

Type: Hermetic scroll compressors - digital

Producer: Copeland

Series: ZFD

Model: ZFD18KVE-TFD

Technical data

Displacement [m ³ /h]:	17,1
Sound power [dBA]:	73
Sound pressure level [dB]:	62
Net Weight [kg]:	43
Gross Weight [kg]:	45
Oil charge [dm ³]:	1,9
Maximum high pressure [bar]:	28
Maximum standstill pressure [bar]:	19

Electrical data

Power supply [V/~/Hz]:	380-420V/3/50Hz
Locked rotor current [A]:	74
Max. operating current [A]:	13,8
Winding resistance [Ω]:	2,3

Connections

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

R404A/R507

Cooling capacity [kW]

t _c \ t _e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	5.47	6.83	8.34	10.05	11.98	14.15	-	-	-	-
15	5.35	6.67	8.15	9.83	11.72	13.86	16.28	-	-	-
20	5.27	6.54	7.98	9.61	11.47	13.59	15.98	18.68	-	-
25	5.21	6.43	7.82	9.41	11.23	13.31	15.67	18.34	21.35	-
30	5.17	6.33	7.67	9.22	11.00	13.03	15.35	17.99	20.97	24.32
35	5.15	6.25	7.54	9.03	10.76	12.75	15.03	17.62	20.57	23.89
40	5.14	6.18	7.40	8.84	10.51	12.45	14.68	17.24	20.14	23.43
45	5.14	6.11	7.27	8.64	10.26	12.14	14.32	16.83	19.69	22.93
50	5.15	6.05	7.13	8.44	9.99	11.81	13.94	16.40	19.21	22.40
55	5.16	5.98	6.99	8.22	9.70	11.46	13.53	15.93	18.69	21.83
60	5.17	5.90	6.83	-	-	11.09	13.09	15.43	18.13	21.22

Power input [kW]

t _c \ t _e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	2.13	2.19	2.25	2.32	2.39	2.47	-	-	-	-
15	2.39	2.48	2.57	2.65	2.74	2.84	2.93	-	-	-
20	2.63	2.75	2.86	2.97	3.08	3.19	3.29	3.40	-	-
25	2.87	3.01	3.15	3.28	3.41	3.53	3.65	3.77	3.88	-
30	3.12	3.29	3.45	3.60	3.75	3.88	4.02	4.14	4.26	4.38
35	3.40	3.60	3.78	3.95	4.11	4.26	4.41	4.54	4.67	4.79
40	3.72	3.94	4.15	4.34	4.52	4.68	4.84	4.98	5.11	5.23
45	4.10	4.35	4.58	4.79	4.98	5.16	5.33	5.48	5.61	5.74
50	4.55	4.82	5.07	5.31	5.52	5.71	5.89	6.04	6.18	6.31
55	5.09	5.39	5.66	5.91	6.14	6.35	6.53	6.70	6.84	6.97
60	5.73	6.06	6.35	-	-	7.09	7.28	7.45	7.60	7.73

Current [A]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	5.23	5.27	5.33	5.39	5.46	5.54	-	-	-	-
15	5.51	5.59	5.67	5.77	5.87	5.97	6.08	-	-	-
20	5.76	5.88	6.00	6.12	6.24	6.37	6.50	6.62	-	-
25	6.01	6.16	6.31	6.47	6.62	6.77	6.91	7.06	7.19	-
30	6.27	6.47	6.65	6.84	7.01	7.19	7.35	7.51	7.66	7.80
35	6.59	6.82	7.04	7.25	7.45	7.65	7.83	8.01	8.17	8.32
40	6.97	7.23	7.49	7.73	7.96	8.18	8.38	8.57	8.75	8.91
45	7.44	7.74	8.03	8.30	8.56	8.80	9.02	9.23	9.42	9.58
50	8.03	8.37	8.69	8.99	9.27	9.54	9.78	10.00	10.20	10.37
55	8.75	9.13	9.48	9.82	10.13	10.41	10.67	10.91	11.12	11.30
60	9.64	10.05	10.44	-	-	11.45	11.73	11.98	12.20	12.39

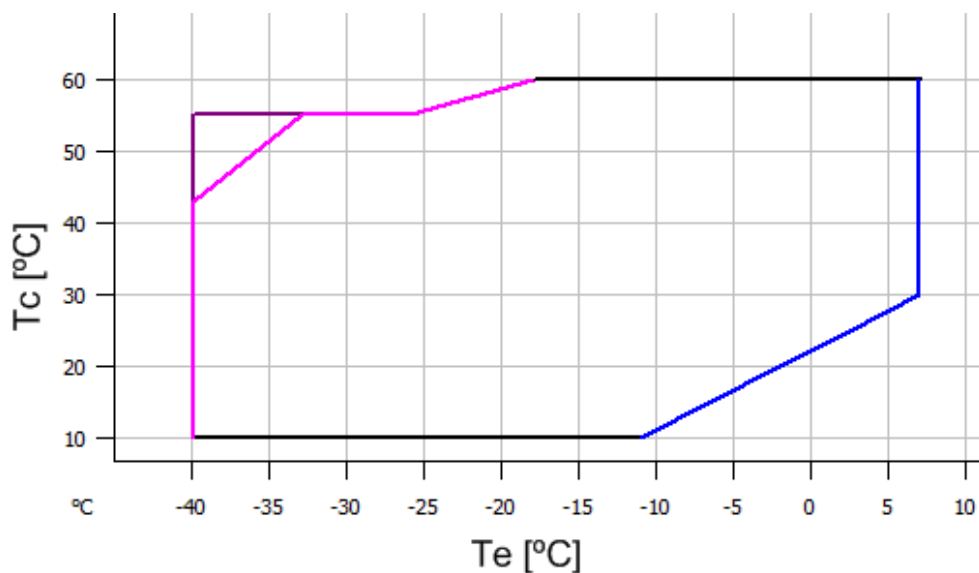
Mass flow [kg/h]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	89.64	115.41	144.98	179.50	220.12	267.97	-	-	-	-
15	88.57	113.86	143.08	177.39	217.92	265.83	322.25	-	-	-
20	87.94	112.66	141.46	175.47	215.85	263.73	320.26	386.58	-	-
25	87.69	111.77	140.06	173.70	213.84	261.62	318.18	384.67	462.22	-
30	87.77	111.13	138.83	172.02	211.84	259.44	315.95	382.53	460.31	550.43
35	88.12	110.68	137.71	170.37	209.80	257.13	313.52	380.10	458.02	548.43
40	88.68	110.36	136.65	168.70	207.65	254.65	310.83	377.34	455.32	545.92
45	89.40	110.12	135.59	166.95	205.35	251.92	307.82	374.18	452.15	542.87
50	90.22	109.90	134.47	165.07	202.83	248.91	304.44	370.57	448.45	539.21
55	91.09	109.66	133.25	162.99	200.05	245.54	300.63	366.46	444.16	534.88
60	91.95	109.33	131.85	-	-	241.78	296.35	361.78	439.23	529.83

C.O.P. [W/W]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
10	2.57	3.12	3.71	4.34	5.01	5.73	-	-	-	-
15	2.24	2.69	3.18	3.70	4.27	4.89	5.55	-	-	-
20	2.00	2.38	2.79	3.24	3.73	4.26	4.85	5.49	-	-
25	1.81	2.13	2.48	2.87	3.30	3.77	4.29	4.87	5.50	-
30	1.65	1.92	2.22	2.56	2.93	3.35	3.82	4.34	4.92	5.55
35	1.51	1.74	1.99	2.29	2.62	2.99	3.41	3.88	4.41	4.99
40	1.38	1.57	1.78	2.04	2.33	2.66	3.04	3.46	3.94	4.48
45	1.25	1.41	1.59	1.81	2.06	2.35	2.69	3.07	3.51	4.00
50	1.13	1.25	1.41	1.59	1.81	2.07	2.37	2.71	3.11	3.55
55	1.01	1.11	1.23	1.39	1.58	1.81	2.07	2.38	2.73	3.13
60	0.90	0.97	1.08	-	-	1.57	1.80	2.07	2.38	2.75

Application range



- Maximum evaporating temperature
- 25°C suction gas temperature
- 0°C suction gas temperature

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

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]



ELEKTRONIKA S.A.
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Model: ZFD18KVE-TFD

Dimensions

