

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

Model: D2DD-50 X

Technical data

Nominal motor power [kW]:	
Cylinder count:	2
Displacement [m ³ /h]:	19,3
Cylinder capacity [cm ³]:	
RPM [min ⁻¹]:	1450
Weight [kg]:	141
Oil charge [dm ³]:	2,3
Power supply [V/~/Hz]:	

Connections

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

R404A/R507

Cooling capacity [W]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
20	2 980	4 140	5 580	7 310	9 390	11 840	14 710	18 020	21 810	26 110	27 990
25	2 490	3 630	5 000	6 660	8 620	10 940	13 640	16 760	20 330	24 390	26 160
30	2 020	3 120	4 440	6 010	7 860	10 040	12 570	15 490	18 840	22 660	24 320
35	1 570	2 640	3 890	5 370	7 100	9 130	11 490	14 220	17 340	20 900	22 460
40	-	2 170	3 360	4 740	6 350	8 230	10 420	12 940	15 830	19 140	20 580
45	-	1 730	2 840	4 120	5 610	7 340	9 340	11 650	14 320	17 360	18 690
50	-	-	2 340	3 520	4 880	6 450	8 270	10 370	12 790	15 570	16 790
55	-	-	1 860	2 930	4 160	5 570	7 200	9 090	11 270	13 770	14 880

Power input [kW]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
20	1.67	1.94	2.19	2.41	2.59	2.71	2.78	2.76	2.66	2.47	2.36
25	1.65	1.96	2.25	2.52	2.75	2.94	3.06	3.13	3.11	3.00	2.93
30	1.61	1.95	2.29	2.60	2.89	3.14	3.33	3.46	3.52	3.50	3.47
35	1.56	1.93	2.31	2.67	3.01	3.31	3.57	3.78	3.92	3.98	3.98
40	-	1.90	2.31	2.72	3.11	3.47	3.79	4.07	4.28	4.43	4.46
45	-	1.85	2.30	2.75	3.19	3.61	3.99	4.34	4.63	4.85	4.92
50	-	-	2.27	2.76	3.25	3.72	4.17	4.58	4.95	5.26	5.36
55	-	-	2.23	2.76	3.30	3.83	4.33	4.81	5.25	5.64	5.78

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	4 640	6 370	8 490	11 040	14 040	17 530	21 520	23 270	26 050	28 520
35	4 040	5 670	7 670	10 070	12 910	16 210	20 010	21 670	24 320	26 680
40	3 470	4 990	6 870	9 130	11 800	14 930	18 520	20 110	22 630	24 880
45	-	4 340	6 090	8 210	10 720	13 670	17 070	18 570	20 970	23 120
50	-	3 700	5 330	7 310	9 660	12 430	15 650	17 070	19 340	21 380
55	-	-	4 600	6 430	8 630	11 230	14 250	15 590	17 740	19 680
60	-	-	3 890	5 580	7 620	10 040	12 880	14 140	16 170	18 000

Power input [kW]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	2.23	2.50	2.75	2.97	3.13	3.23	3.23	3.20	3.12	3.02
35	2.27	2.58	2.88	3.15	3.39	3.56	3.65	3.65	3.64	3.59
40	2.30	2.64	2.99	3.31	3.61	3.85	4.03	4.07	4.11	4.12
45	-	2.69	3.07	3.45	3.81	4.12	4.38	4.46	4.56	4.61
50	-	2.71	3.13	3.56	3.98	4.36	4.70	4.82	4.97	5.07
55	-	-	3.17	3.65	4.12	4.57	4.99	5.14	5.34	5.49
60	-	-	3.19	3.71	4.24	4.75	5.24	5.43	5.68	5.88

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

t_c - Condensing temperature [°C]t_e - Evaporating temperature [°C]



