



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return — 10 K Suction Superheat
- 5 K Suction Superheat OEM envelope — 10 K Suction Superheat OEM envelope
- 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 |
| 10.0 | 9.26 | 11.40 | 14.05 | 17.25 | 21.10 | 25.70 | | | | | | | |
| 15.0 | 8.82 | 11.00 | 13.65 | 16.90 | 20.70 | 25.20 | 30.60 | | | | | | |
| 20.0 | 8.28 | 10.50 | 13.15 | 16.35 | 20.10 | 24.60 | 29.80 | 35.80 | | | | | |
| 25.0 | 7.65 | 9.90 | 12.55 | 15.70 | 19.40 | 23.80 | 28.90 | 34.70 | 37.30 | 41.50 | | | |
| 30.0 | 6.94 | 9.20 | 11.85 | 14.95 | 18.60 | 22.80 | 27.80 | 33.50 | 36.00 | 40.10 | 43.70 | 47.60 | |
| 35.0 | | 8.41 | 11.00 | 14.05 | 17.60 | 21.70 | 26.50 | 32.10 | 34.50 | 38.50 | 42.00 | 45.80 | |
| 40.0 | | | 10.10 | 13.10 | 16.50 | 20.50 | 25.20 | 30.50 | 32.90 | 36.70 | 40.10 | 43.70 | 51.70 |
| 45.0 | | | | 12.00 | 15.30 | 19.20 | 23.70 | 28.80 | 31.10 | 34.70 | 38.00 | 41.50 | 49.20 |
| 50.0 | | | | | 14.00 | 17.70 | 22.00 | 27.00 | 29.10 | 32.60 | 35.80 | 39.10 | 46.50 |
| 55.0 | | | | | | 16.15 | 20.20 | 24.90 | 27.00 | 30.40 | 33.40 | 36.60 | 43.60 |
| 60.0 | | | | | | | 18.30 | 22.80 | 24.80 | 27.90 | 30.80 | 33.80 | 40.60 |
| 65.0 | | | | | | | | 20.50 | 22.40 | 25.40 | 28.10 | 30.90 | 37.30 |

| 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 |
| 10.0 | 2.96 | 3.03 | 3.10 | 3.19 | 3.30 | 3.47 | | | | | | | |
| 15.0 | 3.40 | 3.46 | 3.52 | 3.58 | 3.67 | 3.79 | 3.97 | | | | | | |
| 20.0 | 3.84 | 3.91 | 3.96 | 4.01 | 4.08 | 4.17 | 4.30 | 4.48 | | | | | |
| 25.0 | 4.30 | 4.38 | 4.44 | 4.49 | 4.53 | 4.60 | 4.69 | 4.83 | 4.90 | 5.03 | | | |
| 30.0 | 4.79 | 4.90 | 4.97 | 5.02 | 5.05 | 5.10 | 5.16 | 5.26 | 5.32 | 5.41 | 5.51 | 5.63 | |
| 35.0 | | 5.46 | 5.55 | 5.61 | 5.65 | 5.68 | 5.72 | 5.79 | 5.83 | 5.90 | 5.97 | 6.06 | |
| 40.0 | | | 6.20 | 6.28 | 6.32 | 6.35 | 6.38 | 6.43 | 6.45 | 6.50 | 6.55 | 6.62 | 6.79 |
| 45.0 | | | | 7.03 | 7.09 | 7.12 | 7.15 | 7.18 | 7.19 | 7.23 | 7.26 | 7.31 | 7.43 |
| 50.0 | | | | | 7.96 | 8.00 | 8.03 | 8.05 | 8.06 | 8.08 | 8.11 | 8.14 | 8.23 |
| 55.0 | | | | | | 9.01 | 9.04 | 9.07 | 9.07 | 9.08 | 9.10 | 9.12 | 9.18 |
| 60.0 | | | | | | | 10.20 | 10.20 | 10.25 | 10.25 | 10.25 | 10.25 | 10.30 |
| 65.0 | | | | | | | | 11.55 | 11.55 | 11.55 | 11.55 | 11.55 | 11.60 |

| 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 |
| 10.0 | 9.50 | 9.55 | 9.60 | 9.67 | 9.78 | 9.93 | | | | | | | |
| 15.0 | 9.80 | 9.86 | 9.90 | 9.96 | 10.03 | 10.15 | 10.32 | | | | | | |
| 20.0 | 10.14 | 10.20 | 10.25 | 10.30 | 10.35 | 10.44 | 10.57 | 10.75 | | | | | |
| 25.0 | 10.53 | 10.61 | 10.67 | 10.71 | 10.76 | 10.82 | 10.91 | 11.05 | 11.13 | 11.26 | | | |
| 30.0 | 10.99 | 11.10 | 11.18 | 11.22 | 11.26 | 11.31 | 11.38 | 11.48 | 11.54 | 11.64 | 11.74 | 11.86 | |
| 35.0 | | 11.69 | 11.79 | 11.85 | 11.89 | 11.93 | 11.98 | 12.05 | 12.09 | 12.17 | 12.25 | 12.34 | |
| 40.0 | | | 12.52 | 12.61 | 12.66 | 12.69 | 12.73 | 12.78 | 12.81 | 12.87 | 12.93 | 13.00 | 13.19 |
| 45.0 | | | | 13.51 | 13.58 | 13.63 | 13.66 | 13.70 | 13.72 | 13.76 | 13.80 | 13.85 | 14.00 |
| 50.0 | | | | | 14.69 | 14.74 | 14.78 | 14.81 | 14.82 | 14.85 | 14.88 | 14.92 | 15.02 |
| 55.0 | | | | | | 16.06 | 16.11 | 16.14 | 16.15 | 16.17 | 16.19 | 16.22 | 16.29 |
| 60.0 | | | | | | | 17.67 | 17.71 | 17.72 | 17.74 | 17.75 | 17.77 | 17.82 |
| 65.0 | | | | | | | | 19.54 | 19.55 | 19.57 | 19.58 | 19.60 | 19.63 |

| 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 | |
| 10.0 | 47.40 | 57.60 | 69.80 | 84.60 | 102.00 | 122.50 | | | | | | | | |
| 15.0 | 46.90 | 57.70 | 70.50 | 85.80 | 103.50 | 124.50 | 149.00 | | | | | | | |
| 20.0 | 45.90 | 57.30 | 70.70 | 86.40 | 105.00 | 126.00 | 151.00 | 179.00 | | | | | | |
| 25.0 | 44.30 | 56.30 | 70.30 | 86.50 | 105.50 | 127.00 | 152.00 | 180.50 | 193.00 | 213.00 | | | | |
| 30.0 | 42.00 | 54.80 | 69.30 | 85.90 | 105.00 | 127.00 | 152.50 | 181.50 | 194.00 | 214.00 | 232.00 | 251.00 | | |
| 35.0 | | 52.50 | 67.60 | 84.80 | 104.50 | 127.00 | 152.50 | 181.50 | 194.00 | 215.00 | 233.00 | 252.00 | | |
| 40.0 | | | 65.20 | 82.90 | 103.00 | 125.50 | 151.50 | 181.00 | 194.00 | 214.00 | 233.00 | 252.00 | 294.00 | |
| 45.0 | | | | 80.20 | 100.50 | 124.00 | 150.00 | 180.00 | 192.50 | 213.00 | 232.00 | 251.00 | 294.00 | |
| 50.0 | | | | | 97.60 | 121.00 | 147.50 | 177.50 | 191.00 | 212.00 | 230.00 | 250.00 | 293.00 | |
| 55.0 | | | | | | 117.50 | 144.50 | 175.00 | 188.00 | 209.00 | 228.00 | 248.00 | 291.00 | |
| 60.0 | | | | | | | 140.00 | 171.00 | 184.50 | 206.00 | 224.00 | 245.00 | 288.00 | |
| 65.0 | | | | | | | | 166.00 | 179.50 | 201.00 | 220.00 | 241.00 | 285.00 | |

COMPRESSOR MECHANICAL AND PHYSICAL DATA

| | |
|---|--|
| Displacement @ 50 Hz, m ³ /h | 29.1 |
| Length/Width, mm | 264/285 |
| Height, mm | 533 |
| Net Weight, kg | 61.2 |
| Stub Suction, inch | 1 3/8 |
| Stub Discharge, inch | 7/8 |
| Oil Quantity, l | 3.25 |
| 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 | 66 |
| Sound Conditions (HT, Temperatures: | 7 / 54 / 18 °C at 50 Hz |
| Evap./Cond./Suction at freq./speed) | |
| PED Category | II |
| Max. Low Side Internal Free Volume, l | 12.6 |
| Max. High Side Internal Free Volume, l | 1.5 |
| Max. Internal Free Volume, l | 14.1 |
| High Side PS gauge, bar | 32 |
| Low Side PS gauge, bar | 20 |
| Low Side TS Max., °C | 52 |
| Low Side TS Min., °C | -35 |
| High Side TS Max., °C | 150 |
| High 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 | 19.6 |
| Locked Rotor Current, A | 118 |
| Winding Resistance, ohm | 1.23 |
| 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

| 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 |
| 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 |