

Model: D3DA-75 X

Data

Type: Semi-hermetic piston compressors
Producer: Copeland
Series: DISCUS

Model: D3DA-75 X

Technical data

Cylinder count:	3
Displacement [m³/h]:	32,2
Weight [kg]:	163
Oil charge [dm³]:	3,4
Max. operating current [A]:	17,5
Locked rotor current [A]:	106
Power supply [V/~/Hz]:	380-420V/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	-40	-35	-30	-25	-20	-15	-10	-5	0	5
20	5.60	7.55	9.94	12.82	16.26	20.29	24.97	30.35	36.50	43.44
25	5.17	7.05	9.32	12.05	15.29	19.09	23.50	28.57	34.35	40.91
30	4.67	6.46	8.61	11.18	14.21	17.77	21.89	26.64	32.06	38.21
35	4.13	5.82	7.84	10.23	13.06	16.35	20.18	24.60	29.65	35.38
40	3.58	5.18	7.05	9.26	11.86	14.89	18.42	22.49	27.15	32.46
45	-	4.55	6.27	8.29	10.65	13.41	16.63	20.34	24.61	29.49
50	-	3.99	5.55	7.36	9.48	11.96	14.85	18.20	22.06	26.50
55	-	-	4.92	6.52	8.38	10.56	13.12	16.10	19.55	23.53

Power input [kW]

t _c \ t _e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
20	3.03	3.46	3.86	4.22	4.50	4.70	4.79	4.75	4.56	4.21
25	3.11	3.58	4.04	4.46	4.83	5.12	5.32	5.40	5.35	5.15
30	3.16	3.67	4.17	4.66	5.10	5.48	5.78	5.98	6.06	6.00
35	3.19	3.73	4.28	4.82	5.33	5.79	6.19	6.50	6.71	6.78
40	3.23	3.79	4.37	4.96	5.53	6.07	6.56	6.97	7.30	7.51
45	-	3.85	4.46	5.09	5.72	6.33	6.91	7.42	7.85	8.18
50	-	3.93	4.56	5.23	5.92	6.59	7.24	7.84	8.38	8.83
55	-	-	4.70	5.40	6.12	6.86	7.58	8.27	8.90	9.47

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Current [A]

t _c \ t _e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
20	7.99	8.52	9.01	9.45	9.80	10.04	10.13	10.04	9.75	9.23
25	8.03	8.61	9.18	9.72	10.18	10.55	10.79	10.88	10.78	10.48
30	8.05	8.69	9.33	9.95	10.53	11.02	11.41	11.67	11.76	11.66
35	8.07	8.75	9.46	10.17	10.85	11.46	12.00	12.41	12.68	12.78
40	8.08	8.81	9.58	10.36	11.14	11.88	12.55	13.12	13.56	13.86
45	-	8.87	9.69	10.55	11.42	12.27	13.07	13.79	14.41	14.89
50	-	8.93	9.80	10.73	11.69	12.64	13.57	14.44	15.22	15.88
55	-	-	9.92	10.92	11.95	13.01	14.06	15.06	16.00	16.85

Mass flow [kg/s]

t _c \ t _e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
20	119.78	166.68	221.24	285.79	362.68	454.24	562.81	690.73	840.35	1 013.99
25	116.69	163.29	217.45	281.50	357.78	448.63	556.39	683.40	832.00	1 004.53
30	111.31	157.34	210.81	274.08	349.48	439.34	546.01	671.83	819.13	990.26
35	104.60	149.77	202.29	264.49	338.72	427.31	532.61	656.96	802.69	972.14
40	97.50	141.53	192.80	253.66	326.45	413.49	517.14	639.74	783.61	951.10
45	-	133.56	183.31	242.55	313.61	398.83	500.55	621.11	762.84	928.10
50	-	126.81	174.76	232.10	301.15	384.26	483.77	602.02	741.34	904.07
55	-	-	168.09	223.24	290.01	370.73	467.75	583.41	720.03	879.97

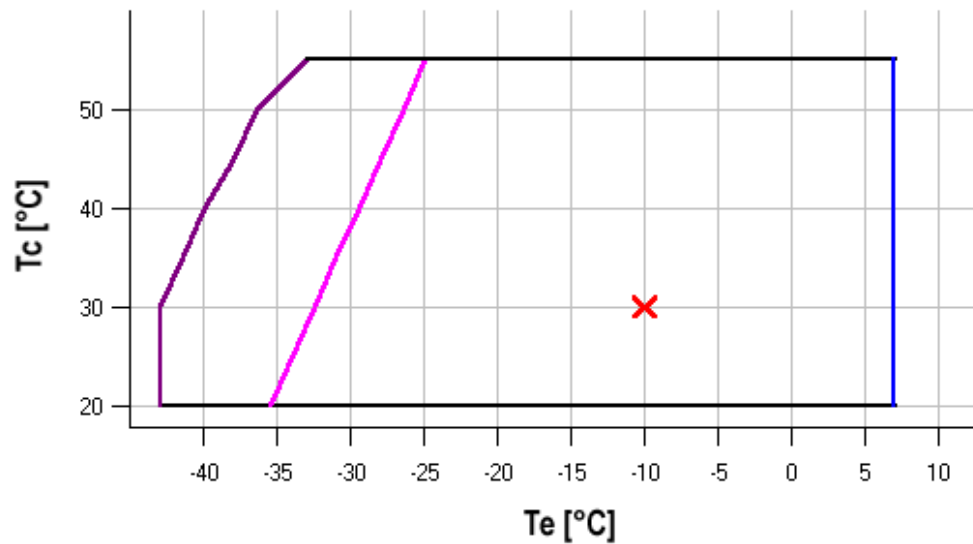
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Capacity

C.O.P. [W/W]

t _c \ t _e	-40	-35	-30	-25	-20	-15	-10	-5	0	5
20	1.85	2.18	2.57	3.04	3.61	4.32	5.22	6.40	8.00	10.32
25	1.66	1.97	2.31	2.70	3.17	3.73	4.42	5.29	6.42	7.94
30	1.48	1.76	2.06	2.40	2.79	3.24	3.79	4.45	5.29	6.36
35	1.29	1.56	1.83	2.12	2.45	2.82	3.26	3.78	4.42	5.21
40	1.11	1.37	1.61	1.87	2.14	2.45	2.81	3.22	3.72	4.32
45	-	1.18	1.41	1.63	1.86	2.12	2.41	2.74	3.14	3.60
50	-	1.02	1.22	1.41	1.60	1.81	2.05	2.32	2.63	3.00
55	-	-	1.05	1.21	1.37	1.54	1.73	1.95	2.20	2.48

Application range



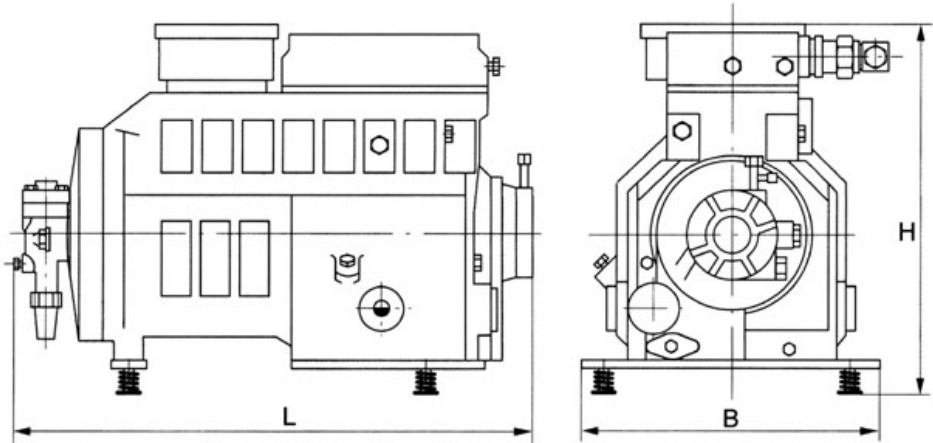
- Maximum evaporating temperature
- 25°C suction gas return
- 25°C suction gas return + additional cooling

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	680 mm
B	370 mm
H	480 mm