

Model: D6DL-270 X

Data

Type: Semi-hermetic piston compressors

Producer: Copeland

Series: DISCUS

Model: D6DL-270 X

Technical data

Cylinder count:	6
Displacement [m ³ /h]:	106
Weight [kg]:	258
Oil charge [dm ³]:	4,3
Max. operating current [A]:	43
Locked rotor current [A]:	192
Power supply [V/~/Hz]:	380-420V/3/50Hz

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:		2 1/8"
Discharge line:		1 3/8"

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Capacity

R404A/R507

Cooling capacity [kW]

$t_c \setminus t_e$	-50	-45	-40	-35	-30	-25	-20	-15	-10
20	12.56	16.85	22.11	28.49	36.10	45.08	55.56	67.68	81.56
25	11.28	15.31	20.23	26.16	33.24	41.60	51.37	62.69	75.67
30	10.00	13.78	18.35	23.86	30.42	38.17	47.24	57.76	69.87
35	8.72	12.26	16.50	21.58	27.63	34.78	43.17	52.91	64.14
40	-	10.74	14.67	19.34	24.89	31.45	39.15	48.12	58.50
45	-	9.24	12.86	17.13	22.19	28.17	35.20	43.41	-
50	-	-	11.07	14.95	19.53	24.94	31.31	38.78	-
55	-	-	9.31	12.81	16.92	21.77	27.49	34.22	-

Power input [kW]

$t_c \setminus t_e$	-50	-45	-40	-35	-30	-25	-20	-15	-10
20	7.37	8.79	10.26	11.75	13.23	14.66	15.99	17.20	18.24
25	7.43	8.92	10.50	12.13	13.76	15.37	16.91	18.34	19.64
30	7.45	9.02	10.70	12.45	14.23	16.01	17.75	19.41	20.96
35	7.45	9.09	10.86	12.72	14.65	16.59	18.52	20.39	22.18
40	-	9.11	10.96	12.94	15.00	17.10	19.21	21.29	23.31
45	-	9.08	11.01	13.09	15.28	17.53	19.82	22.11	-
50	-	-	11.01	13.18	15.49	17.89	20.35	22.83	-
55	-	-	10.94	13.21	15.63	18.17	20.79	23.45	-

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Current [A]

$t_c \setminus t_e$	-50	-45	-40	-35	-30	-25	-20	-15	-10
20	18.80	20.52	22.36	24.29	26.25	28.21	30.11	31.91	33.58
25	18.88	20.71	22.72	24.85	27.08	29.35	31.63	33.85	35.99
30	18.94	20.86	23.01	25.34	27.82	30.39	33.01	35.65	38.25
35	18.97	20.96	23.23	25.74	28.45	31.30	34.27	37.29	40.33
40	-	21.00	23.38	26.05	28.97	32.09	35.37	38.77	42.23
45	-	20.97	23.44	26.26	29.37	32.74	36.33	40.08	-
50	-	-	23.41	26.36	29.65	33.26	37.12	41.21	-
55	-	-	23.29	26.34	29.80	33.62	37.75	42.16	-

Mass flow [kg/s]

$t_c \setminus t_e$	-50	-45	-40	-35	-30	-25	-20	-15	-10
20	260.68	363.09	483.48	626.48	796.74	998.87	1 237.51	1 517.28	1 842.83
25	248.22	347.31	464.06	603.11	769.07	966.58	1 200.27	1 474.76	1 794.70
30	234.25	330.10	443.29	578.43	740.16	933.12	1 161.92	1 431.20	1 745.60
35	218.89	311.56	421.23	552.54	710.11	898.58	1 122.56	1 386.70	1 695.61
40	-	291.76	398.00	525.54	679.01	863.05	1 082.28	1 341.33	1 644.83
45	-	270.81	373.67	497.50	646.94	826.62	1 041.16	1 295.19	-
50	-	-	348.33	468.53	614.00	789.38	999.30	1 248.38	-
55	-	-	322.08	438.70	580.27	751.42	956.78	1 200.97	-

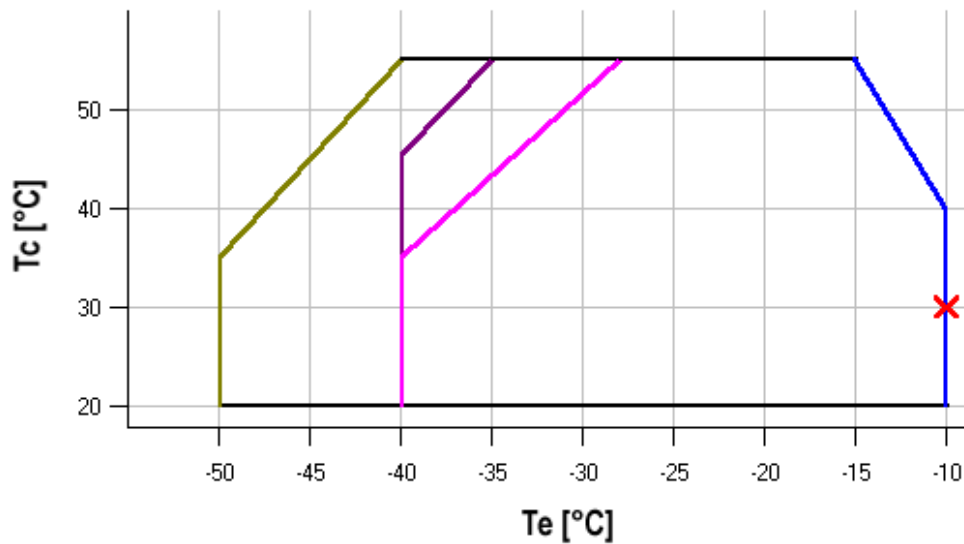
Model: D6DL-270 X





Capacity

C.O.P. [W/W]

$t_c \setminus t_e$	-50	-45	-40	-35	-30	-25	-20	-15	-10
20	1.70	1.92	2.16	2.42	2.73	3.08	3.47	3.93	4.47
25	1.52	1.72	1.93	2.16	2.42	2.71	3.04	3.42	3.85
30	1.34	1.53	1.71	1.92	2.14	2.38	2.66	2.98	3.33
35	1.17	1.35	1.52	1.70	1.89	2.10	2.33	2.59	2.89
40	-	1.18	1.34	1.49	1.66	1.84	2.04	2.26	2.51
45	-	1.02	1.17	1.31	1.45	1.61	1.78	1.96	-
50	-	-	1.01	1.13	1.26	1.39	1.54	1.70	-
55	-	-	0.85	0.97	1.08	1.20	1.32	1.46	-

Application range



-  Maximum evaporating temperature
-  25°C suction gas return
-  0°C suction gas return + additional cooling
-  0°C suction gas return

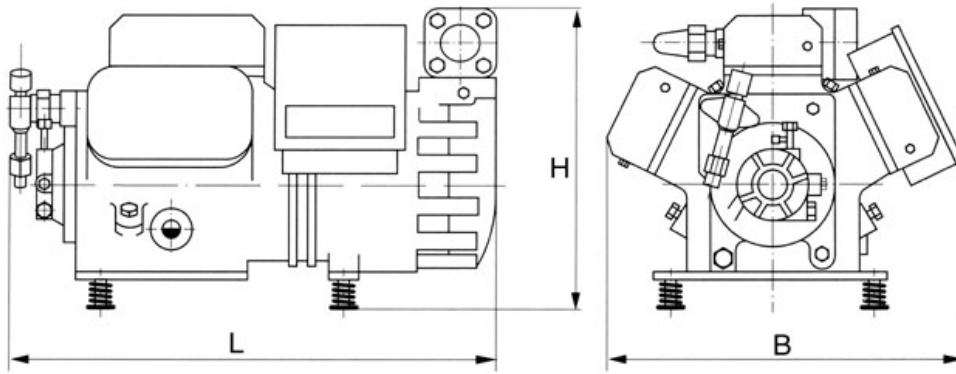
Operating conditions: ISO; subcooling: 0 K, suction superheat: - K, return gas temperature: 20

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

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Dimensions



L	740 mm
B	580 mm
H	650 mm