



Minimum Evaporating Temp. With:

- █ 20 °C Suction Gas Return Liquid injection
- █ Maximum Evaporating Temperature

Suction Return Temperature 18.3°C

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW				
	-40.0	-35.0	-30.0	-25.0	-20.0
4.0	9.42	12.10	15.45	19.50	24.30
5.0	9.38	12.05	15.40	19.45	24.30
10.0	9.02	11.60	14.85	18.80	23.50
15.0	8.67	11.20	14.35	18.20	22.70
20.0	8.34	10.80	13.85	17.55	21.90
25.0	8.00	10.35	13.30	16.90	21.10
30.0	7.67	9.95	12.80	16.20	20.20
35.0	7.33	9.52	12.25	15.50	19.35
40.0	6.98	9.07	11.65	14.75	18.40
45.0	6.62	8.59	11.05	13.95	17.45
50.0					16.40
55.0					15.35

Cond °C	Power, kW				
	-40.0	-35.0	-30.0	-25.0	-20.0
4.0	3.76	4.09	4.39	4.71	5.10
5.0	3.83	4.16	4.46	4.79	5.18
10.0	4.33	4.69	5.03	5.38	5.80
15.0	4.77	5.16	5.53	5.91	6.36
20.0	5.18	5.60	6.00	6.41	6.89
25.0	5.58	6.04	6.46	6.91	7.41
30.0	6.00	6.49	6.95	7.42	7.95
35.0	6.48	7.01	7.50	8.00	8.55
40.0	7.04	7.60	8.12	8.65	9.23
45.0	7.71	8.31	8.86	9.42	10.05
50.0					10.95
55.0					12.05

Cond °C	Current at 400 V, A				
	-40.0	-35.0	-30.0	-25.0	-20.0
4.0	9.38	10.03	10.70	11.41	12.19
5.0	9.59	10.24	10.90	11.61	12.39
10.0	11.18	11.82	12.48	13.18	13.95
15.0	12.54	13.18	13.83	14.53	15.29
20.0	13.73	14.36	15.01	15.70	16.47
25.0	14.77	15.41	16.06	16.76	17.53
30.0	15.72	16.37	17.03	17.73	18.51
35.0	16.63	17.28	17.96	18.67	19.46
40.0	17.54	18.21	18.89	19.63	20.43
45.0	18.50	19.18	19.89	20.64	21.47
50.0					22.61
55.0					23.90

50 Hz

ZF54K5E-TFD

R407C Dew Point

Cond °C	Suction Mass Flow, g/s				
	-40.0	-35.0	-30.0	-25.0	-20.0
4.0	40.00	51.40	65.80	83.40	104.50
5.0	39.90	51.30	65.80	83.40	104.50
10.0	39.60	51.10	65.60	83.30	104.50
15.0	39.40	51.00	65.50	83.20	104.50
20.0	39.20	50.80	65.40	83.10	104.00
25.0	39.00	50.70	65.30	83.00	104.00
30.0	38.90	50.60	65.10	82.80	104.00
35.0	38.70	50.40	64.90	82.50	103.50
40.0	38.50	50.20	64.60	82.20	103.00
45.0	38.30	49.80	64.20	81.60	102.50
50.0					101.50
55.0					100.50

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	48.3
Length/Width, mm	280/280
Height, mm	552
Net Weight, kg	66.2
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
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	190 x 190 (0)
Sound Pressure @ 1m (LT), dBA	77
Sound Power (LT), dBA	88
Sound Conditions (LT, Temperatures:	-35 / 40 / 20 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	2
Max. Internal Free Volume, l	13.3
High Side PS gauge, bar	32
Low Side PS gauge, bar	22.6
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	31
Locked Rotor Current, A	168
Winding Resistance, ohm	0.78
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge line thermostat
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	93 W External
Liquid Injection	DTC Valve
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell
Rotalock valves	suction and discharge

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
TFC	200-240 V / 3~ / 50 Hz	200		Y	1.00
TFD	460 V / 3~ / 60 Hz	460		Y	1.04
TFC	208-230 V / 3~ / 60 Hz	220		Y	2.18