

# Model: D6SH-350 X

## Data

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Type: Semi-hermetic piston compressors

Producer: Copeland

Series: S

## Model: D6SH-350 X

### Technical data

Cylinder count:	6
Displacement [m <sup>3</sup> /h]:	106
Weight [kg]:	240
Oil charge [dm <sup>3</sup> ]:	4,3
Max. operating current [A]:	62,4
Locked rotor current [A]:	284
Power supply [V/~/Hz]:	400V/3/50Hz

### Connections

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

# Model: D6SH-350 X

## Capacity

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R404A/R507

### Cooling capacity [kW]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
30	20.13	26.69	34.49	43.74	54.62	67.32	82.04	98.96	118.28
35	17.84	24.10	31.44	40.07	50.16	61.92	75.54	91.20	109.10
40	-	21.60	28.45	36.42	45.70	56.48	68.96	83.33	99.77
45	-	19.17	25.50	32.78	41.22	50.99	62.31	75.34	90.30
50	-	16.82	22.59	29.15	36.71	45.45	55.56	67.24	80.67
55	-	14.54	19.71	25.53	32.18	39.84	48.73	59.01	70.89

### Power input [kW]

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
30	11.57	14.01	16.36	18.55	20.53	22.23	23.59	24.55	25.05
35	11.69	14.28	16.82	19.23	21.45	23.43	25.10	26.40	27.28
40	-	14.50	17.21	19.82	22.27	24.52	26.48	28.11	29.34
45	-	14.68	17.54	20.33	23.01	25.50	27.74	29.68	31.25
50	-	14.83	17.82	20.78	23.66	26.38	28.88	31.11	33.01
55	-	14.94	18.06	21.17	24.23	27.16	29.91	32.42	34.62

# Model: D6SH-350 X

## Capacity

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### Current [A]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>
<b>30</b>	25.99	29.40	32.74	35.91	38.81	41.33	43.36	44.80	45.54
<b>35</b>	26.14	29.78	33.40	36.90	40.17	43.12	45.62	47.58	48.88
<b>40</b>	-	30.09	33.97	37.77	41.40	44.74	47.69	50.14	51.99
<b>45</b>	-	30.34	34.45	38.53	42.49	46.20	49.58	52.50	54.88
<b>50</b>	-	30.54	34.86	39.20	43.45	47.52	51.30	54.67	57.54
<b>55</b>	-	30.71	35.20	39.77	44.31	48.71	52.86	56.66	60.00

### Mass flow [kg/s]

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>
<b>30</b>	482.74	652.72	848.30	1 078.49	1 352.32	1 678.82	2 067.01	2 525.90	3 064.52
<b>35</b>	451.72	621.58	815.79	1 043.38	1 313.36	1 634.76	2 016.61	2 467.92	2 997.71
<b>40</b>	-	591.06	782.77	1 006.60	1 271.59	1 586.76	1 961.12	2 403.70	2 923.53
<b>45</b>	-	560.96	749.01	967.95	1 226.81	1 534.59	1 900.33	2 333.04	2 841.76
<b>50</b>	-	531.05	714.31	927.21	1 178.78	1 478.04	1 834.01	2 255.72	2 752.18
<b>55</b>	-	501.11	678.44	884.16	1 127.31	1 416.91	1 761.97	2 171.52	2 654.58

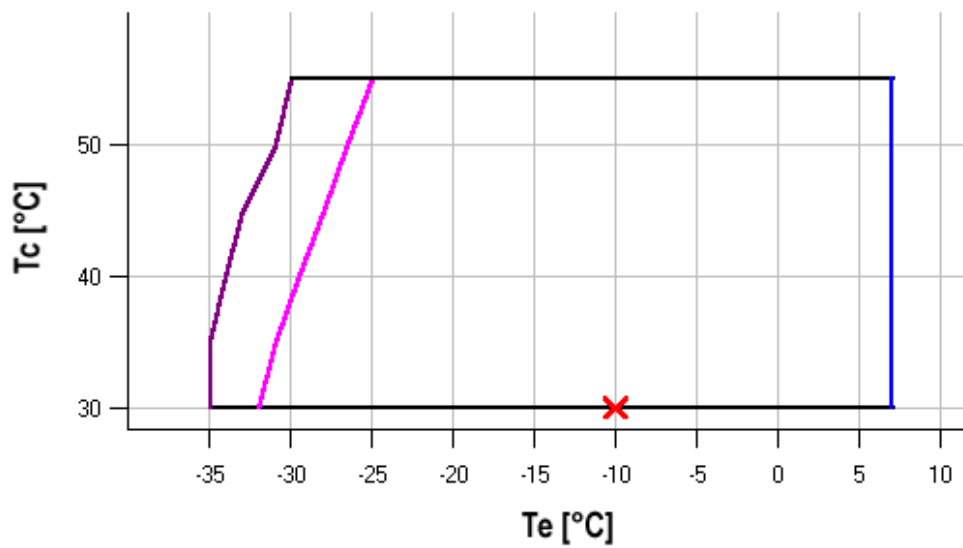
# Model: D6SH-350 X



Capacity


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

$t_c \setminus t_e$	-35	-30	-25	-20	-15	-10	-5	0	5
30	1.74	1.90	2.11	2.36	2.66	3.03	3.48	4.03	4.72
35	1.53	1.69	1.87	2.08	2.34	2.64	3.01	3.45	4.00
40	-	1.49	1.65	1.84	2.05	2.30	2.60	2.96	3.40
45	-	1.31	1.45	1.61	1.79	2.00	2.25	2.54	2.89
50	-	1.13	1.27	1.40	1.55	1.72	1.92	2.16	2.44
55	-	0.97	1.09	1.21	1.33	1.47	1.63	1.82	2.05

## Application range



 Maximum evaporating temperature  
 25°C suction gas temperature

 25°C suction gas return + additional cooling

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

# Model: D6SH-350 X

## Capacity

R407C

### Cooling capacity [kW]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	36.09	46.43	58.99	73.90	91.31	111.33	-	-
15	33.39	43.10	54.96	69.08	85.61	104.68	126.41	-
20	30.82	39.91	51.07	64.41	80.08	98.20	118.91	142.34
25	28.35	36.84	47.30	59.88	74.69	91.88	111.57	133.90
30	25.98	33.87	43.66	55.47	69.44	85.70	104.38	125.62
35	23.70	31.00	40.11	51.16	64.30	79.64	97.33	117.48
40	21.48	28.19	36.64	46.95	59.26	73.70	90.39	109.48
45	19.31	25.45	33.25	42.82	54.31	67.85	83.56	101.59
50	-	22.76	29.91	38.76	49.44	62.09	76.83	93.80
55	-	-	26.61	34.74	44.62	56.39	70.17	86.09
60	-	-	-	30.76	39.85	50.74	63.57	78.46

### Power input [kW]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	8.52	9.42	10.12	10.55	10.61	10.23	-	-
15	9.50	10.59	11.53	12.24	12.63	12.61	12.11	-
20	10.44	11.71	12.87	13.84	14.53	14.86	14.75	14.11
25	11.33	12.75	14.11	15.33	16.31	16.97	17.24	17.01
30	12.17	13.73	15.27	16.71	17.96	18.94	19.56	19.74
35	12.95	14.63	16.33	17.98	19.48	20.76	21.72	22.28
40	13.66	15.44	17.29	19.13	20.87	22.42	23.70	24.63
45	14.29	16.16	18.14	20.15	22.11	23.92	25.50	26.78
50	-	16.79	18.88	21.04	23.19	25.25	27.12	28.72
55	-	-	19.49	21.79	24.12	26.40	28.54	30.45
60	-	-	-	22.39	24.89	27.37	29.76	31.97

# Model: D6SH-350 X

## Capacity

### Current [A]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	23.27	24.33	25.16	25.60	25.54	24.82	-	-
15	24.20	25.53	26.70	27.56	27.99	27.82	26.94	-
20	25.18	26.76	28.25	29.51	30.39	30.77	30.49	29.43
25	26.19	28.00	29.78	31.41	32.74	33.62	33.93	33.52
30	27.19	29.21	31.27	33.25	34.99	36.37	37.24	37.46
35	28.17	30.37	32.69	34.99	37.13	38.97	40.38	41.21
40	29.10	31.46	34.01	36.61	39.12	41.41	43.34	44.76
45	29.96	32.45	35.21	38.09	40.95	43.66	46.08	48.07
50	-	33.31	36.26	39.39	42.59	45.70	48.59	51.11
55	-	-	37.13	40.50	44.00	47.49	50.83	53.87
60	-	-	-	41.39	45.17	49.01	52.78	56.32

### Mass flow [kg/s]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
10	639.99	824.28	1 040.83	1 291.04	1 576.32	1 898.08	-	-
15	618.63	795.88	1 005.74	1 249.61	1 528.90	1 845.01	2 199.35	-
20	597.64	768.12	971.55	1 209.34	1 482.89	1 793.60	2 142.90	2 532.17
25	576.66	740.62	937.87	1 169.83	1 437.90	1 743.49	2 087.99	2 472.83
30	555.30	713.00	904.34	1 130.73	1 393.58	1 694.29	2 034.26	2 414.91
35	533.20	684.89	870.58	1 091.66	1 349.54	1 645.63	1 981.33	2 358.06
40	509.98	655.93	836.21	1 052.24	1 305.41	1 597.14	1 928.83	2 301.88
45	485.26	625.72	800.86	1 012.09	1 260.82	1 548.44	1 876.37	2 246.02
50	-	593.91	764.17	970.86	1 215.39	1 499.16	1 823.59	2 190.08
55	-	-	725.74	928.15	1 168.75	1 448.93	1 770.12	2 133.71
60	-	-	-	883.60	1 120.52	1 397.37	1 715.58	2 076.53

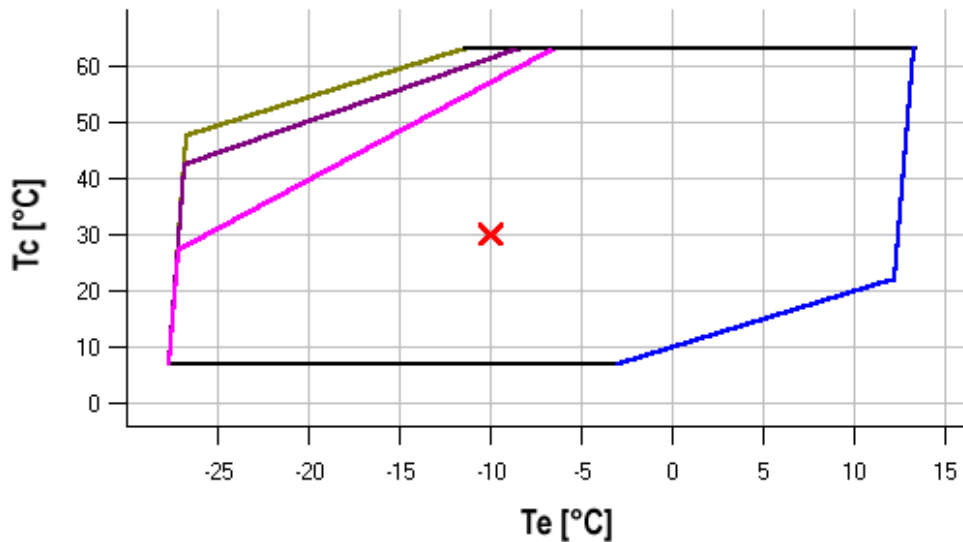
# Model: D6SH-350 X

Capacity

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

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	4.24	4.93	5.83	7.01	8.60	10.88	-	-
<b>15</b>	3.52	4.07	4.77	5.64	6.78	8.30	10.44	-
<b>20</b>	2.95	3.41	3.97	4.66	5.51	6.61	8.06	10.09
<b>25</b>	2.50	2.89	3.35	3.91	4.58	5.41	6.47	7.87
<b>30</b>	2.14	2.47	2.86	3.32	3.87	4.52	5.34	6.36
<b>35</b>	1.83	2.12	2.46	2.85	3.30	3.84	4.48	5.27
<b>40</b>	1.57	1.83	2.12	2.45	2.84	3.29	3.81	4.45
<b>45</b>	1.35	1.57	1.83	2.13	2.46	2.84	3.28	3.79
<b>50</b>	-	1.36	1.58	1.84	2.13	2.46	2.83	3.27
<b>55</b>	-	-	1.37	1.59	1.85	2.14	2.46	2.83
<b>60</b>	-	-	-	1.37	1.60	1.85	2.14	2.45

## Application range

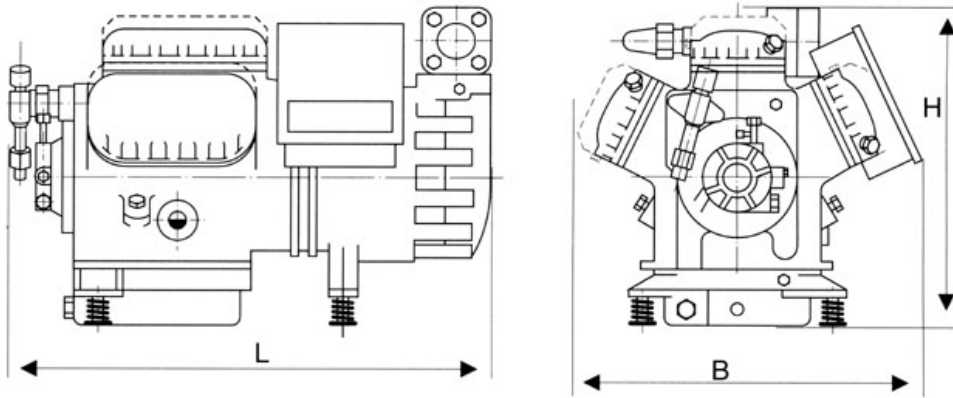


- Maximum evaporating temperature
- 25°C suction gas temperature
- 20K suction gas return
- 20K suction gas return + additional cooling

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

# Model: D6SH-350 X

## Dimensions



L	760 mm
B	540 mm
H	490 mm



# Model: D6SH-350 X

Image

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