



Minimum Evaporating Temp. With:

- 10 K Suction Superheat
- 20 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
10.0	3.40	4.27	5.31	6.54	7.98					
15.0	3.24	4.08	5.09	6.29	7.68					
20.0	3.08	3.90	4.87	6.02	7.37	8.93				
25.0	2.91	3.70	4.64	5.75	7.05	8.55	10.25			
30.0	2.74	3.50	4.41	5.47	6.71	8.15	9.80	11.70	12.50	
35.0	2.57	3.30	4.16	5.18	6.37	7.74	9.32	11.15	11.90	13.15
40.0	2.40	3.10	3.92	4.88	6.01	7.32	8.83	10.55	11.30	12.50
45.0	2.23	2.89	3.67	4.58	5.65	6.89	8.33	9.97	10.70	11.85
50.0		2.68	3.41	4.27	5.28	6.45	7.81	9.36	10.05	11.15
55.0			3.15	3.96	4.90	6.00	7.28	8.75	9.39	10.40
60.0				3.64	4.52	5.54	6.74	8.12	8.72	9.70
65.0					4.13	5.08	6.19	7.47	8.04	8.95
70.0					3.73	4.60	5.63	6.82	7.35	8.20

50 Hz

ZH09KCU-PFZN

R290

Cond °C	Power, kW									
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	1.35	1.36	1.37	1.38	1.39					
15.0	1.47	1.48	1.50	1.52	1.53					
20.0	1.60	1.62	1.64	1.66	1.68	1.70				
25.0	1.72	1.74	1.77	1.80	1.82	1.85	1.88			
30.0	1.85	1.88	1.92	1.94	1.98	2.01	2.04	2.07	2.08	
35.0	1.99	2.03	2.07	2.10	2.14	2.18	2.22	2.25	2.27	2.29
40.0	2.14	2.18	2.23	2.27	2.31	2.36	2.40	2.45	2.46	2.49
45.0	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.68	2.71
50.0		2.53	2.59	2.65	2.70	2.76	2.82	2.88	2.90	2.94
55.0			2.79	2.86	2.92	2.99	3.05	3.12	3.15	3.19
60.0				3.09	3.16	3.23	3.31	3.38	3.41	3.45
65.0					3.42	3.50	3.58	3.66	3.70	3.75
70.0					3.70	3.79	3.88	3.97	4.01	4.06

Cond °C	Current at 230 V, A									
	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	8.20	8.24	8.28	8.32	8.36					
15.0	8.62	8.68	8.73	8.78	8.84					
20.0	9.05	9.12	9.18	9.25	9.33	9.40				
25.0	9.48	9.57	9.66	9.75	9.83	9.92	10.02			
30.0	9.94	10.05	10.15	10.27	10.38	10.49	10.60	10.71	10.76	
35.0	10.43	10.56	10.69	10.82	10.96	11.10	11.23	11.37	11.43	11.51
40.0	10.96	11.11	11.27	11.43	11.59	11.76	11.92	12.09	12.16	12.26
45.0	11.54	11.73	11.91	12.10	12.29	12.49	12.68	12.88	12.95	13.07
50.0		12.41	12.63	12.84	13.07	13.29	13.52	13.74	13.84	13.97
55.0			13.41	13.67	13.92	14.18	14.44	14.70	14.81	14.97
60.0				14.58	14.87	15.17	15.47	15.77	15.89	16.07
65.0					15.93	16.26	16.60	16.94	17.08	17.28
70.0					17.10	17.48	17.86	18.24	18.39	18.62

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
10.0	10.35	12.75	15.55	18.85	22.60					
15.0	10.25	12.65	15.50	18.80	22.60					
20.0	10.15	12.60	15.45	18.75	22.50	26.80				
25.0	10.05	12.50	15.35	18.65	22.40	26.70	31.50			
30.0	9.93	12.40	15.25	18.55	22.30	26.60	31.40	36.70	39.00	
35.0	9.81	12.30	15.15	18.45	22.20	26.50	31.20	36.50	38.80	42.50
40.0	9.68	12.15	15.05	18.30	22.10	26.30	31.00	36.40	38.60	42.20
45.0	9.55	12.05	14.90	18.15	21.90	26.10	30.80	36.10	38.40	42.00
50.0		11.90	14.75	18.00	21.70	25.90	30.60	35.90	38.10	41.70
55.0			14.60	17.85	21.50	25.70	30.30	35.60	37.80	41.40
60.0				17.65	21.30	25.40	30.10	35.30	37.50	41.10
65.0					21.10	25.20	29.80	35.00	37.20	40.80
70.0					20.90	24.90	29.50	34.70	37.00	40.50

### **COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, m³/h	11.7
Length/Width, mm	254/266
Height, mm	442
Net Weight, kg	37.9
Gross Weight, kg	39.8
Stub Suction, inch	7/8
Stub Discharge, inch	1/2
Oil Quantity, l	1.89
Oil type (original charge)	POE Hatcol 4467
Oil type (approved oils)	POE Hatcol 4467
Base mounting (hole dia), mm	190 x 190 (19)
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	2
Max. Low Side Internal Free Volume, l	6.4
Max. High Side Internal Free Volume, l	0.6
Max. Internal Free Volume, l	7.00
High Side PS gauge, bar	28
Low Side PS gauge, bar	17
Low Side TS Max., °C	50
Low Side TS Min., °C	-35
High Side TS Max., °C	150
High Side TS Min., °C	-35
Refrigerant's GWP	3
Refrigerant's classification	A3

### **COMPRESSOR ELECTRICAL DATA (220-240 V / 1~ / 50 Hz)**

Locked Rotor Current, A	108
Winding Resistance, ohm	1.95/0.6 (R/S)
Default Enclosure Class	IP 65 (IEC 60529)

### **ACCESSORIES INCLUDED**

Mounting Grommets	Standard
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### **ACCESSORIES OPTIONAL**

Discharge Temperature Protection	Discharge line thermostat
Single Phase Equipment	Run Capacitor
Crankcase Heater	55 W External
Single Phase Equipment	Start Relay and Capacitor

50 Hz

ZH09KCU-PFZN

R290

## **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>
PFZ	220-240 V / 1~ / 50 Hz	230		PSC	1.00