

Type: Semi-hermetic twin screw compressors

Producer: Frascold

Series: C-TSH

Model: C-TSH8-90 270 Y

Technical data

Nominal motor power [kW/HP]:	66,5 / 90
Displacement [m ³ /h]:	270
Capacity control [%]:	100 - 75 - 50
RPM [min ⁻¹]:	1740
Weight net [kg]:	433
Weight gross [kg]:	465
Oil charge [dm ³]:	13

Electrical data

	<u>PWS</u>
Power supply [V/~ /Hz]:	400/3/50
Locked rotor current [A]:	499
Locked rotor current (D.O.L. - ΔΔ) [A]:	814
Max. operating current [A]:	185
Max. power input [kW]:	116

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	80	3 1/8
Discharge line:	54	2 1/8

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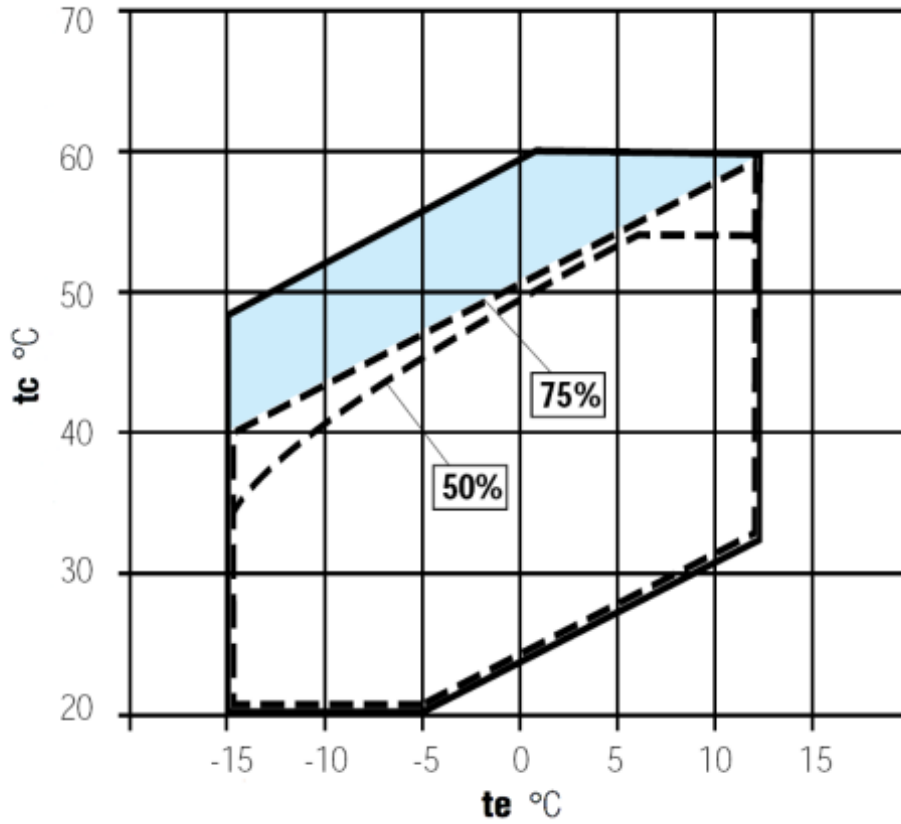
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	283 000	237 780	198 220	163 730	133 780
40	325 930	300 160	253 260	212 070	176 080	144 720	117 510
50	287 730	264 640	222 600	185 690	153 440	125 360	-
55	268 230	246 570	207 140	172 500	142 230	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	55.12	51.97	49.16	46.68	45.06
40	68.07	66.87	63.96	60.81	57.84	55.20	53.46
50	79.95	78.44	75.03	71.55	68.51	66.19	-
55	86.83	85.01	81.15	77.57	74.77	-	-

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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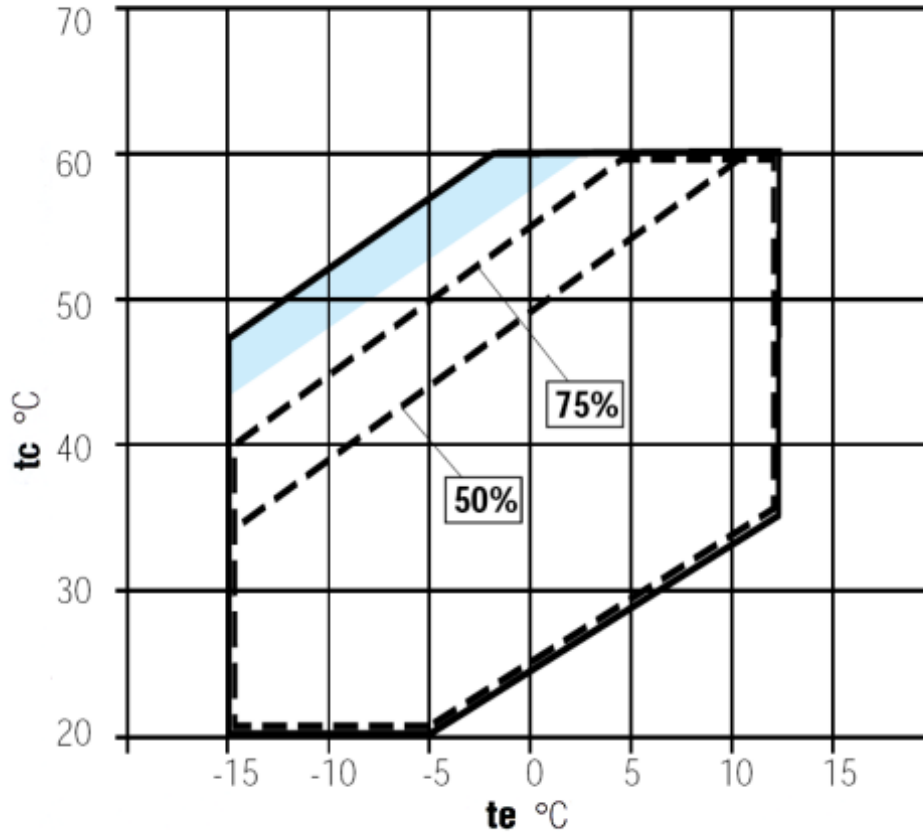
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	266 410	223 060	185 690	153 660	126 380
40	308 270	282 960	237 440	198 150	164 330	135 390	110 760
50	270 670	248 210	207 840	173 030	143 100	117 510	-
55	251 070	230 260	192 850	160 590	132 860	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	52.31	49.17	46.39	44.17	42.93
40	65.26	63.80	60.69	57.44	54.51	52.20	51.03
50	76.54	74.84	71.34	67.92	65.07	63.21	-
55	82.81	80.84	77.09	73.73	71.35	-	-

Application limits

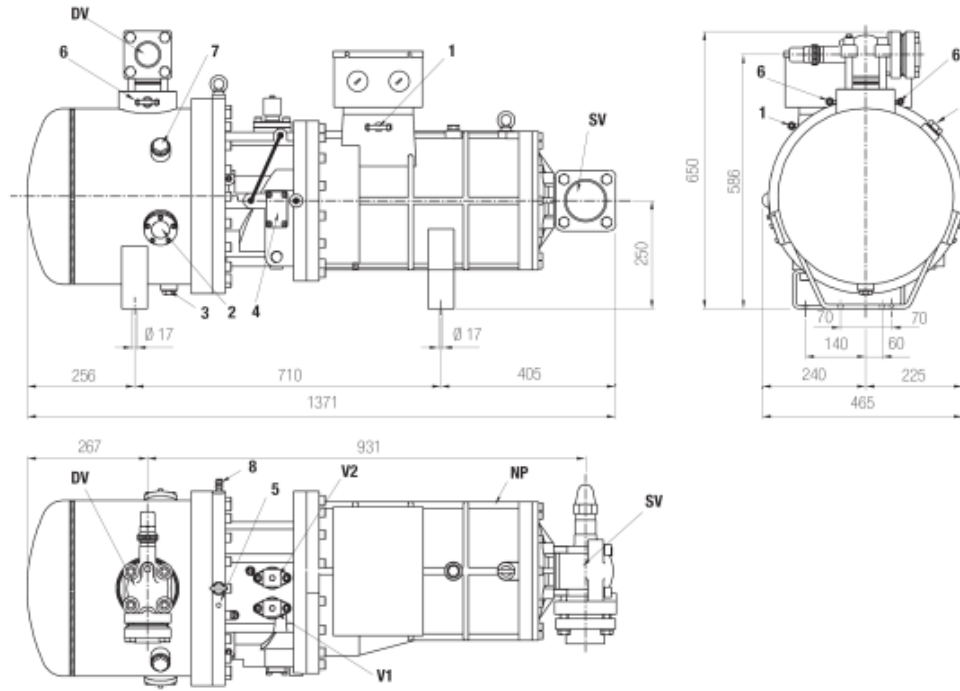


With liquid injection or oil cooler

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% |

