



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	5.51	6.70	8.13	9.82									
20.0	5.31	6.48	7.89	9.56	11.50								
25.0	4.98	6.13	7.51	9.12	11.00	13.20							
30.0	4.68	5.79	7.11	8.67	10.50	12.60	15.05	16.10	17.80				
35.0	4.38	5.45	6.71	8.20	9.95	11.95	14.30	15.30	16.95	18.45	20.00	23.40	
40.0	4.09	5.10	6.30	7.71	9.37	11.30	13.50	14.50	16.05	17.45	18.95	22.20	25.90
45.0		4.74	5.86	7.19	8.74	10.55	12.65	13.60	15.05	16.40	17.80	20.90	24.40
50.0			5.41	6.63	8.08	9.77	11.75	12.60	14.00	15.25	16.60	19.55	22.90
55.0				6.03	7.36	8.92	10.75	11.55	12.85	14.00	15.25	18.05	21.20
60.0					6.58	7.99	9.66	10.40	11.60	12.70	13.85	16.40	19.35
65.0						6.97	8.46	9.13	10.20	11.20	12.25		
68.0							6.31	7.69	8.31	9.32			

50 Hz

ZH12K1P-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	1.76	1.78	1.80	1.80									
20.0	1.88	1.90	1.92	1.93	1.94								
25.0	2.08	2.13	2.15	2.16	2.16	2.17							
30.0	2.30	2.36	2.40	2.41	2.42	2.41	2.42	2.42	2.43				
35.0	2.53	2.62	2.67	2.70	2.70	2.70	2.69	2.69	2.69	2.70	2.71	2.75	
40.0	2.78	2.89	2.97	3.01	3.02	3.02	3.01	3.01	3.00	3.00	3.00	3.02	3.06
45.0		3.20	3.30	3.36	3.38	3.39	3.38	3.37	3.36	3.36	3.35	3.35	3.37
50.0			3.65	3.74	3.78	3.80	3.79	3.79	3.78	3.77	3.76	3.74	3.74
55.0				4.16	4.23	4.26	4.26	4.26	4.25	4.24	4.22	4.20	4.18
60.0					4.72	4.77	4.79	4.79	4.78	4.77	4.76	4.73	4.70
65.0						5.33	5.37	5.37	5.37	5.37	5.36		
68.0						5.70	5.75	5.76	5.76				

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	4.62	4.64	4.65	4.65									
20.0	4.73	4.75	4.76	4.77	4.78								
25.0	4.91	4.95	4.97	4.97	4.98	4.98							
30.0	5.10	5.16	5.19	5.21	5.21	5.20	5.21	5.21	5.23				
35.0	5.31	5.40	5.45	5.47	5.47	5.47	5.46	5.46	5.47	5.47	5.49	5.53	
40.0	5.54	5.66	5.73	5.77	5.79	5.79	5.78	5.77	5.77	5.76	5.77	5.78	5.83
45.0		5.96	6.07	6.13	6.16	6.16	6.15	6.15	6.14	6.13	6.12	6.12	6.14
50.0			6.45	6.54	6.59	6.61	6.60	6.60	6.58	6.57	6.56	6.54	6.53
55.0				7.01	7.09	7.13	7.13	7.13	7.12	7.11	7.09	7.06	7.03
60.0					7.67	7.73	7.75	7.75	7.74	7.73	7.72	7.68	7.65
65.0						8.42	8.46	8.47	8.47	8.47	8.46		
68.0						8.88	8.94	8.95	8.96				

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	28.40	34.10	40.90	48.80										
20.0	28.00	33.80	40.70	48.70	58.10									
25.0	27.50	33.40	40.40	48.50	58.00	68.80								
30.0	27.10	33.10	40.10	48.30	57.80	68.70	81.10	86.60	95.20					
35.0	26.70	32.70	39.80	48.00	57.50	68.50	80.90	86.40	95.10	103.00	111.00	129.00		
40.0	26.40	32.40	39.50	47.70	57.20	68.10	80.60	86.00	94.80	102.50	111.00	129.00	149.00	
45.0		32.10	39.00	47.20	56.60	67.50	80.00	85.40	94.20	102.00	110.50	128.50	149.00	
50.0			38.50	46.60	55.90	66.70	79.10	84.60	93.30	101.00	109.50	128.00	148.50	
55.0				45.80	54.90	65.60	78.00	83.40	92.20	100.00	108.50	127.00	147.50	
60.0					53.80	64.30	76.60	82.10	90.80	98.70	107.00	125.50	147.00	
65.0						63.00	75.20	80.70	89.50	97.40	106.00			
68.0							61.60	73.70	79.20	88.00				

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m ³ /h	8.90
Length/Width, mm	242/242
Height, mm	418
Net Weight, kg	35
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	65
Sound Power (HT), dBA	76
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	3.80
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	9.7
Locked Rotor Current, A	62
Winding Resistance, ohm	2.78
Default Enclosure Class	IP 21 (IEC 34)

50 Hz

ZH12K1P-TFM

R410A Dew Point

ACCESSORIES INCLUDED

ACCESSORIES OPTIONAL

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