

# Model: D6DH-350 X

## Data

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Type: Semi-hermetic piston compressors

Producer: Copeland

Series: DISCUS

## Model: D6DH-350 X

### Technical data

Cylinder count:	6
Displacement [m <sup>3</sup> /h]:	106
Weight [kg]:	262
Oil charge [dm <sup>3</sup> ]:	4,3
Max. operating current [A]:	63,5
Locked rotor current [A]:	284
Power supply [V/~/Hz]:	380-420V/3/50Hz

### Connections

	<u>millimeters</u>	<u>inches</u>
Suction line:		2 1/8"
Discharge line:		1 3/8"

# Model: D6DH-350 X

## Capacity

R134a

### Cooling capacity [kW]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>
<b>40</b>	21.46	27.92	35.60	44.74	55.55	68.26	83.09	100.26	-	-
<b>45</b>	19.47	25.66	32.98	41.65	51.91	63.97	78.06	94.40	113.21	134.71
<b>50</b>	17.50	23.40	30.35	38.55	48.24	59.64	72.97	88.46	106.32	126.78
<b>55</b>	15.56	21.17	27.72	35.44	44.55	55.27	67.83	82.45	99.35	118.76
<b>60</b>	-	18.96	25.10	32.32	40.83	50.87	62.64	76.38	92.30	110.64
<b>65</b>	-	16.77	22.49	29.20	37.10	46.43	57.40	70.25	85.18	102.43
<b>70</b>	-	-	19.90	26.08	33.36	41.97	52.13	64.06	78.00	94.15
<b>75</b>	-	-	-	22.97	29.61	37.49	46.82	57.83	70.75	-
<b>80</b>	-	-	-	19.88	25.86	32.99	41.48	51.56	-	-

### Power input [kW]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>
<b>40</b>	10.49	11.73	12.94	14.07	15.08	15.91	16.52	16.87	-	-
<b>45</b>	10.86	12.23	13.60	14.92	16.14	17.21	18.09	18.72	19.08	19.09
<b>50</b>	11.23	12.72	14.23	15.72	17.14	18.44	19.58	20.50	21.16	21.51
<b>55</b>	11.57	13.17	14.83	16.48	18.09	19.61	21.00	22.19	23.15	23.83
<b>60</b>	-	13.59	15.37	17.19	18.98	20.71	22.33	23.79	25.04	26.04
<b>65</b>	-	13.96	15.87	17.83	19.80	21.73	23.57	25.29	26.82	28.13
<b>70</b>	-	-	16.31	18.40	20.54	22.66	24.72	26.68	28.49	30.09
<b>75</b>	-	-	-	18.90	21.19	23.50	25.77	27.96	30.03	-
<b>80</b>	-	-	-	19.32	21.76	24.23	26.70	29.13	-	-

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## Capacity

### Current [A]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	25.08	26.48	27.90	29.26	30.49	31.51	32.25	32.64	-	-
<b>45</b>	25.56	27.09	28.69	30.28	31.79	33.14	34.27	35.08	35.52	35.50
<b>50</b>	26.00	27.67	29.44	31.26	33.05	34.73	36.23	37.47	38.38	38.89
<b>55</b>	26.41	28.20	30.15	32.20	34.26	36.26	38.13	39.79	41.18	42.20
<b>60</b>	-	28.69	30.81	33.07	35.40	37.72	39.96	42.05	43.90	45.44
<b>65</b>	-	29.11	31.40	33.88	36.48	39.12	41.72	44.22	46.53	48.59
<b>70</b>	-	-	31.93	34.62	37.48	40.43	43.39	46.30	49.08	51.64
<b>75</b>	-	-	-	35.28	38.39	41.65	44.97	48.29	51.52	-
<b>80</b>	-	-	-	35.85	39.22	42.78	46.45	50.17	-	-

### Mass flow [kg/s]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	559.27	714.65	892.52	1 096.83	1 331.52	1 600.53	1 907.80	2 257.28	-	-
<b>45</b>	538.65	694.28	872.10	1 076.07	1 310.13	1 578.22	1 884.28	2 232.25	2 626.08	3 069.72
<b>50</b>	516.70	672.35	849.91	1 053.32	1 286.52	1 553.46	1 858.08	2 204.33	2 596.13	3 037.45
<b>55</b>	493.62	649.07	826.14	1 028.77	1 260.89	1 526.47	1 829.42	2 173.71	2 563.28	3 002.05
<b>60</b>	-	624.65	801.00	1 002.62	1 233.45	1 497.43	1 798.51	2 140.62	2 527.71	2 963.73
<b>65</b>	-	599.28	774.70	975.09	1 204.40	1 466.56	1 765.53	2 105.24	2 489.64	2 922.67
<b>70</b>	-	-	747.43	946.37	1 173.94	1 434.07	1 730.70	2 067.79	2 449.28	2 879.10
<b>75</b>	-	-	-	916.67	1 142.27	1 400.14	1 694.23	2 028.47	2 406.82	-
<b>80</b>	-	-	-	886.20	1 109.61	1 365.00	1 656.31	1 987.48	-	-

# Model: D6DH-350 X

## Capacity

R404A/R507

### Cooling capacity [kW]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	28.45	36.00	45.02	55.71	68.25	82.85	99.69	118.96	140.86
25	26.29	33.47	41.99	52.05	63.82	77.52	93.32	111.42	132.00
30	24.11	30.92	38.94	48.36	59.37	72.15	86.91	103.83	123.11
35	21.90	28.35	35.86	44.64	54.88	66.76	80.47	96.22	114.18
40	-	25.74	32.75	40.89	50.35	61.32	74.00	88.56	105.21
45	-	23.11	29.62	37.11	45.80	55.86	67.48	80.87	96.21
50	-	20.45	26.45	33.30	41.21	50.35	60.93	73.14	87.16
55	-	17.76	23.24	29.46	36.58	44.82	54.35	65.37	78.07

### Power input [kW]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	11.47	12.81	14.10	15.28	16.30	17.13	17.72	18.02	17.98
25	12.03	13.53	15.01	16.39	17.66	18.75	19.62	20.22	20.52
30	12.54	14.20	15.85	17.44	18.93	20.27	21.42	22.33	22.95
35	13.01	14.81	16.63	18.42	20.13	21.72	23.14	24.34	25.28
40	-	15.38	17.36	19.34	21.26	23.09	24.77	26.26	27.51
45	-	15.89	18.03	20.19	22.32	24.38	26.32	28.09	29.64
50	-	16.36	18.66	20.99	23.32	25.60	27.79	29.83	31.68
55	-	16.80	19.23	21.74	24.26	26.76	29.18	31.49	33.64

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## Capacity

### Current [A]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	27.73	29.41	31.05	32.57	33.87	34.85	35.42	35.48	34.93
25	28.47	30.30	32.17	33.98	35.63	37.04	38.09	38.71	38.79
30	29.17	31.16	33.25	35.35	37.35	39.18	40.72	41.89	42.59
35	29.82	31.96	34.27	36.65	39.01	41.26	43.29	45.01	46.32
40	-	32.69	35.22	37.89	40.60	43.26	45.78	48.05	49.98
45	-	33.34	36.09	39.04	42.11	45.19	48.18	51.00	53.55
50	-	33.90	36.87	40.10	43.52	47.01	50.49	53.86	57.02
55	-	34.36	37.54	41.06	44.82	48.73	52.68	56.60	60.37

### Mass flow [kg/s]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
20	616.42	795.90	1 002.37	1 244.41	1 530.62	1 869.57	2 269.84	2 740.03	3 288.72
25	601.08	777.62	980.79	1 219.17	1 501.35	1 835.90	2 231.43	2 696.50	3 239.70
30	582.37	756.17	956.24	1 191.17	1 469.52	1 799.89	2 190.87	2 651.02	3 188.95
35	560.59	731.87	929.05	1 160.72	1 435.45	1 761.85	2 148.47	2 603.93	3 136.78
40	-	705.02	899.51	1 128.13	1 399.46	1 722.08	2 104.57	2 555.51	3 083.50
45	-	675.94	867.96	1 093.73	1 361.85	1 680.90	2 059.46	2 506.11	3 029.44
50	-	644.94	834.68	1 057.82	1 322.94	1 638.63	2 013.45	2 456.01	2 974.89
55	-	612.34	800.01	1 020.72	1 283.05	1 595.57	1 966.88	2 405.55	2 920.17

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## Capacity

R407C

### Cooling capacity [kW]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
35	36.19	45.52	57.01	70.71	86.67	104.96	125.64	-
40	33.62	42.36	53.15	66.04	81.10	98.37	117.91	-
45	30.93	39.08	49.17	61.26	75.40	91.66	110.08	-
50	-	35.63	45.02	56.31	69.54	84.78	102.09	-
55	-	31.94	40.64	51.13	63.46	77.69	93.87	-
60	-	-	35.97	45.66	57.09	70.31	85.37	-

### Power input [kW]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
35	14.61	16.11	17.56	18.85	19.87	20.50	20.65	-
40	15.61	17.28	18.94	20.48	21.80	22.77	23.30	-
45	16.47	18.29	20.16	21.94	23.54	24.84	25.75	-
50	-	19.11	21.16	23.19	25.06	26.69	27.96	-
55	-	19.69	21.93	24.18	26.33	28.27	29.90	-
60	-	-	22.41	24.88	27.30	29.55	31.53	-

# Model: D6DH-350 X

## Capacity

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### Current [A]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
35	31.30	33.30	35.30	37.11	38.57	39.49	39.69	-
40	32.65	34.91	37.23	39.43	41.35	42.79	43.60	-
45	33.81	36.33	38.97	41.57	43.94	45.91	47.30	-
50	-	37.49	40.45	43.43	46.25	48.74	50.72	-
55	-	38.30	41.58	44.94	48.21	51.22	53.78	-
60	-	-	42.27	46.01	49.73	53.25	56.40	-

### Mass flow [kg/s]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
35	690.65	875.71	1 102.65	1 376.11	1 700.74	2 081.20	2 522.13	-
40	671.81	852.17	1 074.71	1 344.07	1 664.92	2 041.89	2 479.65	-
45	648.91	824.75	1 043.07	1 308.53	1 625.77	1 999.46	2 434.24	-
50	-	791.46	1 005.75	1 267.49	1 581.33	1 951.91	2 383.89	-
55	-	750.30	960.76	1 218.97	1 529.58	1 897.25	2 326.62	-
60	-	-	906.10	1 160.97	1 468.55	1 833.49	2 260.44	-