

Model: ZF09K4E-TFD

Type: Hermetic scroll compressors

Producer: Copeland

Series: ZF

Technical data

Displacement [m ³ /h]:	8
Sound power [dBA]:	73
Sound pressure level [dB]:	62
Net Weight [kg]:	27
Gross Weight [kg]:	30
Oil charge [dm ³]:	1,5
Maximum high pressure [bar]:	28,8
Maximum standstill pressure [bar]:	21
Maximum lowside temperature [°C]:	50
PED category:	1

Electrical data

Power supply [V/~/Hz]:	380-420V/3/50Hz
Locked rotor current [A]:	40
Max. operating current [A]:	6
Winding resistance [Ω]:	4,8

Connections

	<u>inches</u>
Suction Rotolock valve connection:	1 1/4"
Discharge Rotolock valve connection:	1"

R404A/R507

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Capacity

Cooling capacity [kW]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	2.07	2.63	3.30	4.09	5.03	6.13	-	-	-	-
15	1.98	2.52	3.16	3.92	4.81	5.85	7.05	-	-	-
20	1.90	2.41	3.02	3.74	4.59	5.57	6.71	8.02	-	-
25	1.81	2.30	2.88	3.56	4.36	5.28	6.36	7.60	9.01	-
30	1.72	2.19	2.73	3.37	4.12	4.99	6.00	7.16	8.49	10.00
35	1.63	2.07	2.58	3.18	3.87	4.69	5.63	6.71	7.96	9.38
40	1.54	1.95	2.42	2.97	3.62	4.37	5.24	6.25	7.41	8.74
45	1.43	1.81	2.25	2.76	3.35	4.04	4.84	5.77	6.85	8.08
50	1.32	1.67	2.07	2.53	3.07	3.69	4.43	5.28	6.26	7.40
55	1.20	1.52	1.88	2.29	2.77	3.33	3.99	4.76	5.66	6.69
60	-	-	-	-	-	2.95	3.53	4.22	5.03	5.97

Power input [kW]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	1.03	1.07	1.13	1.21	1.30	1.40	-	-	-	-
15	1.12	1.16	1.21	1.28	1.37	1.47	1.58	-	-	-
20	1.22	1.25	1.30	1.37	1.45	1.55	1.66	1.78	-	-
25	1.33	1.36	1.40	1.47	1.54	1.64	1.75	1.87	2.00	-
30	1.46	1.48	1.52	1.58	1.66	1.74	1.85	1.97	2.10	2.24
35	1.61	1.62	1.66	1.71	1.78	1.87	1.97	2.08	2.21	2.35
40	1.78	1.79	1.81	1.86	1.93	2.01	2.11	2.22	2.34	2.48
45	1.96	1.97	1.99	2.03	2.09	2.17	2.26	2.37	2.49	2.62
50	2.17	2.17	2.19	2.22	2.28	2.35	2.44	2.54	2.66	2.79
55	2.40	2.39	2.41	2.44	2.49	2.56	2.64	2.74	2.85	2.98
60	-	-	-	-	-	2.78	2.86	2.96	3.07	3.19

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Capacity

Current [A]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	4.18	4.21	4.24	4.28	4.34	4.40	-	-	-	-
15	4.21	4.23	4.27	4.31	4.36	4.43	4.51	-	-	-
20	4.25	4.27	4.31	4.35	4.40	4.47	4.55	4.65	-	-
25	4.31	4.33	4.36	4.40	4.46	4.53	4.61	4.70	4.82	-
30	4.38	4.40	4.43	4.47	4.53	4.60	4.68	4.78	4.89	5.03
35	4.48	4.49	4.52	4.56	4.62	4.69	4.77	4.87	4.99	5.13
40	4.60	4.61	4.64	4.68	4.73	4.80	4.89	4.99	5.11	5.25
45	4.75	4.76	4.78	4.82	4.87	4.94	5.03	5.13	5.26	5.40
50	4.93	4.93	4.95	4.99	5.04	5.11	5.19	5.30	5.43	5.58
55	5.14	5.14	5.16	5.19	5.24	5.31	5.40	5.50	5.63	5.78
60	-	-	-	-	-	5.54	5.63	5.74	5.87	6.02

Mass flow [kg/h]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	39.97	52.89	67.29	83.83	103.13	125.86	-	-	-	-
15	40.53	53.19	67.35	83.66	102.77	125.32	151.95	-	-	-
20	41.01	53.40	67.32	83.41	102.32	124.70	151.17	182.40	-	-
25	41.39	53.51	67.19	83.07	101.78	123.98	150.30	181.40	217.91	-
30	41.66	53.52	66.96	82.61	101.13	123.15	149.33	180.29	216.69	259.17
35	41.81	53.41	66.60	82.04	100.36	122.21	148.23	179.07	215.37	257.76
40	41.84	53.17	66.12	81.34	99.46	121.14	147.01	177.72	213.91	256.22
45	41.72	52.79	65.50	80.50	98.43	119.93	145.65	176.23	212.31	254.54
50	41.45	52.26	64.73	79.51	97.24	118.57	144.14	174.59	210.57	252.72
55	41.03	51.57	63.80	78.36	95.90	117.06	142.48	172.80	208.67	250.73
60	-	-	-	-	-	115.37	140.64	170.83	206.60	248.58

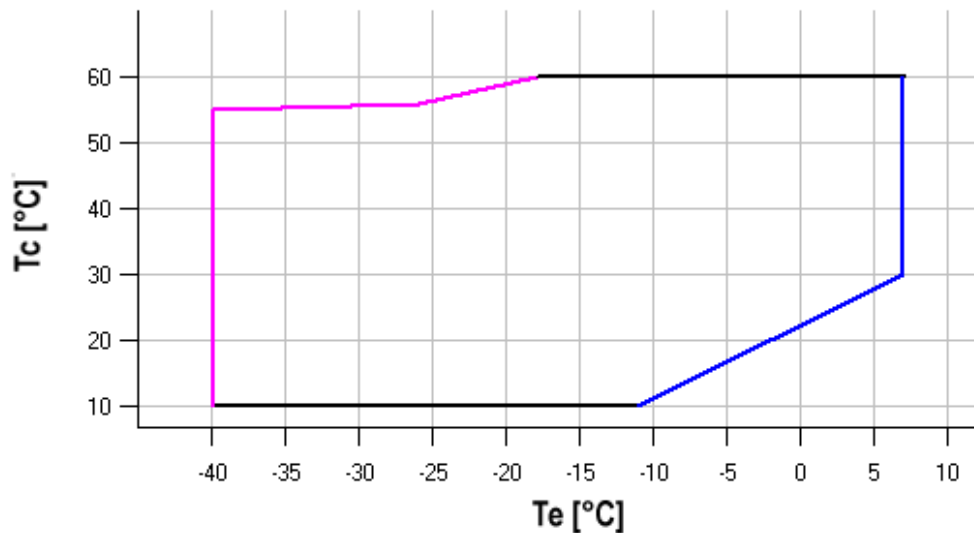
Model: ZF09K4E-TFD

Capacity

C.O.P. [W/W]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	2.01	2.45	2.91	3.39	3.88	4.37	-	-	-	-
15	1.77	2.18	2.61	3.06	3.52	3.99	4.46	-	-	-
20	1.56	1.93	2.32	2.74	3.16	3.60	4.05	4.50	-	-
25	1.36	1.69	2.05	2.43	2.82	3.23	3.64	4.07	4.50	-
30	1.18	1.47	1.79	2.13	2.49	2.86	3.24	3.64	4.05	4.47
35	1.01	1.27	1.55	1.85	2.17	2.51	2.86	3.22	3.60	3.99
40	0.87	1.09	1.33	1.60	1.88	2.17	2.49	2.82	3.17	3.53
45	0.73	0.92	1.13	1.36	1.60	1.86	2.14	2.44	2.75	3.08
50	0.61	0.77	0.95	1.14	1.35	1.57	1.81	2.08	2.35	2.65
55	0.50	0.64	0.78	0.94	1.11	1.30	1.51	1.74	1.98	2.25
60	-	-	-	-	-	1.06	1.23	1.43	1.64	1.87

Application range



- Maximum evaporating temperature
- 25°C suction gas return + liquid injection

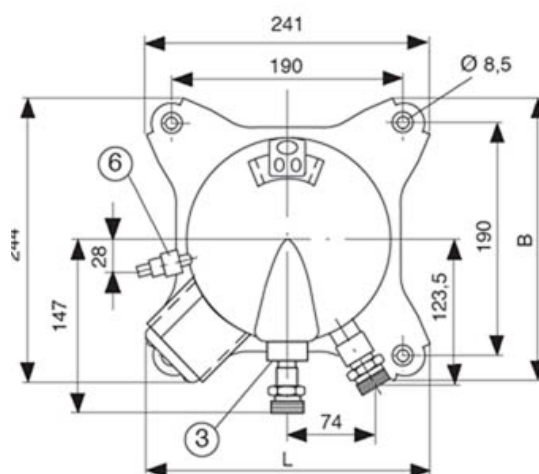
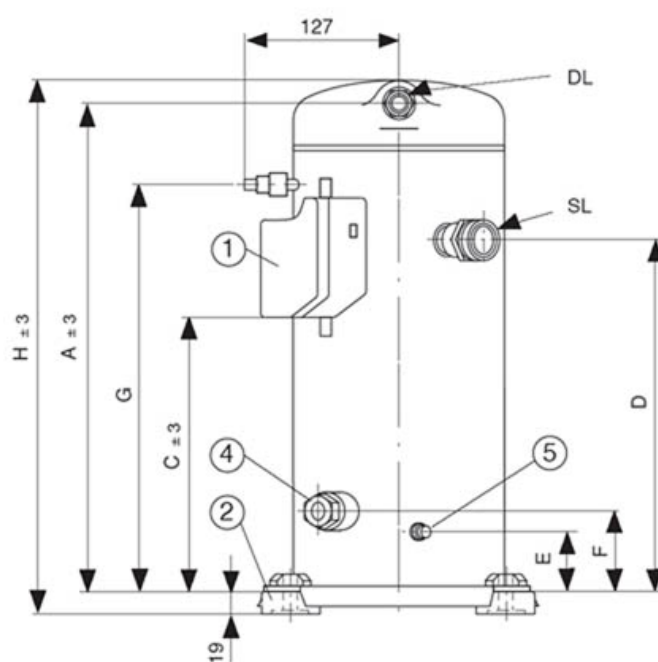
Operating conditions: suction gas temperature 20°C, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

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Dimensions



A	366,5 mm
C	219,3-225,3 mm
C1	-- mm
D	264,5 mm
E	49,6 mm
F	75,1 mm
G	302,5 mm

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Image

