



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 | | | | | | | | | | | | |
|------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 | 20.0 |
| 25.0 | 5.79 | 7.61 | 9.65 | 12.00 | 14.75 | 17.95 | 21.80 | 26.20 | 28.20 | 31.40 | | | |
| 30.0 | 4.96 | 6.92 | 9.06 | 11.45 | 14.20 | 17.35 | 21.10 | 25.30 | 27.20 | 30.30 | 33.10 | 36.10 | |
| 35.0 | | 6.03 | 8.29 | 10.75 | 13.50 | 16.65 | 20.20 | 24.40 | 26.20 | 29.10 | 31.80 | 34.60 | |
| 40.0 | | | 7.30 | 9.84 | 12.60 | 15.75 | 19.25 | 23.30 | 25.00 | 27.90 | 30.40 | 33.10 | 39.20 |
| 45.0 | | | | 8.72 | 11.55 | 14.65 | 18.10 | 22.00 | 23.70 | 26.40 | 28.90 | 31.50 | 37.30 |
| 50.0 | | | | | 10.25 | 13.35 | 16.80 | 20.60 | 22.20 | 24.90 | 27.20 | 29.70 | 35.20 |
| 55.0 | | | | | | 11.90 | 15.25 | 19.00 | 20.60 | 23.10 | 25.40 | 27.80 | 33.10 |
| 60.0 | | | | | | | 13.55 | 17.20 | 18.75 | 21.20 | 23.40 | 25.70 | 30.80 |
| 65.0 | | | | | | | | 15.20 | 16.75 | 19.10 | 21.20 | 23.40 | 28.30 |

50 Hz

ZR94KCE-TFD

R407C Dew Point

| Cond °C | Power, kW | | | | | | | | | | | | |
|------------|-----------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 | 20.0 |
| 25.0 | 3.32 | 3.40 | 3.46 | 3.50 | 3.53 | 3.55 | 3.55 | 3.56 | 3.56 | 3.56 | | | |
| 30.0 | 3.72 | 3.81 | 3.87 | 3.92 | 3.95 | 3.97 | 3.98 | 3.98 | 3.97 | 3.97 | 3.97 | 3.96 | |
| 35.0 | | 4.28 | 4.34 | 4.39 | 4.42 | 4.44 | 4.44 | 4.44 | 4.43 | 4.43 | 4.42 | 4.41 | |
| 40.0 | | | 4.89 | 4.94 | 4.97 | 4.98 | 4.98 | 4.96 | 4.96 | 4.94 | 4.93 | 4.91 | 4.88 |
| 45.0 | | | | 5.57 | 5.59 | 5.60 | 5.59 | 5.57 | 5.55 | 5.53 | 5.51 | 5.49 | 5.45 |
| 50.0 | | | | | 6.32 | 6.32 | 6.30 | 6.26 | 6.24 | 6.21 | 6.19 | 6.16 | 6.09 |
| 55.0 | | | | | | 7.15 | 7.12 | 7.07 | 7.04 | 7.00 | 6.97 | 6.93 | 6.85 |
| 60.0 | | | | | | | 8.06 | 8.00 | 7.97 | 7.92 | 7.87 | 7.83 | 7.72 |
| 65.0 | | | | | | | | 9.07 | 9.04 | 8.97 | 8.92 | 8.86 | 8.73 |

| Cond °C | Current at 400 V, A | | | | | | | | | | | | |
|------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 | 20.0 |
| 25.0 | 8.99 | 9.05 | 9.09 | 9.13 | 9.15 | 9.17 | 9.18 | 9.18 | 9.19 | 9.19 | | | |
| 30.0 | 9.31 | 9.38 | 9.43 | 9.47 | 9.50 | 9.52 | 9.53 | 9.53 | 9.53 | 9.52 | 9.52 | 9.51 | |
| 35.0 | | 9.81 | 9.87 | 9.92 | 9.95 | 9.96 | 9.97 | 9.96 | 9.96 | 9.95 | 9.94 | 9.93 | |
| 40.0 | | | 10.43 | 10.48 | 10.50 | 10.52 | 10.51 | 10.50 | 10.49 | 10.47 | 10.46 | 10.44 | 10.39 |
| 45.0 | | | | 11.18 | 11.20 | 11.21 | 11.19 | 11.17 | 11.15 | 11.13 | 11.10 | 11.08 | 11.01 |
| 50.0 | | | | | 12.05 | 12.05 | 12.03 | 11.99 | 11.97 | 11.93 | 11.90 | 11.86 | 11.77 |
| 55.0 | | | | | | 13.07 | 13.03 | 12.98 | 12.95 | 12.90 | 12.86 | 12.81 | 12.70 |
| 60.0 | | | | | | | 14.24 | 14.16 | 14.12 | 14.06 | 14.01 | 13.95 | 13.81 |
| 65.0 | | | | | | | | 15.56 | 15.52 | 15.44 | 15.37 | 15.30 | 15.13 |

| Cond °C | Suction Mass Flow, g/s | | | | | | | | | | | | |
|------------|------------------------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| | -30.0 | -25.0 | -20.0 | -15.0 | -10.0 | -5.0 | 0.0 | 5.0 | 7.0 | 10.0 | 12.5 | 15.0 | 20.0 |
| 25.0 | 33.50 | 43.30 | 54.00 | 66.10 | 79.90 | 96.00 | 114.50 | 136.00 | 145.50 | 161.00 | | | |
| 30.0 | 30.00 | 41.20 | 53.00 | 65.90 | 80.40 | 96.80 | 115.50 | 137.00 | 146.50 | 162.00 | 175.50 | 190.00 | |
| 35.0 | | 37.70 | 50.80 | 64.80 | 80.00 | 97.00 | 116.00 | 138.00 | 147.50 | 162.50 | 176.00 | 190.50 | |
| 40.0 | | | 47.10 | 62.40 | 78.60 | 96.30 | 116.00 | 138.00 | 147.50 | 162.50 | 176.50 | 191.00 | 222.00 |
| 45.0 | | | | 58.40 | 75.80 | 94.50 | 115.00 | 137.50 | 147.00 | 162.50 | 176.00 | 190.50 | 222.00 |
| 50.0 | | | | | 71.50 | 91.30 | 112.50 | 136.00 | 145.50 | 161.50 | 175.00 | 190.00 | 222.00 |
| 55.0 | | | | | | 86.50 | 109.00 | 133.00 | 143.50 | 159.50 | 173.50 | 188.50 | 220.00 |
| 60.0 | | | | | | | 103.50 | 129.00 | 139.50 | 156.00 | 170.50 | 186.00 | 219.00 |
| 65.0 | | | | | | | | 123.00 | 134.00 | 151.50 | 166.50 | 182.50 | 216.00 |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|--|--|
| Displacement @ 50 Hz, m ³ /h | 22.1 |
| Length/Width, mm | 281/285 |
| Height, mm | 476 |
| Net Weight, kg | 57.2 |
| Stub Suction, inch | 1 1/8 |
| Stub Discharge, inch | 7/8 |
| Oil Quantity, l | 2.65 |
| 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 (0) |
| Sound Pressure @ 1m (HT), dBA | 63 |
| Sound Power (HT), dBA | 74 |
| Sound Power with Sound Shell (HT), dBA | 64 |
| Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed) | 7 / 54 / 18 °C at 50 Hz |
| PED Category | 2 |
| Max. Internal Free Volume, l | 10.5 |
| High Side PS gauge, bar | 32 |
| Low Side PS gauge, bar | 20 |
| Low Side TS Max., °C | 52 |
| Refrigerant's GWP | 1774 |
| Refrigerant's classification | A1 |

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

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 15.9 |
| Locked Rotor Current, A | 95 |
| Winding Resistance, ohm | 1.8 |
| Default Enclosure Class | IP 21 (IEC 34) |

ACCESSORIES INCLUDED

| | |
|----------------------------------|--------------------------------|
| Discharge Temperature Protection | ASTP Therm-O-Disc In Scroll |
| Enclosure Class | IP21 |
| Oil Charge | |
| Oil Service Valve | Schraeder Valve |
| Check Valve | Discharge Low Leak Check Valve |

ACCESSORIES OPTIONAL

| | |
|--------------------|--|
| Crankcase Heater | 90 W External |
| Enclosure Class | IP66 With Molded Plug |
| Mounting Grommets | Hard Mounts for Paralleling |
| Mounting Grommets | Rubber Grommet For Single |
| Adapter Kit | R1"1/4 -B 1"1/8 For TPTL for |
| Oil Control System | Parallel Operation |
| Sound Attenuation | ALCO Trax-Oil OM3 Sound Shell (12dBA) |

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 |
| TF5 | 200-220 V / 3~ / 50 Hz | 200 | | Y | 2.09 |
| TFE | 500 V / 3~ / 50 Hz | 500 | | Y | 0.80 |
| TW5 | 200-220 V / 3~ / 50 Hz | 200 | | Y | 2.30 |
| TFD | 460 V / 3~ / 60 Hz | 460 | | Y | 1.04 |
| TF5 | 200-230 V / 3~ / 60 Hz | 230 | | Y | 2.09 |
| TW7 | 380 V / 3~ / 60 Hz | 380 | | Y | 1.26 |
| TFE | 575 V / 3~ / 60 Hz | 575 | | Y | 0.80 |
| TF7 | 380 V / 3~ / 60 Hz | 380 | | Y | 1.26 |
| TW5 | 200-230 V / 3~ / 60 Hz | 230 | | Y | 2.30 |