



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return ASERCOM certified
- 0 °C Suction Gas Return
- 0 °C Suction Gas Return with add cooling
- Maximum Evaporating Temperature
- 25 °C Suction Gas Return

Suction Return Temperature 20.0°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

| Cond<br>°C | Cooling Capacity, kW |       |       |       |       |       |       |       |       |
|------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | -45.0                | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0  |
| 20.0       | 4.44                 | 6.21  | 8.45  | 11.20 | 14.50 | 18.40 | 23.00 | 28.20 | 34.20 |
| 25.0       | 3.94                 | 5.61  | 7.70  | 10.25 | 13.35 | 17.00 | 21.30 | 26.30 | 31.90 |
| 30.0       |                      | 5.01  | 6.95  | 9.34  | 12.20 | 15.65 | 19.65 | 24.30 | 29.60 |
| 35.0       |                      | 4.43  | 6.22  | 8.42  | 11.10 | 14.25 | 17.95 | 22.30 | 27.30 |
| 40.0       |                      |       | 5.50  | 7.51  | 9.94  | 12.85 | 16.30 | 20.30 | 24.90 |
| 45.0       |                      |       |       | 6.62  | 8.82  | 11.45 | 14.60 | 18.25 | 22.50 |
| 50.0       |                      |       |       | 5.75  | 7.71  | 10.10 | 12.90 | 16.25 | 20.10 |
| 55.0       |                      |       |       |       | 6.62  | 8.72  | 11.25 | 14.25 | 17.75 |

| Cond<br>°C | Power, kW |       |       |       |       |       |       |       |       |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | -45.0     | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0  |
| 20.0       | 2.87      | 3.51  | 4.16  | 4.81  | 5.42  | 5.98  | 6.47  | 6.87  | 7.15  |
| 25.0       | 2.87      | 3.55  | 4.25  | 4.96  | 5.64  | 6.29  | 6.88  | 7.38  | 7.78  |
| 30.0       |           | 3.57  | 4.31  | 5.08  | 5.83  | 6.56  | 7.24  | 7.85  | 8.36  |
| 35.0       |           | 3.56  | 4.35  | 5.17  | 5.99  | 6.79  | 7.55  | 8.26  | 8.88  |
| 40.0       |           |       | 4.37  | 5.23  | 6.10  | 6.98  | 7.82  | 8.62  | 9.35  |
| 45.0       |           |       |       | 5.26  | 6.19  | 7.13  | 8.05  | 8.94  | 9.77  |
| 50.0       |           |       |       | 5.27  | 6.25  | 7.25  | 8.24  | 9.22  | 10.15 |
| 55.0       |           |       |       |       | 6.28  | 7.33  | 8.40  | 9.44  | 10.45 |

| Cond<br>°C | Current at 400 V, A |       |       |       |       |       |       |       |       |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | -45.0               | -40.0 | -35.0 | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0  |
| 20.0       | 8.01                | 8.91  | 9.79  | 10.64 | 11.44 | 12.16 | 12.78 | 13.28 | 13.64 |
| 25.0       | 8.01                | 8.96  | 9.91  | 10.84 | 11.73 | 12.55 | 13.30 | 13.93 | 14.44 |
| 30.0       |                     | 8.98  | 9.99  | 10.99 | 11.97 | 12.90 | 13.75 | 14.52 | 15.17 |
| 35.0       |                     | 8.98  | 10.04 | 11.11 | 12.16 | 13.19 | 14.15 | 15.04 | 15.83 |
| 40.0       |                     |       | 10.06 | 11.18 | 12.31 | 13.43 | 14.50 | 15.50 | 16.43 |
| 45.0       |                     |       |       | 11.23 | 12.43 | 13.62 | 14.79 | 15.91 | 16.95 |
| 50.0       |                     |       |       | 11.24 | 12.50 | 13.77 | 15.03 | 16.25 | 17.42 |
| 55.0       |                     |       |       |       | 12.54 | 13.88 | 15.22 | 16.55 | 17.83 |

| Cond<br>°C | Suction Mass Flow, g/s |       |       |       |       |        |        |        |        |
|------------|------------------------|-------|-------|-------|-------|--------|--------|--------|--------|
|            | -45.0                  | -40.0 | -35.0 | -30.0 | -25.0 | -20.0  | -15.0  | -10.0  | -5.0   |
| 20.0       | 26.80                  | 37.70 | 51.40 | 68.30 | 88.80 | 113.50 | 142.50 | 176.50 | 216.00 |
| 25.0       | 25.00                  | 35.60 | 49.00 | 65.70 | 85.90 | 110.00 | 138.50 | 172.50 | 211.00 |
| 30.0       |                        | 33.50 | 46.60 | 62.80 | 82.60 | 106.50 | 134.50 | 168.00 | 207.00 |
| 35.0       |                        | 31.30 | 44.00 | 59.90 | 79.20 | 102.50 | 130.00 | 163.00 | 201.00 |
| 40.0       |                        |       | 41.40 | 56.70 | 75.50 | 98.20  | 125.50 | 157.50 | 195.50 |
| 45.0       |                        |       |       | 53.40 | 71.60 | 93.70  | 120.50 | 152.00 | 189.50 |
| 50.0       |                        |       |       | 50.00 | 67.50 | 88.90  | 115.00 | 146.00 | 183.50 |
| 55.0       |                        |       |       |       | 63.10 | 83.80  | 109.00 | 140.00 | 177.00 |

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|  |  |
|--|--|
| Number of cylinders  | 3  |
| Displacement @ 50 Hz, m <sup>3</sup> /h                                    | 38.0   |
| Bore/Stroke, mm  | 60.4/50.8                                    |
| Length/Width, mm   | 655/370                                      |
| Height, mm   | 480  |
| Net Weight, kg   | 159  |
| Gross Weight, kg   | 174  |
| Suction, inch  | 1 3/8  |
| Discharge, inch  | 1 1/8  |
| 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<br>EAL Arctic 22 CC |
| Base mounting (hole dia), mm   | 381 x 305 (18)                               |
| Sound Pressure @ 1m (LT), dBA  | 68   |
| Sound Power (LT), dBA  | 79   |
| Sound Conditions (LT, Temperatures:<br>Evap./Cond./Suction at freq./speed) | -35 / 40 / 20 °C at 50 Hz                    |
| Sound Pressure @ 1m (MT), dBA  | 66   |
| Sound Power (MT), dBA  | 77   |
| Sound Conditions (MT, Temperatures:<br>Evap./Cond./Suction at freq./speed) | -10 / 45 / 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 | 18.7           |
| Locked Rotor Current, A      | 82             |
| Default Enclosure Class      | IP 54 (IEC 34) |

**ACCESSORIES INCLUDED**

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

**ACCESSORIES OPTIONAL**

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

**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                       | YYY                     | 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                       | YYY                     | Y                     | 1.73               |
| AWY               | 500-550 V / 3~ / 50 Hz | 525                       | YYY                     | 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                       | YYY                     | Y                     | 1.20               |
| AWD               | 440-480 V / 3~ / 60 Hz | 460                       | YYY                     | Y                     | 1.00               |