50 | 144.50 | 179.50 | 221.00 | | | | | |
| 20.0 | 39.10 | 52.40 | 68.90 | 89.00 | 113.50 | 142.50 | 177.50 | 218.00 | 266.00 | 322.00 | | | |
| 25.0 | | 51.30 | 67.70 | 87.70 | 112.00 | 141.00 | 175.00 | 216.00 | 263.00 | 319.00 | 344.00 | 384.00 | 420.00 |
| 30.0 | | 50.00 | 66.40 | 86.20 | 110.00 | 138.50 | 172.50 | 213.00 | 260.00 | 315.00 | 339.00 | 379.00 | 415.00 |
| 35.0 | | | 64.90 | 84.50 | 108.00 | 136.00 | 169.50 | 209.00 | 255.00 | 310.00 | 335.00 | 374.00 | 410.00 |
| 40.0 | | | | 82.60 | 105.50 | 133.50 | 166.00 | 205.00 | 251.00 | 305.00 | 329.00 | 369.00 | 405.00 |
| 45.0 | | | | 80.60 | 103.00 | 130.00 | 162.50 | 201.00 | 246.00 | 299.00 | 323.00 | 363.00 | 398.00 |
| 50.0 | | | | | 100.50 | 127.00 | 158.00 | 195.50 | 240.00 | 293.00 | 317.00 | 356.00 | 392.00 |
| 55.0 | | | | | 97.50 | 123.00 | 153.50 | 190.50 | 234.00 | 287.00 | 310.00 | | |
| 60.0 | | | | | | 119.50 | 149.00 | 185.00 | 228.00 | | | | |
| 62.0 | | | | | | 117.50 | 147.00 | 182.50 | 225.00 | | | | |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|------------------------------|--|
| Number of cylinders | 3 |
| Displacement @ 50 Hz, m³/h | 49.9 |
| Bore/Stroke, mm | 61.9/63.5 |
| Length/Width, mm | 710/370 |
| Height, mm | 490 |
| Net Weight, kg | 166 |
| Gross Weight, kg | 178 |
| Rotalock Discharge, inch | 1 1/8 |
| Suction, inch | 1 5/8 |
| Drive Frequency Range, Hz | 25 - 60 |
| Oil Quantity, l | 3.7 |
| 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 | 70.6 |
| Sound Power, dBA | 81.6 |
| High Side PS gauge, bar | 32.5 |
| Low Side PS gauge, bar | 22.5 |
| Refrigerant's GWP | 1397 |
| Refrigerant's classification | A1 |

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

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 29 |
| Locked Rotor Current, A | 128 |
| 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 | Moduload |
| 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

| <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 |
| 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 |