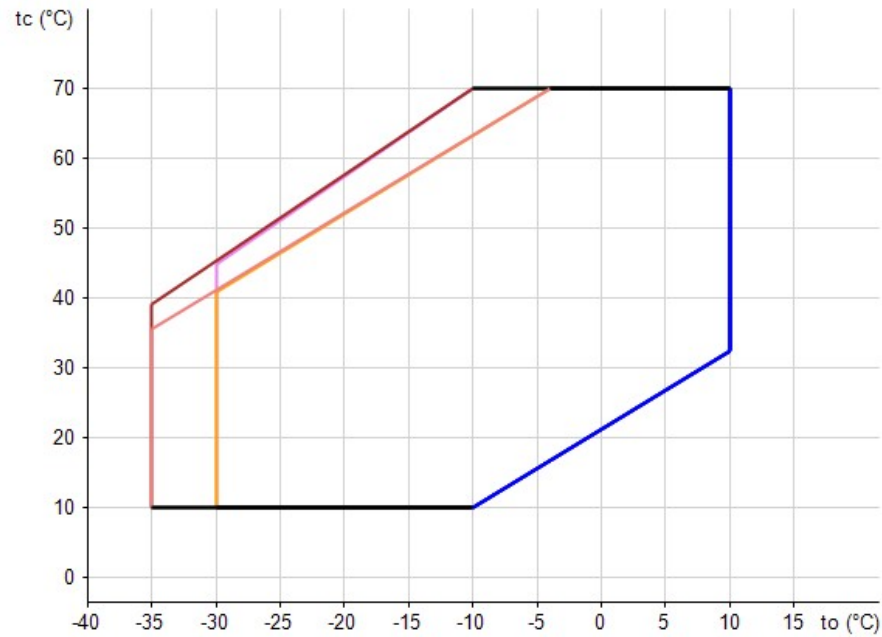




Minimum Evaporating Temp. With:

- 10 K Suction Superheat — 20 K Suction Superheat
- 10 K Suction Superheat OEM envelope — 20 K Suction Superheat OEM envelope
- Maximum Evaporating Temperature

Suction Superheat 11.1K

Liquid Subcooling 8.3K

Evaporating Temperature, °C

Cond °C	Cooling Capacity, kW										
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	4.46	5.52	6.78	8.26	10.00	12.05					
15.0	4.25	5.30	6.55	8.01	9.72	11.70					
20.0	4.03	5.07	6.30	7.73	9.40	11.35	13.55				
25.0	3.79	4.82	6.03	7.43	9.05	10.95	13.10	15.55			
30.0	3.55	4.56	5.74	7.10	8.68	10.50	12.60	15.00	17.70	18.85	
35.0	3.30	4.29	5.44	6.76	8.28	10.05	12.05	14.35	17.00	18.10	19.95
40.0		4.01	5.12	6.39	7.86	9.56	11.50	13.70	16.25	17.35	19.10
45.0		3.72	4.79	6.02	7.43	9.05	10.90	13.05	15.45	16.50	18.20
50.0			4.45	5.62	6.97	8.51	10.30	12.35	14.65	15.65	17.30
55.0				5.22	6.49	7.96	9.65	11.60	13.80	14.75	16.30
60.0					6.00	7.39	8.98	10.80	12.90	13.85	15.30
65.0						6.80	8.30	10.05	12.00	12.90	14.30
70.0						6.20	7.60	9.22	11.10	11.90	13.25

50 Hz

ZH13KCU-TFD

R290

Cond °C	Power, kW										
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	1.72	1.74	1.76	1.78	1.80	1.82					
15.0	1.84	1.88	1.90	1.94	1.96	2.00					
20.0	1.99	2.03	2.07	2.11	2.14	2.18	2.22				
25.0	2.16	2.20	2.25	2.29	2.34	2.38	2.43	2.48			
30.0	2.34	2.40	2.45	2.50	2.55	2.61	2.66	2.71	2.77	2.79	
35.0	2.56	2.62	2.67	2.73	2.79	2.85	2.91	2.97	3.03	3.05	3.09
40.0		2.86	2.93	2.99	3.06	3.12	3.19	3.25	3.32	3.34	3.38
45.0		3.14	3.21	3.28	3.35	3.42	3.49	3.56	3.63	3.66	3.70
50.0			3.52	3.60	3.67	3.75	3.82	3.90	3.97	4.00	4.04
55.0				3.95	4.03	4.11	4.19	4.26	4.34	4.37	4.42
60.0					4.42	4.50	4.59	4.67	4.75	4.78	4.83
65.0						4.94	5.02	5.11	5.19	5.22	5.27
70.0						5.42	5.50	5.59	5.67	5.71	5.76

Cond °C	Current at 400 V, A										
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	5.62	5.63	5.64	5.65	5.66	5.67					
15.0	5.69	5.71	5.73	5.75	5.77	5.79					
20.0	5.78	5.81	5.84	5.87	5.89	5.92	5.95				
25.0	5.90	5.93	5.97	6.01	6.04	6.08	6.12	6.16			
30.0	6.04	6.08	6.13	6.18	6.22	6.27	6.32	6.37	6.41	6.43	
35.0	6.22	6.27	6.33	6.38	6.44	6.49	6.55	6.61	6.66	6.69	6.72
40.0		6.50	6.56	6.63	6.69	6.76	6.82	6.89	6.95	6.98	7.02
45.0		6.77	6.85	6.92	6.99	7.06	7.14	7.21	7.29	7.32	7.37
50.0			7.18	7.26	7.34	7.43	7.51	7.59	7.68	7.71	7.77
55.0				7.67	7.76	7.85	7.94	8.03	8.13	8.16	8.22
60.0					8.23	8.33	8.43	8.53	8.64	8.68	8.74
65.0						8.89	9.00	9.11	9.22	9.26	9.33
70.0						9.52	9.64	9.75	9.87	9.92	9.99

50 Hz

ZH13KCU-TFD

R290

Cond °C	Suction Mass Flow, g/s										
	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0	10.0
10.0	12.85	15.65	18.85	22.60	26.90	31.80					
15.0	12.70	15.55	18.90	22.70	27.10	32.00					
20.0	12.55	15.50	18.85	22.70	27.20	32.20	37.80				
25.0	12.30	15.35	18.80	22.70	27.20	32.20	37.90	44.30			
30.0	12.05	15.15	18.65	22.60	27.10	32.20	37.90	44.30	51.40	54.50	
35.0	11.75	14.90	18.50	22.50	27.00	32.20	37.90	44.30	51.40	54.50	59.30
40.0		14.65	18.30	22.30	26.90	32.00	37.80	44.20	51.30	54.40	59.20
45.0		14.35	18.00	22.10	26.70	31.80	37.60	44.00	51.10	54.20	59.00
50.0			17.70	21.80	26.40	31.50	37.30	43.70	50.80	53.90	58.80
55.0				21.50	26.10	31.20	36.90	43.30	50.50	53.60	58.40
60.0					25.70	30.80	36.50	42.90	50.00	53.10	58.00
65.0						30.30	36.00	42.40	49.50	52.60	57.50
70.0						29.70	35.40	41.80	48.90	52.00	56.90

COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, m³/h	17.1
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	67
Sound Power (HT), dBA	78
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 (380-420 V / 3~ / 50 Hz)

Maximum Operating Current, A	11.8
Locked Rotor Current, A	74
Winding Resistance, ohm	2.74
Default Enclosure Class	IP 54/65

ACCESSORIES INCLUDED

Mounting Grommets	Standard
-------------------	----------

ACCESSORIES OPTIONAL

Crankcase Heater	55 W External
Discharge Temperature Protection	Discharge line thermostat

50 Hz

ZH13KCU-TFD

R290

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