



Minimum Evaporating Temp. With:

- 25 °C Suction Gas Return Liquid injection
- Maximum Evaporating Temperature

Suction Return Temperature 20.0°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
10.0	9.36	11.95	15.00	18.60	22.80	27.80					
15.0	8.96	11.45	14.40	17.85	21.90	26.50	31.90				
20.0	8.56	10.95	13.75	17.05	20.80	25.30	30.40	36.30			
25.0	8.16	10.45	13.10	16.20	19.80	24.00	28.80	34.40	40.70		
30.0	7.74	9.93	12.45	15.35	18.70	22.60	27.20	32.40	38.30	45.10	48.10
35.0	7.30	9.37	11.75	14.45	17.60	21.20	25.40	30.30	35.90	42.30	45.10
40.0	6.82	8.78	10.95	13.50	16.40	19.75	23.70	28.20	33.40	39.30	41.90
45.0	6.31	8.13	10.15	12.45	15.15	18.20	21.80	26.00	30.80	36.30	38.70
50.0	5.74	7.43	9.29	11.40	13.80	16.60	19.85	23.70	28.10	33.10	35.40
55.0	5.11	6.67	8.35	10.25	12.40	14.90	17.80	21.20	25.20	29.90	31.90
60.0						13.10	15.70	18.70	22.30	26.50	28.30

50 Hz

ZF40K4E-TWD

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
10.0	4.14	4.39	4.66	4.98	5.33	5.71					
15.0	4.52	4.78	5.06	5.38	5.73	6.11	6.51				
20.0	4.94	5.22	5.52	5.84	6.19	6.56	6.96	7.39			
25.0	5.40	5.70	6.02	6.35	6.71	7.08	7.48	7.89	8.33		
30.0	5.90	6.23	6.57	6.92	7.29	7.67	8.06	8.47	8.89	9.33	9.51
35.0	6.44	6.80	7.16	7.54	7.92	8.31	8.71	9.11	9.53	9.95	10.15
40.0	7.02	7.41	7.81	8.20	8.60	9.01	9.41	9.82	10.25	10.65	10.80
45.0	7.62	8.06	8.49	8.92	9.34	9.76	10.20	10.60	11.00	11.40	11.60
50.0	8.26	8.74	9.22	9.68	10.15	10.55	11.00	11.45	11.85	12.25	12.45
55.0	8.94	9.47	9.98	10.50	10.95	11.45	11.90	12.35	12.75	13.20	13.35
60.0						12.35	12.85	13.30	13.75	14.15	14.30

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
10.0	11.11	11.33	11.59	11.88	12.23	12.62					
15.0	11.45	11.70	11.98	12.29	12.65	13.04	13.49				
20.0	11.84	12.12	12.43	12.77	13.14	13.55	13.99	14.48			
25.0	12.28	12.61	12.95	13.32	13.71	14.13	14.59	15.08	15.61		
30.0	12.79	13.16	13.55	13.95	14.37	14.81	15.28	15.77	16.30	16.86	17.10
35.0	13.35	13.78	14.21	14.65	15.11	15.57	16.06	16.57	17.10	17.66	17.89
40.0	13.98	14.47	14.95	15.44	15.93	16.43	16.94	17.46	18.01	18.57	18.81
45.0	14.68	15.23	15.77	16.31	16.84	17.38	17.92	18.47	19.03	19.60	19.84
50.0	15.45	16.07	16.68	17.27	17.85	18.43	19.00	19.58	20.16	20.75	20.99
55.0	16.30	16.99	17.66	18.32	18.95	19.58	20.19	20.80	21.41	22.02	22.26
60.0						20.83	21.49	22.14	22.78	23.42	23.67

50 Hz

ZF40K4E-TWD

R404A Dew Point

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
10.0	52.10	66.70	84.00	104.50	129.00	158.00					
15.0	52.00	66.60	84.00	104.50	129.00	157.50	191.00				
20.0	51.90	66.60	84.00	104.50	128.50	156.50	190.00	229.00			
25.0	51.80	66.60	83.90	104.00	128.00	156.00	189.00	227.00	273.00		
30.0	51.70	66.50	83.70	104.00	127.50	155.00	187.50	226.00	271.00	323.00	347.00
35.0	51.50	66.30	83.40	103.00	126.50	154.00	186.00	224.00	269.00	321.00	345.00
40.0	51.10	65.90	82.80	102.50	125.50	152.00	184.00	222.00	266.00	318.00	342.00
45.0	50.40	65.30	82.00	101.00	123.50	150.00	181.50	219.00	263.00	316.00	339.00
50.0	49.40	64.20	80.80	99.70	121.50	147.50	178.50	216.00	260.00	312.00	336.00
55.0	47.90	62.80	79.00	97.60	119.00	144.50	175.00	212.00	256.00	309.00	333.00
60.0						141.00	171.50	208.00	252.00	306.00	331.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	35.6
Length/Width, mm	316/368
Height, mm	532
Net Weight, kg	103
Gross Weight, kg	110
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Stub Injection, inch	1/4
Oil Quantity, l	4.14
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	220 x 220 (22.4)
Sound Pressure @ 1m (LT), dBA	72
Sound Power (LT), dBA	83
Sound Power with Sound Shell (LT), dBA	72
Sound Conditions (LT, Temperatures: Evap./Cond./Suction at freq./speed)	-35 / 40 / 20 °C at 50 Hz
PED Category	2
Internal Free Volume, l	20.2
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	25.1
Locked Rotor Current, A	167
Winding Resistance, ohm	0.83
Default Enclosure Class	IP 54 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	Internal Thermistor
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	49 W External
Liquid Injection	Capillary Tube
Mounting Grommets	Hard Mounts for Paralleling
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
TWD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TWC	200 V / 3~ / 50 Hz	200		Y	2.09
TWE	500 V / 3~ / 50 Hz	500		Y	0.80
TWR	220-240 V / 3~ / 50 Hz	230		Y	1.73
TWD	460 V / 3~ / 60 Hz	460		Y	1.04
TWC	208-230 V / 3~ / 60 Hz	230		Y	2.09
TWE	575 V / 3~ / 60 Hz	575		Y	0.80
TW7	380 V / 3~ / 60 Hz	380		Y	1.26