



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 °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 | 1.88 | 2.39 | 3.02 | 3.77 | 4.65 | 5.66 | 6.11 | 6.81 | 7.43 | 8.08 |
| 35.0 | 1.74 | 2.24 | 2.85 | 3.58 | 4.45 | 5.43 | 5.86 | 6.55 | 7.15 | 7.79 |
| 40.0 | 1.60 | 2.08 | 2.67 | 3.38 | 4.21 | 5.16 | 5.58 | 6.25 | 6.83 | 7.45 |
| 45.0 | | 1.92 | 2.47 | 3.15 | 3.95 | 4.87 | 5.27 | 5.91 | 6.47 | 7.07 |
| 50.0 | | | 2.28 | 2.91 | 3.67 | 4.54 | 4.92 | 5.53 | 6.07 | 6.65 |
| 55.0 | | | | 2.67 | 3.37 | 4.19 | 4.55 | 5.13 | 5.64 | 6.18 |
| 60.0 | | | | | 3.06 | 3.82 | 4.16 | 4.70 | 5.18 | 5.69 |
| 65.0 | | | | | 2.74 | 3.44 | 3.75 | 4.24 | 4.69 | 5.16 |
| 67.0 | | | | | | 3.28 | 3.58 | 4.06 | 4.49 | 4.94 |

50 Hz

ZR22K3E-TFD

R407C Dew Point

| Cond °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 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.88 |
| 35.0 | 1.07 | 1.07 | 1.07 | 1.06 | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.00 |
| 40.0 | 1.21 | 1.21 | 1.22 | 1.21 | 1.20 | 1.19 | 1.18 | 1.16 | 1.15 | 1.13 |
| 45.0 | | 1.37 | 1.38 | 1.38 | 1.36 | 1.35 | 1.34 | 1.32 | 1.30 | 1.28 |
| 50.0 | | | 1.56 | 1.56 | 1.54 | 1.53 | 1.52 | 1.50 | 1.48 | 1.46 |
| 55.0 | | | | 1.76 | 1.75 | 1.73 | 1.72 | 1.70 | 1.68 | 1.65 |
| 60.0 | | | | | 1.98 | 1.96 | 1.95 | 1.92 | 1.90 | 1.87 |
| 65.0 | | | | | 2.24 | 2.22 | 2.20 | 2.18 | 2.15 | 2.12 |
| 67.0 | | | | | | 2.33 | 2.31 | 2.29 | 2.26 | 2.23 |

| Cond °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 |
| 30.0 | 2.13 | 2.12 | 2.12 | 2.11 | 2.11 | 2.10 | 2.09 | 2.08 | 2.06 | 2.04 |
| 35.0 | 2.27 | 2.26 | 2.26 | 2.26 | 2.25 | 2.24 | 2.23 | 2.21 | 2.19 | 2.16 |
| 40.0 | 2.43 | 2.43 | 2.43 | 2.43 | 2.42 | 2.41 | 2.40 | 2.37 | 2.35 | 2.32 |
| 45.0 | | 2.62 | 2.63 | 2.63 | 2.63 | 2.61 | 2.60 | 2.57 | 2.54 | 2.51 |
| 50.0 | | | 2.87 | 2.88 | 2.87 | 2.85 | 2.83 | 2.80 | 2.77 | 2.73 |
| 55.0 | | | | 3.16 | 3.15 | 3.12 | 3.11 | 3.07 | 3.04 | 2.99 |
| 60.0 | | | | | 3.47 | 3.44 | 3.43 | 3.39 | 3.35 | 3.30 |
| 65.0 | | | | | 3.85 | 3.82 | 3.79 | 3.75 | 3.71 | 3.66 |
| 67.0 | | | | | | 3.98 | 3.96 | 3.91 | 3.87 | 3.82 |

| Cond °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 | 11.00 | 13.75 | 17.10 | 21.00 | 25.50 | 30.70 | 32.90 | 36.30 | 39.40 | 42.60 |
| 35.0 | 10.70 | 13.45 | 16.90 | 20.90 | 25.50 | 30.70 | 33.00 | 36.50 | 39.60 | 42.90 |
| 40.0 | 10.35 | 13.15 | 16.60 | 20.70 | 25.30 | 30.60 | 32.90 | 36.50 | 39.60 | 42.90 |
| 45.0 | | 12.80 | 16.25 | 20.30 | 25.00 | 30.40 | 32.70 | 36.30 | 39.50 | 42.80 |
| 50.0 | | | 15.85 | 19.90 | 24.60 | 29.90 | 32.20 | 35.90 | 39.10 | 42.40 |
| 55.0 | | | | 19.40 | 24.10 | 29.40 | 31.70 | 35.30 | 38.50 | 41.90 |
| 60.0 | | | | | 23.40 | 28.70 | 30.90 | 34.60 | 37.70 | 41.10 |
| 65.0 | | | | | 22.70 | 27.80 | 30.10 | 33.60 | 36.80 | 40.10 |
| 67.0 | | | | | | 27.40 | 29.70 | 33.20 | 36.40 | 39.70 |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|---|--|
| Displacement @ 50 Hz, m ³ /h | 5.34 |
| Length/Width, mm | 242/242 |
| Height, mm | 363 |
| Net Weight, kg | 22 |
| Gross Weight, kg | 26 |
| Stub Suction, inch | 3/4 |
| Stub Discharge, inch | 1/2 |
| Oil Quantity, l | 1 |
| Oil type (original charge) | POE RL32-3MAF |
| Oil type (approved oils) | POE RL32-3MAF, POE MOBIL 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 Power with Sound Shell (HT), dBA | 58 |
| Sound Conditions (HT, Temperatures: | 7 / 54 / 18 °C at 50 Hz |
| Evap./Cond./Suction at freq./speed) | |
| PED Category | 1 |
| Max. Internal Free Volume, l | 2.90 |
| 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 (380-420 V / 3~ / 50 Hz)

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 4.2 |
| Locked Rotor Current, A | 24 |
| Winding Resistance, ohm | 8.64 |
| Default Enclosure Class | IP 21 (IEC 34) |

ACCESSORIES INCLUDED

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

ACCESSORIES OPTIONAL

| | |
|------------------|---------------|
| Crankcase Heater | 70 W External |
|------------------|---------------|

MOTOR OPTIONS

| Motor Code | Power Supply | Nominal Voltage, V | Start Connection | DOL Connection | Amps Factor |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| TFD | 380-420 V / 3~ / 50 Hz | 400 | | Y | 1.00 |
| TF5 | 200-220 V / 3~ / 50 Hz | 200 | | Y | 2.09 |
| TFD | 460 V / 3~ / 60 Hz | 460 | | Y | 1.04 |
| TF5 | 200-230 V / 3~ / 60 Hz | 230 | | Y | 2.09 |