



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- 5 K Suction Superheat
- Maximum Evaporating Temperature

Suction Superheat 10.0K

Liquid Subcooling 0.0K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW												
	-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
17.0	4.22	5.20	6.36	7.73									
20.0	4.07	5.04	6.18	7.53	9.10								
25.0	3.83	4.77	5.88	7.18	8.69	10.45							
30.0	3.60	4.51	5.57	6.82	8.27	9.94	11.85	12.70	14.05				
35.0	3.36	4.24	5.26	6.45	7.82	9.42	11.25	12.05	13.35	14.50	15.70	18.40	
40.0	3.12	3.96	4.93	6.05	7.36	8.86	10.60	11.35	12.55	13.65	14.80	17.35	20.20
45.0		3.67	4.58	5.64	6.86	8.28	9.90	10.60	11.75	12.80	13.90	16.30	19.00
50.0			4.22	5.20	6.34	7.66	9.17	9.84	10.90	11.85	12.90	15.15	17.70
55.0				4.74	5.79	7.00	8.40	9.02	10.00	10.90	11.85	13.95	16.35
60.0					5.19	6.29	7.57	8.13	9.04	9.86	10.75	12.70	14.90
65.0						5.52	6.66	7.17	7.99	8.73	9.53		
68.0						5.03	6.08	6.56	7.32				

50 Hz

ZH09K1P-TFM

R410A Dew Point

Cond °C	Power, kW												
	-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
17.0	1.39	1.40	1.40	1.40									
20.0	1.49	1.50	1.51	1.50	1.49								
25.0	1.66	1.68	1.70	1.70	1.69	1.67							
30.0	1.82	1.87	1.90	1.90	1.90	1.89	1.86	1.86	1.84				
35.0	2.01	2.07	2.11	2.13	2.14	2.13	2.11	2.10	2.08	2.06	2.05	2.01	
40.0	2.20	2.28	2.34	2.37	2.39	2.39	2.38	2.37	2.35	2.34	2.32	2.28	2.24
45.0		2.50	2.58	2.63	2.66	2.67	2.67	2.66	2.65	2.64	2.62	2.59	2.54
50.0			2.84	2.91	2.96	2.98	2.99	2.99	2.98	2.97	2.96	2.92	2.88
55.0				3.21	3.28	3.32	3.34	3.34	3.34	3.33	3.33	3.30	3.26
60.0					3.62	3.68	3.72	3.72	3.73	3.73	3.73	3.71	3.68
65.0						4.07	4.13	4.14	4.16	4.17	4.17		
68.0						4.33	4.39	4.41	4.43				

Cond °C	Current at 400 V, A												
	-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
17.0	2.96	2.98	2.99	2.97									
20.0	3.10	3.14	3.14	3.14	3.11								
25.0	3.35	3.39	3.41	3.42	3.40	3.37							
30.0	3.60	3.66	3.70	3.71	3.70	3.68	3.65	3.63	3.61				
35.0	3.85	3.93	3.99	4.01	4.02	4.01	3.98	3.97	3.95	3.93	3.91	3.86	
40.0	4.11	4.22	4.29	4.33	4.35	4.35	4.34	4.33	4.31	4.29	4.27	4.23	4.19
45.0		4.51	4.60	4.67	4.71	4.72	4.72	4.71	4.70	4.68	4.67	4.63	4.59
50.0			4.93	5.02	5.07	5.11	5.12	5.12	5.11	5.10	5.09	5.06	5.03
55.0				5.38	5.46	5.51	5.54	5.55	5.55	5.55	5.54	5.53	5.50
60.0					5.87	5.94	5.99	6.00	6.02	6.02	6.03	6.02	6.00
65.0						6.39	6.46	6.49	6.51	6.53	6.54		
68.0						6.67	6.76	6.79	6.82				

Cond °C	Suction Mass Flow, g/s													
	-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	
17.0	21.70	26.40	32.00	38.40										
20.0	21.50	26.30	31.90	38.40	45.90									
25.0	21.20	26.00	31.70	38.20	45.70	54.40								
30.0	20.80	25.70	31.40	38.00	45.50	54.20	64.00	68.30	75.10					
35.0	20.50	25.50	31.20	37.70	45.30	53.90	63.70	67.90	74.80	80.80	87.30	101.50		
40.0	20.10	25.20	30.90	37.40	44.90	53.50	63.20	67.40	74.20	80.30	86.70	101.00	116.50	
45.0		24.80	30.50	37.00	44.40	52.90	62.60	66.80	73.60	79.60	86.00	100.00	116.00	
50.0			30.10	36.50	43.90	52.30	61.80	66.00	72.80	78.70	85.10	99.10	115.00	
55.0				35.90	43.20	51.50	61.00	65.10	71.80	77.80	84.10	98.10	114.00	
60.0					42.50	50.60	60.00	64.20	70.80	76.70	83.10	97.10	113.00	
65.0						49.90	59.20	63.40	70.00	75.90	82.30			
68.0							49.10	58.40	62.50	69.10				

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	6.93
Length/Width, mm	242/242
Height, mm	418
Net Weight, kg	33
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Oil Quantity, l	1.24
Oil type (original charge)	POE RL32-3MAF
Oil type (approved oils)	POE RL32-3MAF
Base mounting (hole dia), mm	190 x 190 (8.5)
Sound Pressure @ 1m (HT), dBA	63
Sound Power (HT), dBA	74
Sound Conditions (HT, Temperatures:	-7 / 50 / 3 °C at 50 Hz
Evap./Cond./Suction at freq./speed)	
PED Category	1
Max. Internal Free Volume, l	3.60
High Side PS gauge, bar	46
Low Side PS gauge, bar	28
Refrigerant's GWP	2088
Refrigerant's classification	A1

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

Maximum Operating Current, A	7.4
Locked Rotor Current, A	51.5
Winding Resistance, ohm	3.2
Default Enclosure Class	IP 21 (IEC 34)

50 Hz

ZH09K1P-TFM

R410A Dew Point

ACCESSORIES INCLUDED

ACCESSORIES OPTIONAL

Crankcase Heater

40 W External

MOTOR OPTIONS

Motor Code	Power Supply	Nominal Voltage, V	Start Connection	DOL Connection	Amps Factor
TFM	380-420 V / 3~ / 50 Hz	400		Y	1.00