



Minimum Evaporating Temp. With:  
— 10 K Suction Superheat  
— Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW												
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0
25.0	6.24	7.96	9.97	12.35	15.10	18.30	22.00	26.30	28.20	31.20			
30.0	5.67	7.39	9.36	11.65	14.30	17.35	20.90	24.90	26.70	29.60	32.10	34.80	
35.0		6.76	8.71	10.95	13.45	16.40	19.75	23.60	25.20	27.90	30.30	32.90	
40.0			7.99	10.15	12.60	15.40	18.55	22.20	23.80	26.30	28.60	31.00	36.20
45.0				9.29	11.65	14.30	17.35	20.80	22.20	24.60	26.80	29.00	34.00
50.0					10.60	13.15	16.05	19.25	20.70	22.90	24.90	27.00	31.60
55.0						11.90	14.60	17.65	18.95	21.10	22.90	24.90	29.20
60.0							13.00	15.85	17.10	19.05	20.80	22.60	26.60
65.0								13.85	15.00	16.80	18.35	20.00	23.70

50 Hz

ZP91KCE-TFD

R410A Dew Point

Cond °C	Power, kW												
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0
25.0	3.47	3.48	3.50	3.54	3.57	3.58	3.55	3.48	3.44	3.35			
30.0	3.91	3.89	3.91	3.94	3.98	4.00	4.01	3.97	3.94	3.88	3.82	3.73	
35.0		4.36	4.36	4.38	4.42	4.45	4.47	4.47	4.45	4.42	4.37	4.31	
40.0			4.87	4.88	4.90	4.94	4.97	4.98	4.98	4.96	4.94	4.90	4.77
45.0				5.45	5.46	5.49	5.52	5.54	5.55	5.54	5.53	5.51	5.42
50.0					6.09	6.11	6.13	6.16	6.17	6.18	6.17	6.16	6.10
55.0						6.82	6.83	6.86	6.87	6.88	6.88	6.88	6.84
60.0							7.64	7.65	7.66	7.67	7.67	7.67	7.65
65.0								8.56	8.56	8.56	8.57	8.57	8.56

Cond °C	Current at 400 V, A												
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0
25.0	8.67	8.63	8.64	8.67	8.70	8.70	8.66	8.54	8.46	8.31			
30.0	9.13	9.06	9.06	9.09	9.14	9.17	9.16	9.10	9.05	8.94	8.83	8.68	
35.0		9.56	9.53	9.55	9.59	9.64	9.67	9.65	9.62	9.55	9.47	9.36	
40.0			10.08	10.08	10.11	10.16	10.21	10.22	10.21	10.17	10.12	10.04	9.80
45.0				10.71	10.72	10.77	10.82	10.85	10.85	10.84	10.80	10.75	10.58
50.0					11.46	11.48	11.53	11.57	11.58	11.58	11.57	11.53	11.41
55.0						12.35	12.38	12.42	12.43	12.44	12.43	12.42	12.33
60.0							13.40	13.42	13.43	13.44	13.44	13.44	13.38
65.0								14.62	14.63	14.63	14.63	14.63	14.59

Cond °C	Suction Mass Flow, g/s												
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0	12.5	15.0	20.0
25.0	35.00	44.00	54.40	66.40	80.30	96.30	114.50	135.50	145.00	159.50			
30.0	33.30	42.80	53.50	65.70	79.60	95.50	113.50	134.50	143.50	158.00	171.00	184.50	
35.0		41.20	52.40	64.80	78.90	94.80	113.00	133.50	142.50	156.50	169.50	183.00	
40.0			50.80	63.60	77.90	93.90	112.00	132.50	141.00	155.50	168.00	181.00	210.00
45.0				61.90	76.50	92.80	111.00	131.00	140.00	154.00	166.50	179.50	209.00
50.0					74.50	91.10	109.50	130.00	138.50	152.50	165.00	178.00	207.00
55.0						88.80	107.50	128.00	137.00	151.00	163.50	176.50	205.00
60.0							105.00	126.00	135.00	149.00	161.50	175.00	204.00
65.0								123.00	132.50	147.00	160.00	173.00	202.00

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m <sup>3</sup> /h	14.7
Length/Width, mm	243/248
Height, mm	443
Net Weight, kg	40.8
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1 1/4
Stub Suction, inch	7/8
Stub Discharge, inch	3/4
Oil Quantity, l	1.77
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF
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)	
PED Category	1
Max. Internal Free Volume, l	4.30
High Side PS gauge, bar	45
Low Side PS gauge, bar	29.5
Low Side TS Min., °C	-35
Refrigerant's GWP	2088
Refrigerant's classification	A1

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

Maximum Operating Current, A	16.2
Locked Rotor Current, A	101
Winding Resistance, ohm	1.79
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Mounting Grommets	Rubber Grommet For Single
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**ACCESSORIES OPTIONAL**

Enclosure Class	IP 54
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**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
TF5	200-220 V / 3~ / 50 Hz	200		Y	2.09
TFE	500 V / 3~ / 50 Hz	500		Y	0.80
TFD	460 V / 3~ / 60 Hz	460		Y	1.04
TF5	200-230 V / 3~ / 60 Hz	230		Y	2.09
TFE	575 V / 3~ / 60 Hz	575		Y	0.80
TF7	380 V / 3~ / 60 Hz	380		Y	1.26