

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

Model: D2DB-75 X

Technical data

Nominal motor power [kW]:	
Cylinder count:	2
Displacement [m ³ /h]:	28
Cylinder capacity [cm ³]:	
RPM [min ⁻¹]:	1450
Weight [kg]:	145
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:	28	1 1/8"

R134a

Cooling capacity [W]

t_c \ t_e	-20	-15	-10	-5	0	5	7	10	12.5	15	20	25
40	4 650	6 370	8 410	10 840	13 710	17 080	18 570	20 990	23 170	25 510	-	-
45	4 140	5 800	7 740	10 050	12 770	15 980	17 400	19 710	21 800	24 030	28 970	34 560
50	3 630	5 220	7 080	9 260	11 850	14 890	16 240	18 440	20 420	22 560	27 290	32 660
55	3 110	4 650	6 420	8 490	10 930	13 810	15 090	17 170	19 060	21 080	25 600	30 740
60	-	4 090	5 780	7 740	10 030	12 740	13 950	15 910	17 690	19 610	23 890	28 800
65	-	3 530	5 150	7 000	9 150	11 680	12 810	14 650	16 330	18 130	22 180	26 830
70	-	-	4 530	6 270	8 280	10 640	11 690	13 410	14 970	16 660	20 450	24 840
75	-	-	-	5 560	7 430	9 610	10 590	12 170	13 610	15 180	18 700	22 810
80	-	-	-	4 870	6 600	8 600	9 490	10 940	12 260	13 700	16 950	20 760

Power input [kW]

t_c \ t_e	-20	-15	-10	-5	0	5	7	10	12.5	15	20	25
40	2.62	2.95	3.27	3.54	3.76	3.92	3.96	4.00	4.01	3.99	-	-
45	2.62	3.01	3.37	3.71	4.00	4.23	4.31	4.39	4.44	4.47	4.45	4.32
50	2.63	3.05	3.47	3.87	4.22	4.53	4.63	4.76	4.85	4.92	4.99	4.95
55	2.63	3.09	3.56	4.01	4.43	4.80	4.93	5.11	5.24	5.35	5.50	5.55
60	-	3.13	3.63	4.14	4.62	5.05	5.22	5.44	5.61	5.76	5.99	6.13
65	-	3.16	3.70	4.25	4.78	5.29	5.47	5.74	5.95	6.13	6.45	6.68
70	-	-	3.75	4.34	4.93	5.49	5.71	6.01	6.26	6.48	6.88	7.20
75	-	-	-	4.42	5.05	5.67	5.91	6.26	6.54	6.80	7.28	7.69
80	-	-	-	4.48	5.15	5.83	6.09	6.48	6.79	7.09	7.65	8.14

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	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
20	5 570	7 220	9 250	11 700	14 620	18 070	22 090	26 740	32 060	38 110	40 750
25	4 990	6 600	8 550	10 890	13 670	16 940	20 750	25 140	30 180	35 900	38 400
30	4 430	5 990	7 860	10 080	12 710	15 790	19 370	23 510	28 250	33 650	36 000
35	3 870	5 390	7 170	9 270	11 730	14 620	17 970	21 850	26 290	31 350	33 550
40	3 330	4 780	6 470	8 440	10 740	13 430	16 540	20 140	24 280	28 990	31 050
45	-	4 180	5 760	7 590	9 720	12 200	15 080	18 400	22 220	26 580	28 490
50	-	3 560	5 040	6 730	8 680	10 950	13 570	16 610	20 110	24 110	25 870
55	-	-	4 300	5 840	7 610	9 650	12 020	14 760	17 930	21 580	23 190

Power input [kW]

t_c \ t_e	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
20	2.51	2.88	3.23	3.55	3.82	4.04	4.18	4.23	4.17	4.00	3.90
25	2.58	2.99	3.39	3.77	4.10	4.39	4.61	4.74	4.78	4.71	4.65
30	2.63	3.08	3.53	3.96	4.36	4.72	5.01	5.23	5.36	5.39	5.37
35	2.66	3.15	3.65	4.13	4.59	5.02	5.39	5.69	5.91	6.03	6.05
40	2.67	3.20	3.74	4.28	4.80	5.29	5.74	6.12	6.43	6.65	6.71
45	-	3.23	3.82	4.41	4.99	5.54	6.06	6.52	6.92	7.23	7.33
50	-	3.24	3.86	4.50	5.14	5.76	6.35	6.89	7.37	7.78	7.92
55	-	-	3.89	4.58	5.27	5.95	6.61	7.23	7.80	8.29	8.47

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	7 850	10 180	13 070	16 570	20 710	25 520	31 040	33 450	37 290	40 700
35	7 160	9 330	12 030	15 310	19 210	23 750	28 980	31 270	34 920	38 170
40	6 500	8 510	11 030	14 100	17 750	22 030	26 970	29 140	32 610	35 710
45	-	7 720	10 060	12 920	16 340	20 350	25 010	27 070	30 350	33 290
50	-	6 960	9 120	11 770	14 960	18 710	23 100	25 030	28 140	30 920
55	-	-	8 210	10 650	13 610	17 110	21 220	23 040	25 960	28 600
60	-	-	7 310	9 560	12 280	15 540	19 370	21 070	23 830	26 310

Power input [kW]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	3.42	3.77	4.10	4.40	4.64	4.78	4.81	4.78	4.69	4.57
35	3.60	3.98	4.37	4.74	5.05	5.29	5.43	5.45	5.43	5.38
40	3.77	4.18	4.62	5.05	5.44	5.77	6.01	6.08	6.14	6.15
45	-	4.37	4.85	5.33	5.80	6.21	6.55	6.66	6.79	6.87
50	-	4.55	5.07	5.60	6.13	6.62	7.06	7.21	7.41	7.55
55	-	-	5.26	5.85	6.43	7.00	7.53	7.72	7.98	8.18
60	-	-	5.45	6.07	6.71	7.35	7.96	8.19	8.52	8.77

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

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]



