



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return
- 10 K Suction Superheat
- Maximum Evaporating Temperature

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 |
| 30.0       | 1.51                 | 2.01  | 2.58  | 3.24 | 4.00 | 4.88 | 5.27 | 5.90 | 6.46 | 7.06 |
| 35.0       | 1.36                 | 1.86  | 2.41  | 3.05 | 3.79 | 4.64 | 5.01 | 5.61 | 6.16 | 6.74 |
| 40.0       | 1.21                 | 1.68  | 2.22  | 2.84 | 3.55 | 4.37 | 4.73 | 5.31 | 5.84 | 6.40 |
| 45.0       |                      | 1.50  | 2.02  | 2.61 | 3.30 | 4.09 | 4.44 | 4.99 | 5.50 | 6.04 |
| 50.0       |                      |       | 1.79  | 2.36 | 3.02 | 3.78 | 4.11 | 4.65 | 5.13 | 5.65 |
| 55.0       |                      |       |       | 2.09 | 2.72 | 3.45 | 3.77 | 4.28 | 4.74 | 5.24 |
| 60.0       |                      |       |       |      | 2.39 | 3.08 | 3.39 | 3.88 | 4.32 | 4.79 |
| 65.0       |                      |       |       |      | 2.02 | 2.68 | 2.97 | 3.44 | 3.86 | 4.31 |
| 67.0       |                      |       |       |      |      | 2.51 | 2.80 | 3.26 | 3.67 | 4.11 |

50 Hz

ZR18K5E-PFJ

R407C Dew Point

| 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 |
| 30.0       | 0.82      | 0.82  | 0.81  | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 | 0.75 | 0.74 |
| 35.0       | 0.92      | 0.92  | 0.92  | 0.91 | 0.90 | 0.88 | 0.88 | 0.87 | 0.86 | 0.85 |
| 40.0       | 1.04      | 1.04  | 1.03  | 1.03 | 1.02 | 1.01 | 1.00 | 0.99 | 0.98 | 0.97 |
| 45.0       |           | 1.18  | 1.18  | 1.17 | 1.16 | 1.14 | 1.14 | 1.12 | 1.12 | 1.10 |
| 50.0       |           |       | 1.34  | 1.34 | 1.32 | 1.30 | 1.30 | 1.28 | 1.27 | 1.26 |
| 55.0       |           |       |       | 1.52 | 1.51 | 1.48 | 1.48 | 1.46 | 1.45 | 1.44 |
| 60.0       |           |       |       |      | 1.72 | 1.70 | 1.69 | 1.67 | 1.66 | 1.64 |
| 65.0       |           |       |       |      | 1.98 | 1.95 | 1.94 | 1.92 | 1.90 | 1.88 |
| 67.0       |           |       |       |      |      | 2.06 | 2.04 | 2.02 | 2.00 | 1.98 |

| Cond<br>°C | Current at 230 V, A |       |       |      |      |      |      |      |      |      |
|------------|---------------------|-------|-------|------|------|------|------|------|------|------|
|            | -20.0               | -15.0 | -10.0 | -5.0 | 0.0  | 5.0  | 7.0  | 10.0 | 12.5 | 15.0 |
| 30.0       | 3.79                | 3.79  | 3.78  | 3.74 | 3.69 | 3.62 | 3.58 | 3.53 | 3.47 | 3.42 |
| 35.0       | 4.24                | 4.25  | 4.24  | 4.21 | 4.17 | 4.10 | 4.07 | 4.02 | 3.97 | 3.92 |
| 40.0       | 4.79                | 4.80  | 4.79  | 4.77 | 4.72 | 4.66 | 4.63 | 4.57 | 4.53 | 4.47 |
| 45.0       |                     | 5.46  | 5.45  | 5.42 | 5.37 | 5.30 | 5.26 | 5.21 | 5.16 | 5.10 |
| 50.0       |                     |       | 6.23  | 6.18 | 6.12 | 6.04 | 6.00 | 5.94 | 5.88 | 5.82 |
| 55.0       |                     |       |       | 7.08 | 7.00 | 6.90 | 6.86 | 6.78 | 6.71 | 6.64 |
| 60.0       |                     |       |       |      | 8.03 | 7.90 | 7.85 | 7.76 | 7.68 | 7.59 |
| 65.0       |                     |       |       |      | 9.22 | 9.06 | 8.99 | 8.89 | 8.79 | 8.69 |
| 67.0       |                     |       |       |      |      | 9.57 | 9.50 | 9.38 | 9.28 | 9.17 |

| 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  |
| 30.0       | 8.84                   | 11.55 | 14.60 | 18.05 | 22.00 | 26.40 | 28.40 | 31.50 | 34.30 | 37.20 |
| 35.0       | 8.39                   | 11.20 | 14.30 | 17.80 | 21.70 | 26.20 | 28.20 | 31.30 | 34.10 | 37.10 |
| 40.0       | 7.80                   | 10.70 | 13.85 | 17.40 | 21.40 | 25.90 | 27.90 | 31.00 | 33.90 | 36.80 |
| 45.0       |                        | 10.00 | 13.25 | 16.85 | 20.90 | 25.50 | 27.50 | 30.70 | 33.50 | 36.50 |
| 50.0       |                        |       | 12.45 | 16.15 | 20.30 | 24.90 | 26.90 | 30.20 | 33.00 | 36.10 |
| 55.0       |                        |       |       | 15.20 | 19.40 | 24.10 | 26.20 | 29.50 | 32.40 | 35.50 |
| 60.0       |                        |       |       |       | 18.25 | 23.10 | 25.20 | 28.50 | 31.50 | 34.60 |
| 65.0       |                        |       |       |       | 16.70 | 21.70 | 23.90 | 27.30 | 30.30 | 33.50 |
| 67.0       |                        |       |       |       |       | 21.00 | 23.20 | 26.70 | 29.80 | 33.00 |

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|   |  |
|---|--|
| Displacement @ 50 Hz, m <sup>3</sup> /h | 4.39   |
| Length/Width, mm                        | 246/246                                      |
| Height, mm                              | 387  |
| Net Weight, kg                          | 22.4   |
| Stub Suction, inch                      | 3/4  |
| Stub Discharge, inch                    | 1/2  |
| Oil Quantity, l                         | 0.74   |
| 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 (8.5)                              |
| Sound Pressure @ 1m (HT), dBA           | 54   |
| Sound Power (HT), dBA                   | 65   |
| Sound Conditions (HT, Temperatures:     | 7 / 54 / 18 °C at 50 Hz                      |
| Evap./Cond./Suction at freq./speed)     |  |
| High Side PS gauge, bar                 | 29.5   |
| Low Side PS gauge, bar                  | 20   |
| Low Side TS Max., °C                    | 50   |
| Refrigerant's GWP                       | 1774   |
| Refrigerant's classification            | A1   |

**COMPRESSOR ELECTRICAL DATA (220-240 V / 1~ / 50 Hz)**

|                              |                |
|------------------------------|----------------|
| Maximum Operating Current, A | 10             |
| Locked Rotor Current, A      | 45             |
| Winding Resistance, ohm      | 1.9/2.91 (R/S) |
| Default Enclosure Class      | IP 21 (IEC 34) |

**ACCESSORIES INCLUDED**

|                                  |                     |
|----------------------------------|---------------------|
| Discharge Temperature Protection | Internal Thermistor |
| Mounting Grommets                | Standard            |

**ACCESSORIES OPTIONAL**

|                        |               |
|------------------------|---------------|
| Crankcase Heater       | 40 W External |
| Single Phase Equipment | Run Capacitor |

**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> |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| PFJ               | 220-240 V / 1~ / 50 Hz | 230                       |                         | PSC                   | 1.00               |
| PFJ               | 265 V / 1~ / 60 Hz     | 265                       |                         | PSC                   | 0.75               |