



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	3.98											
15.0	3.93											
20.0	3.72	4.67	5.82									
25.0	3.50	4.42	5.52	6.84	8.39							
30.0	3.27	4.16	5.21	6.47	7.96	9.72	10.50					
35.0	3.05	3.89	4.90	6.10	7.53	9.20	9.95	11.15	12.25	13.45		
40.0	2.83	3.63	4.59	5.73	7.09	8.69	9.40	10.55	11.60	12.75	15.25	
45.0	2.60	3.36	4.27	5.35	6.64	8.16	8.84	9.95	10.95	12.05	14.45	17.20
50.0		3.10	3.95	4.97	6.19	7.63	8.28	9.33	10.30	11.30	13.60	16.25
55.0			3.63	4.59	5.74	7.10	7.71	8.71	9.61	10.60	12.80	15.30
60.0			3.32	4.21	5.28	6.56	7.14	8.08	8.94	9.86	11.95	14.35
65.0				3.83	4.83	6.03	6.57	7.45	8.26	9.13	11.10	13.40
70.0					4.38	5.49	5.99	6.82	7.58	8.40	10.25	
75.0					3.92	4.95	5.42	6.19	6.89	7.66		

50 Hz

ZRD61KRE-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	1.19											
15.0	1.20											
20.0	1.27	1.32	1.36									
25.0	1.35	1.40	1.46	1.50	1.54							
30.0	1.44	1.50	1.56	1.62	1.66	1.71	1.72					
35.0	1.56	1.62	1.68	1.74	1.80	1.85	1.87	1.90	1.92	1.94		
40.0	1.70	1.76	1.82	1.89	1.95	2.00	2.03	2.06	2.08	2.11	2.16	
45.0	1.85	1.92	1.98	2.05	2.12	2.18	2.20	2.24	2.27	2.30	2.35	2.41
50.0		2.10	2.17	2.23	2.30	2.37	2.39	2.43	2.47	2.50	2.56	2.63
55.0			2.36	2.44	2.51	2.58	2.61	2.65	2.68	2.72	2.79	2.86
60.0			2.59	2.66	2.73	2.81	2.84	2.88	2.92	2.96	3.04	3.11
65.0				2.90	2.98	3.06	3.09	3.14	3.18	3.22	3.30	3.39
70.0					3.25	3.33	3.37	3.42	3.46	3.50	3.59	
75.0					3.55	3.63	3.66	3.72	3.76	3.81		

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	3.83											
20.0	3.97	4.05	4.12									
25.0	4.12	4.19	4.26	4.33	4.39							
30.0	4.26	4.34	4.41	4.48	4.54	4.60	4.62					
35.0	4.41	4.49	4.57	4.64	4.71	4.77	4.79	4.83	4.86	4.89		
40.0	4.58	4.66	4.74	4.81	4.88	4.95	4.98	5.02	5.05	5.08	5.14	
45.0	4.76	4.84	4.92	5.00	5.08	5.16	5.18	5.23	5.26	5.30	5.37	5.44
50.0		5.05	5.14	5.22	5.30	5.38	5.41	5.46	5.50	5.54	5.62	5.69
55.0			5.37	5.46	5.55	5.63	5.67	5.72	5.77	5.81	5.90	5.98
60.0			5.64	5.73	5.83	5.92	5.96	6.02	6.06	6.11	6.21	6.30
65.0				6.04	6.14	6.24	6.28	6.35	6.40	6.45	6.56	6.67
70.0					6.50	6.61	6.65	6.72	6.78	6.83	6.95	
75.0					6.90	7.02	7.06	7.14	7.20	7.26		

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	24.00											
15.0	23.90											
20.0	23.60	29.00	35.40									
25.0	23.20	28.70	35.00	42.50	51.10							
30.0	22.80	28.30	34.60	42.10	50.70	60.50	64.90					
35.0	22.40	27.80	34.20	41.60	50.20	60.00	64.40	71.30	77.50	84.00		
40.0	21.90	27.40	33.70	41.10	49.60	59.50	63.80	70.70	76.90	83.50	97.80	
45.0	21.40	26.90	33.20	40.60	49.10	58.90	63.20	70.10	76.30	82.80	97.20	113.50
50.0		26.30	32.60	40.00	48.40	58.20	62.50	69.40	75.60	82.20	96.60	113.00
55.0			32.00	39.30	47.80	57.50	61.80	68.70	74.90	81.40	95.90	112.00
60.0			31.40	38.60	47.00	56.70	61.00	67.90	74.10	80.70	95.20	111.50
65.0				37.90	46.20	55.90	60.20	67.10	73.30	79.90	94.50	111.00
70.0					45.40	55.10	59.40	66.30	72.50	79.10	93.80	
75.0					44.60	54.30	58.50	65.50	71.70	78.40		

### COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/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 (HT), dBA	65
Sound Power (HT), dBA	76
Sound Power with Sound Shell (HT), dBA	70
Sound Conditions (HT, Temperatures:	7 / 54 / 18 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
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	605
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**

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

### **MOTOR OPTIONS**

<b>Motor Code</b>	<b>Power Supply</b>	<b>Nominal Voltage, V</b>	<b>Start Connection</b>	<b>DOL Connection</b>	<b>Amps Factor</b>
TFD	380-420 V / 3~ / 50 Hz	400		Y	1.00
TFD	460 V / 3~ / 60 Hz	460		Y	1.04