

# Model: D8SJ-6000

## Data

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Type: Semi-hermetic piston compressors

Producer: Copeland

Series: S

## Model: D8SJ-6000

### Technical data

Cylinder count:	8
Displacement [m <sup>3</sup> /h]:	181
Weight [kg]:	367
Oil charge [dm <sup>3</sup> ]:	7,7
Max. operating current [A]:	107
Locked rotor current [A]:	544
Power supply [V/~/Hz]:	400V/3/50Hz

### Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:		3 1/8"
Discharge line:		1 5/8"

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## Capacity

R22

### Cooling capacity [kW]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	69.54	87.92	109.42	134.41	163.28	196.42	-	-
15	64.04	81.92	102.74	126.89	154.75	186.71	-	-
20	58.59	75.95	96.08	119.37	146.21	176.97	212.05	-
25	53.28	70.09	89.52	111.93	137.72	167.27	200.97	239.19
30	48.15	64.41	83.11	104.63	129.35	157.67	189.97	226.63
35	43.29	58.97	76.92	97.53	121.18	148.25	179.13	214.20
40	38.76	53.84	71.03	90.71	113.26	139.06	168.51	201.98
45	34.63	49.10	65.51	84.24	105.67	130.19	158.18	190.03
50	30.97	44.81	60.43	78.19	98.48	121.70	148.22	178.43
55	-	-	55.84	72.62	91.76	113.66	138.69	167.24
60	-	-	-	67.61	85.58	106.14	129.66	156.53

### Power input [kW]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	19.97	20.99	21.50	21.41	20.60	18.98	-	-
15	21.28	22.75	23.77	24.26	24.10	23.19	-	-
20	22.38	24.27	25.78	26.81	27.27	27.04	26.03	-
25	23.32	25.59	27.56	29.12	30.17	30.60	30.31	29.20
30	24.13	26.77	29.17	31.22	32.83	33.89	34.29	33.94
35	24.87	27.85	30.64	33.16	35.30	36.96	38.03	38.41
40	25.58	28.86	32.03	34.99	37.64	39.86	41.57	42.65
45	26.31	29.86	33.38	36.75	39.87	42.64	44.96	46.71
50	27.09	30.90	34.73	38.48	42.05	45.33	48.23	50.64
55	-	-	36.13	40.23	44.22	47.99	51.44	54.47
60	-	-	-	42.05	46.43	50.66	54.63	58.25

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## Capacity

### Current [A]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	53.02	54.62	55.63	55.88	55.19	53.39	-	-
15	54.93	56.88	58.35	59.16	59.14	58.12	-	-
20	56.54	58.84	60.77	62.16	62.82	62.59	61.28	-
25	57.89	60.56	62.96	64.93	66.28	66.85	66.45	64.91
30	59.04	62.07	64.96	67.51	69.57	70.94	71.46	70.95
35	60.02	63.44	66.81	69.97	72.72	74.91	76.36	76.88
40	60.89	64.70	68.57	72.33	75.80	78.82	81.19	82.76
45	61.69	65.89	70.27	74.65	78.85	82.69	86.01	88.63
50	62.47	67.08	71.97	76.97	81.90	86.59	90.86	94.54
55	-	-	73.71	79.34	85.02	90.56	95.79	100.53
60	-	-	-	81.82	88.24	94.64	100.84	106.66

### Mass flow [kg/s]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	1 264.69	1 606.28	1 991.96	2 428.78	2 923.78	3 483.99	-	-
15	1 217.17	1 559.29	1 944.70	2 380.46	2 873.59	3 431.15	-	-
20	1 161.69	1 503.83	1 888.48	2 322.67	2 813.45	3 367.85	3 992.92	-
25	1 101.01	1 442.69	1 826.08	2 258.22	2 746.15	3 296.90	3 917.53	4 615.07
30	1 037.95	1 378.67	1 760.30	2 189.89	2 674.47	3 221.08	3 836.77	4 528.58
35	975.28	1 314.55	1 693.93	2 120.47	2 601.21	3 143.18	3 753.44	4 439.02
40	915.80	1 253.12	1 629.75	2 052.75	2 529.15	3 066.00	3 670.33	4 349.18
45	862.31	1 197.17	1 570.57	1 989.53	2 461.10	2 992.31	3 590.22	4 261.85
50	817.58	1 149.50	1 519.16	1 933.59	2 399.83	2 924.92	3 515.91	4 179.83
55	-	-	1 478.32	1 887.72	2 348.14	2 866.61	3 450.18	4 105.89
60	-	-	-	1 854.72	2 308.81	2 820.17	3 395.84	4 042.84

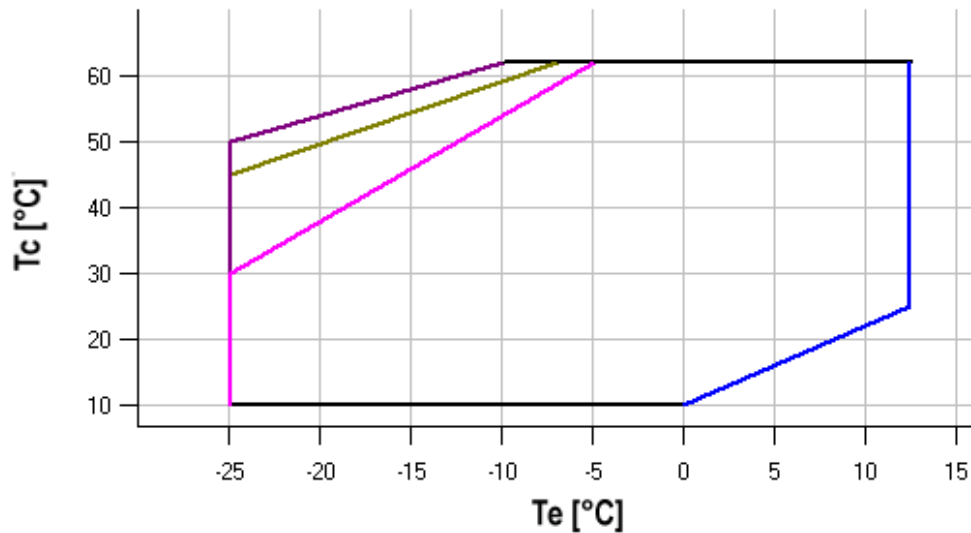
# Model: D8SJ-6000

Capacity

## C.O.P. [W/W]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	3.48	4.19	5.09	6.28	7.93	10.35	-	-
15	3.01	3.60	4.32	5.23	6.42	8.05	-	-
20	2.62	3.13	3.73	4.45	5.36	6.54	8.15	-
25	2.28	2.74	3.25	3.84	4.57	5.47	6.63	8.19
30	2.00	2.41	2.85	3.35	3.94	4.65	5.54	6.68
35	1.74	2.12	2.51	2.94	3.43	4.01	4.71	5.58
40	1.51	1.87	2.22	2.59	3.01	3.49	4.05	4.74
45	1.32	1.64	1.96	2.29	2.65	3.05	3.52	4.07
50	1.14	1.45	1.74	2.03	2.34	2.68	3.07	3.52
55	-	-	1.55	1.81	2.08	2.37	2.70	3.07
60	-	-	-	1.61	1.84	2.10	2.37	2.69

## Application range

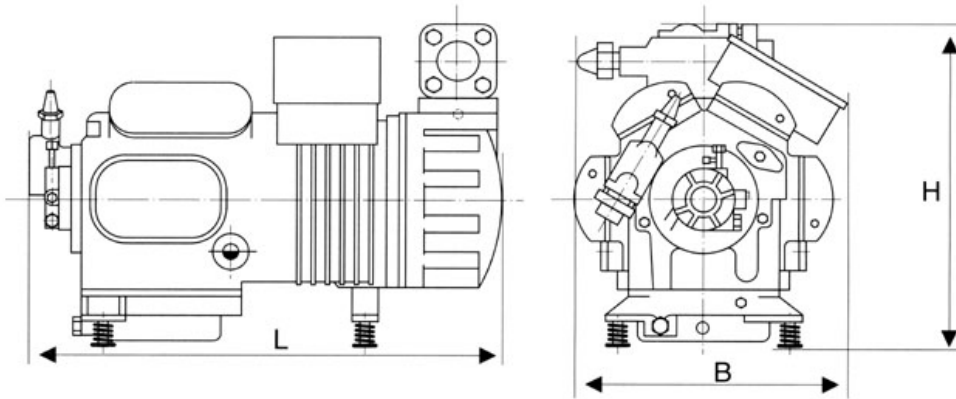


- Maximum evaporating temperature
- 25°C suction gas temperature
- 10K suction gas return + additional cooling
- 20K suction gas return

Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -  
 $t_c$  - Condensing temperature [°C]  
 $t_e$  - Evaporating temperature [°C]

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## Dimensions



L	835 mm
B	625 mm
H	670 mm

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Image

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