

Model: D4DA-200 X

Data

Type: Semi-hermetic piston compressors

Producer: Copeland

Series: DISCUS

Model: D4DA-200 X

Technical data

Cylinder count:	4
Displacement [m ³ /h]:	56
Weight [kg]:	212
Oil charge [dm ³]:	3,6
Max. operating current [A]:	32,5
Locked rotor current [A]:	160
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"

Model: D4DA-200 X

Capacity

R134a

Cooling capacity [kW]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
40	11.19	14.65	18.77	23.67	29.46	36.26	44.20	53.39	-	-
45	10.04	13.37	17.30	21.95	27.45	33.92	41.47	50.23	60.30	71.82
50	8.90	12.08	15.82	20.23	25.44	31.56	38.72	47.03	56.62	67.59
55	7.77	10.80	14.33	18.50	23.41	29.18	35.94	43.80	52.89	63.32
60	-	9.52	12.85	16.76	21.36	26.78	33.13	40.54	49.12	59.00
65	-	8.25	11.37	15.01	19.31	24.36	30.30	37.25	45.32	54.64
70	-	-	9.89	13.27	17.24	21.93	27.45	33.93	41.49	50.23
75	-	-	-	11.52	15.17	19.48	24.58	30.59	37.62	45.79
80	-	-	-	9.78	13.09	17.03	21.70	27.22	33.72	-

Power input [kW]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
40	5.07	5.73	6.37	6.97	7.50	7.93	8.24	8.40	-	-
45	5.24	5.98	6.71	7.41	8.05	8.61	9.06	9.37	9.53	9.50
50	5.40	6.20	7.02	7.81	8.56	9.25	9.83	10.30	10.62	10.77
55	5.52	6.39	7.29	8.18	9.04	9.84	10.57	11.18	11.67	11.99
60	-	6.55	7.52	8.50	9.47	10.39	11.25	12.01	12.66	13.16
65	-	6.67	7.71	8.78	9.85	10.89	11.88	12.79	13.59	14.26
70	-	-	7.86	9.02	10.18	11.34	12.45	13.50	14.46	15.30
75	-	-	-	9.20	10.46	11.73	12.97	14.16	15.27	16.27
80	-	-	-	9.32	10.68	12.05	13.42	14.74	16.00	-

Model: D4DA-200 X

Capacity

Current [A]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
40	13.42	14.09	14.77	15.43	16.03	16.51	16.85	17.00	-	-
45	13.64	14.37	15.14	15.91	16.65	17.30	17.84	18.21	18.38	18.31
50	13.83	14.62	15.47	16.36	17.24	18.06	18.79	19.39	19.81	20.02
55	13.97	14.82	15.77	16.77	17.79	18.79	19.72	20.54	21.22	21.71
60	-	14.98	16.02	17.14	18.31	19.48	20.61	21.67	22.60	23.38
65	-	15.09	16.22	17.47	18.78	20.13	21.47	22.75	23.95	25.02
70	-	-	16.37	17.74	19.21	20.74	22.28	23.80	25.26	26.62
75	-	-	-	17.96	19.58	21.29	23.05	24.81	26.53	28.18
80	-	-	-	18.12	19.90	21.80	23.76	25.76	27.76	-

Mass flow [kg/s]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
40	290.75	374.73	470.52	580.29	706.20	850.39	1 015.03	1 202.27	-	-
45	277.72	361.88	457.71	567.38	693.05	836.87	1 000.99	1 187.57	1 398.78	1 636.76
50	263.06	347.45	443.38	553.01	678.49	821.99	985.65	1 171.64	1 382.11	1 619.21
55	246.77	331.45	427.53	537.17	662.53	805.76	969.03	1 154.47	1 364.26	1 600.54
60	-	313.88	410.17	519.89	645.18	788.20	951.11	1 136.07	1 345.23	1 580.75
65	-	294.76	391.32	501.15	626.43	769.30	931.92	1 116.45	1 325.05	1 559.86
70	-	-	370.96	480.98	606.30	749.07	911.46	1 095.62	1 303.70	1 537.86
75	-	-	-	459.38	584.79	727.53	889.74	1 073.57	1 281.20	1 514.76
80	-	-	-	436.35	561.92	704.67	866.75	1 050.33	1 257.55	-

Model: D4DA-200 X

Capacity

R404A/R507

Cooling capacity [kW]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	14.15	18.32	23.33	29.27	36.24	44.33	53.65	64.29	76.35
25	12.90	16.89	21.64	27.26	33.85	41.49	50.30	60.36	71.78
30	11.64	15.43	19.93	25.23	31.42	38.61	46.89	56.37	67.13
35	10.38	13.97	18.20	23.17	28.96	35.69	43.44	52.32	62.42
40	-	12.51	16.46	21.08	26.47	32.72	39.94	48.22	57.65
45	-	11.03	14.71	18.98	23.95	29.73	36.40	44.06	52.82
50	-	9.56	12.94	16.86	21.41	26.70	32.81	39.86	47.93
55	-	8.10	11.18	14.73	18.85	23.64	29.19	35.61	42.99

Power input [kW]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	6.07	6.74	7.41	8.03	8.51	8.80	8.81	8.49	7.76
25	6.21	6.98	7.78	8.55	9.22	9.71	9.97	9.91	9.47
30	6.30	7.14	8.06	8.96	9.80	10.49	10.97	11.16	11.01
35	6.34	7.25	8.26	9.30	10.29	11.16	11.85	12.28	12.39
40	-	7.33	8.43	9.57	10.69	11.73	12.62	13.27	13.63
45	-	7.40	8.56	9.80	11.05	12.24	13.30	14.17	14.77
50	-	7.48	8.69	10.01	11.37	12.70	13.93	14.99	15.81
55	-	7.59	8.84	10.23	11.68	13.13	14.51	15.75	16.78

Model: D4DA-200 X

Capacity

Current [A]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	15.05	15.70	16.34	16.95	17.48	17.91	18.20	18.33	18.25
25	15.24	16.05	16.85	17.60	18.28	18.85	19.28	19.54	19.58
30	15.36	16.36	17.33	18.27	19.11	19.85	20.44	20.85	21.04
35	15.38	16.58	17.77	18.90	19.94	20.87	21.64	22.23	22.60
40	-	16.71	18.12	19.48	20.74	21.88	22.87	23.66	24.23
45	-	16.70	18.37	19.97	21.49	22.87	24.09	25.11	25.91
50	-	16.53	18.48	20.36	22.14	23.79	25.27	26.55	27.59
55	-	16.17	18.43	20.61	22.69	24.62	26.39	27.95	29.27

Mass flow [kg/s]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	305.43	405.03	519.79	654.28	813.05	1 000.68	1 221.74	1 480.80	1 782.41
25	294.41	392.40	505.65	638.74	796.23	982.68	1 202.67	1 460.76	1 761.52
30	281.30	377.74	489.55	621.31	777.57	962.90	1 181.88	1 439.07	1 739.04
35	266.25	361.20	471.63	602.11	757.21	941.49	1 159.52	1 415.86	1 715.10
40	-	342.92	452.03	581.30	735.29	918.57	1 135.71	1 391.28	1 689.84
45	-	323.03	430.88	559.00	711.95	894.30	1 110.61	1 365.46	1 663.41
50	-	301.68	408.33	535.36	687.33	868.80	1 084.35	1 338.54	1 635.95
55	-	279.00	384.52	510.52	661.57	842.23	1 057.07	1 310.67	1 607.58

Model: D4DA-200 X

Capacity

R407C

Cooling capacity [kW]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
35	18.76	24.00	30.18	37.45	45.98	55.93	67.47	-
40	17.15	22.17	28.02	34.89	42.92	52.28	63.14	-
45	15.51	20.29	25.83	32.28	39.81	48.58	58.75	-
50	-	18.39	23.60	29.63	36.65	44.82	54.30	-
55	-	16.44	21.32	26.93	33.44	41.01	49.79	-
60	-	-	19.01	24.19	30.18	37.14	45.23	-

Power input [kW]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
35	7.26	8.06	8.79	9.43	9.93	10.24	10.31	-
40	7.65	8.57	9.44	10.23	10.90	11.38	11.65	-
45	8.01	9.04	10.04	10.98	11.80	12.47	12.93	-
50	-	9.45	10.58	11.65	12.63	13.46	14.10	-
55	-	9.78	11.02	12.22	13.34	14.34	15.16	-
60	-	-	11.34	12.67	13.93	15.08	16.07	-

Model: D4DA-200 X

Capacity

Current [A]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
35	16.17	17.27	18.41	19.46	20.27	20.69	20.58	-
40	16.80	18.02	19.32	20.57	21.61	22.31	22.51	-
45	17.30	18.64	20.10	21.55	22.83	23.80	24.31	-
50	-	19.15	20.78	22.42	23.94	25.18	26.00	-
55	-	19.59	21.37	23.21	24.96	26.48	27.62	-
60	-	-	21.91	23.95	25.94	27.73	29.18	-

Mass flow [kg/s]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
35	357.80	461.96	583.91	728.89	902.16	1 108.98	1 354.60	-
40	342.41	445.87	566.64	709.99	881.16	1 085.40	1 327.97	-
45	325.66	428.29	547.76	689.33	858.25	1 059.78	1 299.17	-
50	-	409.02	527.05	666.71	833.25	1 031.92	1 267.99	-
55	-	387.88	504.33	641.93	805.95	1 001.64	1 234.24	-
60	-	-	479.38	614.80	776.16	968.72	1 197.73	-