



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 |
| 10.0 | 39.30 | 49.40 | 61.70 | | | | | | | | | |
| 15.0 | 37.20 | 46.90 | 58.70 | 73.00 | | | | | | | | |
| 20.0 | 35.10 | 44.40 | 55.80 | 69.40 | 85.50 | | | | | | | |
| 25.0 | 33.00 | 42.00 | 52.80 | 65.90 | 81.30 | 99.40 | 107.50 | | | | | |
| 30.0 | 31.00 | 39.50 | 49.90 | 62.30 | 77.10 | 94.30 | 102.00 | 114.50 | 125.50 | | | |
| 35.0 | 28.90 | 37.10 | 47.00 | 58.80 | 72.80 | 89.30 | 96.60 | 108.50 | 119.00 | 130.50 | | |
| 40.0 | 26.90 | 34.70 | 44.10 | 55.30 | 68.60 | 84.20 | 91.10 | 102.50 | 112.50 | 123.50 | 147.50 | 174.50 |
| 45.0 | 24.90 | 32.30 | 41.20 | 51.80 | 64.40 | 79.20 | 85.70 | 96.40 | 106.00 | 116.50 | 139.00 | 165.00 |
| 50.0 | 22.90 | 30.00 | 38.30 | 48.30 | 60.20 | 74.10 | 80.30 | 90.40 | 99.50 | 109.00 | 131.00 | 155.50 |
| 55.0 | 21.00 | 27.60 | 35.50 | 44.90 | 56.00 | 69.10 | 74.90 | 84.40 | 93.00 | 102.00 | 122.50 | 146.00 |
| 60.0 | | 25.30 | 32.70 | 41.40 | 51.80 | 64.10 | 69.60 | 78.50 | 86.50 | 95.20 | 114.50 | 137.00 |
| 65.0 | | | 29.90 | 38.00 | 47.70 | 59.10 | 64.20 | 72.50 | 80.10 | 88.20 | 106.50 | 127.50 |
| 70.0 | | | 27.20 | 34.70 | 43.60 | 54.20 | 58.90 | 66.60 | 73.70 | 81.30 | 98.40 | 118.00 |
| 75.0 | | | | 31.40 | 39.50 | 49.30 | 53.70 | 60.80 | 67.40 | 74.40 | 90.40 | 109.00 |
| 80.0 | | | | 28.10 | 35.60 | 44.50 | 48.50 | 55.10 | 61.10 | 67.70 | 82.50 | 99.80 |

| 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 | 8.63 | 9.25 | 9.60 | | | | | | | | | |
| 15.0 | 9.32 | 10.15 | 10.80 | 11.10 | | | | | | | | |
| 20.0 | 9.96 | 11.00 | 11.85 | 12.50 | 12.80 | | | | | | | |
| 25.0 | 10.55 | 11.75 | 12.80 | 13.75 | 14.35 | 14.65 | 14.65 | | | | | |
| 30.0 | 11.10 | 12.40 | 13.70 | 14.85 | 15.80 | 16.45 | 16.60 | 16.70 | 16.65 | | | |
| 35.0 | 11.65 | 13.05 | 14.50 | 15.90 | 17.10 | 18.10 | 18.40 | 18.70 | 18.90 | 18.95 | | |
| 40.0 | 12.15 | 13.70 | 15.25 | 16.85 | 18.30 | 19.55 | 20.00 | 20.60 | 20.90 | 21.20 | 21.40 | 21.00 |
| 45.0 | 12.70 | 14.30 | 16.00 | 17.70 | 19.40 | 20.90 | 21.50 | 22.30 | 22.80 | 23.30 | 23.90 | 24.10 |
| 50.0 | 13.30 | 14.90 | 16.65 | 18.55 | 20.40 | 22.20 | 22.90 | 23.80 | 24.60 | 25.20 | 26.30 | 26.90 |
| 55.0 | 13.90 | 15.50 | 17.35 | 19.30 | 21.40 | 23.40 | 24.20 | 25.30 | 26.20 | 27.00 | 28.40 | 29.50 |
| 60.0 | | 16.15 | 18.00 | 20.10 | 22.30 | 24.50 | 25.30 | 26.60 | 27.70 | 28.60 | 30.40 | 31.90 |
| 65.0 | | | 18.70 | 20.80 | 23.10 | 25.50 | 26.50 | 27.90 | 29.00 | 30.20 | 32.30 | 34.10 |
| 70.0 | | | 19.45 | 21.60 | 24.00 | 26.50 | 27.50 | 29.00 | 30.30 | 31.60 | 34.00 | 36.20 |
| 75.0 | | | | 22.40 | 24.80 | 27.40 | 28.50 | 30.20 | 31.50 | 32.90 | 35.60 | 38.20 |
| 80.0 | | | | 23.20 | 25.60 | 28.30 | 29.50 | 31.20 | 32.70 | 34.20 | 37.10 | 40.00 |

| 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 | 30.64 | 31.19 | 31.46 | | | | | | | | | |
| 15.0 | 30.90 | 31.64 | 32.16 | 32.39 | | | | | | | | |
| 20.0 | 31.23 | 32.14 | 32.89 | 33.42 | 33.64 | | | | | | | |
| 25.0 | 31.61 | 32.68 | 33.66 | 34.47 | 35.03 | 35.28 | 35.27 | | | | | |
| 30.0 | 32.02 | 33.26 | 34.45 | 35.53 | 36.43 | 37.07 | 37.23 | 37.37 | 37.37 | | | |
| 35.0 | 32.47 | 33.85 | 35.26 | 36.60 | 37.82 | 38.84 | 39.18 | 39.58 | 39.83 | 39.97 | | |
| 40.0 | 32.94 | 34.46 | 36.06 | 37.67 | 39.21 | 40.60 | 41.10 | 41.77 | 42.25 | 42.65 | 43.17 | 43.25 |
| 45.0 | 33.42 | 35.08 | 36.87 | 38.72 | 40.57 | 42.32 | 42.98 | 43.92 | 44.64 | 45.28 | 46.34 | 47.01 |
| 50.0 | 33.91 | 35.69 | 37.66 | 39.76 | 41.90 | 44.01 | 44.83 | 46.02 | 46.97 | 47.86 | 49.44 | 50.71 |
| 55.0 | 34.40 | 36.29 | 38.44 | 40.76 | 43.19 | 45.65 | 46.63 | 48.07 | 49.24 | 50.37 | 52.48 | 54.32 |
| 60.0 | | 36.87 | 39.18 | 41.73 | 44.44 | 47.23 | 48.36 | 50.05 | 51.44 | 52.80 | 55.43 | 57.84 |
| 65.0 | | | 39.88 | 42.64 | 45.62 | 48.75 | 50.03 | 51.96 | 53.56 | 55.16 | 58.29 | 61.26 |
| 70.0 | | | 40.54 | 43.50 | 46.75 | 50.20 | 51.62 | 53.78 | 55.60 | 57.42 | 61.04 | 64.58 |
| 75.0 | | | | 44.30 | 47.80 | 51.56 | 53.12 | 55.51 | 57.54 | 59.58 | 63.69 | 67.77 |
| 80.0 | | | | 45.02 | 48.77 | 52.83 | 54.53 | 57.15 | 59.38 | 61.64 | 66.23 | 70.84 |

| 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 | 204.00 | 251.00 | 309.00 | | | | | | | | | |
| 15.0 | 199.50 | 247.00 | 304.00 | 372.00 | | | | | | | | |
| 20.0 | 195.50 | 243.00 | 300.00 | 367.00 | 444.00 | | | | | | | |
| 25.0 | 191.50 | 239.00 | 295.00 | 362.00 | 438.00 | 527.00 | 566.00 | | | | | |
| 30.0 | 187.50 | 235.00 | 291.00 | 356.00 | 432.00 | 520.00 | 558.00 | 619.00 | 674.00 | | | |
| 35.0 | 183.00 | 230.00 | 286.00 | 350.00 | 426.00 | 512.00 | 550.00 | 611.00 | 665.00 | 722.00 | | |
| 40.0 | 178.50 | 225.00 | 280.00 | 344.00 | 419.00 | 504.00 | 542.00 | 602.00 | 655.00 | 712.00 | 836.00 | 974.00 |
| 45.0 | 173.50 | 220.00 | 275.00 | 338.00 | 412.00 | 496.00 | 533.00 | 592.00 | 645.00 | 701.00 | 824.00 | 961.00 |
| 50.0 | 169.00 | 215.00 | 269.00 | 332.00 | 404.00 | 487.00 | 524.00 | 582.00 | 634.00 | 690.00 | 811.00 | 947.00 |
| 55.0 | 164.00 | 210.00 | 264.00 | 325.00 | 396.00 | 478.00 | 514.00 | 572.00 | 623.00 | 678.00 | 798.00 | 933.00 |
| 60.0 | | 205.00 | 257.00 | 318.00 | 388.00 | 469.00 | 504.00 | 561.00 | 612.00 | 666.00 | 785.00 | 919.00 |
| 65.0 | | | 251.00 | 311.00 | 380.00 | 459.00 | 494.00 | 550.00 | 600.00 | 654.00 | 771.00 | 904.00 |
| 70.0 | | | 245.00 | 304.00 | 371.00 | 449.00 | 483.00 | 539.00 | 588.00 | 641.00 | 757.00 | 889.00 |
| 75.0 | | | | 296.00 | 363.00 | 439.00 | 473.00 | 527.00 | 576.00 | 628.00 | 744.00 | 874.00 |
| 80.0 | | | | 290.00 | 355.00 | 430.00 | 463.00 | 516.00 | 565.00 | 616.00 | 731.00 | 861.00 |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|---|--|
| Number of cylinders | 6 |
| Displacement @ 50 Hz, m ³ /h | 127 |
| Bore/Stroke, mm | 74.6/55.6 |
| Length/Width, mm | 760/580 |
| Height, mm | 545 |
| Net Weight, kg | 261 |
| Gross Weight, kg | 277 |
| Rotalock Discharge, inch | 1 3/8 |
| Suction, inch | 2 1/8 |
| Drive Frequency Range, Hz | 25 - 60 |
| Oil Quantity, l | 6.8 |
| 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 | 75 |
| Sound Power, dBA | 86 |
| 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 | 83 |
| Locked Rotor Current, A | 304 |
| Default Enclosure Class | IP 54 (IEC 34) |

ACCESSORIES INCLUDED

| | |
|---------------------|-------------|
| Oil Pressure Switch | OPS2 Sensor |
| Mounting Springs | 4 |
| Deep Oil Sump | Mounted |

ACCESSORIES OPTIONAL

| | |
|---------------------|------------------------------|
| Additional Cooling | 70 W Vertical Air Flow Fan |
| Capacity Control | Capacity Steps 66/33% |
| Crankcase Heater | 200 W Internal |
| Enclosure Class | IP 56 |
| Oil Pressure Switch | OPS2 Electronic Switch |
| Unloaded start | Available |
| 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 |
| 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 |