

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

Model: D3DA-50 X

Technical data

Nominal motor power [kW]:	
Cylinder count:	3
Displacement [m ³ /h]:	32,2
Cylinder capacity [cm ³]:	
RPM [min ⁻¹]:	1450
Weight [kg]:	157
Oil charge [dm ³]:	3,4
Power supply [V/~/Hz]:	

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	35	1 3/8"
Discharge line:	22	7/8"

R134a

Cooling capacity [W]

t_c \ t_e	-20	-15	-10	-5	0	5	7	10	12.5
30	7 110	9 260	11 820	14 840	18 380	22 500	24 310	27 240	29 870
35	6 570	8 630	11 070	13 950	17 320	21 250	22 990	25 780	28 300
40	6 050	8 000	10 320	13 050	16 260	19 990	21 640	24 300	26 700
45	5 520	7 390	9 580	12 160	15 180	18 710	20 280	22 790	25 060
50	5 010	6 770	8 840	11 270	14 110	17 420	18 890	21 260	23 390
55	4 500	6 170	8 110	10 380	13 030	16 110	17 480	19 690	21 680
60	4 000	5 580	7 390	9 490	11 940	14 790	16 050	18 090	19 930
62	-	-	7 100	9 130	11 500	14 250	15 470	17 440	19 220

Power input [kW]

t_c \ t_e	-20	-15	-10	-5	0	5	7	10	12.5
30	2.83	3.09	3.32	3.48	3.58	3.58	3.56	3.50	3.41
35	2.91	3.24	3.53	3.77	3.94	4.03	4.04	4.03	3.99
40	2.99	3.37	3.72	4.03	4.27	4.44	4.49	4.53	4.54
45	3.05	3.48	3.89	4.26	4.58	4.83	4.91	5.00	5.05
50	3.10	3.57	4.03	4.47	4.85	5.18	5.29	5.43	5.52
55	3.14	3.64	4.15	4.64	5.09	5.49	5.63	5.82	5.96
60	3.16	3.70	4.25	4.79	5.30	5.77	5.94	6.18	6.35
62	-	-	4.27	4.84	5.37	5.87	6.05	6.31	6.50

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

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

R404A/R507

Cooling capacity [W]

$t_c \setminus t_e$	-50	-45	-40	-35	-30	-25	-20
20	2 920	4 160	5 690	7 540	9 730	12 320	15 320
25	2 520	3 680	5 110	6 820	8 860	11 260	14 050
30	2 140	3 220	4 540	6 120	8 000	10 220	12 800
35	1 780	2 780	3 990	5 440	7 170	9 200	11 580
40	-	2 360	3 460	4 790	6 360	8 210	10 380
45	-	1 960	2 960	4 160	5 580	7 250	9 210
50	-	-	2 490	3 560	4 820	6 320	8 070
55	-	-	2 040	2 980	4 100	5 420	6 970

Power input [kW]

$t_c \setminus t_e$	-50	-45	-40	-35	-30	-25	-20
20	2.27	2.71	3.13	3.52	3.88	4.21	4.50
25	2.24	2.72	3.19	3.63	4.05	4.45	4.81
30	2.19	2.71	3.22	3.72	4.20	4.66	5.09
35	2.12	2.68	3.24	3.79	4.32	4.84	5.34
40	-	2.63	3.24	3.83	4.43	5.01	5.58
45	-	2.57	3.22	3.87	4.52	5.16	5.80
50	-	-	3.18	3.88	4.59	5.30	6.00
55	-	-	3.14	3.89	4.65	5.42	6.20

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

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]



