



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	5.81											
15.0	5.74											
20.0	5.42	6.87	8.60									
25.0	5.09	6.48	8.15	10.15	12.50							
30.0	4.76	6.09	7.69	9.59	11.85	14.50	15.65					
35.0	4.42	5.70	7.22	9.04	11.20	13.70	14.85	16.65	18.30	20.10		
40.0	4.08	5.30	6.75	8.48	10.55	12.95	14.00	15.75	17.30	19.00	22.80	
45.0	3.74	4.90	6.28	7.92	9.86	12.15	13.15	14.80	16.30	17.95	21.50	25.60
50.0		4.50	5.80	7.35	9.18	11.35	12.30	13.90	15.30	16.85	20.30	24.20
55.0			5.32	6.77	8.50	10.55	11.45	12.95	14.30	15.75	19.00	22.80
60.0			4.84	6.20	7.82	9.74	10.60	12.00	13.30	14.65	17.75	21.30
65.0				5.62	7.13	8.93	9.74	11.05	12.25	13.55	16.50	19.85
70.0					6.45	8.12	8.88	10.10	11.25	12.45	15.20	
75.0					5.76	7.31	8.01	9.15	10.20	11.35		

50 Hz

ZRD92KRE-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	1.76											
15.0	1.78											
20.0	1.90	1.97	2.04									
25.0	2.03	2.11	2.19	2.26	2.34							
30.0	2.18	2.27	2.35	2.43	2.51	2.59	2.63					
35.0	2.36	2.45	2.54	2.62	2.71	2.79	2.83	2.88	2.93	2.98		
40.0	2.56	2.66	2.75	2.84	2.93	3.01	3.05	3.11	3.16	3.21	3.32	
45.0	2.78	2.89	2.99	3.08	3.17	3.26	3.30	3.36	3.41	3.46	3.57	3.70
50.0		3.15	3.26	3.36	3.45	3.54	3.58	3.64	3.69	3.74	3.85	3.98
55.0			3.56	3.66	3.76	3.86	3.89	3.95	4.00	4.06	4.17	4.29
60.0			3.89	4.00	4.10	4.20	4.24	4.30	4.35	4.41	4.52	4.64
65.0				4.38	4.48	4.58	4.62	4.69	4.74	4.79	4.90	5.02
70.0					4.90	5.00	5.05	5.11	5.16	5.21	5.33	
75.0					5.36	5.47	5.51	5.57	5.63	5.68		

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	5.34											
15.0	5.39											
20.0	5.60	5.71	5.80									
25.0	5.81	5.92	6.01	6.11	6.20							
30.0	6.02	6.13	6.23	6.32	6.42	6.51	6.55					
35.0	6.24	6.35	6.45	6.55	6.64	6.74	6.78	6.84	6.90	6.95		
40.0	6.46	6.58	6.69	6.79	6.88	6.98	7.02	7.09	7.14	7.20	7.32	
45.0	6.72	6.84	6.95	7.05	7.15	7.25	7.30	7.36	7.41	7.47	7.59	7.73
50.0		7.12	7.24	7.35	7.45	7.56	7.60	7.67	7.72	7.78	7.90	8.04
55.0			7.57	7.68	7.79	7.90	7.95	8.01	8.07	8.13	8.25	8.39
60.0			7.95	8.07	8.18	8.30	8.34	8.41	8.47	8.53	8.66	8.80
65.0				8.50	8.63	8.74	8.79	8.86	8.92	8.99	9.12	9.26
70.0					9.13	9.26	9.31	9.38	9.44	9.51	9.64	
75.0					9.70	9.84	9.89	9.97	10.04	10.10		

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	35.00											
15.0	34.90											
20.0	34.40	42.60	52.30									
25.0	33.80	42.10	51.70	63.00	76.00							
30.0	33.10	41.50	51.10	62.40	75.30	90.20	96.70					
35.0	32.40	40.80	50.40	61.60	74.60	89.40	95.90	106.50	115.50	125.50		
40.0	31.60	40.00	49.70	60.90	73.80	88.60	95.10	105.50	114.50	124.50	146.00	
45.0	30.70	39.10	48.80	60.00	72.80	87.60	94.10	104.50	113.50	123.50	145.00	169.00
50.0		38.20	47.90	59.00	71.90	86.60	93.00	103.50	112.50	122.50	144.00	168.00
55.0			46.90	58.00	70.80	85.40	91.90	102.00	111.50	121.50	143.00	167.00
60.0			45.80	56.90	69.60	84.20	90.60	101.00	110.00	120.00	141.50	166.00
65.0				55.60	68.30	82.90	89.30	99.60	109.00	118.50	140.50	164.50
70.0					67.00	81.50	87.90	98.30	107.50	117.50	139.00	
75.0					65.50	80.10	86.50	96.90	106.00	116.00		

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	21.4
Length/Width, mm	246/257
Height, mm	481
Net Weight, kg	43.1
Stub Suction, inch	7/8
Stub Discharge, inch	3/4
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	64
Sound Power (HT), dBA	75
Sound Conditions (HT, Temperatures: Evap./Cond./Suction at freq./speed)	7 / 54 / 18 °C at 50 Hz
Max. Internal Free Volume, l	5.70
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	15.9
Locked Rotor Current, A	102
Winding Resistance, ohm	1.72
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	ASTP Therm-O-Disc In Scroll
Oil Charge	
Digital Control	Integrated Solenoid Valve
Discharge Temperature Protection	Internal Thermistor
Enclosure Class	IP21
Mounting Grommets	Rubber Grommet For Single
Check Valve	Discharge Low Leak Check Valve

ACCESSORIES OPTIONAL

Mounting Grommets	Standard
Mounting Grommets	Hard Mounts for Paralleling
Digital Control	Digital Valve Coil 230V
Digital Control	Digital Valve Coil 24V
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (12dBA)
Crankcase Heater	66 W External
Crankcase Heater	70 W External
Sound Attenuation	Sound Shell (10dBA)
Rotalock valves	suction and discharge

MOTOR OPTIONS

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