

Model: D8DH-500 X

Data

Type: Semi-hermetic piston compressors

Producer: Copeland

Series: DISCUS

Model: D8DH-500 X

Technical data

Nominal motor power [kW]:	
Cylinder count:	8
Displacement [m ³ /h]:	151
Cylinder capacity [cm ³]:	
RPM [min ⁻¹]:	1450
Weight [kg]:	351
Oil charge [dm ³]:	7,7
Power supply [V/~/Hz]:	

Connections

	<u>millimeters</u>	<u>inches</u>
Suction line:		2 5/8"
Discharge line:	42	1 5/8"

Model: D8DH-500 X

Capacity

R134a

Cooling capacity [W]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	7	10	12.5	15	20	25
40	27	36	46	59	74	91	99	112	123	135	162	192
	430	230	780	400	350	910	720	320	670	820	570	680
45	25	33	43	55	69	86	93	105	116	128	153	183
	070	450	450	400	580	280	720	760	620	260	970	020
50	22	30	40	51	64	80	87	99	109	120	145	173
	700	690	160	440	850	670	730	180	530	640	250	190
55	20	27	36	47	60	75	81	92	102	112	136	163
	310	950	910	530	150	070	750	580	390	950	410	160
60	17	25	33	43	55	69	75	85	95	105	127	152
	920	240	700	670	490	480	760	960	210	190	430	920
65	15	22	30	39	50	63	69	79	87	97	118	142
	530	560	540	860	870	920	770	310	980	340	310	450
70	13	19	27	36	46	58	63	72	80	89	109	131
	140	910	440	110	300	370	790	630	690	420	030	740
75	-	17	24	32	41	52	57	65	73	81	99	120
		310	390	420	780	830	810	930	340	400	570	760
80	-	-	21	28	37	47	51	59	65	73	89	109
			410	800	310	320	820	190	940	280	930	500

Power input [kW]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	7	10	12.5	15	20	25
40	14.57	16.30	17.96	19.49	20.82	21.90	22.26	22.69	22.96	23.14	23.20	22.85
45	14.82	16.76	18.67	20.48	22.12	23.55	24.05	24.71	25.17	25.55	26.03	26.11
50	15.08	17.19	19.33	21.40	23.35	25.11	25.75	26.63	27.28	27.85	28.75	29.27
55	15.34	17.60	19.93	22.25	24.49	26.57	27.34	28.44	29.28	30.04	31.35	32.29
60	15.61	17.98	20.49	23.03	25.53	27.92	28.83	30.13	31.15	32.11	33.82	35.19
65	15.87	18.33	20.99	23.73	26.48	29.16	30.20	31.71	32.91	34.05	36.15	37.96
70	16.14	18.65	21.42	24.35	27.33	30.29	31.45	33.15	34.52	35.85	38.34	40.57
75	-	18.93	21.80	24.88	28.07	31.28	32.56	34.45	35.99	37.50	40.37	43.02
80	-	-	22.10	25.31	28.69	32.14	33.53	35.60	37.31	38.99	42.24	45.30

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

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Model: D8DH-500 X

Capacity

R404A/R507

Cooling capacity [W]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
20	27 050	35 440	45 940	58 810	74 340	92 820	114 520	139 740	168 720	201 680	216 010
25	23 560	31 710	41 740	53 930	68 590	85 990	106 450	130 250	157 670	188 940	202 560
30	20 300	28 150	37 670	49 150	62 900	79 200	98 380	120 740	146 560	176 100	189 020
35	-	24 770	33 740	44 460	57 260	72 430	90 300	111 170	135 370	163 170	175 350
40	-	21 540	29 910	39 840	51 650	65 650	82 170	101 540	124 080	150 100	161 550
45	-	18 460	26 190	35 280	46 070	58 860	74 000	91 830	112 680	136 880	147 580
50	-	15 510	22 550	30 770	40 490	52 040	65 770	82 010	101 140	123 500	133 440
55	-	-	18 990	26 300	34 920	45 190	57 460	72 080	89 450	109 930	119 090

Power input [kW]

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7
20	14.41	16.37	18.24	19.96	21.45	22.64	23.46	23.83	23.67	22.92	22.43
25	14.76	16.93	19.06	21.08	22.91	24.49	25.73	26.57	26.93	26.74	26.49
30	15.05	17.41	19.78	22.08	24.24	26.18	27.84	29.13	29.98	30.33	30.31
35	-	17.84	20.43	22.98	25.45	27.73	29.78	31.50	32.83	33.69	33.89
40	-	18.23	21.01	23.81	26.55	29.16	31.57	33.70	35.49	36.84	37.25
45	-	18.59	21.54	24.56	27.56	30.47	33.23	35.75	37.97	39.80	40.42
50	-	18.93	22.04	25.25	28.49	31.69	34.77	37.67	40.29	42.58	43.39
55	-	-	22.52	25.90	29.36	32.82	36.21	39.45	42.47	45.20	46.19

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

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Model: D8DH-500 X

Capacity

R407C

Cooling capacity [W]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	39 840	52 350	68 030	86 980	109 300	135 130	164 570	177 380	197 700	215 670
35	36 440	48 060	62 720	80 500	101 540	125 980	153 920	166 110	185 480	202 640
40	33 020	43 780	57 420	74 060	93 840	116 890	143 360	154 930	173 350	189 720
45	29 690	39 580	52 230	67 740	86 270	107 950	132 950	143 910	161 400	176 980
50	-	35 570	47 220	61 620	78 900	99 230	122 770	133 130	149 690	164 470
55	-	-	42 480	55 770	71 810	90 790	112 890	122 640	138 280	152 280
60	-	-	38 090	50 270	65 080	82 720	103 370	112 520	127 240	140 460

Power input [kW]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	7	10	12.5
30	19.00	21.02	22.98	24.75	26.17	27.09	27.37	27.27	26.85	26.25
35	20.12	22.32	24.55	26.64	28.46	29.85	30.66	30.79	30.75	30.48
40	21.23	23.58	26.03	28.43	30.61	32.44	33.76	34.11	34.42	34.46
45	22.27	24.76	27.40	30.06	32.58	34.82	36.61	37.17	37.82	38.16
50	-	25.80	28.62	31.51	34.34	36.95	39.19	39.95	40.91	41.53
55	-	-	29.63	32.73	35.84	38.79	41.44	42.39	43.65	44.54
60	-	-	30.40	33.68	37.03	40.30	43.34	44.46	46.00	47.14

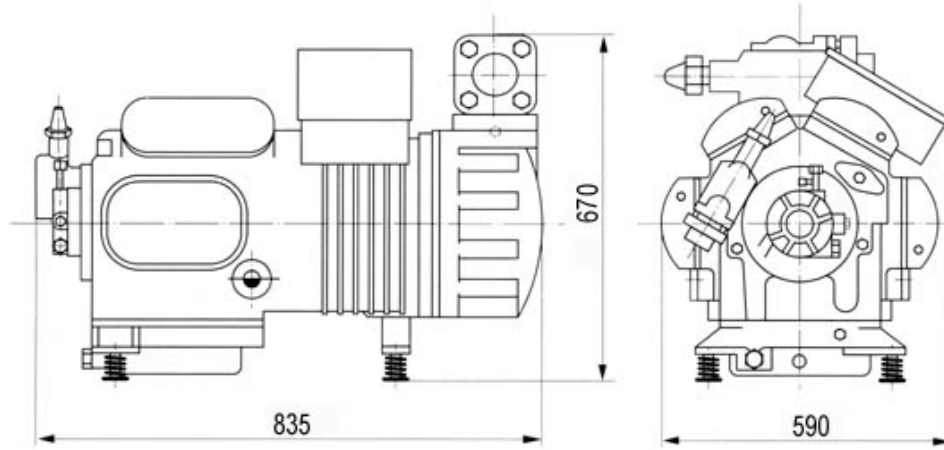
Operating conditions: suction gas temperature 25°C + additional cooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Model: D8DH-500 X

Dimensions



Model: D8DH-500 X

Image

