

Model: ZP180KCE-TWD

Data

Type: Hermetic piston compressors
Producer: Copeland
Series: ZP

Model: ZP180KCE-TWD

Technical data

Nominal motor power [HP]:	15
Displacement [m ³ /h]:	29
Sound pressure level :	69
Weight [kg]:	130/119
Oil charge [dm ³]:	4,1

Electrical data

Power supply [V/~/Hz]:	380-420V/3/50Hz
Locked rotor current [A]:	198
Max. operating current [A]:	31
Winding resistance [Ω]:	0,7

Connections

	<u>milimeters</u>	<u>inches</u>
Suction Rotolock valve connection:		2 1/4"
Discharge Rotolock valve connection:		1 3/4"
Suction connection with supplied sleeve:		1 5/8"
Discharge connection with supplied sleeve:		1 1/8"

Model: ZP180KCE-TWD**Capacity**

R410A

Cooling capacity [kW]

t_c \ t_e	-20	-15	-10	-5	0	5	10	15
25	20.67	25.16	30.37	36.37	43.25	51.07	59.92	-
30	19.45	23.86	28.95	34.79	41.46	49.04	57.61	67.25
35	18.21	22.50	27.44	33.09	39.53	46.84	55.10	64.38
40	16.90	21.06	25.81	31.24	37.42	44.43	52.35	61.26
45	-	19.50	24.05	29.22	35.12	41.80	49.35	57.85
50	-	-	22.11	27.01	32.58	38.91	46.06	54.12
55	-	-	-	24.58	29.80	35.74	42.47	50.06
60	-	-	-	-	26.75	32.27	38.54	45.64
65	-	-	-	-	23.39	28.46	34.25	40.82

Power input [kW]

t_c \ t_e	-20	-15	-10	-5	0	5	10	15
25	6.95	6.99	7.03	7.10	7.27	7.57	8.07	-
30	7.71	7.78	7.81	7.84	7.93	8.12	8.47	9.02
35	8.51	8.64	8.69	8.71	8.75	8.86	9.08	9.48
40	9.36	9.57	9.67	9.71	9.72	9.77	9.90	10.16
45	-	10.58	10.75	10.82	10.84	10.86	10.92	11.08
50	-	-	11.92	12.06	12.11	12.12	12.14	12.22
55	-	-	-	13.40	13.51	13.54	13.54	13.57
60	-	-	-	-	15.04	15.12	15.14	15.14
65	-	-	-	-	16.69	16.85	16.90	16.91

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Capacity

Current [A]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
25	14.85	15.06	15.20	15.33	15.49	15.73	16.11	-
30	15.76	15.97	16.10	16.20	16.31	16.49	16.78	17.24
35	16.76	16.98	17.11	17.19	17.27	17.39	17.61	17.98
40	17.86	18.12	18.26	18.33	18.39	18.48	18.64	18.94
45	-	19.41	19.58	19.66	19.71	19.77	19.90	20.13
50	-	-	21.11	21.21	21.27	21.32	21.41	21.60
55	-	-	-	23.02	23.09	23.14	23.22	23.38
60	-	-	-	-	25.21	25.28	25.36	25.49
65	-	-	-	-	27.67	27.77	27.86	27.99

Mass flow [kg/s]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
25	402.20	486.76	582.06	689.77	811.57	949.16	1 104.20	-
30	400.69	486.45	582.97	691.91	814.98	953.85	1 110.20	1 285.72
35	396.02	483.03	580.81	691.05	815.44	955.65	1 113.36	1 290.27
40	388.31	476.62	575.73	687.32	813.07	954.67	1 113.80	1 292.14
45	-	467.36	567.84	680.83	808.00	951.05	1 111.65	1 291.48
50	-	-	557.28	671.72	800.37	944.91	1 107.03	1 288.41
55	-	-	-	660.11	790.29	936.39	1 100.08	1 283.05
60	-	-	-	-	777.90	925.60	1 090.92	1 275.54
65	-	-	-	-	763.33	912.68	1 079.68	1 266.01

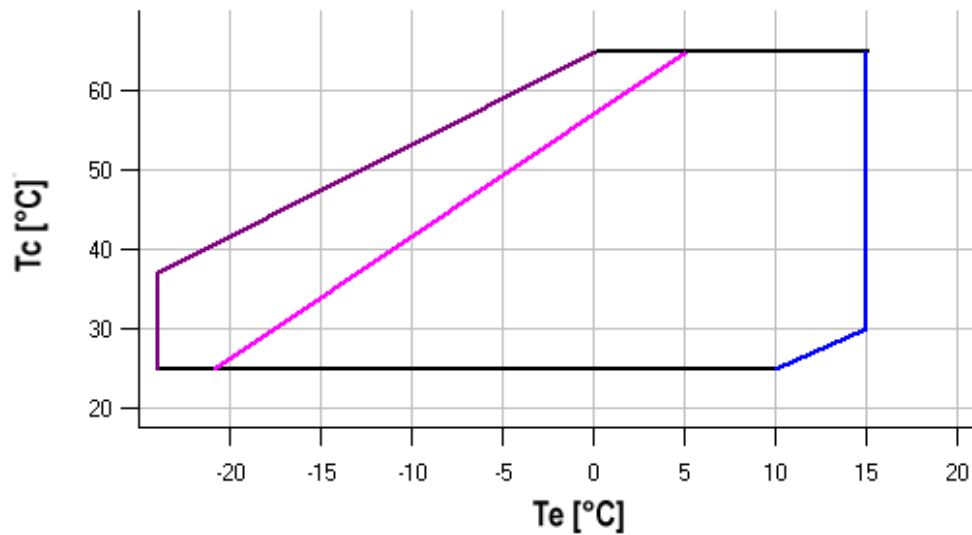
Model: ZP180KCE-TWD

Capacity

C.O.P. [W/W]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
25	2.97	3.60	4.32	5.12	5.95	6.74	7.43	-
30	2.52	3.07	3.71	4.44	5.23	6.04	6.80	7.45
35	2.14	2.60	3.16	3.80	4.52	5.29	6.07	6.79
40	1.81	2.20	2.67	3.22	3.85	4.55	5.29	6.03
45	-	1.84	2.24	2.70	3.24	3.85	4.52	5.22
50	-	-	1.86	2.24	2.69	3.21	3.79	4.43
55	-	-	-	1.83	2.21	2.64	3.14	3.69
60	-	-	-	-	1.78	2.13	2.55	3.01
65	-	-	-	-	1.40	1.69	2.03	2.41

Application range



- Maximum evaporating temperature
- 25°C suction gas temperature
- 10K gas overheat

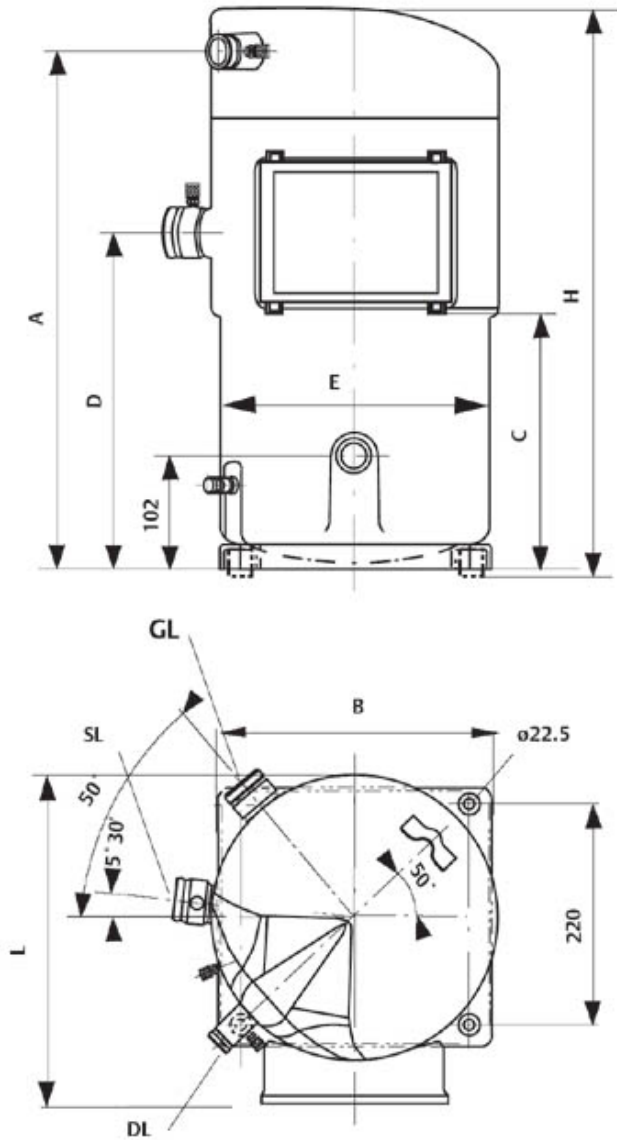
Operating conditions: 10K suction superheat, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

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Dimensions



A	546 mm
B	268 mm
C	224 mm
D	318 mm
E	283 mm
H	591 mm
L	360 mm

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Image

