



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- 20 °C Suction Gas Return
- 5 K Suction Superheat OEM envelope
- Maximum Evaporating Temperature

Additional restrictions, please see application guidelines

|                         |                        |
|-------------------------|------------------------|
| Suction Superheat 10.0K | Liquid Subcooling 0.0K |
|-------------------------|------------------------|

Evaporating Temperature, °C

| Cond<br>°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  |
| 14.0       | 7.17                 |       |       |       |       |       |       |       |       |       |       |       |
| 15.0       | 7.09                 |       |       |       |       |       |       |       |       |       |       |       |
| 20.0       | 6.67                 | 8.41  | 10.45 |       |       |       |       |       |       |       |       |       |
| 25.0       | 6.25                 | 7.93  | 9.91  | 12.25 | 14.95 |       |       |       |       |       |       |       |
| 30.0       | 5.82                 | 7.43  | 9.34  | 11.60 | 14.20 | 17.20 | 18.50 |       |       |       |       |       |
| 35.0       | 5.38                 | 6.92  | 8.75  | 10.90 | 13.40 | 16.30 | 17.55 | 19.60 | 21.40 | 23.40 |       |       |
| 40.0       | 4.95                 | 6.40  | 8.14  | 10.20 | 12.60 | 15.35 | 16.60 | 18.55 | 20.30 | 22.20 | 26.30 |       |
| 45.0       | 4.52                 | 5.88  | 7.51  | 9.45  | 11.75 | 14.40 | 15.55 | 17.45 | 19.10 | 20.90 | 24.80 | 29.30 |
| 50.0       |                      | 5.35  | 6.87  | 8.70  | 10.85 | 13.35 | 14.45 | 16.25 | 17.85 | 19.60 | 23.40 | 27.60 |
| 55.0       |                      |       | 6.23  | 7.92  | 9.94  | 12.30 | 13.35 | 15.05 | 16.60 | 18.20 | 21.80 | 25.90 |
| 60.0       |                      |       | 5.58  | 7.14  | 9.01  | 11.20 | 12.20 | 13.80 | 15.25 | 16.80 | 20.20 | 24.10 |
| 65.0       |                      |       |       | 6.34  | 8.06  | 10.10 | 11.05 | 12.55 | 13.90 | 15.35 | 18.60 | 22.30 |
| 70.0       |                      |       |       |       | 7.09  | 8.97  | 9.82  | 11.20 | 12.45 | 13.85 | 16.90 |       |
| 75.0       |                      |       |       |       | 6.11  | 7.81  | 8.59  | 9.86  | 11.05 | 12.30 |       |       |

| Cond<br>°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 |
| 14.0       | 2.04      |       |       |      |      |      |      |      |      |      |      |      |
| 15.0       | 2.07      |       |       |      |      |      |      |      |      |      |      |      |
| 20.0       | 2.22      | 2.29  | 2.36  |      |      |      |      |      |      |      |      |      |
| 25.0       | 2.39      | 2.47  | 2.55  | 2.64 | 2.72 |      |      |      |      |      |      |      |
| 30.0       | 2.58      | 2.68  | 2.77  | 2.86 | 2.96 | 3.05 | 3.08 |      |      |      |      |      |
| 35.0       | 2.80      | 2.91  | 3.01  | 3.12 | 3.21 | 3.31 | 3.34 | 3.40 | 3.44 | 3.48 |      |      |
| 40.0       | 3.03      | 3.16  | 3.28  | 3.39 | 3.50 | 3.59 | 3.63 | 3.69 | 3.73 | 3.77 | 3.85 |      |
| 45.0       | 3.29      | 3.44  | 3.57  | 3.70 | 3.81 | 3.91 | 3.95 | 4.01 | 4.05 | 4.09 | 4.16 | 4.22 |
| 50.0       |           | 3.74  | 3.89  | 4.03 | 4.15 | 4.26 | 4.30 | 4.36 | 4.40 | 4.44 | 4.51 | 4.57 |
| 55.0       |           |       | 4.24  | 4.39 | 4.52 | 4.64 | 4.68 | 4.74 | 4.78 | 4.82 | 4.89 | 4.95 |
| 60.0       |           |       | 4.62  | 4.79 | 4.93 | 5.05 | 5.10 | 5.16 | 5.20 | 5.24 | 5.31 | 5.36 |
| 65.0       |           |       |       | 5.21 | 5.37 | 5.50 | 5.55 | 5.61 | 5.66 | 5.70 | 5.77 | 5.81 |
| 70.0       |           |       |       |      | 5.84 | 5.98 | 6.03 | 6.10 | 6.15 | 6.19 | 6.26 |      |
| 75.0       |           |       |       |      | 6.35 | 6.51 | 6.56 | 6.63 | 6.68 | 6.73 |      |      |

Additional restrictions, please see application guidelines

| Cond<br>°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  |
| 14.0       | 5.52                |       |       |      |       |       |       |       |       |       |       |       |
| 15.0       | 5.59                |       |       |      |       |       |       |       |       |       |       |       |
| 20.0       | 5.91                | 6.01  | 6.12  |      |       |       |       |       |       |       |       |       |
| 25.0       | 6.21                | 6.32  | 6.43  | 6.54 | 6.64  |       |       |       |       |       |       |       |
| 30.0       | 6.49                | 6.61  | 6.73  | 6.84 | 6.95  | 7.05  | 7.10  |       |       |       |       |       |
| 35.0       | 6.77                | 6.90  | 7.02  | 7.14 | 7.25  | 7.36  | 7.40  | 7.46  | 7.51  | 7.56  |       |       |
| 40.0       | 7.05                | 7.19  | 7.33  | 7.45 | 7.57  | 7.68  | 7.72  | 7.78  | 7.83  | 7.88  | 7.97  |       |
| 45.0       | 7.34                | 7.50  | 7.65  | 7.79 | 7.91  | 8.03  | 8.07  | 8.13  | 8.18  | 8.22  | 8.31  | 8.38  |
| 50.0       |                     | 7.83  | 8.00  | 8.15 | 8.28  | 8.40  | 8.45  | 8.51  | 8.56  | 8.60  | 8.69  | 8.76  |
| 55.0       |                     |       | 8.38  | 8.54 | 8.69  | 8.82  | 8.87  | 8.94  | 8.99  | 9.03  | 9.12  | 9.19  |
| 60.0       |                     |       | 8.80  | 8.99 | 9.15  | 9.29  | 9.34  | 9.41  | 9.47  | 9.52  | 9.61  | 9.68  |
| 65.0       |                     |       |       | 9.49 | 9.66  | 9.82  | 9.88  | 9.96  | 10.02 | 10.07 | 10.16 | 10.23 |
| 70.0       |                     |       |       |      | 10.25 | 10.42 | 10.48 | 10.57 | 10.64 | 10.69 | 10.79 |       |
| 75.0       |                     |       |       |      | 10.91 | 11.10 | 11.17 | 11.27 | 11.34 | 11.40 |       |       |

| Cond<br>°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   |
| 14.0       | 46.90                  |       |       |       |       |        |        |        |        |        |        |        |
| 15.0       | 46.80                  |       |       |       |       |        |        |        |        |        |        |        |
| 20.0       | 46.10                  | 56.80 | 69.10 |       |       |        |        |        |        |        |        |        |
| 25.0       | 45.40                  | 56.20 | 68.70 | 82.90 | 98.90 |        |        |        |        |        |        |        |
| 30.0       | 44.60                  | 55.50 | 68.10 | 82.40 | 98.60 | 117.00 | 124.50 |        |        |        |        |        |
| 35.0       | 43.70                  | 54.60 | 67.30 | 81.70 | 98.10 | 116.50 | 124.50 | 137.00 | 148.00 | 159.50 |        |        |
| 40.0       | 42.70                  | 53.70 | 66.30 | 80.90 | 97.40 | 116.00 | 124.00 | 136.50 | 148.00 | 159.50 | 185.00 |        |
| 45.0       | 41.60                  | 52.60 | 65.20 | 79.80 | 96.30 | 115.00 | 123.00 | 136.00 | 147.00 | 159.00 | 184.50 | 213.00 |
| 50.0       |                        | 51.40 | 64.00 | 78.50 | 95.10 | 114.00 | 122.00 | 135.00 | 146.50 | 158.50 | 184.50 | 213.00 |
| 55.0       |                        |       | 62.50 | 77.00 | 93.50 | 112.50 | 120.50 | 133.50 | 145.00 | 157.50 | 183.50 | 212.00 |
| 60.0       |                        |       | 60.90 | 75.20 | 91.70 | 110.50 | 119.00 | 132.00 | 143.50 | 156.00 | 182.50 | 212.00 |
| 65.0       |                        |       |       | 73.20 | 89.60 | 108.50 | 117.00 | 130.00 | 142.00 | 154.00 | 181.00 | 211.00 |
| 70.0       |                        |       |       |       | 87.30 | 106.00 | 114.50 | 128.00 | 139.50 | 152.50 | 179.50 |        |
| 75.0       |                        |       |       |       | 84.60 | 103.50 | 112.00 | 125.50 | 137.50 | 150.50 |        |        |

Additional restrictions, please see application guidelines

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|   |  |
|---|--|
| Displacement @ 50 Hz, m <sup>3</sup> /h | 21.4   |
| Length/Width, mm                        | 246/257                                      |
| Height, mm                              | 481  |
| Net Weight, kg                          | 43.1   |
| Stub Suction, inch                      | 7/8  |
| Stub Discharge, inch                    | 3/4  |
| Oil Quantity, l                         | 1.89   |
| 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            | 190 x 190 (19)                               |
| Max. Internal Free Volume, l            | 5.70   |
| High Side PS gauge, bar                 | 29   |
| Low Side PS gauge, bar                  | 21   |
| Low Side TS Max., °C                    | 50   |
| Low Side TS Min., °C                    | -35  |
| Refrigerant's GWP                       | 631  |
| Refrigerant's classification            | A1   |

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

|                              |                |
|------------------------------|----------------|
| Maximum Operating Current, A | 15.9           |
| Locked Rotor Current, A      | 102            |
| Winding Resistance, ohm      | 1.72           |
| Default Enclosure Class      | IP 21 (IEC 34) |

**ACCESSORIES INCLUDED**

|                                  |                                |
|----------------------------------|--------------------------------|
| Discharge Temperature Protection | Internal Thermistor            |
| Discharge Temperature Protection | ASTP Therm-O-Disc In Scroll    |
| Enclosure Class                  | IP21                           |
| Mounting Grommets                | Rubber Grommet For Single      |
| Oil Charge                       |                                |
| Digital Control                  | Integrated Solenoid Valve      |
| Check Valve                      | Discharge Low Leak Check Valve |

Additional restrictions, please see application guidelines

**ACCESSORIES OPTIONAL**

|                    |                             |
|--------------------|-----------------------------|
| Crankcase Heater   | 70 W External               |
| Crankcase Heater   | 66 W External               |
| Mounting Grommets  | Standard                    |
| Mounting Grommets  | Hard Mounts for Paralleling |
| Digital Control    | Digital Valve Coil 24V      |
| Digital Control    | Digital Valve Coil 230V     |
| Oil Control System | ALCO Trax-Oil OM3           |
| Sound Attenuation  | Sound Shell (12dBA)         |
| Sound Attenuation  | Sound Shell (10dBA)         |
| Rotalock valves    | suction and discharge       |

**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> |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| TFD               | 380-420 V / 3~ / 50 Hz | 400                       |                         | Y                     | 1.00               |
| TFD               | 460 V / 3~ / 60 Hz     | 460                       |                         | Y                     | 1.04               |

Additional restrictions, please see application guidelines