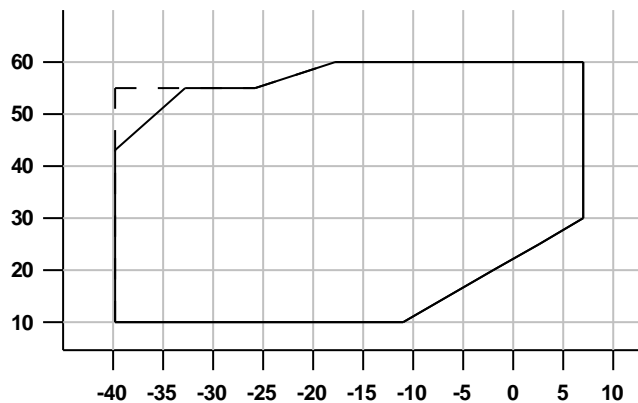


50Hz

ZF18KVE-TFD EVI

R404A



Minimum evaporating temp. with:

———— 25°C Suction Gas Return

- - - 0°C Suction Gas Return

Suction Return Temperature 20.0°C

Evaporating Temperature °C

Liquid subcooling included

Cond °C	Capacity kW										
	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
10	5.28	6.59	8.04	9.67	11.50	13.55					
20	5.09	6.30	7.68	9.24	11.00	13.00	15.25	17.80			
30	4.99	6.10	7.38	8.85	10.55	12.45	14.65	17.10	19.90	23.00	24.40
35	4.96	6.02	7.24	8.66	10.30	12.15	14.30	16.75	19.50	22.60	23.90
40	4.95	5.95	7.11	8.47	10.05	11.90	14.00	16.35	19.10	22.10	23.50
45		5.88	6.98	8.28	9.80	11.55	13.60	15.95	18.65	21.70	23.00
50		5.81	6.84	8.07	9.53	11.25	13.25	15.55	18.15	21.10	22.40
55			6.70	7.86	9.25	10.90	12.85	15.05	17.65	20.50	21.80
60						10.55	12.40	14.55	17.05	19.95	21.20
	Power Input kW										
	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
10	2.13	2.19	2.26	2.32	2.39	2.47					
20	2.65	2.76	2.87	2.98	3.09	3.19	3.30	3.41			
30	3.15	3.32	3.48	3.63	3.77	3.90	4.03	4.15	4.27	4.39	4.43
35	3.44	3.63	3.81	3.98	4.14	4.29	4.43	4.56	4.69	4.81	4.85
40	3.77	3.99	4.19	4.38	4.56	4.72	4.87	5.01	5.14	5.27	5.31
45		4.41	4.64	4.85	5.04	5.22	5.38	5.53	5.67	5.79	5.84
50		4.92	5.16	5.39	5.60	5.79	5.97	6.13	6.27	6.40	6.44
55			5.79	6.04	6.27	6.47	6.66	6.82	6.97	7.11	7.16
60						7.28	7.48	7.66	7.82	7.96	8.02
	Current 400V, A										
	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
10	5.25	5.29	5.34	5.40	5.47	5.54					
20	5.79	5.90	6.02	6.14	6.26	6.38	6.51	6.63			
30	6.33	6.51	6.70	6.88	7.05	7.22	7.38	7.53	7.68	7.82	7.87
35	6.65	6.88	7.10	7.31	7.51	7.70	7.88	8.05	8.20	8.35	8.41
40	7.06	7.32	7.57	7.81	8.03	8.25	8.45	8.63	8.80	8.96	9.02
45		7.86	8.14	8.41	8.66	8.90	9.12	9.32	9.51	9.67	9.74
50		8.53	8.84	9.14	9.42	9.68	9.92	10.14	10.34	10.52	10.59
55			9.70	10.03	10.33	10.62	10.88	11.12	11.34	11.53	11.61
60						11.76	12.04	12.31	12.55	12.77	12.85
	Mass Flow g/s										
	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
10	24.90	32.10	40.30	49.90	61.10	74.40					
20	24.40	31.30	39.30	48.70	60.00	73.30	89.00	107.50			
30	24.40	30.90	38.60	47.80	58.80	72.10	88.00	106.50	128.00	153.00	164.00
35	24.50	30.70	38.30	47.30	58.30	71.40	87.00	105.50	127.00	152.00	163.00
40	24.60	30.70	38.00	46.90	57.70	70.70	86.50	105.00	126.50	152.00	163.00
45		30.60	37.70	46.40	57.00	70.00	85.50	104.00	125.50	151.00	162.00
50		30.50	37.40	45.90	56.30	69.10	84.50	103.00	124.50	150.00	161.00
55			37.00	45.30	55.60	68.20	83.50	102.00	123.50	148.50	160.00
60						67.20	82.50	100.50	122.00	147.00	158.00

Copeland Scroll - Compressor - Refrigeration - Vapour injection
COMPRESSOR MECHANICAL AND PHYSICAL DATA

Displacement @ 50 Hz, cu.m/h	17.1
Length/Width, mm	308/246
Height, mm	438
Net Weight, kg	39.5
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Stub Injection, inch	1/2
Oil Quantity, l	1.9
Base mounting (hole dia), mm	190 x 190 (8.5)
Sound Pressure @ 1m, dBA	67
Sound Power, dBA	78
Sound Power with Sound Shell, dBA	68
PED Category	1
High Side PS, bar(g)	28.8
Low Side PS, bar(g)	21
Low Side TS Max., °C	50
Internal Free Volume, l	5.7

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

Maximum Operating Current, A	13
Locked Rotor Current, A	74
Winding Resistance, ohm	2.3
Default Enclosure Class	IP 21 (IEC 34)

ACCESSORIES INCLUDED

Discharge Temperature Protection	External Thermostat
Mounting Grommets	Standard

ACCESSORIES OPTIONAL

Crankcase Heater	70W External
Current Sensing Relay	External
Liquid Injection	Demand Cooling
Sound Attenuation	Sound Shell (10dBA)

MOTOR OPTIONS

<i>Power Supply</i>	<i>Nominal Voltage</i>	<i>Motor Code</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
380-420 V/3~/50H	400	TFD		Y	1.00
200-220 V/3~/50H	200	TF5		Y	2.09
200-230 V/3~/60H	230	TF5		Y	2.09
575 V/3~/60Hz	575	TFE		Y	0.80
380 V/3~/60Hz	380	TF7		Y	1.26
460 V/3~/60Hz	460	TFD		Y	1.04

Model: ZF18KVE-TFD EVI

Refrigerant: R404A

S.I.

Suction Return Temperature 20.0°C

Liquid subcooling included

50Hz

	Evaporating Temperature °C										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
	Capacity kW										
10.0	5.28	6.59	8.04	9.67	11.50	13.55					
15.0	5.17	6.43	7.85	9.45	11.25	13.30	15.55				
20.0	5.09	6.30	7.68	9.24	11.00	13.00	15.25	17.80			
25.0	5.03	6.19	7.52	9.04	10.75	12.75	14.95	17.45	20.30		
30.0	4.99	6.10	7.38	8.85	10.55	12.45	14.65	17.10	19.90	23.00	24.40
35.0	4.96	6.02	7.24	8.66	10.30	12.15	14.30	16.75	19.50	22.60	23.90
40.0	4.95	5.95	7.11	8.47	10.05	11.90	14.00	16.35	19.10	22.10	23.50
45.0		5.88	6.98	8.28	9.80	11.55	13.60	15.95	18.65	21.70	23.00
50.0		5.81	6.84	8.07	9.53	11.25	13.25	15.55	18.15	21.10	22.40
55.0			6.70	7.86	9.25	10.90	12.85	15.05	17.65	20.50	21.80
60.0						10.55	12.40	14.55	17.05	19.95	21.20

	Power Input kW										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	2.13	2.19	2.26	2.32	2.39	2.47					
15.0	2.40	2.49	2.57	2.66	2.75	2.84	2.94				
20.0	2.65	2.76	2.87	2.98	3.09	3.19	3.30	3.41			
25.0	2.89	3.03	3.17	3.30	3.42	3.54	3.66	3.77	3.89		
30.0	3.15	3.32	3.48	3.63	3.77	3.90	4.03	4.15	4.27	4.39	4.43
35.0	3.44	3.63	3.81	3.98	4.14	4.29	4.43	4.56	4.69	4.81	4.85
40.0	3.77	3.99	4.19	4.38	4.56	4.72	4.87	5.01	5.14	5.27	5.31
45.0		4.41	4.64	4.85	5.04	5.22	5.38	5.53	5.67	5.79	5.84
50.0		4.92	5.16	5.39	5.60	5.79	5.97	6.13	6.27	6.40	6.44
55.0			5.79	6.04	6.27	6.47	6.66	6.82	6.97	7.11	7.16
60.0						7.28	7.48	7.66	7.82	7.96	8.02

	COP										
	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
10.0	2.48	3.00	3.57	4.17	4.81	5.50					
15.0	2.16	2.59	3.05	3.55	4.09	4.68	5.31				
20.0	1.92	2.28	2.67	3.10	3.57	4.07	4.63	5.23			
25.0	1.74	2.04	2.37	2.74	3.15	3.60	4.09	4.63	5.22		
30.0	1.58	1.84	2.12	2.44	2.80	3.19	3.63	4.12	4.66	5.25	5.50
35.0	1.44	1.66	1.90	2.17	2.49	2.84	3.23	3.67	4.16	4.71	4.94
40.0	1.31	1.49	1.69	1.93	2.20	2.51	2.87	3.26	3.71	4.21	4.42
45.0		1.33	1.50	1.71	1.94	2.22	2.53	2.89	3.29	3.74	3.93
50.0		1.18	1.32	1.50	1.70	1.94	2.22	2.54	2.90	3.30	3.48
55.0			1.16	1.30	1.48	1.68	1.93	2.21	2.53	2.89	3.05
60.0						1.45	1.66	1.90	2.18	2.50	2.64

Model: ZF18KVE-TFD EVI

Refrigerant: R404A

	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
	Current 400V, A										
10.0	5.25	5.29	5.34	5.40	5.47	5.54					
15.0	5.53	5.61	5.69	5.78	5.88	5.98	6.08				
20.0	5.79	5.90	6.02	6.14	6.26	6.38	6.51	6.63			
25.0	6.05	6.20	6.35	6.50	6.64	6.79	6.93	7.07	7.20		
30.0	6.33	6.51	6.70	6.88	7.05	7.22	7.38	7.53	7.68	7.82	7.87
35.0	6.65	6.88	7.10	7.31	7.51	7.70	7.88	8.05	8.20	8.35	8.41
40.0	7.06	7.32	7.57	7.81	8.03	8.25	8.45	8.63	8.80	8.96	9.02
45.0		7.86	8.14	8.41	8.66	8.90	9.12	9.32	9.51	9.67	9.74
50.0		8.53	8.84	9.14	9.42	9.68	9.92	10.14	10.34	10.52	10.59
55.0			9.70	10.03	10.33	10.62	10.88	11.12	11.34	11.53	11.61
60.0						11.76	12.04	12.31	12.55	12.77	12.85

	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
	Mass Flow g/s										
10.0	24.90	32.10	40.30	49.90	61.10	74.40					
15.0	24.60	31.60	39.80	49.30	60.50	73.80	89.50				
20.0	24.40	31.30	39.30	48.70	60.00	73.30	89.00	107.50			
25.0	24.40	31.10	38.90	48.30	59.40	72.70	88.50	107.00	128.50		
30.0	24.40	30.90	38.60	47.80	58.80	72.10	88.00	106.50	128.00	153.00	164.00
35.0	24.50	30.70	38.30	47.30	58.30	71.40	87.00	105.50	127.00	152.00	163.00
40.0	24.60	30.70	38.00	46.90	57.70	70.70	86.50	105.00	126.50	152.00	163.00
45.0		30.60	37.70	46.40	57.00	70.00	85.50	104.00	125.50	151.00	162.00
50.0		30.50	37.40	45.90	56.30	69.10	84.50	103.00	124.50	150.00	161.00
55.0			37.00	45.30	55.60	68.20	83.50	102.00	123.50	148.50	160.00
60.0						67.20	82.50	100.50	122.00	147.00	158.00

	-40.0	-35.0	-30.0	-25.0	-20.0	-15.0	-10.0	-5.0	0.0	5.0	7.0
	Heat Rejection kW										
10.0	7.31	8.67	10.20	11.90	13.80	15.90					
15.0	7.45	8.80	10.30	12.00	13.85	16.00	18.35				
20.0	7.60	8.93	10.40	12.05	13.95	16.05	18.40	21.00			
25.0	7.77	9.07	10.55	12.15	14.00	16.10	18.45	21.10	24.00		
30.0	7.98	9.25	10.70	12.30	14.10	16.15	18.45	21.10	24.00	27.20	28.60
35.0	8.23	9.47	10.85	12.45	14.25	16.25	18.55	21.10	24.00	27.20	28.60
40.0	8.54	9.74	11.10	12.65	14.40	16.35	18.60	21.10	24.00	27.10	28.50
45.0		10.05	11.40	12.90	14.60	16.55	18.75	21.20	24.00	27.20	28.50
50.0		10.50	11.75	13.20	14.85	16.75	18.90	21.30	24.10	27.20	28.50
55.0			12.20	13.60	15.20	17.05	19.15	21.50	24.30	27.30	28.60
60.0						17.45	19.50	21.80	24.50	27.50	28.80