

Type: Semi-hermetic twin screw compressors

Producer: Frascold

Series: C-TSH

Model: C-TSH8-100 300 Y

Technical data

Nominal motor power [kW/HP]:	74 / 100
Displacement [m ³ /h]:	300
Capacity control [%]:	100 - 75 - 50
RPM [min ⁻¹]:	1740
Weight net [kg]:	475
Weight gross [kg]:	510
Oil charge [dm ³]:	19

Electrical data

	<u>PWS</u>
Power supply [V/~ /Hz]:	400/3/50
Locked rotor current [A]:	634
Locked rotor current (D.O.L. - ΔΔ) [A]:	1036
Max. operating current [A]:	216
Max. power input [kW]:	136

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	80	3 1/8
Discharge line:	67	2 5/8

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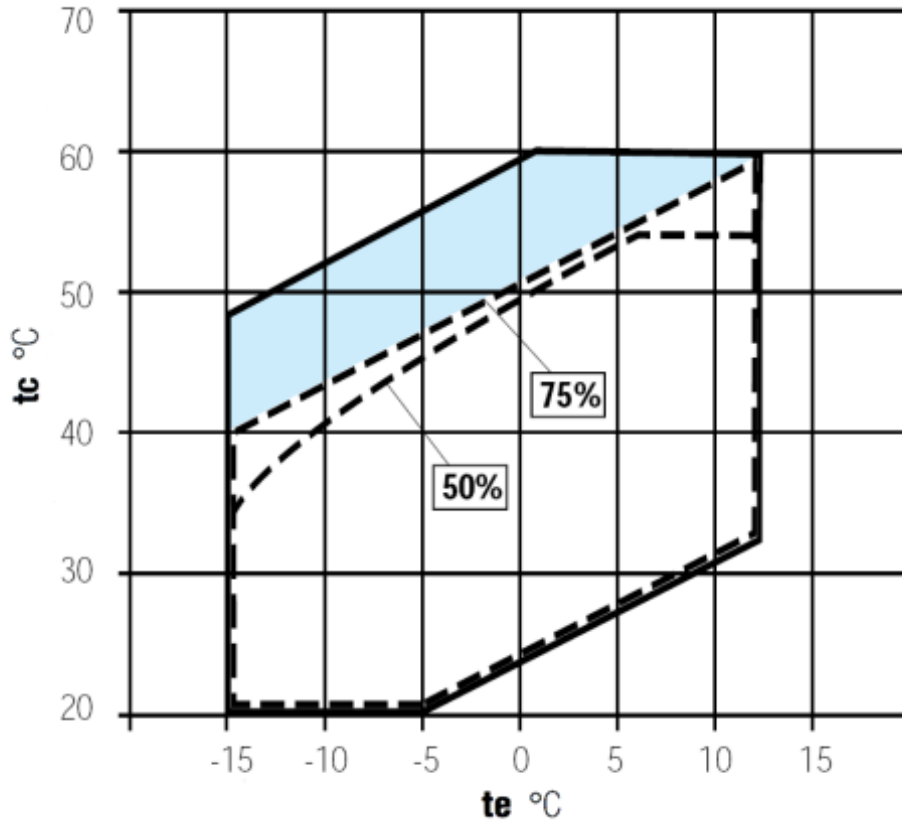
Cooling capacity [W]

t_c \ t_e	12.5	10	5	0	-5	-10	-15
30	-	-	312 490	262 520	218 820	180 810	147 650
40	360 550	332 030	280 110	234 510	194 660	159 960	129 860
50	318 390	292 790	246 210	205 320	169 620	138 550	-
55	296 620	272 680	229 090	190 810	157 370	-	-

Power input [W]

t_c \ t_e	12.5	10	5	0	-5	-10	-15
30	-	-	60.38	56.93	53.86	51.22	49.41
40	75.23	73.79	70.41	66.82	63.48	60.56	58.68
50	88.54	86.90	83.15	79.23	75.71	72.83	-
55	96.49	94.35	89.94	85.89	82.72	-	-

Application limits



With liquid injection or oil cooler

Operating conditions: suction gas overheating 10K, 0K subcooling
 t_c - Condensing temperature [°C]
 t_e - Evaporating temperature [°C]

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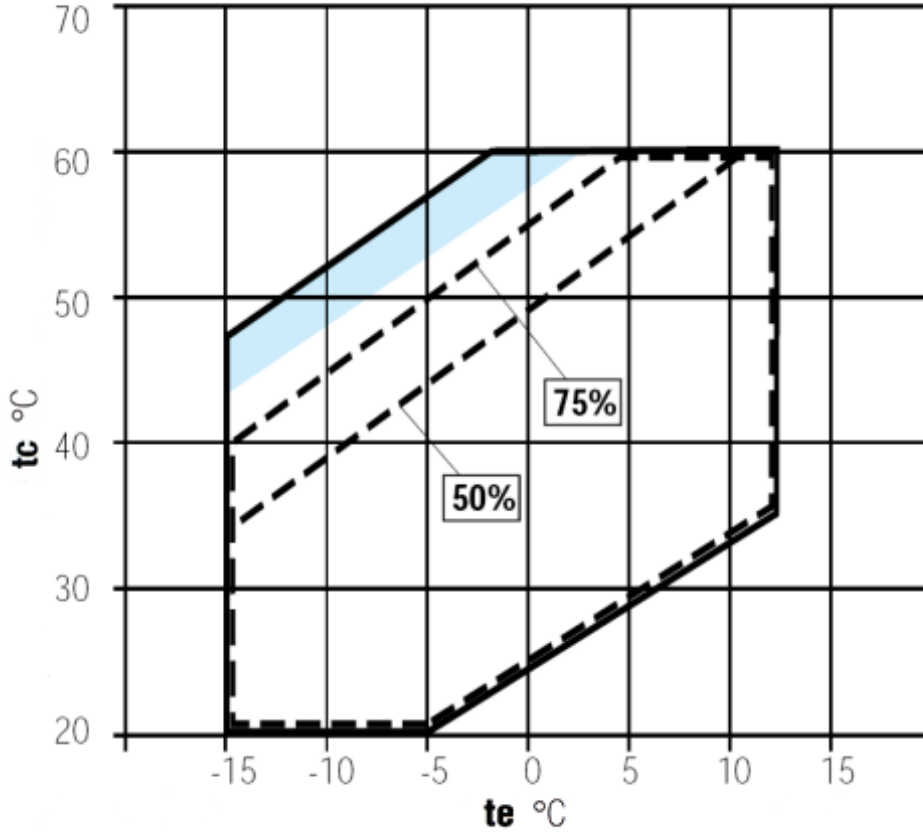
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	294 320	246 360	205 110	169 570	139 360
40	340 770	312 780	262 430	218 980	181 580	149 580	122 370
50	299 350	274 490	229 810	191 290	158 180	129 890	-
55	277 730	254 690	213 280	177 580	146 900	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	57.26	53.81	50.83	48.41	47.10
40	71.94	70.27	66.72	63.07	59.82	57.24	55.94
50	84.62	82.67	78.69	74.80	71.55	69.36	-
55	91.91	89.60	85.23	81.38	78.74	-	-

Application limits

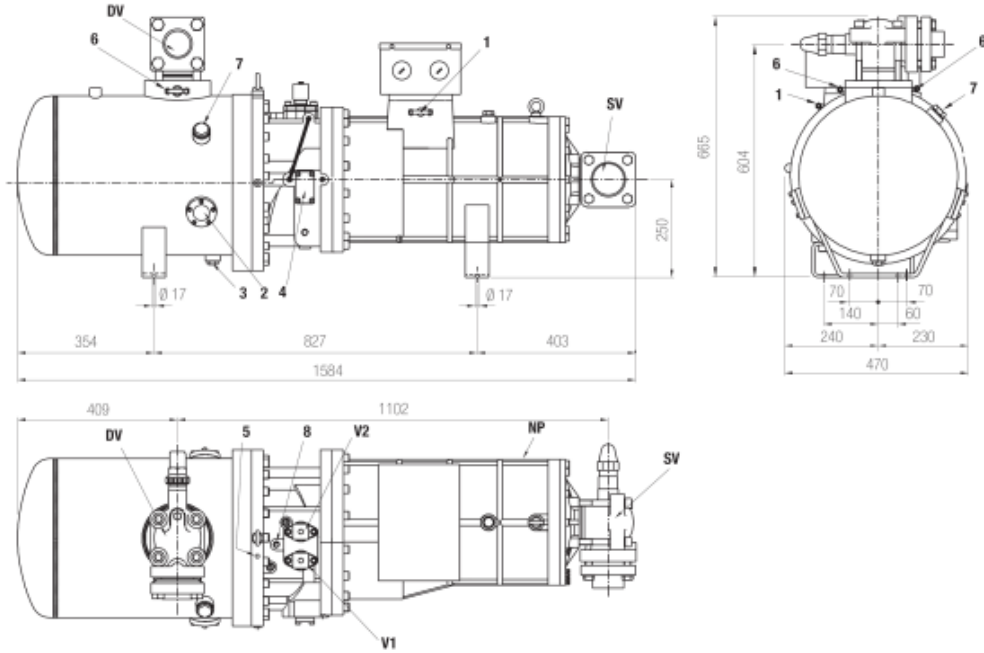


With liquid injection or oil cooler

Operating conditions: suction gas overheating 10K, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]



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|-----|--|-----|-----------------------------------|
| 1: | low pressure connections | 2: | oil level sight glass |
| 3: | oil drain | 4: | connections for remote oil cooler |
| 5: | maximum discharge temperature sensor | 6: | capacity control valve |
| 6: | high pressure connections | 7: | oil charge plug |
| 8: | liquid injection/economizer connection | DV: | discharge valve |
| NP: | name plate | SV: | suction valve |
| V1: | capacity control valve 50% | V2: | capacity control valve 75% |

