



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return
- 20 °C Suction Gas Return with add cooling
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

| Cond<br>°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       | 7.11                 | 9.33  | 12.05 | 15.25 | 19.10 | 23.60 | 28.80 | 34.70 |       |       |       |
| 15.0       | 6.53                 | 8.67  | 11.25 | 14.35 | 18.00 | 22.20 | 27.20 | 32.80 | 39.30 |       |       |
| 20.0       | 5.94                 | 8.00  | 10.45 | 13.40 | 16.85 | 20.90 | 25.60 | 30.90 | 37.10 | 44.00 | 47.00 |
| 25.0       | 5.34                 | 7.31  | 9.65  | 12.45 | 15.70 | 19.50 | 23.90 | 29.00 | 34.80 | 41.40 | 44.20 |
| 30.0       | 4.74                 | 6.62  | 8.83  | 11.45 | 14.55 | 18.10 | 22.30 | 27.10 | 32.50 | 38.70 | 41.40 |
| 35.0       | 4.13                 | 5.91  | 8.01  | 10.45 | 13.35 | 16.70 | 20.60 | 25.10 | 30.20 | 36.10 | 38.60 |
| 40.0       |                      | 5.21  | 7.17  | 9.47  | 12.15 | 15.25 | 18.90 | 23.10 | 27.90 | 33.40 | 35.70 |
| 45.0       |                      | 4.51  | 6.34  | 8.46  | 10.95 | 13.85 | 17.20 | 21.10 | 25.50 | 30.60 | 32.90 |
| 50.0       |                      | 3.81  | 5.50  | 7.46  | 9.73  | 12.40 | 15.45 | 19.05 | 23.20 | 27.90 | 29.90 |
| 55.0       |                      |       | 4.67  | 6.45  | 8.52  | 10.95 | 13.75 | 17.00 | 20.80 | 25.10 | 27.00 |
| 60.0       |                      |       | 3.84  | 5.45  | 7.31  | 9.47  | 12.00 | 14.95 | 18.40 |       |       |
| 62.0       |                      |       | 3.51  | 5.05  | 6.82  | 8.89  | 11.30 | 14.15 | 17.40 |       |       |

| Cond<br>°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       | 3.07      | 3.38  | 3.63  | 3.80  | 3.88  | 3.83  | 3.66  | 3.34 |      |      |      |
| 15.0       | 3.18      | 3.56  | 3.89  | 4.15  | 4.32  | 4.38  | 4.32  | 4.11 | 3.75 |      |      |
| 20.0       | 3.25      | 3.71  | 4.11  | 4.46  | 4.72  | 4.88  | 4.93  | 4.85 | 4.61 | 4.21 | 3.99 |
| 25.0       | 3.29      | 3.81  | 4.30  | 4.72  | 5.08  | 5.34  | 5.50  | 5.53 | 5.42 | 5.14 | 4.99 |
| 30.0       | 3.28      | 3.88  | 4.44  | 4.95  | 5.39  | 5.75  | 6.02  | 6.16 | 6.17 | 6.03 | 5.93 |
| 35.0       | 3.24      | 3.90  | 4.53  | 5.13  | 5.66  | 6.12  | 6.48  | 6.74 | 6.87 | 6.86 | 6.81 |
| 40.0       |           | 3.88  | 4.59  | 5.26  | 5.88  | 6.43  | 6.90  | 7.27 | 7.52 | 7.64 | 7.64 |
| 45.0       |           | 3.83  | 4.60  | 5.35  | 6.06  | 6.70  | 7.27  | 7.75 | 8.12 | 8.36 | 8.42 |
| 50.0       |           | 3.72  | 4.57  | 5.39  | 6.18  | 6.92  | 7.59  | 8.18 | 8.66 | 9.02 | 9.13 |
| 55.0       |           |       | 4.49  | 5.39  | 6.26  | 7.09  | 7.86  | 8.55 | 9.15 | 9.63 | 9.79 |
| 60.0       |           |       | 4.36  | 5.33  | 6.29  | 7.21  | 8.07  | 8.87 | 9.58 |      |      |
| 62.0       |           |       | 4.30  | 5.30  | 6.28  | 7.24  | 8.14  | 8.98 | 9.73 |      |      |

| Cond<br>°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       | 8.63                | 8.90  | 9.14  | 9.32  | 9.41  | 9.39  | 9.21  | 8.85  |       |       |       |
| 15.0       | 8.74                | 9.07  | 9.38  | 9.64  | 9.83  | 9.91  | 9.85  | 9.63  | 9.21  |       |       |
| 20.0       | 8.83                | 9.21  | 9.60  | 9.95  | 10.23 | 10.43 | 10.49 | 10.41 | 10.13 | 9.65  | 9.39  |
| 25.0       | 8.87                | 9.32  | 9.79  | 10.23 | 10.62 | 10.93 | 11.12 | 11.18 | 11.06 | 10.74 | 10.54 |
| 30.0       | 8.87                | 9.40  | 9.94  | 10.48 | 10.98 | 11.41 | 11.73 | 11.93 | 11.97 | 11.82 | 11.70 |
| 35.0       | 8.82                | 9.42  | 10.06 | 10.69 | 11.30 | 11.85 | 12.32 | 12.67 | 12.87 | 12.89 | 12.84 |
| 40.0       |                     | 9.40  | 10.12 | 10.86 | 11.58 | 12.26 | 12.87 | 13.37 | 13.73 | 13.93 | 13.96 |
| 45.0       |                     | 9.31  | 10.13 | 10.97 | 11.82 | 12.63 | 13.38 | 14.04 | 14.57 | 14.95 | 15.06 |
| 50.0       |                     | 9.15  | 10.07 | 11.03 | 12.00 | 12.94 | 13.84 | 14.66 | 15.37 | 15.94 | 16.12 |
| 55.0       |                     |       | 9.94  | 11.01 | 12.11 | 13.20 | 14.25 | 15.23 | 16.12 | 16.88 | 17.14 |
| 60.0       |                     |       | 9.73  | 10.93 | 12.15 | 13.39 | 14.60 | 15.75 | 16.81 |       |       |
| 62.0       |                     |       | 9.63  | 10.87 | 12.15 | 13.44 | 14.71 | 15.93 | 17.08 |       |       |

| Cond<br>°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       | 39.60                  | 52.10 | 67.40 | 85.90 | 108.00 | 134.00 | 164.50 | 200.00 |        |        |        |
| 15.0       | 37.90                  | 50.40 | 65.70 | 84.10 | 106.00 | 132.00 | 162.50 | 198.00 | 239.00 |        |        |
| 20.0       | 36.00                  | 48.60 | 63.80 | 82.10 | 104.00 | 129.50 | 160.00 | 195.00 | 236.00 | 284.00 | 305.00 |
| 25.0       | 33.90                  | 46.60 | 61.80 | 79.90 | 101.50 | 127.00 | 157.00 | 192.00 | 233.00 | 281.00 | 302.00 |
| 30.0       | 31.60                  | 44.30 | 59.50 | 77.50 | 98.80  | 124.00 | 154.00 | 189.00 | 230.00 | 277.00 | 299.00 |
| 35.0       | 29.10                  | 41.90 | 56.90 | 74.80 | 96.00  | 121.00 | 150.50 | 185.50 | 226.00 | 274.00 | 295.00 |
| 40.0       |                        | 39.20 | 54.20 | 71.90 | 92.80  | 117.50 | 147.00 | 181.50 | 222.00 | 270.00 | 291.00 |
| 45.0       |                        | 36.20 | 51.10 | 68.70 | 89.50  | 114.00 | 143.00 | 177.50 | 218.00 | 266.00 | 288.00 |
| 50.0       |                        | 32.90 | 47.80 | 65.20 | 85.80  | 110.00 | 139.00 | 173.50 | 214.00 | 263.00 | 285.00 |
| 55.0       |                        |       | 44.20 | 61.50 | 81.90  | 106.00 | 135.00 | 169.50 | 211.00 | 260.00 | 282.00 |
| 60.0       |                        |       | 40.30 | 57.60 | 77.90  | 102.00 | 131.00 | 166.00 | 208.00 |        |        |
| 62.0       |                        |       | 38.60 | 56.00 | 76.40  | 100.50 | 130.00 | 165.00 | 207.00 |        |        |

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|  |  |
|--|--|
| Number of cylinders  | 3  |
| Displacement @ 50 Hz, m³/h   | 32.2   |
| Bore/Stroke, mm  | 55.6/50.8                                    |
| Length/Width, mm   | 680/370                                      |
| Height, mm   | 480  |
| Net Weight, kg   | 152  |
| Gross Weight, kg   | 163  |
| Rotalock Discharge, inch   | 1 1/8  |
| Suction, inch  | 1 3/8  |
| Oil Quantity, l  | 3.7  |
| 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)                               |
| Sound Pressure @ 1m (MT), dBA  | 70   |
| Sound Power (MT), dBA  | 81   |
| Sound Conditions (MT, Temperatures:<br>Evap./Cond./Suction at freq./speed) | -10 / 45 / 20 °C at 50 Hz                    |
| Sound Pressure @ 1m (HT), dBA  | 70   |
| Sound Power (HT), dBA  | 81   |
| Sound Conditions (HT, Temperatures:<br>Evap./Cond./Suction at freq./speed) | 5 / 55 / 20 °C at 50 Hz                      |
| High Side PS gauge, bar  | 32.5   |
| Low Side PS gauge, bar   | 22.5   |
| Refrigerant's GWP  | 3922   |
| Refrigerant's classification   | A1   |

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

|                              |                |
|------------------------------|----------------|
| Maximum Operating Current, A | 17.5           |
| Locked Rotor Current, A      | 106            |
| Default Enclosure Class      | IP 54 (IEC 34) |

**ACCESSORIES INCLUDED**

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

**ACCESSORIES OPTIONAL**

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

**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               |
| 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               |