



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 | 4.31 | 5.54 | 7.02 | 8.79 | 10.85 | 13.25 | 14.30 | 15.95 | | |
| 35.0 | 4.02 | 5.18 | 6.60 | 8.29 | 10.30 | 12.60 | 13.60 | 15.20 | 16.65 | |
| 40.0 | 3.73 | 4.82 | 6.17 | 7.78 | 9.69 | 11.90 | 12.85 | 14.45 | 15.85 | 17.35 |
| 45.0 | | 4.47 | 5.74 | 7.26 | 9.07 | 11.20 | 12.15 | 13.65 | 14.95 | 16.40 |
| 50.0 | | 4.13 | 5.31 | 6.74 | 8.45 | 10.45 | 11.35 | 12.80 | 14.10 | 15.45 |
| 55.0 | | | 4.88 | 6.21 | 7.82 | 9.72 | 10.55 | 11.90 | 13.15 | 14.45 |
| 60.0 | | | | 5.68 | 7.17 | 8.95 | 9.75 | 11.05 | 12.20 | 13.45 |
| 65.0 | | | | 5.15 | 6.52 | 8.17 | 8.91 | 10.10 | 11.20 | 12.40 |
| 70.0 | | | | | 5.85 | 7.37 | 8.05 | 9.18 | 10.20 | 11.30 |
| 75.0 | | | | | 5.18 | 6.55 | 7.18 | 8.21 | 9.15 | 10.15 |

50 Hz

ZR72KCE-TFD

R134a

| 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 | 2.02 | 2.01 | 2.01 | 2.02 | 2.04 | 2.06 | 2.07 | 2.09 | | |
| 35.0 | 2.29 | 2.28 | 2.28 | 2.29 | 2.30 | 2.32 | 2.33 | 2.35 | 2.36 | |
| 40.0 | 2.59 | 2.57 | 2.56 | 2.57 | 2.58 | 2.60 | 2.61 | 2.62 | 2.63 | 2.65 |
| 45.0 | | 2.90 | 2.88 | 2.88 | 2.89 | 2.90 | 2.91 | 2.92 | 2.93 | 2.94 |
| 50.0 | | 3.27 | 3.24 | 3.23 | 3.23 | 3.24 | 3.25 | 3.26 | 3.26 | 3.27 |
| 55.0 | | | 3.66 | 3.64 | 3.63 | 3.63 | 3.63 | 3.63 | 3.64 | 3.64 |
| 60.0 | | | | 4.10 | 4.08 | 4.07 | 4.07 | 4.07 | 4.07 | 4.07 |
| 65.0 | | | | 4.64 | 4.60 | 4.58 | 4.57 | 4.57 | 4.56 | 4.56 |
| 70.0 | | | | | 5.20 | 5.17 | 5.15 | 5.14 | 5.13 | 5.12 |
| 75.0 | | | | | 5.89 | 5.84 | 5.82 | 5.79 | 5.78 | 5.76 |

| 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 | 4.93 | 4.94 | 4.94 | 4.94 | 4.95 | 4.97 | 4.98 | 5.01 | | |
| 35.0 | 5.20 | 5.20 | 5.21 | 5.21 | 5.22 | 5.24 | 5.25 | 5.28 | 5.30 | |
| 40.0 | 5.52 | 5.52 | 5.52 | 5.52 | 5.53 | 5.55 | 5.56 | 5.58 | 5.61 | 5.64 |
| 45.0 | | 5.91 | 5.90 | 5.89 | 5.89 | 5.91 | 5.92 | 5.94 | 5.96 | 5.99 |
| 50.0 | | 6.37 | 6.35 | 6.34 | 6.33 | 6.33 | 6.34 | 6.35 | 6.37 | 6.40 |
| 55.0 | | | 6.89 | 6.87 | 6.85 | 6.84 | 6.84 | 6.85 | 6.87 | 6.89 |
| 60.0 | | | | 7.50 | 7.47 | 7.44 | 7.44 | 7.44 | 7.45 | 7.46 |
| 65.0 | | | | 8.25 | 8.19 | 8.16 | 8.15 | 8.14 | 8.14 | 8.14 |
| 70.0 | | | | | 9.05 | 8.99 | 8.97 | 8.95 | 8.94 | 8.94 |
| 75.0 | | | | | 10.04 | 9.96 | 9.94 | 9.90 | 9.88 | 9.86 |

| 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 | 28.30 | 35.60 | 44.20 | 54.30 | 65.70 | 78.70 | 84.20 | 93.10 | | |
| 35.0 | 27.70 | 34.90 | 43.60 | 53.60 | 65.10 | 78.10 | 83.80 | 92.70 | 100.50 | |
| 40.0 | 27.20 | 34.30 | 42.80 | 52.90 | 64.40 | 77.50 | 83.10 | 92.10 | 100.00 | 108.50 |
| 45.0 | | 33.60 | 42.10 | 52.00 | 63.50 | 76.70 | 82.40 | 91.40 | 99.40 | 108.00 |
| 50.0 | | 33.00 | 41.30 | 51.10 | 62.60 | 75.70 | 81.40 | 90.50 | 98.50 | 107.00 |
| 55.0 | | | 40.40 | 50.10 | 61.50 | 74.50 | 80.20 | 89.30 | 97.40 | 106.00 |
| 60.0 | | | | 49.00 | 60.20 | 73.20 | 78.90 | 88.00 | 96.00 | 104.50 |
| 65.0 | | | | 47.80 | 58.80 | 71.60 | 77.30 | 86.40 | 94.50 | 103.00 |
| 70.0 | | | | | 57.20 | 69.90 | 75.50 | 84.50 | 92.60 | 101.00 |
| 75.0 | | | | | 55.40 | 67.80 | 73.40 | 82.40 | 90.40 | 99.00 |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|--|--|
| Displacement @ 50 Hz, m ³ /h | 17.1 |
| Length/Width, mm | 246/246 |
| Height, mm | 451 |
| Net Weight, kg | 38.6 |
| Gross Weight, kg | 44 |
| Rotalock Suction, inch | 1 1/4 |
| Rotalock Discharge, inch | 1 |
| Stub Suction, inch | 7/8 |
| Stub Discharge, inch | 1/2 |
| Oil Quantity, l | 1.77 |
| 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 | 61 |
| Sound Power (HT), dBA | 72 |
| Sound Power with Sound Shell (HT), dBA | 66 |
| Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed) | 7 / 54 / 18 °C at 50 Hz |
| PED Category | 1 |
| Max. Internal Free Volume, l | 4.10 |
| High Side PS gauge, bar | 29.5 |
| Low Side PS gauge, bar | 20 |
| Low Side TS Max., °C | 50 |
| Refrigerant's GWP | 1430 |
| Refrigerant's classification | A1 |

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

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 12.1 |
| Locked Rotor Current, A | 74 |
| Winding Resistance, ohm | 2.27 |
| 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 |