



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- 20 K suction Superheat
- 20 K suction Superheat + fan
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Evaporating Temperature, °C

Liquid Subcooling 0.0K

| Cond<br>°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       | 39.50                | 51.30 | 65.70 | 83.00 | 103.50 | 127.50 |        |        |        |        |        |
| 15.0       | 37.40                | 48.90 | 62.80 | 79.40 | 99.00  | 122.00 | 148.50 |        |        |        |        |
| 20.0       | 35.20                | 46.20 | 59.60 | 75.50 | 94.30  | 116.00 | 141.50 | 152.50 | 170.50 |        |        |
| 25.0       | 32.90                | 43.40 | 56.20 | 71.40 | 89.30  | 110.50 | 134.50 | 145.00 | 162.00 | 177.50 | 193.50 |
| 30.0       | 30.40                | 40.50 | 52.60 | 67.10 | 84.10  | 104.00 | 127.00 | 137.00 | 153.50 | 168.00 | 183.50 |
| 35.0       | 27.90                | 37.50 | 48.90 | 62.60 | 78.70  | 97.60  | 119.50 | 129.00 | 144.50 | 158.50 | 173.00 |
| 40.0       | 25.30                | 34.30 | 45.10 | 58.00 | 73.10  | 90.90  | 111.50 | 120.50 | 135.00 | 148.50 | 162.50 |
| 45.0       | 22.70                | 31.10 | 41.20 | 53.20 | 67.40  | 84.00  | 103.50 | 112.00 | 126.00 | 138.00 | 151.50 |
| 50.0       | 20.00                | 27.90 | 37.20 | 48.30 | 61.50  | 77.00  | 95.10  | 103.00 | 116.00 | 127.50 | 140.00 |
| 55.0       |                      | 24.60 | 33.20 | 43.40 | 55.60  | 69.90  | 86.70  | 94.10  | 106.00 | 117.00 | 128.50 |
| 60.0       |                      |       | 29.20 | 38.40 | 49.50  | 62.60  | 78.10  | 84.90  | 96.10  | 106.00 | 117.00 |
| 65.0       |                      |       |       | 33.50 | 43.40  | 55.30  | 69.40  | 75.70  | 85.90  | 95.20  | 105.00 |

| Cond<br>°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       | 11.85     | 12.80 | 13.45 | 13.70 | 13.40 | 12.50 |       |       |       |       |       |
| 15.0       | 12.65     | 13.90 | 14.90 | 15.55 | 15.70 | 15.35 | 14.30 |       |       |       |       |
| 20.0       | 13.35     | 14.90 | 16.25 | 17.25 | 17.85 | 18.00 | 17.50 | 17.10 | 16.35 |       |       |
| 25.0       | 13.95     | 15.75 | 17.40 | 18.80 | 19.85 | 20.40 | 20.50 | 20.30 | 19.90 | 19.35 | 18.60 |
| 30.0       | 14.45     | 16.50 | 18.45 | 20.20 | 21.70 | 22.70 | 23.30 | 23.30 | 23.30 | 23.00 | 22.60 |
| 35.0       | 14.80     | 17.10 | 19.35 | 21.40 | 23.30 | 24.80 | 25.80 | 26.10 | 26.40 | 26.40 | 26.30 |
| 40.0       | 15.10     | 17.60 | 20.10 | 22.50 | 24.70 | 26.70 | 28.20 | 28.70 | 29.30 | 29.60 | 29.80 |
| 45.0       | 15.30     | 18.00 | 20.70 | 23.40 | 26.00 | 28.40 | 30.40 | 31.00 | 31.90 | 32.50 | 33.00 |
| 50.0       | 15.35     | 18.25 | 21.20 | 24.20 | 27.10 | 29.80 | 32.30 | 33.20 | 34.40 | 35.30 | 36.00 |
| 55.0       |           | 18.35 | 21.60 | 24.80 | 28.10 | 31.20 | 34.00 | 35.10 | 36.60 | 37.70 | 38.80 |
| 60.0       |           |       | 21.80 | 25.30 | 28.80 | 32.30 | 35.60 | 36.80 | 38.60 | 40.00 | 41.30 |
| 65.0       |           |       |       | 25.60 | 29.40 | 33.20 | 36.90 | 38.30 | 40.40 | 42.00 | 43.50 |

| Cond<br>°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       | 31.41               | 31.64 | 31.57 | 31.21 | 30.54 | 29.57 |       |       |       |       |       |
| 15.0       | 32.14               | 32.92 | 33.41 | 33.59 | 33.47 | 33.05 | 32.33 |       |       |       |       |
| 20.0       | 32.70               | 34.04 | 35.07 | 35.81 | 36.24 | 36.37 | 36.20 | 36.05 | 35.73 |       |       |
| 25.0       | 33.09               | 34.98 | 36.57 | 37.85 | 38.84 | 39.52 | 39.90 | 39.97 | 39.98 | 39.91 | 39.77 |
| 30.0       | 33.32               | 35.75 | 37.89 | 39.73 | 41.27 | 42.50 | 43.43 | 43.72 | 44.07 | 44.27 | 44.40 |
| 35.0       | 33.37               | 36.36 | 39.05 | 41.44 | 43.53 | 45.31 | 46.80 | 47.31 | 47.98 | 48.46 | 48.87 |
| 40.0       | 33.26               | 36.80 | 40.04 | 42.98 | 45.62 | 47.96 | 49.99 | 50.72 | 51.73 | 52.48 | 53.16 |
| 45.0       | 32.98               | 37.07 | 40.86 | 44.35 | 47.54 | 50.43 | 53.02 | 53.97 | 55.31 | 56.34 | 57.29 |
| 50.0       | 32.52               | 37.17 | 41.51 | 45.55 | 49.29 | 52.74 | 55.87 | 57.05 | 58.71 | 60.02 | 61.25 |
| 55.0       |                     | 37.10 | 41.99 | 46.59 | 50.88 | 54.87 | 58.56 | 59.95 | 61.95 | 63.53 | 65.04 |
| 60.0       |                     |       | 42.31 | 47.45 | 52.30 | 56.84 | 61.08 | 62.69 | 65.02 | 66.88 | 68.66 |
| 65.0       |                     |       |       | 48.15 | 53.55 | 58.64 | 63.43 | 65.27 | 67.93 | 70.06 | 72.12 |

| Cond<br>°C | 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       | 199.00         | 255.00 | 322.00 | 401.00 | 493.00 | 599.00 |        |        |        |        |        |
| 15.0       | 196.00         | 252.00 | 319.00 | 398.00 | 489.00 | 595.00 | 714.00 |        |        |        |        |
| 20.0       | 192.00         | 248.00 | 315.00 | 393.00 | 484.00 | 588.00 | 707.00 | 759.00 | 841.00 |        |        |
| 25.0       | 187.00         | 243.00 | 309.00 | 387.00 | 477.00 | 580.00 | 698.00 | 750.00 | 831.00 | 904.00 | 981.00 |
| 30.0       | 181.00         | 237.00 | 303.00 | 380.00 | 469.00 | 571.00 | 688.00 | 738.00 | 819.00 | 891.00 | 967.00 |
| 35.0       | 174.50         | 230.00 | 295.00 | 371.00 | 459.00 | 560.00 | 675.00 | 726.00 | 806.00 | 877.00 | 952.00 |
| 40.0       | 166.50         | 222.00 | 286.00 | 361.00 | 448.00 | 547.00 | 661.00 | 711.00 | 790.00 | 860.00 | 935.00 |
| 45.0       | 158.00         | 212.00 | 276.00 | 349.00 | 435.00 | 533.00 | 645.00 | 694.00 | 772.00 | 842.00 | 916.00 |
| 50.0       | 148.50         | 202.00 | 264.00 | 337.00 | 420.00 | 517.00 | 627.00 | 675.00 | 752.00 | 821.00 | 894.00 |
| 55.0       |                | 191.00 | 252.00 | 322.00 | 404.00 | 499.00 | 607.00 | 655.00 | 731.00 | 799.00 | 871.00 |
| 60.0       |                |        | 238.00 | 307.00 | 386.00 | 479.00 | 585.00 | 632.00 | 707.00 | 774.00 | 845.00 |
| 65.0       |                |        |        | 289.00 | 367.00 | 457.00 | 561.00 | 607.00 | 681.00 | 747.00 | 817.00 |

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|   |  |
|---|--|
| Number of cylinders                     | 6  |
| Displacement @ 50 Hz, m <sup>3</sup> /h | 127  |
| Bore/Stroke, mm                         | 74.7/55.6                                    |
| Length/Width, mm                        | 760/565                                      |
| Height, mm                              | 545  |
| Net Weight, kg                          | 252  |
| Gross Weight, kg                        | 268  |
| Rotalock Discharge, inch                | 1 3/8  |
| Suction, inch                           | 2 1/8  |
| Oil Quantity, l                         | 6.8  |
| Frequency Range, Hz                     | 25 - 60                                      |
| 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 (18.0)                             |
| Sound Pressure @ 1m, dBA                | 80   |
| Sound Power, dBA                        | 91   |
| High Side PS, bar(g)                    | 32.5   |
| Low Side PS, bar(g)                     | 22.5   |
| Refrigerant's GWP                       | 1774   |
| Refrigerant's classification            | A1   |

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

|                              |                |
|------------------------------|----------------|
| Maximum Operating Current, A | 71.8           |
| 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   |
| Discharge Temperature Protection | Head PTC sensor  |
| 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  |
| Inverter                         | Emerson Industrial Automation,<br>Unidrive M400 07 400 770 |

**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                       | 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               |