

Type: Semi-hermetic piston compressors

Producer: Copeland

Series: S

Model: D4SH-2500

Technical data

Cylinder count:	4
Displacement [m ³ /h]:	70,8
Weight [kg]:	210
Oil charge [dm ³]:	4
Max. operating current [A]:	40,1
Locked rotor current [A]:	192
Power supply [V/~/Hz]:	400V/3/50Hz

Connections

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

R22
Cooling capacity [kW]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	27.34	34.16	42.22	51.66	62.61	75.20	-	-
15	25.48	32.17	40.04	49.23	59.87	72.09	-	-
20	23.66	30.19	37.85	46.77	57.09	68.92	82.42	-
25	21.90	28.25	35.67	44.30	54.26	65.69	78.72	93.48
30	20.18	26.33	33.50	41.82	51.41	62.41	74.95	89.17
35	18.53	24.46	31.35	39.33	48.53	59.08	71.12	84.77
40	16.94	22.63	29.22	36.84	45.63	55.71	67.22	80.28
45	15.43	20.85	27.12	34.37	42.72	52.31	63.26	75.72
50	13.99	19.13	25.06	31.90	39.80	48.87	59.26	71.09
55	-	-	23.04	29.46	36.88	45.41	55.21	66.38
60	-	-	-	27.04	33.96	41.94	51.12	61.62

Power input [kW]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	8.04	8.37	8.52	8.45	8.11	7.49	-	-
15	8.34	8.86	9.21	9.36	9.27	8.91	-	-
20	8.66	9.35	9.89	10.25	10.40	10.30	9.92	-
25	8.99	9.84	10.56	11.13	11.50	11.65	11.53	11.12
30	9.32	10.32	11.21	11.97	12.56	12.94	13.09	12.96
35	9.64	10.78	11.84	12.78	13.58	14.19	14.59	14.74
40	9.96	11.23	12.44	13.56	14.55	15.38	16.02	16.43
45	10.26	11.65	13.01	14.29	15.47	16.51	17.38	18.04
50	10.55	12.05	13.54	14.98	16.33	17.57	18.66	19.57
55	-	-	14.03	15.61	17.14	18.57	19.87	21.00
60	-	-	-	16.19	17.87	19.48	20.98	22.34

Current [A]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	17.88	18.28	18.44	18.30	17.83	16.95	-	-
15	18.29	18.92	19.35	19.53	19.39	18.88	-	-
20	18.70	19.57	20.26	20.73	20.92	20.77	20.23	-
25	19.13	20.21	21.16	21.91	22.41	22.61	22.45	21.87
30	19.56	20.85	22.03	23.06	23.86	24.39	24.60	24.42
35	19.98	21.47	22.88	24.16	25.26	26.12	26.68	26.89
40	20.39	22.07	23.70	25.23	26.60	27.77	28.67	29.26
45	20.79	22.63	24.47	26.23	27.88	29.35	30.59	31.54
50	21.16	23.17	25.19	27.18	29.09	30.84	32.40	33.71
55	-	-	25.86	28.07	30.22	32.25	34.12	35.77
60	-	-	-	28.88	31.26	33.56	35.73	37.71

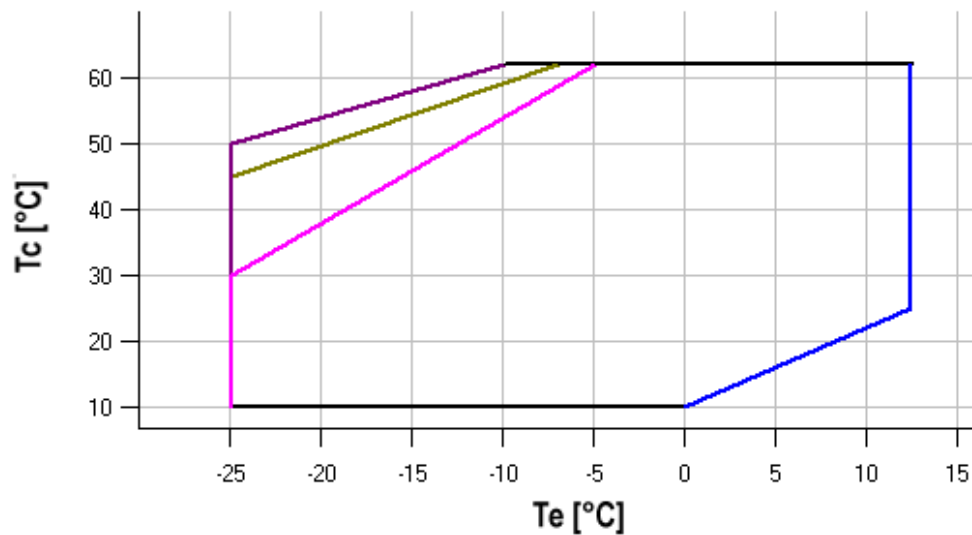
Mass flow [kg/s]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	528.46	649.66	789.83	951.22	1 136.10	1 346.71	-	-
15	505.18	628.46	770.47	933.45	1 119.66	1 331.38	-	-
20	482.64	607.50	750.83	914.89	1 101.94	1 314.24	1 554.05	-
25	460.87	586.80	730.94	895.57	1 082.95	1 295.32	1 534.96	1 804.11
30	439.91	566.38	710.83	875.52	1 062.71	1 274.64	1 513.60	1 781.82
35	419.76	546.28	690.53	854.76	1 041.25	1 252.24	1 490.00	1 756.78
40	400.47	526.51	670.04	833.32	1 018.59	1 228.12	1 464.18	1 729.01
45	382.04	507.11	649.41	811.21	994.76	1 202.33	1 436.17	1 698.54
50	364.51	488.08	628.65	788.46	969.78	1 174.87	1 405.98	1 665.38
55	-	-	607.79	765.11	943.68	1 145.78	1 373.66	1 629.57
60	-	-	-	741.16	916.48	1 115.08	1 339.21	1 591.13

C.O.P. [W/W]

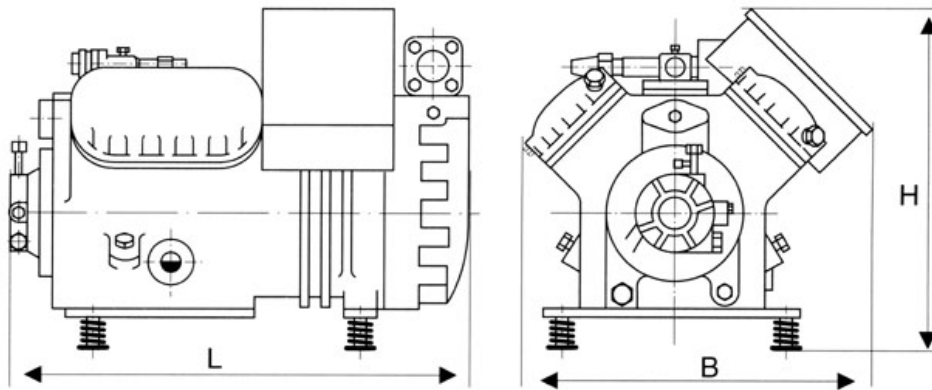
$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	3.40	4.08	4.96	6.12	7.72	10.04	-	-
15	3.05	3.63	4.35	5.26	6.46	8.09	-	-
20	2.73	3.23	3.83	4.56	5.49	6.69	8.31	-
25	2.44	2.87	3.38	3.98	4.72	5.64	6.83	8.40
30	2.17	2.55	2.99	3.49	4.09	4.82	5.73	6.88
35	1.92	2.27	2.65	3.08	3.57	4.16	4.87	5.75
40	1.70	2.02	2.35	2.72	3.14	3.62	4.20	4.89
45	1.50	1.79	2.09	2.40	2.76	3.17	3.64	4.20
50	1.33	1.59	1.85	2.13	2.44	2.78	3.17	3.63
55	-	-	1.64	1.89	2.15	2.45	2.78	3.16
60	-	-	-	1.67	1.90	2.15	2.44	2.76

Application range



- Maximum evaporating temperature
- 25°C suction gas temperature
- 10K suction gas return + additional cooling
- 20K suction gas return

Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -
 t_c - Condensing temperature [°C]
 t_e - Evaporating temperature [°C]



L	670 mm
B	490 mm
H	495 mm

