

Type: Semi-hermetic twin screw compressors

Producer: Frascold

Series: C-TSH

Model: C-TSH8-70 210 Y

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. - ΔΔ) [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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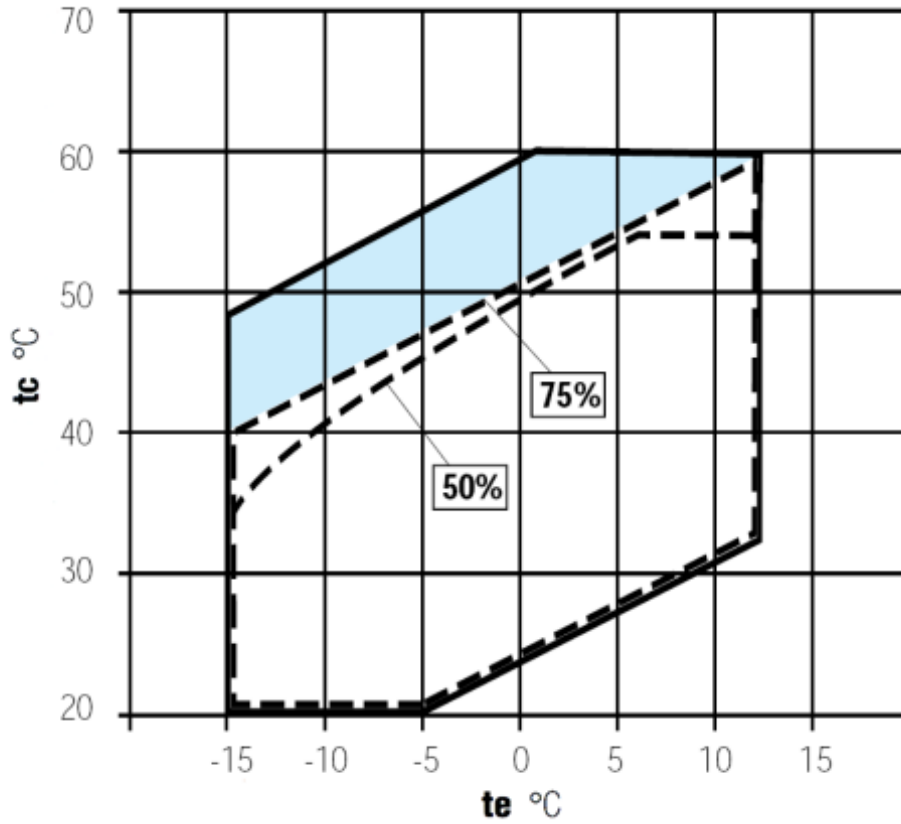
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	218 640	183 720	153 180	126 570	103 460
40	251 780	231 890	195 680	163 890	136 110	111 890	90 880
50	222 070	204 270	171 870	143 400	118 520	96 840	-
55	206 770	190 110	159 620	132 980	109 680	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	40.00	37.87	35.80	33.81	32.20
40	49.23	48.46	46.48	44.23	42.03	39.98	38.45
50	57.63	56.53	54.05	51.51	49.30	47.62	-
55	64.50	62.98	59.78	56.94	54.75	-	-

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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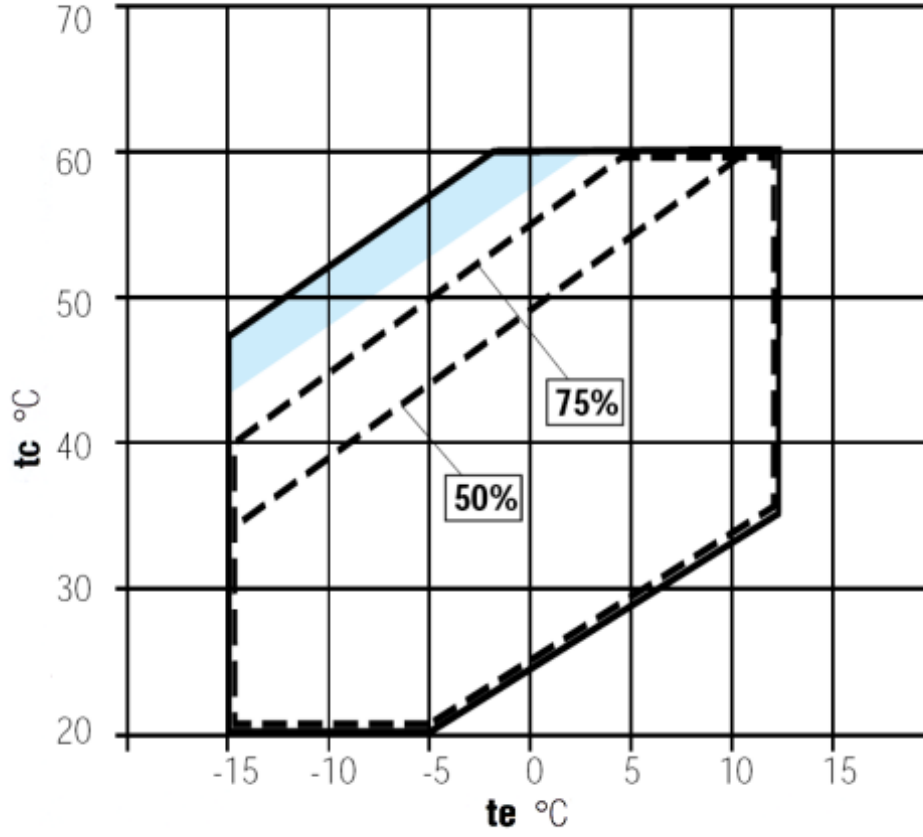
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	205 910	172 400	143 530	118 800	97 740
40	238 230	218 660	183 490	153 150	127 030	104 680	85 660
50	208 800	191 480	160 360	133 530	110 460	90 730	-
55	193 500	177 460	148 650	123 830	102 510	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	37.92	35.97	34.05	32.31	31.02
40	46.40	45.65	43.90	41.93	40.08	38.60	37.88
50	55.76	54.67	52.36	49.99	47.94	46.47	-
55	60.74	59.59	57.15	54.62	52.33	-	-

Application limits

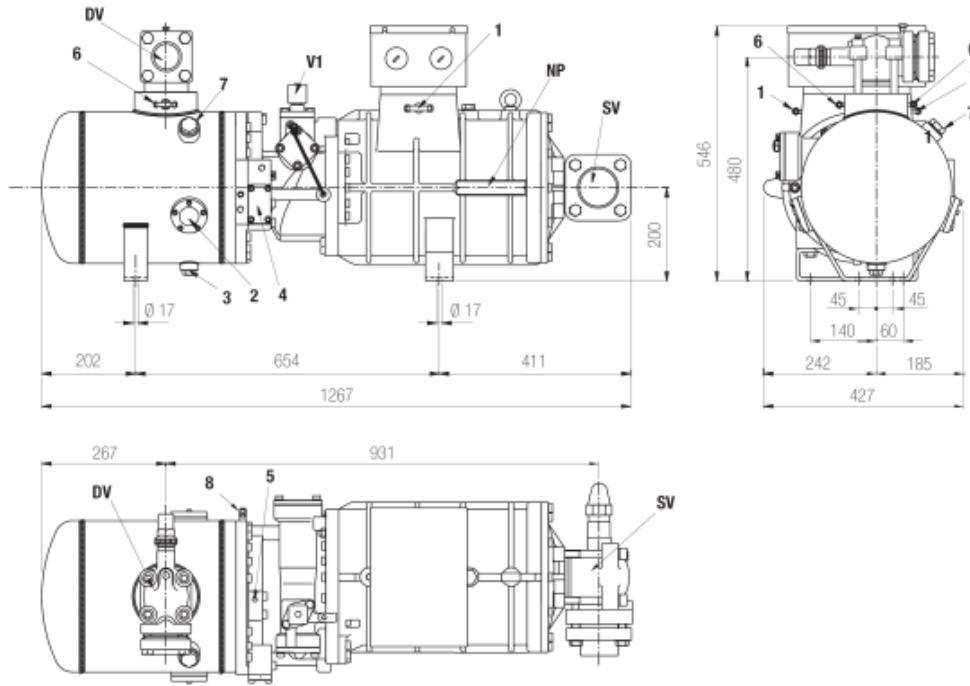


With liquid injection or oil cooler

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

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

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



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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% |

