



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	6.68	8.26	10.20	12.55	15.30	18.50	22.20	26.40	28.20	31.10				
30.0	6.21	7.74	9.60	11.85	14.45	17.55	21.00	25.00	26.80	29.60	32.00	34.60		
35.0		7.22	9.00	11.15	13.65	16.55	19.90	23.70	25.40	28.00	30.40	32.80		
40.0			8.37	10.40	12.80	15.55	18.75	22.40	23.90	26.40	28.70	31.00	36.10	
45.0				9.60	11.85	14.50	17.50	20.90	22.40	24.80	26.90	29.10	34.00	
50.0					10.85	13.35	16.15	19.40	20.80	23.10	25.00	27.20	31.70	
55.0						12.00	14.70	17.70	19.05	21.20	23.00	25.00	29.30	
60.0							13.00	15.85	17.05	19.00	20.80	22.60	26.60	
65.0								13.65	14.75	16.55	18.15	19.85	23.50	

50 Hz

ZP90KCE-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	3.72	3.70	3.68	3.66	3.64	3.63	3.64	3.66	3.67	3.70			
30.0	4.09	4.07	4.06	4.05	4.05	4.06	4.08	4.13	4.15	4.20	4.24	4.29	
35.0		4.51	4.49	4.48	4.48	4.49	4.53	4.58	4.61	4.67	4.72	4.78	
40.0			5.02	4.99	4.98	4.98	5.01	5.06	5.09	5.15	5.20	5.27	5.42
45.0				5.61	5.58	5.56	5.57	5.61	5.63	5.68	5.73	5.79	5.93
50.0					6.31	6.26	6.24	6.25	6.26	6.29	6.33	6.38	6.50
55.0						7.12	7.05	7.02	7.01	7.02	7.04	7.07	7.17
60.0							8.04	7.95	7.93	7.91	7.90	7.91	7.96
65.0								9.09	9.04	8.98	8.95	8.92	8.91

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	7.81	7.76	7.72	7.68	7.66	7.65	7.65	7.66	7.67	7.69			
30.0	8.20	8.15	8.11	8.09	8.09	8.11	8.14	8.19	8.22	8.26	8.31	8.35	
35.0		8.64	8.59	8.57	8.57	8.59	8.64	8.71	8.75	8.81	8.87	8.93	
40.0			9.22	9.17	9.15	9.16	9.21	9.28	9.32	9.38	9.45	9.52	9.69
45.0				9.94	9.89	9.87	9.89	9.94	9.97	10.03	10.09	10.16	10.33
50.0					10.83	10.76	10.73	10.75	10.77	10.81	10.86	10.92	11.07
55.0						11.89	11.80	11.76	11.76	11.77	11.80	11.84	11.95
60.0							13.15	13.03	13.00	12.97	12.96	12.97	13.03
65.0								14.61	14.54	14.46	14.41	14.37	14.35

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	37.40	45.60	55.60	67.50	81.40	97.40	115.50	136.00	145.00	159.50			
30.0	36.50	44.80	54.90	66.80	80.60	96.50	114.50	135.00	144.00	158.00	170.50	183.50	
35.0		44.00	54.10	66.10	79.90	95.80	114.00	134.50	143.00	157.00	169.50	182.50	
40.0			53.20	65.20	79.10	95.00	113.00	133.50	142.00	156.00	168.50	181.50	210.00
45.0				63.90	77.90	93.90	112.00	132.50	141.00	155.00	167.50	180.50	209.00
50.0					76.10	92.20	110.50	131.00	139.50	153.50	166.00	179.00	208.00
55.0						89.70	108.00	128.50	137.50	151.50	164.00	177.50	206.00
60.0							104.50	125.50	134.50	149.00	161.50	175.00	204.00
65.0								121.00	130.50	145.00	158.00	171.50	201.00

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	14.6
Length/Width, mm	281/285
Height, mm	476
Net Weight, kg	58.1
Gross Weight, kg	67
Stub Suction, inch	1 1/8
Stub Discharge, inch	7/8
Oil Quantity, l	2.51
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF
Base mounting (hole dia), mm	190 x 190 (0)
Sound Pressure @ 1m (HT), dBA	61
Sound Power (HT), dBA	72
Sound Power with Sound Shell (HT), dBA	63
Sound Conditions (HT, Temperatures:	7 / 54 / 18 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	2
Max. Internal Free Volume, l	10.5
High Side PS gauge, bar	45
Low Side PS gauge, bar	29.5
Low Side TS Max., °C	50
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
Locked Rotor Current, A	95
Winding Resistance, ohm	1.59
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	ASTP Therm-O-Disc In Scroll
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ACCESSORIES OPTIONAL

Mounting Grommets	Hard Mounts for Paralleling
Crankcase Heater	66 W External
Mounting Grommets	Rubber Grommet For Single

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