



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 |
| 27.0 | 5.19 | 6.68 | 8.43 | 10.45 | 12.80 | 15.45 | 16.65 | 18.45 | 20.10 | 21.80 |
| 30.0 | 4.99 | 6.44 | 8.17 | 10.20 | 12.50 | 15.15 | 16.30 | 18.10 | 19.75 | 21.40 |
| 35.0 | 4.65 | 6.05 | 7.72 | 9.68 | 11.95 | 14.55 | 15.70 | 17.50 | 19.10 | 20.80 |
| 40.0 | 4.34 | 5.65 | 7.24 | 9.13 | 11.35 | 13.85 | 15.00 | 16.75 | 18.30 | 20.00 |
| 45.0 | | 5.27 | 6.77 | 8.56 | 10.70 | 13.15 | 14.20 | 15.95 | 17.50 | 19.10 |
| 50.0 | | | 6.31 | 7.99 | 10.00 | 12.35 | 13.40 | 15.05 | 16.55 | 18.15 |
| 55.0 | | | | 7.43 | 9.31 | 11.55 | 12.55 | 14.15 | 15.60 | 17.15 |
| 60.0 | | | | | 8.64 | 10.75 | 11.70 | 13.20 | 14.60 | 16.10 |
| 65.0 | | | | | 8.00 | 9.94 | 10.85 | 12.25 | 13.60 | 15.05 |

50 Hz

ZRD61KRE-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 |
| 27.0 | 2.25 | 2.27 | 2.30 | 2.34 | 2.39 | 2.46 | 2.50 | 2.57 | 2.63 | 2.71 |
| 30.0 | 2.43 | 2.46 | 2.48 | 2.51 | 2.55 | 2.61 | 2.64 | 2.69 | 2.74 | 2.80 |
| 35.0 | 2.72 | 2.77 | 2.80 | 2.82 | 2.85 | 2.89 | 2.90 | 2.93 | 2.97 | 3.00 |
| 40.0 | 3.02 | 3.09 | 3.14 | 3.17 | 3.19 | 3.22 | 3.23 | 3.24 | 3.26 | 3.28 |
| 45.0 | | 3.43 | 3.50 | 3.55 | 3.58 | 3.60 | 3.60 | 3.61 | 3.62 | 3.63 |
| 50.0 | | | 3.89 | 3.96 | 4.00 | 4.03 | 4.03 | 4.04 | 4.04 | 4.04 |
| 55.0 | | | | 4.40 | 4.46 | 4.50 | 4.51 | 4.52 | 4.52 | 4.52 |
| 60.0 | | | | | 4.96 | 5.03 | 5.04 | 5.06 | 5.06 | 5.06 |
| 65.0 | | | | | 5.50 | 5.59 | 5.62 | 5.65 | 5.66 | 5.67 |

| 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 |
| 27.0 | 5.60 | 5.65 | 5.71 | 5.78 | 5.86 | 5.95 | 5.99 | 6.04 | 6.10 | 6.15 |
| 30.0 | 5.70 | 5.76 | 5.82 | 5.89 | 5.96 | 6.03 | 6.06 | 6.11 | 6.15 | 6.19 |
| 35.0 | 5.93 | 6.00 | 6.07 | 6.14 | 6.20 | 6.26 | 6.28 | 6.31 | 6.34 | 6.36 |
| 40.0 | 6.25 | 6.35 | 6.43 | 6.50 | 6.56 | 6.61 | 6.63 | 6.65 | 6.66 | 6.67 |
| 45.0 | | 6.79 | 6.90 | 6.98 | 7.05 | 7.09 | 7.10 | 7.12 | 7.12 | 7.12 |
| 50.0 | | | 7.48 | 7.58 | 7.66 | 7.71 | 7.72 | 7.73 | 7.73 | 7.72 |
| 55.0 | | | | 8.32 | 8.41 | 8.47 | 8.48 | 8.49 | 8.49 | 8.47 |
| 60.0 | | | | | 9.31 | 9.39 | 9.40 | 9.42 | 9.41 | 9.40 |
| 65.0 | | | | | 10.37 | 10.46 | 10.49 | 10.51 | 10.51 | 10.50 |

| 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 |
| 27.0 | 29.50 | 37.40 | 46.40 | 56.80 | 68.50 | 81.60 | 87.20 | 96.10 | 104.00 | 112.00 |
| 30.0 | 29.20 | 37.10 | 46.20 | 56.70 | 68.60 | 82.00 | 87.70 | 96.70 | 104.50 | 113.00 |
| 35.0 | 28.50 | 36.50 | 45.70 | 56.40 | 68.60 | 82.30 | 88.20 | 97.50 | 105.50 | 114.00 |
| 40.0 | 28.00 | 35.80 | 45.10 | 55.90 | 68.20 | 82.20 | 88.30 | 97.80 | 106.50 | 115.00 |
| 45.0 | | 35.30 | 44.50 | 55.20 | 67.70 | 81.90 | 88.10 | 97.90 | 106.50 | 115.50 |
| 50.0 | | | 43.90 | 54.60 | 67.10 | 81.40 | 87.70 | 97.70 | 106.50 | 116.00 |
| 55.0 | | | | 54.10 | 66.50 | 80.90 | 87.20 | 97.40 | 106.50 | 116.00 |
| 60.0 | | | | | 66.10 | 80.50 | 86.90 | 97.20 | 106.50 | 116.50 |
| 65.0 | | | | | 66.10 | 80.40 | 86.80 | 97.30 | 106.50 | 117.00 |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|--|--|
| Displacement @ 50 Hz, m³/h | 14.4 |
| Length/Width, mm | 246/257 |
| Height, mm | 481 |
| Net Weight, kg | 38.1 |
| Stub Suction, inch | 7/8 |
| Stub Discharge, inch | 1/2 |
| Oil Quantity, l | 1.89 |
| 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 (19) |
| Sound Pressure @ 1m (MT), dBA | 67 |
| Sound Power (MT), dBA | 78 |
| Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed) | -10 / 45 / 20 °C at 50 Hz |
| Max. Internal Free Volume, l | 4.20 |
| 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 | 1774 |
| Refrigerant's classification | A1 |

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

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 11.3 |
| Locked Rotor Current, A | 64 |
| Winding Resistance, ohm | 2.8 |
| Default Enclosure Class | IP 21 (IEC 34) |

ACCESSORIES INCLUDED

| | |
|----------------------------------|---------------------|
| Discharge Temperature Protection | External thermistor |
| Discharge Temperature Protection | NTC sensor |

ACCESSORIES OPTIONAL

| | |
|--|---|
| <p>Mounting Grommets</p> <p>Digital Tubing Kit</p> <p>Crankcase Heater</p> <p>Oil Control System</p> <p>Sound Attenuation</p> <p>Valve Coil</p> <p>Solenoid Valve Kit</p> <p>Digital Control Kit</p> <p>Mounting Grommets</p> <p>Digital Control</p> <p>Valve Coil</p> <p>Solenoid Valve Kit</p> <p>Digital Control Kit</p> <p>Mounting Grommets</p> <p>Solenoid valve</p> <p>Digital Tubing Kit</p> <p>Digital Driver</p> | <p>Hard Mounts for Paralleling</p> <p>220 V 0.3m Rotalock</p> <p>70 W External</p> <p>ALCO Trax-Oil OM3</p> <p>Sound Shell (10dBA)</p> <p>220V</p> <p>220 V Ac 12" lead Length</p> <p>EC2-552</p> <p>Rubber Grommet For Single</p> <p>24V AC</p> <p>24V AC</p> <p>24 V Ac 12" lead Length</p> <p>EC3-652</p> <p>Standard</p> <p>Standard</p> <p>24 V 0.3m Rotalock</p> <p>EC3-D13</p> |
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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> |
|-------------------|------------------------|---------------------------|-------------------------|-----------------------|--------------------|
| TFD | 380-420 V / 3~ / 50 Hz | 400 | | Y | 1.00 |
| TFD | 460 V / 3~ / 60 Hz | 460 | | Y | 1.04 |