

Type: Semi-hermetic piston compressors

Producer: Copeland

Series: DISCUS

Model: D4DJ-300 X

Technical data

Nominal motor power [kW]:

Cylinder count:

4

Displacement [m³/h]:

84,7

Cylinder capacity [cm³]:

RPM [min⁻¹]:

1450

Weight [kg]:

230

Oil charge [dm³]:

4

Power supply [V/~/Hz]:

Connections

Suction line:

milimeters

54

inches

2 1/8"

Discharge line:

35

1 3/8"

R134a

Cooling capacity [W]

t_c \ t_e	-20	-15	-10	-5	0	5	7	10	12.5	15	20	25
40	17 090	22 290	28 460	35 800	44 490	54 710	59 260	66 600	73 220	80 300	-	-
45	15 640	20 590	26 430	33 350	41 550	51 220	55 530	62 500	68 800	75 550	90 480	107 350
50	14 090	18 850	24 380	30 900	38 620	47 730	51 800	58 400	64 370	70 780	85 010	101 160
55	12 460	17 070	22 310	28 450	35 690	44 250	48 080	54 290	59 920	65 990	79 490	94 900
60	-	15 230	20 220	25 990	32 770	40 770	44 350	50 170	55 460	61 170	73 910	88 540
65	-	13 340	18 120	23 540	29 850	37 290	40 620	46 050	50 990	56 320	68 280	-
70	-	-	15 990	21 080	26 950	33 820	36 900	41 920	46 490	51 440	62 590	-
75	-	-	-	18 630	24 050	30 350	33 180	37 770	41 970	46 530	56 820	-
80	-	-	-	16 180	21 160	26 890	29 450	33 620	37 430	41 570	-	-

Power input [kW]

t_c \ t_e	-20	-15	-10	-5	0	5	7	10	12.5	15	20	25
40	8.17	9.27	10.37	11.43	12.40	13.26	13.57	13.99	14.29	14.55	-	-
45	8.40	9.61	10.84	12.04	13.19	14.25	14.64	15.18	15.59	15.96	16.57	16.98
50	8.64	9.93	11.27	12.62	13.93	15.17	15.64	16.30	16.82	17.30	18.14	18.79
55	8.89	10.23	11.67	13.15	14.61	16.02	16.57	17.35	17.97	18.56	19.63	20.52
60	-	10.52	12.04	13.63	15.23	16.81	17.42	18.32	19.04	19.74	21.02	22.16
65	-	10.80	12.38	14.06	15.79	17.52	18.20	19.21	20.03	20.82	22.33	-
70	-	-	12.67	14.44	16.28	18.15	18.90	20.00	20.91	21.81	23.52	-
75	-	-	-	14.75	16.69	18.69	19.50	20.70	21.70	22.69	24.61	-
80	-	-	-	15.01	17.03	19.14	20.00	21.30	22.38	23.46	-	-

Operating conditions: suction gas temperature 25°C + additional cooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

R404A/R507

Cooling capacity [W]

t_c \ t_e	-35	-30	-25	-20	-15	-10	-5	0	5	7
20	22 770	28 730	35 850	44 260	54 110	65 520	78 650	93 600	110 520	117 860
25	21 120	26 740	33 420	41 290	50 500	61 180	73 470	87 500	103 390	110 300
30	19 440	24 730	30 970	38 320	46 890	56 840	68 300	81 410	96 280	102 760
35	17 730	22 690	28 510	35 330	43 280	52 510	63 140	75 330	89 200	95 240
40	-	20 630	26 030	32 330	39 660	48 170	57 990	69 260	82 120	87 740
45	-	18 540	23 530	29 310	36 030	43 830	52 840	63 210	75 070	80 260
50	-	16 430	21 010	26 290	32 400	39 490	47 700	57 160	68 030	72 800
55	-	14 280	18 470	23 240	28 750	35 140	42 560	51 130	61 010	-

Power input [kW]

t_c \ t_e	-35	-30	-25	-20	-15	-10	-5	0	5	7
20	9.08	10.23	11.36	12.43	13.43	14.31	15.07	15.66	16.07	16.18
25	9.61	10.90	12.18	13.42	14.59	15.67	16.63	17.45	18.09	18.29
30	10.08	11.51	12.94	14.34	15.68	16.95	18.11	19.13	20.00	20.29
35	10.51	12.06	13.63	15.18	16.70	18.14	19.49	20.72	21.81	22.19
40	-	12.55	14.25	15.95	17.63	19.25	20.78	22.21	23.51	23.98
45	-	12.97	14.80	16.65	18.47	20.26	21.98	23.60	25.10	25.66
50	-	13.33	15.28	17.26	19.24	21.19	23.08	24.89	26.59	27.24
55	-	13.62	15.69	17.80	19.92	22.02	24.08	26.07	27.97	-

Operating conditions: suction gas temperature 25°C + additional cooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

R407C

Cooling capacity [W]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	25 220	32 010	40 320	50 290	62 030	75 660	91 280	98 100	108 970	118 620
35	23 140	29 450	37 200	46 510	57 510	70 320	85 040	91 500	101 790	110 950
40	21 160	27 020	34 220	42 890	53 160	65 160	79 020	85 110	94 840	103 520
45	-	24 700	31 370	39 420	48 980	60 200	73 190	78 920	88 100	96 310
50	-	22 490	28 650	36 090	44 960	55 400	67 560	72 930	81 560	89 310
55	-	-	26 040	32 890	41 090	50 770	62 100	67 130	75 220	82 500
60	-	-	23 540	29 830	37 360	46 310	56 820	61 500	69 060	75 880

Power input [kW]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	10.66	11.90	13.13	14.27	15.27	16.06	16.57	16.69	16.75	16.69
35	11.59	12.93	14.29	15.61	16.81	17.84	18.63	18.86	19.12	19.23
40	12.49	13.91	15.38	16.84	18.23	19.48	20.53	20.87	21.31	21.58
45	-	14.83	16.39	17.98	19.53	20.98	22.27	22.72	23.33	23.75
50	-	15.71	17.34	19.04	20.74	22.37	23.87	24.42	25.17	25.74
55	-	-	18.23	20.02	21.84	23.63	25.32	25.96	26.86	27.55
60	-	-	19.07	20.93	22.85	24.78	26.65	27.37	28.40	29.21

Operating conditions: suction gas temperature 25°C + additional cooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]



