



Minimum Evaporating Temp. With:	
— 25 °C Suction Gas Return	— 10 K Suction Superheat
— 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
27.0	6.21	7.93	9.97	12.50	15.60	19.45	21.20	24.10	26.80	29.80
30.0	6.16	7.83	9.81	12.20	15.15	18.85	20.50	23.30	25.90	28.80
35.0	5.94	7.58	9.46	11.70	14.45	17.85	19.40	22.00	24.40	27.10
40.0	5.57	7.21	9.03	11.15	13.75	16.90	18.35	20.70	23.00	25.40
45.0		6.71	8.50	10.55	12.95	15.90	17.25	19.50	21.60	23.90
50.0			7.89	9.87	12.15	14.95	16.20	18.30	20.20	22.40
55.0				9.14	11.35	13.95	15.15	17.10	18.90	20.90
60.0					10.50	13.00	14.15	15.95	17.65	19.50
65.0					9.65	12.05	13.10	14.85	16.45	18.20

50 Hz

ZRD72KCE-TFD

R407C 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
27.0	2.64	2.73	2.77	2.81	2.86	2.98	3.04	3.17	3.31	3.49
30.0	2.84	2.94	2.99	3.03	3.09	3.21	3.27	3.41	3.55	3.72
35.0	3.17	3.28	3.34	3.39	3.46	3.58	3.64	3.77	3.92	4.09
40.0	3.51	3.63	3.70	3.76	3.83	3.96	4.02	4.16	4.30	4.47
45.0		4.02	4.10	4.17	4.24	4.37	4.44	4.57	4.71	4.88
50.0			4.55	4.62	4.70	4.83	4.90	5.03	5.16	5.33
55.0				5.15	5.23	5.36	5.43	5.55	5.69	5.85
60.0					5.85	5.97	6.04	6.17	6.30	6.46
65.0					6.57	6.69	6.76	6.88	7.01	7.17

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
27.0	5.48	5.62	5.76	5.92	6.12	6.35	6.46	6.65	6.82	7.02
30.0	5.66	5.80	5.95	6.11	6.30	6.53	6.64	6.82	6.99	7.18
35.0	5.98	6.13	6.28	6.44	6.63	6.86	6.97	7.14	7.31	7.49
40.0	6.36	6.51	6.67	6.83	7.02	7.25	7.35	7.52	7.68	7.86
45.0		6.95	7.11	7.28	7.47	7.69	7.79	7.96	8.12	8.29
50.0			7.63	7.80	7.99	8.21	8.31	8.47	8.62	8.79
55.0				8.39	8.58	8.79	8.89	9.05	9.20	9.36
60.0					9.24	9.46	9.56	9.71	9.86	10.01
65.0					10.00	10.21	10.31	10.46	10.60	10.76

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
27.0	35.30	44.40	54.90	67.70	83.40	102.50	111.00	125.50	139.00	153.50
30.0	36.00	45.10	55.50	68.00	83.30	102.00	110.50	124.50	137.50	151.50
35.0	36.40	45.70	56.10	68.30	83.10	101.00	109.00	122.50	135.00	149.00
40.0	36.00	45.70	56.20	68.30	82.70	100.00	108.00	121.00	133.00	146.50
45.0		44.90	55.80	68.00	82.20	99.20	107.00	119.50	131.50	144.50
50.0			54.90	67.40	81.70	98.50	106.00	118.50	130.00	142.50
55.0				66.50	81.00	97.90	105.50	118.00	129.00	141.50
60.0					80.40	97.50	105.00	117.50	128.50	141.00
65.0					79.70	97.40	105.00	117.50	129.00	141.50

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m <sup>3</sup> /h	17.1
Length/Width, mm	246/246
Height, mm	494
Net Weight, kg	39.5
Gross Weight, kg	44
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 (8.5)
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	29.5
Low Side PS gauge, bar	20
Refrigerant's GWP	1774
Refrigerant's classification	A1

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

Maximum Operating Current, A	12.5
Locked Rotor Current, A	74
Winding Resistance, ohm	2.27
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Discharge Temperature Protection	External thermistor
Mounting Grommets	Standard

**ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Mounting Grommets	Hard Mounts for Paralleling
Mounting Grommets	Rubber Grommet For Single
Digital Control	24V AC
Valve Coil	220V
Valve Coil	24V AC

**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