



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- 20 °C Suction Gas Return
- 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
22.0	3.92									
25.0	3.79	4.93								
30.0	3.58	4.69	5.90	7.29						
35.0	3.39	4.46	5.62	6.93	8.48	10.30	11.15			
40.0	3.22	4.25	5.35	6.59	8.04	9.77	10.55	11.85	13.00	14.30
45.0	3.05	4.04	5.09	6.26	7.62	9.24	9.98	11.20	12.30	13.50
50.0		3.84	4.83	5.93	7.20	8.72	9.41	10.55	11.60	12.75
55.0			4.57	5.60	6.78	8.19	8.84	9.90	10.90	11.95
60.0			4.30	5.26	6.36	7.67	8.26	9.25	10.15	11.20
65.0				4.91	5.93	7.13	7.69	8.60	9.45	10.40
70.0					5.48	6.59	7.09	7.94	8.73	9.61
75.0					5.02	6.02	6.48	7.26	7.98	8.80

50 Hz

ZRD61KRE-TFD

R134a

Cond °C	Power, kW									
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0
22.0	1.47									
25.0	1.54	1.64								
30.0	1.66	1.78	1.86	1.96						
35.0	1.80	1.92	2.02	2.11	2.21	2.34	2.40			
40.0	1.92	2.08	2.19	2.29	2.38	2.50	2.55	2.65	2.75	2.87
45.0	2.06	2.24	2.37	2.48	2.58	2.68	2.73	2.82	2.91	3.01
50.0		2.41	2.57	2.69	2.79	2.90	2.94	3.02	3.10	3.19
55.0			2.77	2.91	3.03	3.14	3.18	3.26	3.33	3.41
60.0			2.98	3.15	3.28	3.40	3.44	3.52	3.59	3.66
65.0				3.39	3.55	3.68	3.73	3.81	3.87	3.95
70.0					3.84	3.99	4.04	4.12	4.19	4.26
75.0					4.14	4.31	4.37	4.46	4.54	4.61

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
22.0	3.56									
25.0	3.69	3.88								
30.0	3.92	4.13	4.28	4.43						
35.0	4.15	4.38	4.55	4.69	4.85	5.07	5.18			
40.0	4.38	4.65	4.84	4.98	5.12	5.31	5.40	5.58	5.75	5.97
45.0	4.61	4.92	5.13	5.28	5.42	5.58	5.67	5.81	5.96	6.15
50.0		5.18	5.43	5.60	5.74	5.89	5.96	6.08	6.21	6.37
55.0			5.72	5.92	6.07	6.21	6.27	6.39	6.50	6.63
60.0			6.02	6.25	6.41	6.55	6.61	6.71	6.81	6.93
65.0				6.57	6.76	6.91	6.97	7.06	7.15	7.26
70.0					7.11	7.28	7.34	7.43	7.51	7.61
75.0					7.46	7.65	7.71	7.81	7.89	7.97

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
22.0	23.90									
25.0	23.70	30.30								
30.0	23.50	30.10	37.10	45.00						
35.0	23.40	30.10	37.10	44.80	53.70	64.00	68.60			
40.0	23.40	30.20	37.10	44.80	53.50	63.60	68.10	75.50	82.20	89.50
45.0	23.50	30.40	37.30	44.80	53.40	63.30	67.70	75.00	81.60	88.80
50.0		30.60	37.50	44.90	53.30	63.00	67.40	74.60	81.10	88.20
55.0			37.80	45.10	53.30	62.90	67.10	74.10	80.60	87.60
60.0			38.20	45.40	53.40	62.70	66.90	73.80	80.10	87.00
65.0				45.70	53.50	62.60	66.70	73.40	79.70	86.50
70.0					53.60	62.50	66.50	73.10	79.20	86.00
75.0					53.80	62.40	66.30	72.80	78.90	85.60

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	14.4
Length/Width, mm	246/257
Height, mm	481
Net Weight, kg	38.1
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Oil Quantity, l	1.89
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 (19)
Sound Pressure @ 1m (MT), dBA	67
Sound Power (MT), dBA	78
Sound Conditions (MT, Temperatures: Evap./Cond./Suction at freq./speed)	-10 / 45 / 20 °C at 50 Hz
Max. Internal Free Volume, l	4.20
High Side PS gauge, bar	29
Low Side PS gauge, bar	21
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
Refrigerant's GWP	1430
Refrigerant's classification	A1

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

Maximum Operating Current, A	11.3
Locked Rotor Current, A	64
Winding Resistance, ohm	2.8
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	External thermistor
Discharge Temperature Protection	NTC sensor

ACCESSORIES OPTIONAL

Crankcase Heater	70 W External
Mounting Grommets	Standard
Mounting Grommets	Hard Mounts for Paralleling
Mounting Grommets	Rubber Grommet For Single
Solenoid valve	Standard
Digital Control	24V AC
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10dBA)
Valve Coil	220V
Valve Coil	24V AC
Solenoid Valve Kit	220 V Ac 12" lead Length
Solenoid Valve Kit	24 V Ac 12" lead Length
Digital Tubing Kit	220 V 0.3m Rotalock
Digital Tubing Kit	24 V 0.3m Rotalock
Digital Control Kit	EC2-552
Digital Control Kit	EC3-652
Digital Driver	EC3-D13

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