

# Model: D6SF-200 X

## Data

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Type: Semi-hermetic piston compressors

Producer: Copeland

Series: S

## Model: D6SF-200 X

### Technical data

Cylinder count:	6
Displacement [m <sup>3</sup> /h]:	84
Weight [kg]:	228
Oil charge [dm <sup>3</sup> ]:	4,3
Max. operating current [A]:	38,4
Locked rotor current [A]:	160
Power supply [V/~/Hz]:	400V/3/50Hz

### Connections

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

# Model: D6SF-200 X

## Capacity

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R22

### Cooling capacity [kW]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5
30	12.18	16.80	22.26	28.68	36.18	44.88	54.87
35	10.86	15.33	20.61	26.80	34.02	42.38	52.01
40	-	13.80	18.85	24.77	31.67	39.68	48.90
45	-	12.18	16.97	22.58	29.13	36.73	45.51
50	-	-	14.96	20.22	26.38	33.54	41.84
55	-	-	-	17.67	23.40	30.09	37.86

### Power input [kW]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5
30	8.55	9.88	11.14	12.31	13.34	14.21	14.86
35	8.72	10.23	11.69	13.06	14.32	15.42	16.34
40	-	10.51	12.15	13.73	15.20	16.53	17.70
45	-	10.70	12.51	14.28	15.95	17.51	18.91
50	-	-	12.74	14.68	16.56	18.33	19.96
55	-	-	-	14.93	16.99	18.96	20.81

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## Capacity

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### Current [A]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5
<b>30</b>	17.08	18.75	20.41	22.00	23.45	24.67	25.61
<b>35</b>	17.29	19.20	21.14	23.05	24.84	26.44	27.79
<b>40</b>	-	19.57	21.78	23.99	26.11	28.07	29.82
<b>45</b>	-	19.82	22.29	24.77	27.21	29.53	31.66
<b>50</b>	-	-	22.60	25.36	28.11	30.77	33.26
<b>55</b>	-	-	-	25.71	28.75	31.73	34.59

### Mass flow [kg/s]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5
<b>30</b>	272.88	371.12	484.90	616.17	766.86	938.91	1 134.25
<b>35</b>	253.43	352.36	466.66	598.26	749.11	921.13	1 116.28
<b>40</b>	-	331.19	445.23	576.40	726.63	897.87	1 092.04
<b>45</b>	-	306.29	419.31	549.27	698.12	867.79	1 060.23
<b>50</b>	-	-	387.58	515.57	662.27	829.61	1 019.54
<b>55</b>	-	-	-	473.99	617.77	782.01	968.67

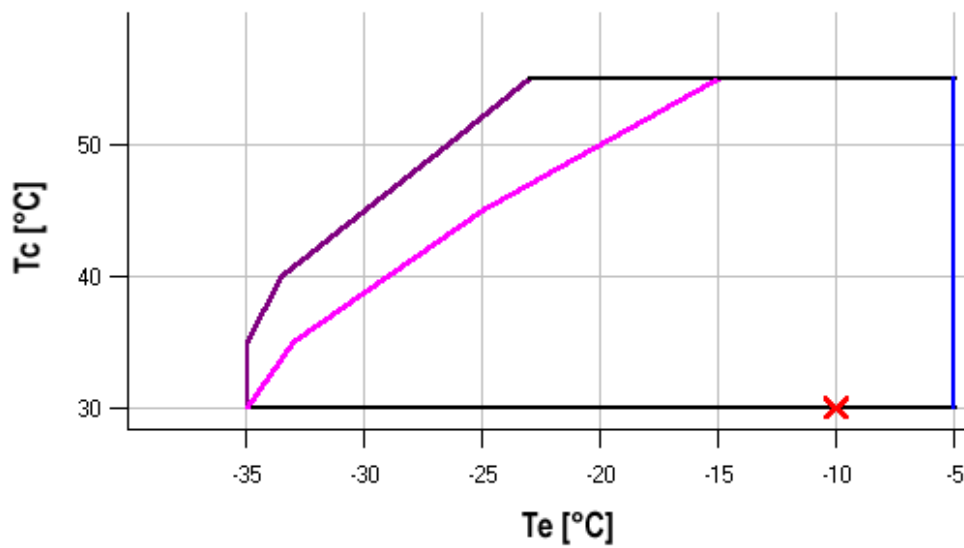
# Model: D6SF-200 X

Capacity

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

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5
30	1.43	1.70	2.00	2.33	2.71	3.16	3.69
35	1.24	1.50	1.76	2.05	2.38	2.75	3.18
40	-	1.31	1.55	1.80	2.08	2.40	2.76
45	-	1.14	1.36	1.58	1.83	2.10	2.41
50	-	-	1.17	1.38	1.59	1.83	2.10
55	-	-	-	1.18	1.38	1.59	1.82

## Application range



 Maximum evaporating temperature

 20K 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]

# Model: D6SF-200 X

## Capacity

R404A/R507

### Cooling capacity [kW]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-45</b>	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>
<b>20</b>	10.90	14.98	20.12	26.35	33.72	42.29	52.08	-	-
<b>25</b>	9.74	13.60	18.44	24.31	31.25	39.31	48.53	58.94	-
<b>30</b>	8.61	12.24	16.78	22.28	28.78	36.32	44.95	54.70	65.64
<b>35</b>	7.53	10.91	15.14	20.25	26.30	33.31	41.34	50.43	60.62
<b>40</b>	6.48	9.62	13.52	18.24	23.81	30.29	37.71	46.11	55.55
<b>45</b>	5.48	8.35	11.92	16.23	21.32	27.25	34.05	41.76	50.43
<b>50</b>	-	7.11	10.33	14.23	18.83	24.20	30.36	37.37	45.27
<b>55</b>	-	5.91	8.77	12.23	16.34	21.13	26.66	32.95	40.06

### Power input [kW]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-45</b>	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>
<b>20</b>	6.42	7.71	9.06	10.41	11.71	12.88	13.89	-	-
<b>25</b>	6.41	7.80	9.27	10.77	12.22	13.58	14.80	15.80	-
<b>30</b>	6.36	7.85	9.43	11.06	12.67	14.21	15.63	16.85	17.84
<b>35</b>	6.27	7.85	9.54	11.30	13.06	14.77	16.38	17.83	19.05
<b>40</b>	6.14	7.80	9.59	11.47	13.38	15.27	17.06	18.72	20.18
<b>45</b>	5.97	7.70	9.59	11.59	13.64	15.69	17.67	19.53	21.22
<b>50</b>	-	7.56	9.54	11.66	13.84	16.04	18.20	20.26	22.17
<b>55</b>	-	7.37	9.44	11.66	13.98	16.33	18.66	20.92	23.04

# Model: D6SF-200 X

## Capacity

### Current [A]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5
<b>20</b>	14.77	16.15	17.74	19.44	21.13	22.72	24.09	-	-
<b>25</b>	14.77	16.26	18.00	19.89	21.82	23.68	25.37	26.78	-
<b>30</b>	14.72	16.31	18.20	20.27	22.42	24.55	26.55	28.31	29.74
<b>35</b>	14.63	16.31	18.33	20.58	22.95	25.33	27.63	29.74	31.54
<b>40</b>	14.49	16.26	18.40	20.81	23.39	26.03	28.62	31.05	33.23
<b>45</b>	14.31	16.15	18.41	20.98	23.75	26.63	29.50	32.26	34.81
<b>50</b>	-	15.99	18.35	21.06	24.03	27.14	30.28	33.36	36.26
<b>55</b>	-	15.77	18.22	21.08	24.22	27.55	30.96	34.34	37.59

### Mass flow [kg/s]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5
<b>20</b>	236.08	328.44	442.97	581.90	747.49	941.95	1 167.54	-	-
<b>25</b>	222.09	312.74	425.44	562.42	725.91	918.17	1 141.42	1 397.90	-
<b>30</b>	208.12	296.74	407.27	541.96	703.05	892.77	1 113.35	1 367.05	1 656.08
<b>35</b>	194.00	280.25	388.30	520.38	678.72	865.57	1 083.17	1 333.74	1 619.53
<b>40</b>	179.55	263.12	368.35	497.48	652.76	836.42	1 050.69	1 297.82	1 580.03
<b>45</b>	164.61	245.16	347.25	473.11	624.99	805.13	1 015.75	1 259.11	1 537.42
<b>50</b>	-	226.21	324.82	447.09	595.25	771.54	978.19	1 217.44	1 491.52
<b>55</b>	-	206.09	300.91	419.26	563.36	735.47	937.82	1 172.64	1 442.17

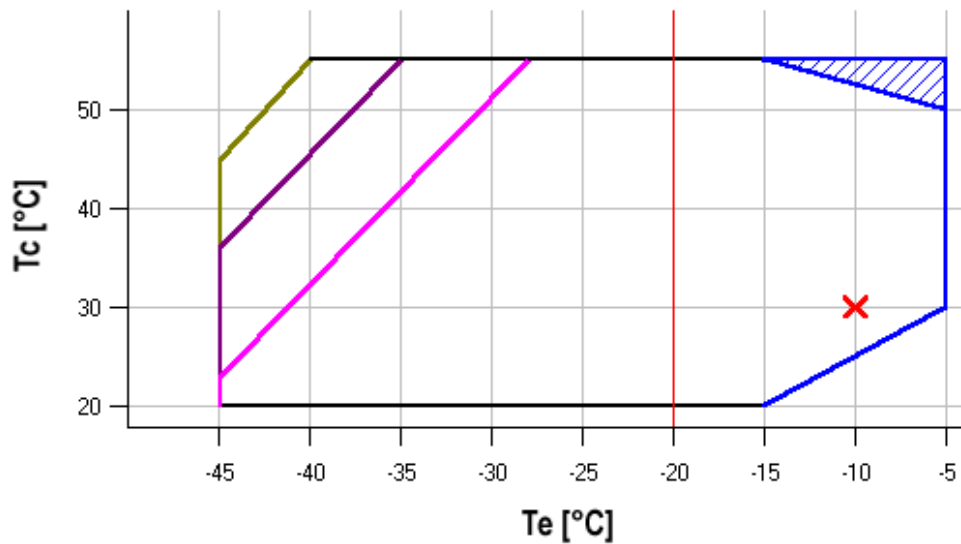
# Model: D6SF-200 X

## Capacity

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

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5
<b>20</b>	1.70	1.94	2.22	2.53	2.88	3.28	3.75	-	-
<b>25</b>	1.52	1.74	1.99	2.26	2.56	2.89	3.28	3.73	-
<b>30</b>	1.35	1.56	1.78	2.01	2.27	2.56	2.88	3.25	3.68
<b>35</b>	1.20	1.39	1.59	1.79	2.01	2.25	2.52	2.83	3.18
<b>40</b>	1.05	1.23	1.41	1.59	1.78	1.98	2.21	2.46	2.75
<b>45</b>	0.92	1.08	1.24	1.40	1.56	1.74	1.93	2.14	2.38
<b>50</b>	-	0.94	1.08	1.22	1.36	1.51	1.67	1.84	2.04
<b>55</b>	-	0.80	0.93	1.05	1.17	1.29	1.43	1.58	1.74

### Application range



Maximum evaporating temperature  
 25°C suction gas temperature

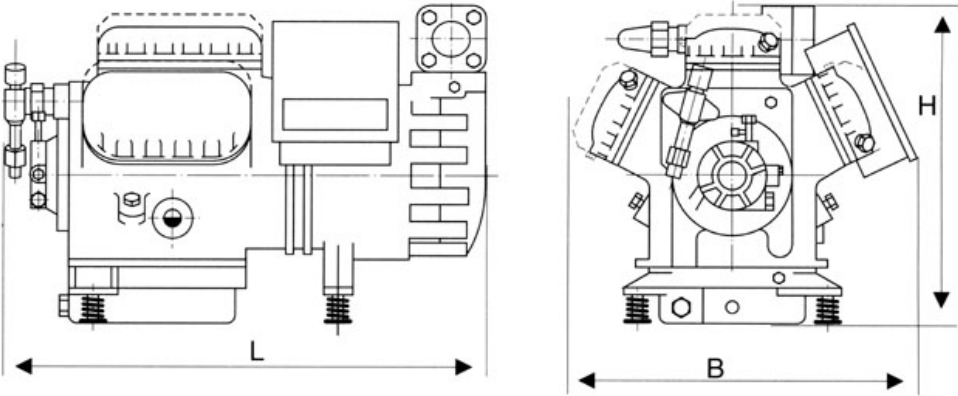
0°C suction gas return  
 0°C suction gas return + additional cooling  
 Limited superheat 20K

Operating conditions: ISO; subcooling: 0 K, suction superheat: - K, return gas temperature: 20

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

**Model: D6SF-200 X**  
**Dimensions**



L	740 mm
B	540 mm
H	490 mm



**Model: D6SF-200 X**

**Image**

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