

Type: Semi-hermetic twin screw compressors

Producer: Frascold

Series: C-TSH

Model: C-TSH8-100 300 Y ECO

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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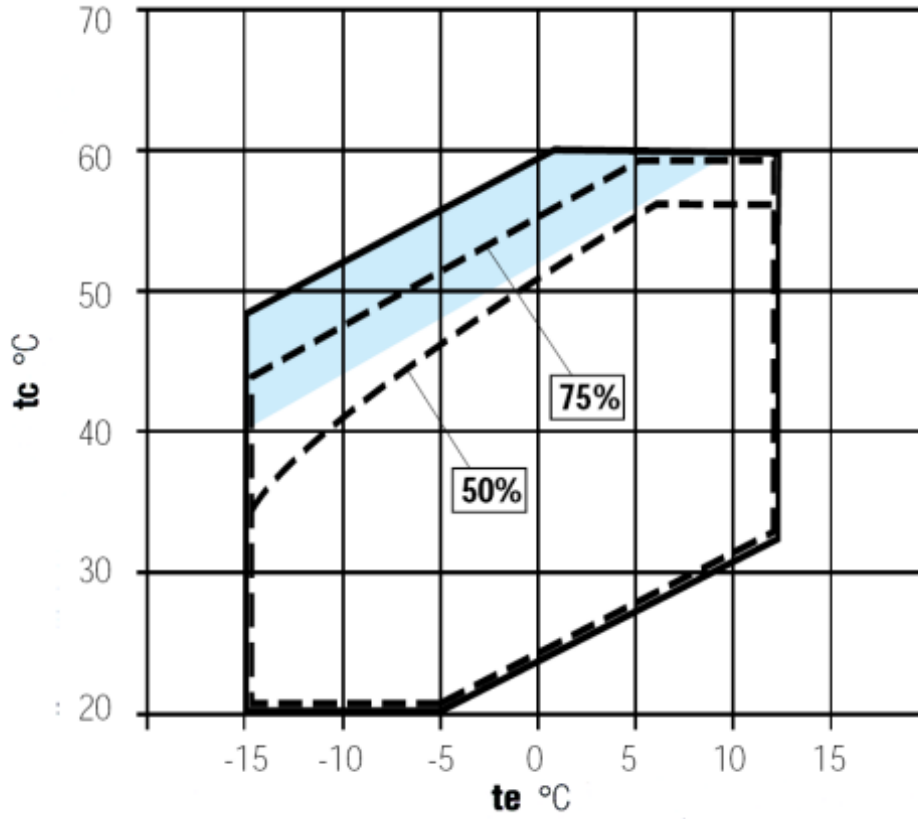
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	335 110	285 710	241 790	202 830	168 520
40	392 060	363 940	312 060	265 630	224 260	187 510	154 950
50	361 760	335 690	287 470	244 250	205 670	171 320	-
55	345 900	321 040	275 030	233 660	196 680	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	62.40	59.23	56.43	54.01	53.56
40	78.26	77.04	74.06	70.82	67.79	65.18	63.66
50	94.01	92.63	89.37	85.89	82.78	90.34	-
55	104.43	102.54	98.53	94.84	92.14	-	-

Application limits



With liquid injection or oil cooler

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

t_c - Condensing temperature [$^{\circ}\text{C}$]

t_e - Evaporating temperature [$^{\circ}\text{C}$]

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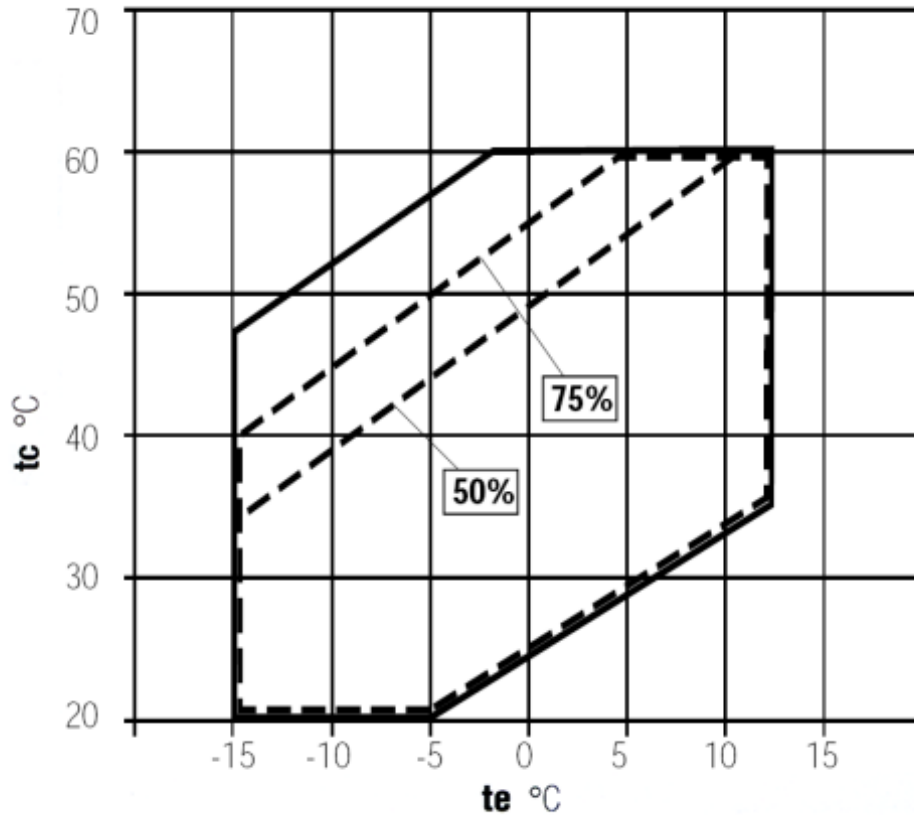
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	319 770	272 440	230 890	194 760	163 220
40	377 480	349 870	299 470	255 050	215 970	181 790	152 020
50	351 810	326 310	279 640	238 410	202 030	170 130	-
55	338 740	314 530	270 180	230 890	196 170	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	59.54	56.41	53.71	51.66	50.71
40	75.52	74.10	71.00	67.75	64.85	62.65	61.84
50	91.36	89.72	86.31	82.94	80.19	78.62	-
55	101.19	99.15	85.29	92.02	90.10	-	-

Application limits

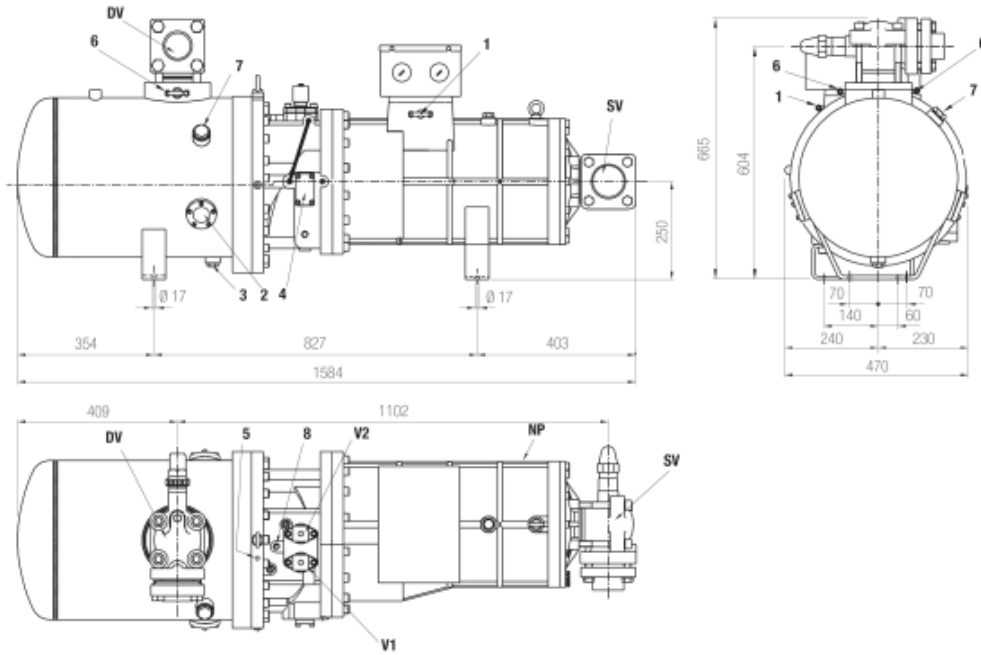


With liquid injection or oil cooler

Operating conditions: suction gas overheating 10K, 10K 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% |

