



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	20.0	25.0
14.0	4.69											
15.0	4.64											
20.0	4.38	5.53	6.91									
25.0	4.12	5.23	6.55	8.13	9.99							
30.0	3.86	4.92	6.19	7.70	9.49	11.60	12.50					
35.0	3.60	4.62	5.83	7.27	8.98	11.00	11.85	13.30	14.60	16.00		
40.0	3.34	4.31	5.46	6.84	8.46	10.40	11.25	12.60	13.85	15.20	18.20	
45.0	3.07	4.00	5.09	6.40	7.94	9.77	10.60	11.90	13.10	14.40	17.25	20.50
50.0		3.69	4.72	5.96	7.42	9.15	9.93	11.20	12.30	13.55	16.30	19.40
55.0			4.35	5.52	6.90	8.54	9.27	10.45	11.55	12.70	15.30	18.30
60.0			3.98	5.07	6.37	7.92	8.61	9.73	10.75	11.85	14.35	17.20
65.0				4.63	5.84	7.29	7.94	9.00	9.97	11.00	13.35	16.10
70.0					5.31	6.66	7.27	8.27	9.18	10.15	12.40	
75.0					4.78	6.03	6.60	7.53	8.38	9.31		

50 Hz

ZRD72KRE-TFD

R450A Dew Point

Cond °C	Power, kW											
	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0	25.0
14.0	1.32											
15.0	1.34											
20.0	1.46	1.53	1.63									
25.0	1.58	1.64	1.74	1.85	1.98							
30.0	1.70	1.78	1.86	1.96	2.09	2.23	2.29					
35.0	1.85	1.92	2.00	2.10	2.21	2.35	2.40	2.50	2.58	2.66		
40.0	2.02	2.08	2.16	2.25	2.36	2.49	2.54	2.63	2.70	2.78	2.95	
45.0	2.21	2.27	2.35	2.44	2.54	2.66	2.71	2.79	2.86	2.93	3.09	3.27
50.0		2.50	2.57	2.65	2.75	2.86	2.91	2.98	3.05	3.12	3.27	3.43
55.0			2.82	2.90	2.99	3.10	3.14	3.21	3.27	3.34	3.48	3.63
60.0			3.12	3.19	3.28	3.38	3.42	3.48	3.54	3.60	3.73	3.87
65.0				3.53	3.61	3.70	3.74	3.80	3.86	3.91	4.03	4.15
70.0					4.00	4.08	4.12	4.17	4.22	4.27	4.38	
75.0					4.43	4.51	4.55	4.60	4.64	4.69		

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	20.0	25.0
14.0	3.81											
15.0	3.85											
20.0	4.07	4.19	4.34									
25.0	4.27	4.39	4.52	4.68	4.87							
30.0	4.48	4.58	4.71	4.86	5.03	5.22	5.31					
35.0	4.70	4.79	4.91	5.04	5.20	5.38	5.46	5.58	5.69	5.80		
40.0	4.93	5.02	5.12	5.25	5.40	5.57	5.64	5.75	5.85	5.96	6.18	
45.0	5.19	5.27	5.37	5.49	5.63	5.78	5.85	5.96	6.05	6.15	6.36	6.58
50.0		5.57	5.66	5.77	5.90	6.04	6.11	6.21	6.30	6.39	6.58	6.79
55.0			6.00	6.10	6.22	6.36	6.42	6.51	6.59	6.68	6.86	7.06
60.0			6.39	6.49	6.60	6.73	6.79	6.88	6.96	7.04	7.21	7.39
65.0				6.95	7.06	7.18	7.24	7.32	7.39	7.47	7.63	7.80
70.0					7.60	7.71	7.76	7.84	7.91	7.98	8.14	
75.0					8.23	8.34	8.39	8.46	8.53	8.59		

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	20.0	25.0
14.0	28.30											
15.0	28.20											
20.0	27.80	34.30	42.00									
25.0	27.40	33.90	41.60	50.50	60.80							
30.0	26.90	33.50	41.20	50.10	60.40	72.20	77.30					
35.0	26.40	33.00	40.70	49.60	59.80	71.60	76.80	85.00	92.40	100.00		
40.0	25.80	32.50	40.20	49.10	59.30	71.10	76.20	84.50	91.80	99.60	117.00	
45.0	25.20	31.90	39.60	48.50	58.70	70.40	75.60	83.80	91.20	99.00	116.00	135.50
50.0		31.30	39.00	47.90	58.10	69.80	74.90	83.20	90.60	98.40	115.50	135.00
55.0			38.40	47.20	57.40	69.10	74.30	82.50	89.90	97.70	115.00	134.00
60.0			37.70	46.50	56.70	68.40	73.60	81.80	89.20	97.10	114.50	133.50
65.0				45.80	56.00	67.70	72.80	81.10	88.50	96.40	113.50	133.50
70.0					55.20	66.90	72.10	80.40	87.80	95.80	113.00	
75.0					54.40	66.20	71.40	79.70	87.20	95.20		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	17.1
Length/Width, mm	246/257
Height, mm	481
Net Weight, kg	39.9
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 (HT), dBA	61
Sound Power (HT), dBA	72
Sound Power with Sound Shell (HT), dBA	67
Sound Conditions (HT, Temperatures:	7 / 54 / 18 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
Max. Internal Free Volume, l	5.90
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	605
Refrigerant's classification	A1

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

Maximum Operating Current, A	12.1
Locked Rotor Current, A	74
Winding Resistance, ohm	2.27
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	External thermistor
Discharge Temperature Protection	NTC sensor

ACCESSORIES OPTIONAL

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

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