

Type: Semi-hermetic twin screw compressors

Producer: Frascold

Series: C-TSH

Model: C-TSH8-70 210 Y ECO

Technical data

Nominal motor power [kW/HP]:	52 / 70
Displacement [m ³ /h]:	210
Capacity control [%]:	100 - 50
RPM [min ⁻¹]:	1740
Weight net [kg]:	400
Weight gross [kg]:	430
Oil charge [dm ³]:	9

Electrical data

	<u>PWS</u>
Power supply [V/~/Hz]:	400/3/50
Locked rotor current [A]:	333
Locked rotor current (D.O.L. - $\Delta\Delta$) [A]:	546
Max. operating current [A]:	148
Max. power input [kW]:	90

Connections

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

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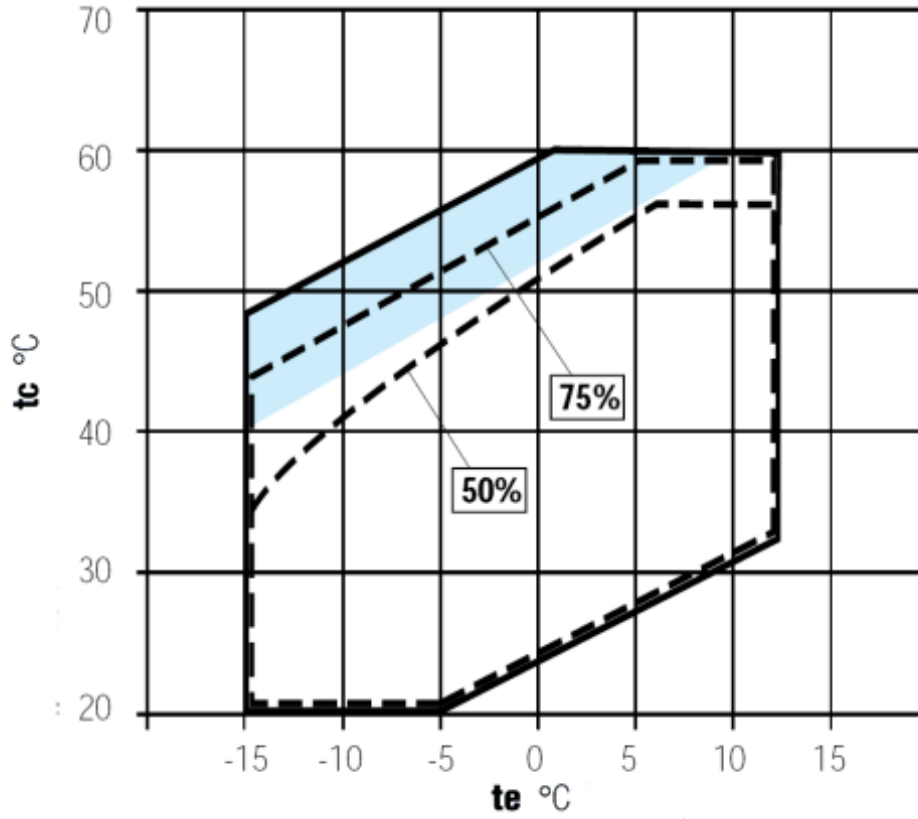
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	234 420	199 910	169 220	142 010	117 940
40	273 680	254 060	217 900	185 550	156 720	131 100	108 390
50	252 390	234 010	200 500	170 440	143 580	119 630	-
55	240 890	223 630	191 630	162 810	137 020	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	41.37	39.44	37.54	35.71	34.25
40	51.24	50.63	48.93	46.92	44.93	43.09	41.79
50	61.29	60.30	58.15	55.90	53.97	52.60	-
55	69.83	68.43	65.56	63.00	61.14	-	-

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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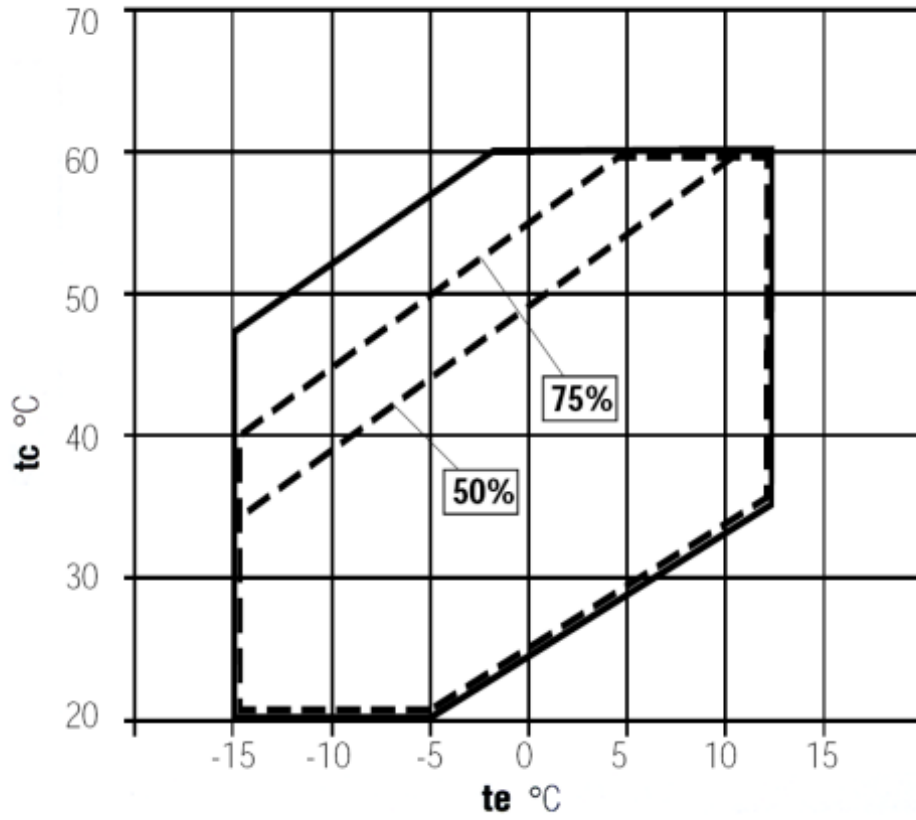
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	223 670	190 600	161 590	136 280	114 310
40	263 780	244 490	209 280	178 280	151 010	127 140	106 350
50	245 140	227 390	194 910	166 220	140 900	118 680	-
55	236 010	219 130	188 230	160 910	136 660	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	39.47	37.75	36.03	34.49	33.41
40	48.74	48.18	46.76	45.08	43.53	42.34	41.97
50	60.26	59.39	57.49	55.51	53.82	52.78	-
55	66.89	66.00	64.03	61.93	59.99	-	-

Application limits

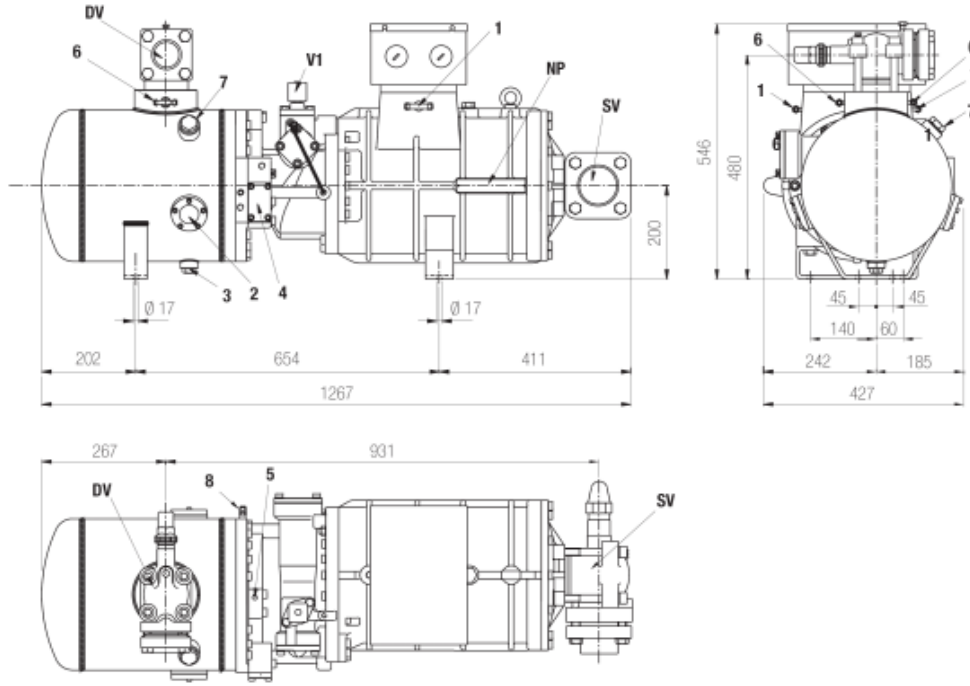


With liquid injection or oil cooler

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% |

