

Model: D3SC-75 X

Data

Type: Semi-hermetic piston compressors

Producer: Copeland

Series: S

Model: D3SC-75 X

Technical data

Cylinder count:	3
Displacement [m ³ /h]:	38
Weight [kg]:	161
Oil charge [dm ³]:	3,7
Max. operating current [A]:	18,7
Locked rotor current [A]:	82
Power supply [V/~/Hz]:	400V/3/50Hz

Connections

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

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Capacity

R404A/R507

Cooling capacity [kW]

t_c \ t_e	-45	-40	-35	-30	-25	-20	-15	-10	-5
20	4.44	6.21	8.45	11.19	14.49	18.40	22.96	28.23	34.24
25	3.94	5.61	7.70	10.26	13.36	17.02	21.31	26.26	31.94
30	3.47	5.01	6.95	9.34	12.22	15.64	19.64	24.28	29.61
35	3.01	4.43	6.22	8.42	11.08	14.24	17.96	22.29	27.26
40	2.58	3.88	5.50	7.51	9.94	12.85	16.28	20.28	24.89
45	2.19	3.35	4.81	6.62	8.82	11.46	14.59	18.26	22.51
50	-	2.86	4.14	5.75	7.71	10.08	12.91	16.24	20.13
55	-	2.40	3.51	4.90	6.62	8.72	11.24	14.23	17.74

Power input [kW]

t_c \ t_e	-45	-40	-35	-30	-25	-20	-15	-10	-5
20	2.84	3.47	4.12	4.76	5.37	5.94	6.44	6.85	7.15
25	2.84	3.51	4.21	4.91	5.59	6.24	6.84	7.36	7.78
30	2.83	3.53	4.27	5.03	5.78	6.51	7.20	7.82	8.36
35	2.80	3.53	4.31	5.11	5.93	6.74	7.51	8.23	8.89
40	2.76	3.51	4.32	5.17	6.05	6.92	7.78	8.60	9.36
45	2.71	3.48	4.31	5.21	6.14	7.08	8.01	8.92	9.78
50	-	3.43	4.29	5.22	6.19	7.19	8.20	9.19	10.14
55	-	3.36	4.24	5.20	6.22	7.28	8.35	9.42	10.46

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Current [A]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5
20	8.21	9.01	9.78	10.53	11.25	11.95	12.62	13.27	13.89
25	8.12	9.02	9.89	10.73	11.55	12.34	13.11	13.85	14.57
30	8.00	8.99	9.96	10.89	11.81	12.70	13.56	14.40	15.21
35	7.84	8.93	9.99	11.02	12.03	13.02	13.98	14.91	15.82
40	7.65	8.83	9.99	11.12	12.22	13.30	14.36	15.39	16.39
45	7.42	8.70	9.95	11.18	12.38	13.55	14.70	15.83	16.92
50	-	8.53	9.88	11.20	12.50	13.77	15.01	16.23	17.42
55	-	8.33	9.77	11.19	12.58	13.95	15.29	16.60	17.89

Mass flow [kg/s]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5
20	95.63	136.34	186.38	247.48	321.40	409.90	514.72	637.62	780.35
25	89.74	129.04	177.71	237.50	310.17	397.46	501.12	622.91	764.59
30	84.00	121.68	168.78	227.05	298.24	384.11	486.41	606.89	747.30
35	78.40	114.24	159.56	216.10	285.62	369.86	470.59	589.54	728.48
40	72.93	106.73	150.06	204.66	272.29	354.70	453.64	570.87	708.12
45	67.58	99.13	140.26	192.72	258.26	338.62	435.57	550.85	686.22
50	-	91.44	130.17	180.27	243.50	321.62	416.36	529.50	662.77
55	-	83.65	119.76	167.30	228.02	303.67	396.01	506.78	637.75

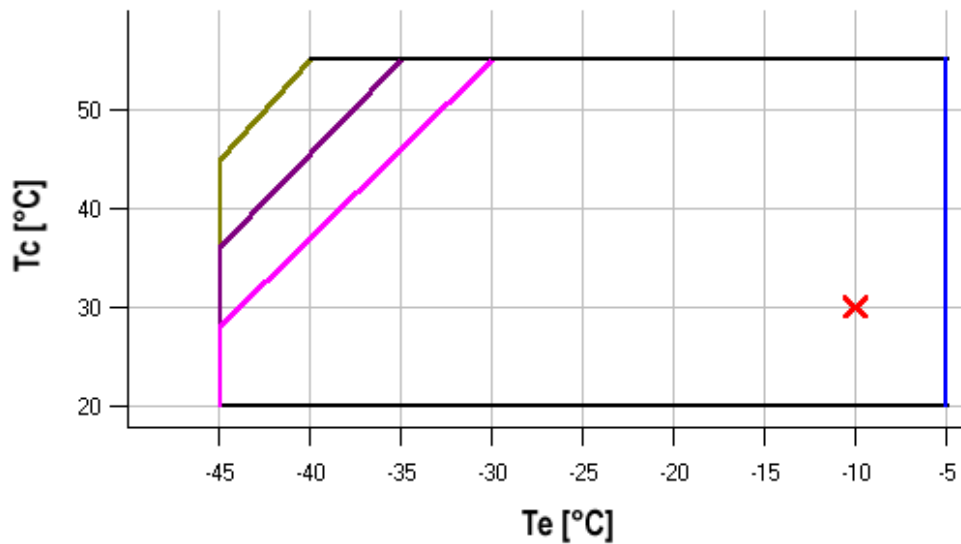
Model: D3SC-75 X



Capacity



C.O.P. [W/W]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5
20	1.56	1.79	2.05	2.35	2.70	3.10	3.57	4.12	4.79
25	1.39	1.60	1.83	2.09	2.39	2.73	3.12	3.57	4.10
30	1.22	1.42	1.63	1.86	2.11	2.40	2.73	3.10	3.54
35	1.07	1.26	1.44	1.65	1.87	2.11	2.39	2.71	3.07
40	0.94	1.10	1.27	1.45	1.64	1.86	2.09	2.36	2.66
45	0.81	0.96	1.12	1.27	1.44	1.62	1.82	2.05	2.30
50	-	0.83	0.97	1.10	1.25	1.40	1.57	1.77	1.98
55	-	0.71	0.83	0.94	1.06	1.20	1.35	1.51	1.70

Application range



 Maximum evaporating temperature
 25°C suction gas temperature

 0°C suction gas return
 0°C suction gas return + additional cooling

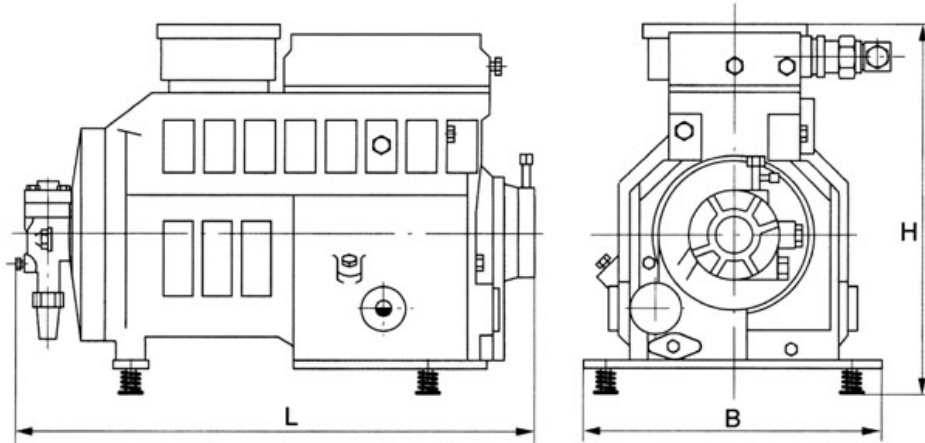
Operating conditions: ISO; subcooling: 0 K, suction superheat: - K, return gas temperature: 20

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

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Dimensions



L	655 mm
B	370 mm
H	480 mm