

Model: D3DS-1500

Data

Type: Semi-hermetic piston compressors

Producer: Copeland

Series: DISCUS

Model: D3DS-1500

Technical data

Cylinder count:	3
Displacement [m ³ /h]:	49,9
Weight [kg]:	178
Oil charge [dm ³]:	3,4
Max. operating current [A]:	28,8
Locked rotor current [A]:	129
Power supply [V/~/Hz]:	380-420V/3/50Hz

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:		1 5/8"
Discharge line:		1 1/8"

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Capacity

R22

Cooling capacity [kW]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
30	15.90	20.07	24.97	30.68	37.33	45.03	53.87	63.98
35	14.85	18.89	23.58	29.04	35.37	42.69	51.10	60.72
40	13.82	17.71	22.20	27.39	33.41	40.35	48.33	57.45
45	-	16.55	20.83	25.76	31.45	38.01	45.55	54.17
50	-	15.43	19.49	24.15	29.51	35.68	42.77	50.89
55	-	-	18.19	22.57	27.60	33.38	40.02	47.63
60	-	-	16.94	21.04	25.72	31.11	37.29	44.39

Power input [kW]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
30	6.68	7.25	7.74	8.13	8.39	8.49	8.40	8.09
35	7.00	7.66	8.26	8.78	9.18	9.44	9.53	9.42
40	7.31	8.06	8.76	9.40	9.94	10.36	10.62	10.70
45	-	8.44	9.25	10.00	10.67	11.24	11.67	11.93
50	-	8.82	9.72	10.58	11.38	12.09	12.68	13.12
55	-	-	10.18	11.15	12.07	12.92	13.66	14.28
60	-	-	10.65	11.71	12.75	13.73	14.62	15.40

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Current [A]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	10
30	13.59	14.47	15.23	15.84	16.24	16.39	16.25	15.77
35	14.08	15.10	16.04	16.85	17.48	17.88	18.02	17.85
40	14.56	15.72	16.82	17.82	18.67	19.32	19.74	19.86
45	-	16.32	17.58	18.76	19.82	20.72	21.39	21.82
50	-	16.91	18.32	19.68	20.94	22.07	23.01	23.71
55	-	-	19.05	20.58	22.04	23.39	24.58	25.56
60	-	-	19.78	21.47	23.12	24.68	26.11	27.36

Mass flow [kg/s]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	10
30	302.98	385.92	481.99	594.60	727.17	883.12	1 065.85	1 278.78
35	293.16	375.77	471.13	582.66	713.78	867.89	1 048.42	1 258.78
40	283.35	365.46	459.94	570.22	699.71	851.82	1 029.98	1 237.59
45	-	355.28	448.72	557.57	685.27	835.21	1 010.82	1 215.52
50	-	345.56	437.77	545.04	670.76	818.37	991.26	1 192.87
55	-	-	427.41	532.91	656.50	801.60	971.61	1 169.95
60	-	-	417.94	521.51	642.79	785.20	952.16	1 147.07

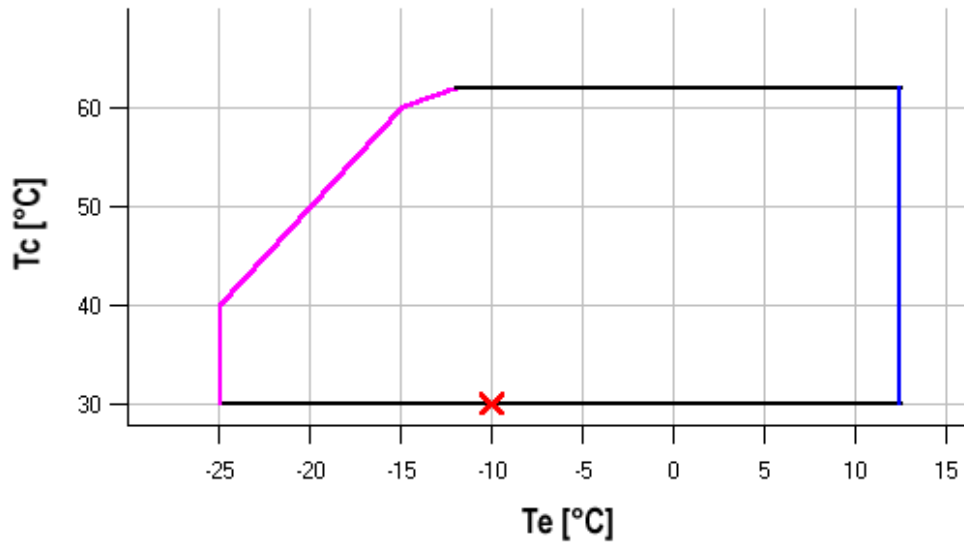
Model: D3DS-1500

Capacity

C.O.P. [W/W]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
30	2.38	2.77	3.22	3.77	4.45	5.30	6.42	7.91
35	2.12	2.47	2.85	3.31	3.85	4.52	5.36	6.45
40	1.89	2.20	2.53	2.91	3.36	3.90	4.55	5.37
45	-	1.96	2.25	2.58	2.95	3.38	3.90	4.54
50	-	1.75	2.01	2.28	2.59	2.95	3.37	3.88
55	-	-	1.79	2.02	2.29	2.58	2.93	3.34
60	-	-	1.59	1.80	2.02	2.27	2.55	2.88

Application range



- Maximum evaporating temperature
- 25°C suction gas return

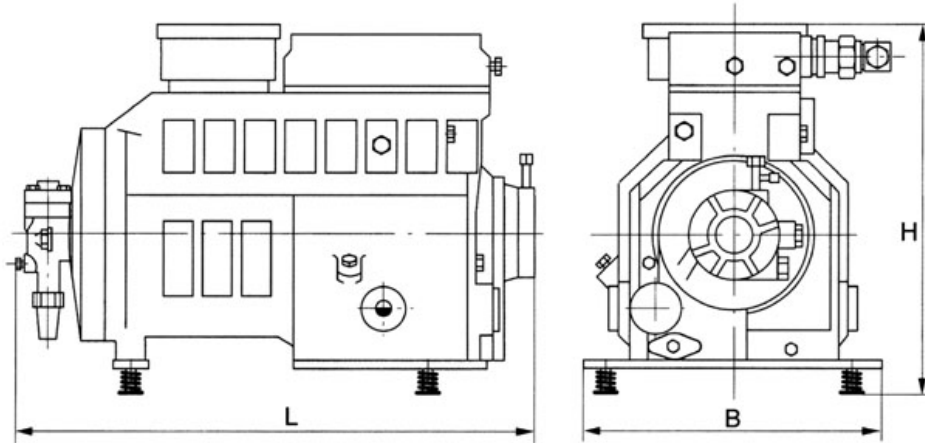
Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

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Dimensions



L	710 mm
B	370 mm
H	490 mm

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Image

