

Model: D4DJ-300 X

Data

Type: Semi-hermetic piston compressors

Producer: Copeland

Series: DISCUS

Model: D4DJ-300 X

Technical data

Cylinder count:	4
Displacement [m ³ /h]:	84,7
Weight [kg]:	230
Oil charge [dm ³]:	4
Max. operating current [A]:	52
Locked rotor current [A]:	218
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]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	22.25	28.58	36.15	45.13	55.68	67.97	82.16	98.41	116.89
25	20.37	26.41	33.58	42.05	51.98	63.52	76.86	92.14	109.54
30	18.48	24.23	31.00	38.95	48.24	59.05	71.52	85.84	102.15
35	16.59	22.04	28.40	35.83	44.49	54.55	66.17	79.51	94.73
40	-	19.85	25.80	32.70	40.73	50.03	60.79	73.15	87.29
45	-	17.65	23.19	29.57	36.95	45.51	55.39	66.78	79.83
50	-	15.46	20.58	26.43	33.17	40.97	49.99	60.39	72.35
55	-	13.28	17.98	23.30	29.40	36.44	44.58	54.00	64.86

Power input [kW]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	9.63	10.72	11.72	12.63	13.44	14.15	14.75	15.23	15.59
25	9.99	11.24	12.41	13.49	14.48	15.38	16.16	16.83	17.38
30	10.26	11.68	13.03	14.30	15.48	16.56	17.54	18.41	19.17
35	10.42	12.03	13.57	15.02	16.40	17.68	18.87	19.95	20.92
40	-	12.27	14.01	15.67	17.25	18.74	20.14	21.44	22.64
45	-	12.40	14.34	16.21	18.01	19.73	21.35	22.88	24.31
50	-	12.40	14.56	16.65	18.68	20.62	22.48	24.25	25.92
55	-	12.26	14.65	16.98	19.24	21.42	23.53	25.54	27.46

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Current [A]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	21.05	22.24	23.31	24.20	24.88	25.31	25.44	25.23	24.64
25	21.41	22.94	24.37	25.65	26.74	27.60	28.19	28.46	28.38
30	21.62	23.46	25.23	26.87	28.36	29.63	30.66	31.40	31.80
35	21.70	23.84	25.92	27.91	29.76	31.43	32.88	34.06	34.93
40	-	24.08	26.46	28.78	30.98	33.02	34.86	36.47	37.78
45	-	24.22	26.89	29.50	32.03	34.43	36.65	38.65	40.40
50	-	24.29	27.21	30.11	32.95	35.67	38.25	40.64	42.79
55	-	24.30	27.46	30.62	33.75	36.79	39.70	42.45	44.98

Mass flow [kg/s]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	482.63	632.32	805.05	1 008.04	1 248.49	1 533.62	1 870.64	2 266.75	2 729.16
25	465.71	613.56	784.13	984.63	1 222.28	1 504.28	1 837.84	2 230.17	2 688.48
30	446.16	592.31	760.85	959.00	1 193.98	1 472.98	1 803.21	2 191.90	2 646.25
35	424.27	568.84	735.49	931.43	1 163.86	1 440.00	1 767.05	2 152.23	2 602.74
40	-	543.45	708.34	902.19	1 132.21	1 405.62	1 729.62	2 111.42	2 558.23
45	-	516.40	679.66	871.56	1 099.31	1 370.12	1 691.20	2 069.75	2 513.00
50	-	487.97	649.74	839.83	1 065.44	1 333.78	1 652.07	2 027.51	2 467.32
55	-	458.45	618.86	807.26	1 030.86	1 296.87	1 612.51	1 984.98	2 421.49

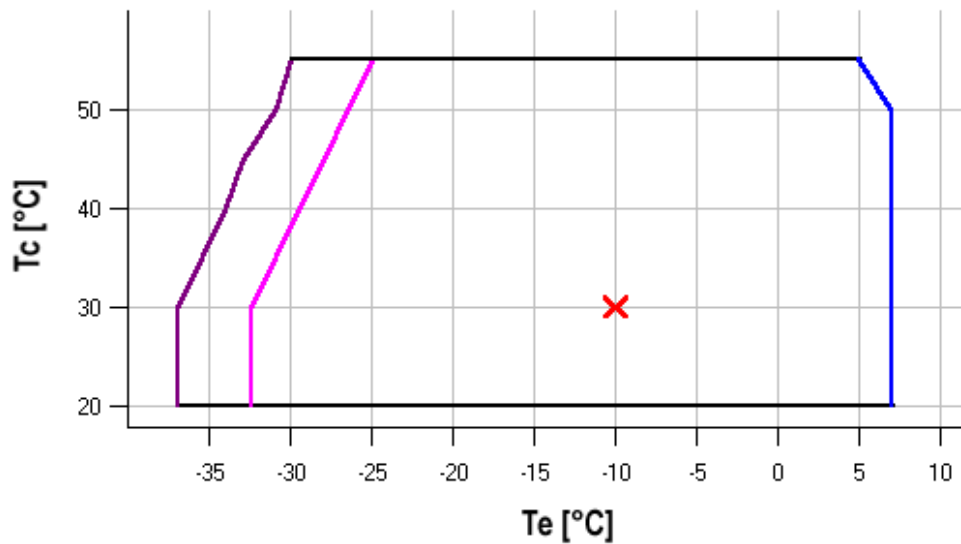
Model: D4DJ-300 X




Capacity

C.O.P. [W/W]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	2.31	2.67	3.09	3.57	4.14	4.80	5.57	6.46	7.50
25	2.04	2.35	2.71	3.12	3.59	4.13	4.76	5.47	6.30
30	1.80	2.07	2.38	2.72	3.12	3.57	4.08	4.66	5.33
35	1.59	1.83	2.09	2.38	2.71	3.08	3.51	3.99	4.53
40	-	1.62	1.84	2.09	2.36	2.67	3.02	3.41	3.86
45	-	1.42	1.62	1.82	2.05	2.31	2.59	2.92	3.28
50	-	1.25	1.41	1.59	1.78	1.99	2.22	2.49	2.79
55	-	1.08	1.23	1.37	1.53	1.70	1.90	2.11	2.36

Application range



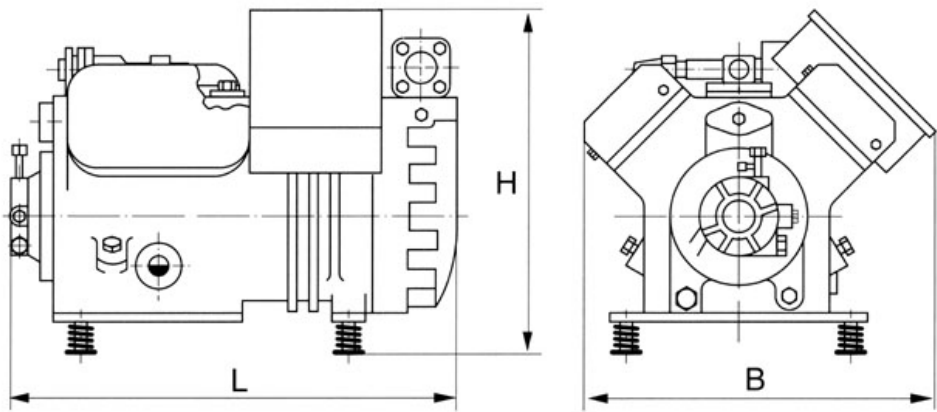
-  Maximum evaporating temperature
-  25°C suction gas return
-  25°C suction gas return + additional cooling

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 690 mm
B 535 mm
H 495 mm