



Minimum Evaporating Temp. With:

- 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 | 12.75 | 16.20 | 20.30 | 25.20 | 30.90 | 37.60 | 40.60 | 45.40 | 49.70 | 54.40 |
| 35.0 | 11.85 | 15.30 | 19.30 | 24.00 | 29.40 | 35.80 | 38.60 | 43.10 | 47.10 | 51.40 |
| 40.0 | 10.60 | 14.10 | 18.05 | 22.60 | 27.80 | 33.80 | 36.40 | 40.60 | 44.40 | 48.50 |
| 45.0 | | 12.70 | 16.65 | 21.00 | 26.00 | 31.70 | 34.20 | 38.10 | 41.70 | 45.50 |
| 50.0 | | | 15.10 | 19.40 | 24.20 | 29.50 | 31.90 | 35.60 | 39.00 | 42.50 |
| 55.0 | | | | 17.70 | 22.30 | 27.40 | 29.60 | 33.10 | 36.30 | 39.60 |
| 60.0 | | | | | 20.50 | 25.40 | 27.50 | 30.80 | 33.70 | 36.80 |
| 65.0 | | | | | 18.75 | 23.40 | 25.40 | 28.50 | 31.30 | 34.20 |
| 67.0 | | | | | | 22.70 | 24.60 | 27.70 | 30.40 | 33.20 |

50 Hz

ZRT144KCE-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 | 5.65 | 5.72 | 5.77 | 5.80 | 5.84 | 5.91 | 5.95 | 6.02 | 6.10 | 6.19 |
| 35.0 | 6.34 | 6.45 | 6.50 | 6.53 | 6.56 | 6.59 | 6.62 | 6.66 | 6.71 | 6.78 |
| 40.0 | 7.10 | 7.23 | 7.31 | 7.35 | 7.37 | 7.39 | 7.40 | 7.42 | 7.46 | 7.50 |
| 45.0 | | 8.09 | 8.20 | 8.26 | 8.28 | 8.29 | 8.30 | 8.31 | 8.32 | 8.35 |
| 50.0 | | | 9.17 | 9.26 | 9.30 | 9.31 | 9.31 | 9.32 | 9.32 | 9.33 |
| 55.0 | | | | 10.35 | 10.45 | 10.45 | 10.45 | 10.45 | 10.45 | 10.45 |
| 60.0 | | | | | 11.70 | 11.70 | 11.75 | 11.75 | 11.75 | 11.75 |
| 65.0 | | | | | 13.05 | 13.15 | 13.15 | 13.15 | 13.15 | 13.15 |
| 67.0 | | | | | | 13.75 | 13.75 | 13.75 | 13.80 | 13.80 |

| 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 | 11.56 | 11.66 | 11.73 | 11.77 | 11.82 | 11.90 | 11.95 | 12.05 | 12.15 | 12.27 |
| 35.0 | 12.49 | 12.62 | 12.70 | 12.74 | 12.78 | 12.82 | 12.85 | 12.91 | 12.98 | 13.07 |
| 40.0 | 13.51 | 13.69 | 13.80 | 13.85 | 13.88 | 13.91 | 13.92 | 13.96 | 14.00 | 14.06 |
| 45.0 | | 14.90 | 15.04 | 15.12 | 15.16 | 15.17 | 15.18 | 15.20 | 15.22 | 15.25 |
| 50.0 | | | 16.46 | 16.58 | 16.63 | 16.65 | 16.66 | 16.66 | 16.67 | 16.69 |
| 55.0 | | | | 18.23 | 18.33 | 18.36 | 18.37 | 18.38 | 18.38 | 18.39 |
| 60.0 | | | | | 20.27 | 20.33 | 20.35 | 20.36 | 20.36 | 20.37 |
| 65.0 | | | | | 22.47 | 22.59 | 22.62 | 22.64 | 22.65 | 22.66 |
| 67.0 | | | | | | 23.58 | 23.61 | 23.64 | 23.66 | 23.67 |

| 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 | 74.70 | 93.20 | 115.00 | 140.50 | 170.00 | 204.00 | 219.00 | 243.00 | 264.00 | 286.00 |
| 35.0 | 72.60 | 92.20 | 114.50 | 140.00 | 169.00 | 202.00 | 217.00 | 240.00 | 261.00 | 283.00 |
| 40.0 | 68.40 | 89.40 | 112.50 | 138.50 | 167.50 | 200.00 | 214.00 | 237.00 | 258.00 | 279.00 |
| 45.0 | | 85.10 | 109.50 | 136.00 | 165.00 | 197.50 | 212.00 | 234.00 | 254.00 | 275.00 |
| 50.0 | | | 105.00 | 132.50 | 162.00 | 195.00 | 209.00 | 231.00 | 251.00 | 271.00 |
| 55.0 | | | | 129.00 | 159.50 | 192.00 | 206.00 | 228.00 | 248.00 | 268.00 |
| 60.0 | | | | | 156.50 | 190.00 | 204.00 | 226.00 | 246.00 | 266.00 |
| 65.0 | | | | | 155.00 | 189.50 | 204.00 | 226.00 | 245.00 | 266.00 |
| 67.0 | | | | | | 189.50 | 204.00 | 227.00 | 246.00 | 267.00 |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|---|--|
| Displacement @ 50 Hz, m ³ /h | 34.0 |
| Length/Width, mm | 626/297 |
| Height, mm | 478 |
| Net Weight, kg | 93 |
| Gross Weight, kg | 113 |
| Stub Suction, inch | 1 1/8 |
| Stub Discharge, inch | 3/4 |
| Oil Quantity, l | 3.37 |
| 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 | 546 x 190.5 (22.4) |
| Sound Pressure @ 1m (HT), dBA | 64 |
| Sound Power (HT), dBA | 75 |
| Sound Power with Sound Shell (HT), dBA | 69 |
| Sound Conditions (HT, Temperatures: | 7 / 54 / 18 °C at 50 Hz |
| Evap./Cond./Suction at freq./speed) | |
| Max. Internal Free Volume, l | 8.10 |
| High Side PS gauge, bar | 29.5 |
| Low Side PS gauge, bar | 20 |
| Refrigerant's GWP | 1774 |
| Refrigerant's classification | A1 |

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

| | |
|------------------------------|----------------|
| Maximum Operating Current, A | 2 x 13 |
| Locked Rotor Current, A | 2 x 74 |
| Default Enclosure Class | IP 21 (IEC 34) |

ACCESSORIES INCLUDED

| | |
|----------------------------------|---------------------|
| Capacity Control | Capacity Steps 50% |
| Discharge Temperature Protection | Internal Thermodisk |

ACCESSORIES OPTIONAL

| | |
|------------------|-------------------|
| Crankcase Heater | 2 x 70 W External |
|------------------|-------------------|

50 Hz

ZRT144KCE-TFD

R407C Dew Point

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 |
| TFD | 460 V / 3~ / 60 Hz | 460 | | Y | 1.04 |