



Minimum Evaporating Temp. With:

- 20 °C Suction Gas Return Liquid injection
- Maximum Evaporating Temperature
- | Voltage limit -5% above -4°C

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	-15.0	-10.0	-5.0	0.0	5.0	7.0
4.0	9.53	11.95	15.00	18.65	23.10	28.30	34.40				
5.0	9.49	11.90	14.95	18.60	23.00	28.20	34.20				
10.0	9.13	11.50	14.40	17.90	22.10	27.00	32.80	39.50			
15.0	8.76	11.05	13.80	17.15	21.10	25.80	31.30	37.60	44.90		
20.0	8.37	10.55	13.20	16.35	20.10	24.60	29.80	35.80	42.60	50.40	
25.0	7.96	10.05	12.55	15.55	19.10	23.30	28.20	33.80	40.30	47.70	50.90
30.0	7.53	9.51	11.90	14.70	18.05	22.00	26.50	31.80	37.90	44.80	47.90
35.0	7.08	8.96	11.20	13.80	16.90	20.60	24.80	29.70	35.40	41.90	44.80
40.0	6.62	8.38	10.45	12.85	15.75	19.10	23.00	27.60	32.90	38.90	41.60
45.0	6.14	7.78	9.68	11.90	14.50	17.60	21.20	25.40	30.30	35.90	38.30
50.0	5.64	7.16	8.88	10.90	13.25	16.05	19.30	23.10	27.60	32.70	35.00
54.4	5.19	6.58	8.16	9.98	12.10	14.65	17.60	21.10			

50 Hz

ZF41K5E-TFD

R404A Dew Point

Cond °C	Power, kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
4.0	3.36	3.73	4.11	4.49	4.87	5.25	5.63				
5.0	3.38	3.76	4.14	4.52	4.90	5.27	5.65				
10.0	3.65	4.03	4.41	4.79	5.16	5.54	5.92	6.30			
15.0	3.95	4.33	4.71	5.09	5.48	5.86	6.24	6.62	7.01		
20.0	4.27	4.66	5.05	5.44	5.83	6.22	6.61	7.00	7.39	7.78	
25.0	4.63	5.04	5.44	5.84	6.24	6.64	7.04	7.44	7.84	8.24	8.40
30.0	5.03	5.44	5.86	6.27	6.69	7.10	7.52	7.94	8.35	8.77	8.93
35.0	5.45	5.89	6.32	6.75	7.19	7.62	8.06	8.49	8.92	9.36	9.53
40.0	5.91	6.37	6.82	7.28	7.74	8.19	8.65	9.10	9.56	10.00	10.20
45.0	6.41	6.89	7.37	7.85	8.33	8.81	9.30	9.78	10.25	10.75	10.95
50.0	6.94	7.45	7.96	8.47	8.98	9.49	10.00	10.50	11.00	11.55	11.75
54.4	7.44	7.98	8.52	9.06	9.60	10.15	10.65	11.20			

Cond °C	Current at 400 V, A										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
4.0	10.30	10.80	11.32	11.85	12.39	12.95	13.52				
5.0	10.33	10.84	11.36	11.89	12.43	12.99	13.56				
10.0	10.70	11.21	11.73	12.27	12.82	13.39	13.96	14.55			
15.0	11.11	11.63	12.17	12.72	13.28	13.86	14.45	15.05	15.67		
20.0	11.56	12.10	12.66	13.23	13.82	14.42	15.04	15.66	16.30	16.95	
25.0	12.06	12.63	13.22	13.83	14.44	15.08	15.72	16.38	17.05	17.74	18.01
30.0	12.62	13.23	13.86	14.50	15.16	15.83	16.52	17.22	17.93	18.65	18.95
35.0	13.25	13.90	14.57	15.26	15.97	16.69	17.42	18.17	18.93	19.71	20.02
40.0	13.94	14.65	15.37	16.12	16.88	17.65	18.44	19.25	20.07	20.90	21.24
45.0	14.71	15.48	16.27	17.08	17.90	18.74	19.59	20.46	21.35	22.25	22.61
50.0	15.57	16.41	17.26	18.14	19.04	19.95	20.88	21.82	22.78	23.75	24.15
54.4	16.39	17.30	18.23	19.17	20.14	21.12	22.12	23.13			

Cond °C	Suction Mass Flow, g/s										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
4.0	51.20	64.50	81.00	101.50	126.00	155.50	190.00				
5.0	51.20	64.50	81.00	101.50	126.00	155.50	190.00				
10.0	51.30	64.60	81.20	101.50	126.00	155.00	189.50	230.00			
15.0	51.20	64.70	81.30	101.50	125.50	154.50	189.00	229.00	276.00		
20.0	51.10	64.70	81.20	101.50	125.50	154.00	188.00	228.00	275.00	329.00	
25.0	51.00	64.60	81.10	101.00	124.50	153.00	186.50	226.00	273.00	327.00	352.00
30.0	50.80	64.40	80.80	100.50	124.00	152.00	185.00	224.00	271.00	325.00	349.00
35.0	50.50	64.10	80.30	99.70	123.00	150.50	183.50	222.00	268.00	322.00	347.00
40.0	50.10	63.70	79.80	98.90	121.50	149.00	181.50	220.00	265.00	320.00	344.00
45.0	49.70	63.20	79.00	97.80	120.00	147.00	179.00	217.00	262.00	316.00	341.00
50.0	49.20	62.70	78.20	96.60	118.50	144.50	176.00	214.00	259.00	313.00	338.00
54.4	48.70	62.10	77.50	95.40	117.00	142.50	173.50	211.00			

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	35.3
Length/Width, mm	280/280
Height, mm	534
Net Weight, kg	63.1
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	69
Sound Power (LT), dBA	80
Sound Power with Sound Shell (LT), dBA	68
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
Refrigerant's GWP	3922
Refrigerant's classification	A1

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

Maximum Operating Current, A	29
Locked Rotor Current, A	118
Winding Resistance, ohm	1.24
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Discharge line thermostat
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	66 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