

Type: Hermetic scroll compressors

Producer: Copeland

Series: ZP

Model: ZP137KCE-TFD

Technical data

Displacement [m ³ /h]:	22,1
Sound power [dBA]:	75
Sound pressure level [dB]:	64
Net Weight [kg]:	61,0
Gross Weight [kg]:	72
Oil charge [dm ³]:	3,3
Maximum high pressure [bar]:	45
Maximum standstill pressure [bar]:	29,5
Minimal lowside temperature [°C]:	-35
Maximum lowside temperature [°C]:	50
PED category:	2

Electrical data

Power supply [V/~/Hz]:	380-420V/3/50Hz
Locked rotor current [A]:	118,0
Max. operating current [A]:	25,0
Winding resistance [Ω]:	1,2

Connections

	<u>inches</u>
Suction connection with supplied sleeve:	1 3/8"
Discharge connection with supplied sleeve:	7/8"

R410A

Cooling capacity [kW]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	10	15	20
25	12.78	16.02	19.70	23.92	28.77	34.33	40.69	47.94	56.16	65.44
30	11.64	14.90	18.56	22.70	27.41	32.79	38.92	45.88	53.76	62.66
35	10.42	13.68	17.30	21.34	25.91	31.09	36.97	43.63	51.17	59.66
40	-	12.35	15.90	19.84	24.25	29.22	34.83	41.18	48.35	56.43
45	-	-	14.36	18.17	22.41	27.15	32.48	38.50	45.29	52.94
50	-	-	-	16.32	20.36	24.87	29.91	35.59	41.98	49.18
55	-	-	-	-	18.11	22.35	27.09	32.41	38.39	45.13
60	-	-	-	-	-	19.59	24.01	28.95	34.51	40.77
65	-	-	-	-	-	-	20.64	25.20	30.32	36.09

Power input [kW]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	10	15	20
25	5.23	5.25	5.25	5.27	5.30	5.38	5.52	5.74	6.06	6.50
30	5.85	5.88	5.89	5.88	5.89	5.93	6.02	6.17	6.42	6.76
35	6.53	6.58	6.60	6.59	6.58	6.59	6.63	6.73	6.90	7.17
40	-	7.37	7.40	7.40	7.38	7.37	7.38	7.43	7.53	7.72
45	-	-	8.32	8.33	8.31	8.28	8.26	8.27	8.33	8.45
50	-	-	-	9.39	9.38	9.34	9.30	9.28	9.29	9.35
55	-	-	-	-	10.60	10.57	10.52	10.47	10.45	10.46
60	-	-	-	-	-	11.97	11.92	11.86	11.80	11.78
65	-	-	-	-	-	-	13.52	13.45	13.38	13.32

Current [A]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15	20
25	11.09	11.11	11.12	11.12	11.16	11.26	11.44	11.72	12.14	12.72
30	11.85	11.89	11.90	11.90	11.90	11.95	12.06	12.27	12.59	13.04
35	12.73	12.80	12.82	12.82	12.81	12.81	12.87	13.00	13.23	13.58
40	-	13.87	13.92	13.92	13.89	13.87	13.88	13.95	14.10	14.35
45	-	-	15.20	15.22	15.19	15.16	15.13	15.14	15.22	15.39
50	-	-	-	16.75	16.74	16.69	16.64	16.61	16.62	16.71
55	-	-	-	-	18.55	18.50	18.44	18.37	18.33	18.35
60	-	-	-	-	-	20.62	20.55	20.46	20.38	20.34
65	-	-	-	-	-	-	23.01	22.90	22.79	22.70

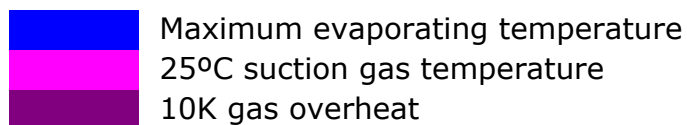
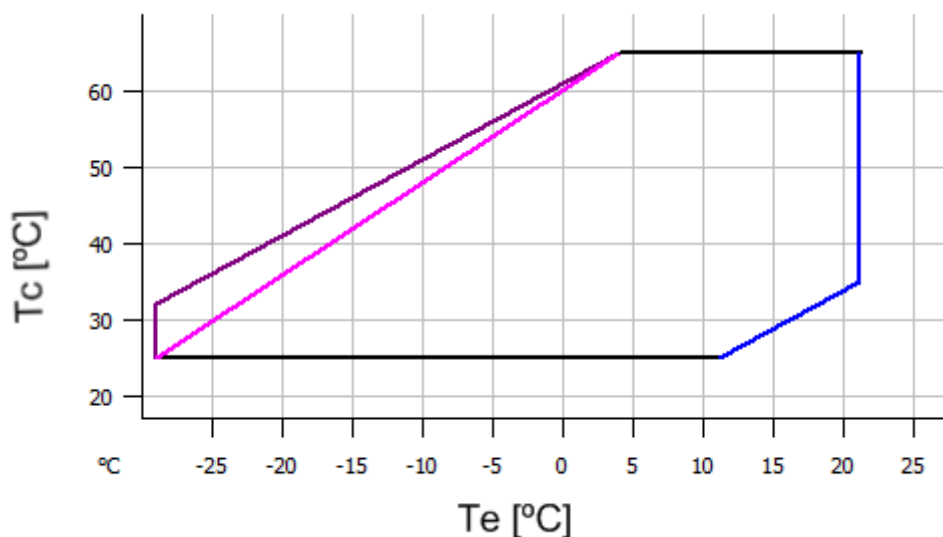
Mass flow [kg/h]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15	20
25	250.85	313.38	382.18	459.04	545.80	644.27	756.25	883.57	1 028.03	1 191.46
30	242.75	307.75	378.59	457.09	545.04	644.28	756.61	883.86	1 027.82	1 190.33
35	230.43	298.13	371.23	451.56	540.94	641.16	754.06	881.44	1 025.13	1 186.92
40	-	284.24	359.83	442.22	533.22	634.65	748.33	876.07	1 019.68	1 180.98
45	-	-	344.13	428.78	521.63	624.48	739.16	867.47	1 011.22	1 172.25
50	-	-	-	411.00	505.91	610.40	726.28	855.38	999.49	1 160.45
55	-	-	-	-	485.79	592.13	709.44	839.53	984.23	1 145.34
60	-	-	-	-	-	569.42	688.37	819.68	965.17	1 126.64
65	-	-	-	-	-	-	662.82	795.56	942.05	1 104.11

C.O.P. [W/W]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15	20
25	2.44	3.05	3.75	4.54	5.43	6.38	7.37	8.35	9.27	10.07
30	1.99	2.53	3.15	3.86	4.65	5.53	6.46	7.43	8.38	9.27
35	1.60	2.08	2.62	3.24	3.94	4.72	5.57	6.48	7.41	8.33
40	-	1.68	2.15	2.68	3.28	3.97	4.72	5.55	6.42	7.31
45	-	-	1.73	2.18	2.70	3.28	3.93	4.66	5.44	6.27
50	-	-	-	1.74	2.17	2.66	3.21	3.83	4.52	5.26
55	-	-	-	-	1.71	2.12	2.58	3.09	3.67	4.31
60	-	-	-	-	-	1.64	2.01	2.44	2.92	3.46
65	-	-	-	-	-	-	1.53	1.87	2.27	2.71

Application range



Operating conditions: 10K suction superheat, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

