

Type: Semi-hermetic twin screw compressors

Producer: Frascold

Series: C-TSH

Model: C-TSH8-50 150 Y

Technical data

Nominal motor power [kW/HP]:	37 / 50
Displacement [m ³ /h]:	150
Capacity control [%]:	100 - 50
RPM [min ⁻¹]:	1740
Weight net [kg]:	310
Weight gross [kg]:	333
Oil charge [dm ³]:	9

Electrical data

	<u>PWS</u>
Power supply [V/~/Hz]:	400/3/50
Locked rotor current [A]:	243
Locked rotor current (D.O.L. - $\Delta\Delta$) [A]:	399
Max. operating current [A]:	108
Max. power input [kW]:	65

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	54	2 1/8
Discharge line:	42	1 5/8

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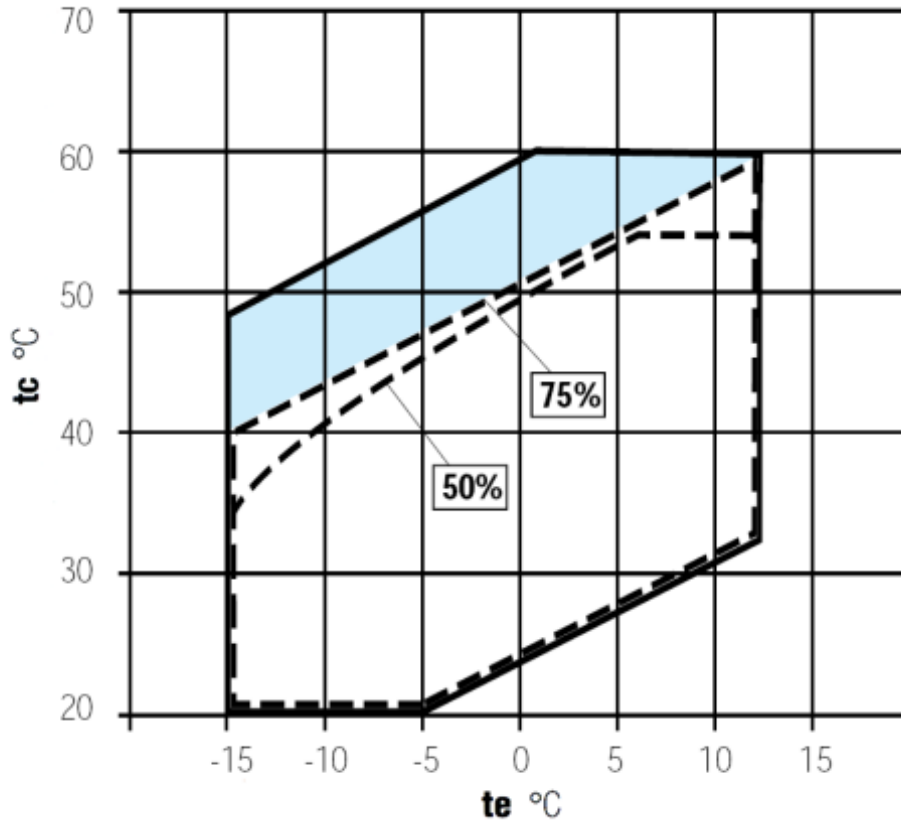
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	154 290	130 280	109 300	91 010	75 130
40	179 650	165 750	140 460	118 270	98 880	82 000	67 350
50	159 490	146 900	123 990	103 880	86 320	71 020	-
55	148 340	136 480	114 810	95 910	79 410	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	29.30	28.07	26.91	25.91	25.26
40	36.44	36.01	34.76	33.26	31.76	30.35	29.27
50	43.23	42.64	41.22	39.69	38.38	37.44	-
55	46.89	46.30	44.86	43.49	42.44	-	-

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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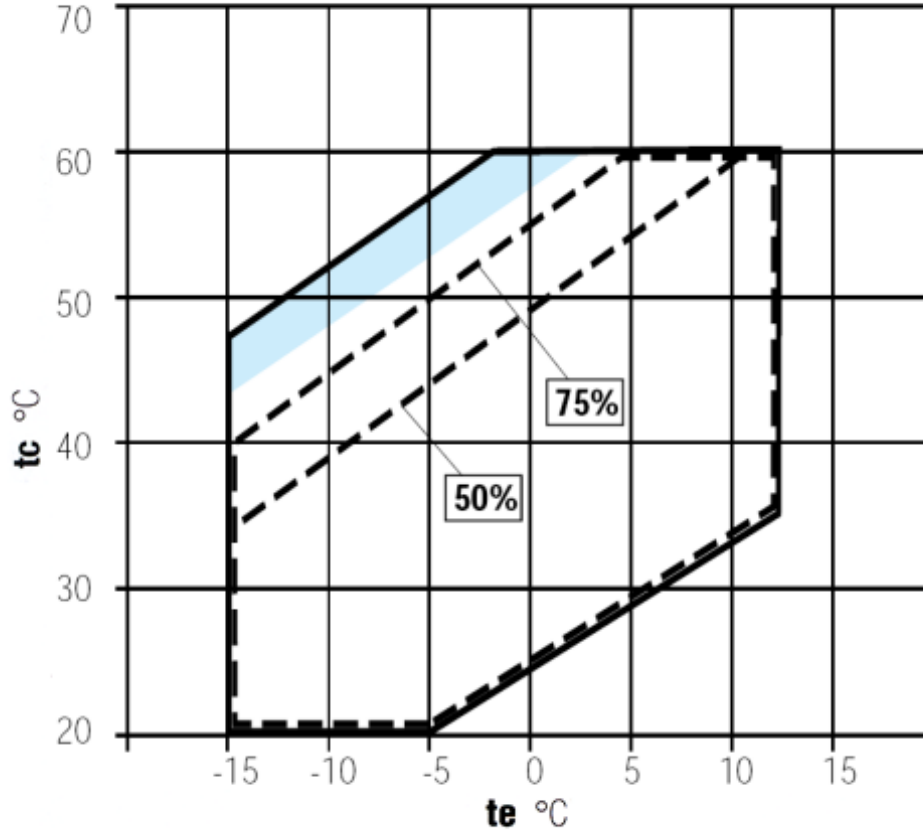
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	145 270	122 280	102 460	85 480	71 010
40	169 830	156 190	131 680	110 540	92 350	76 780	63 530
50	149 940	137 740	115 810	96 880	80 580	66 630	-
55	138 860	127 480	107 010	89 380	74 210	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	27.75	26.54	25.46	24.58	24.15
40	34.63	34.12	32.86	31.39	29.96	28.71	27.87
50	41.89	40.93	39.05	37.34	36.12	35.70	-
55	44.71	43.96	42.48	41.19	40.43	-	-

Application limits

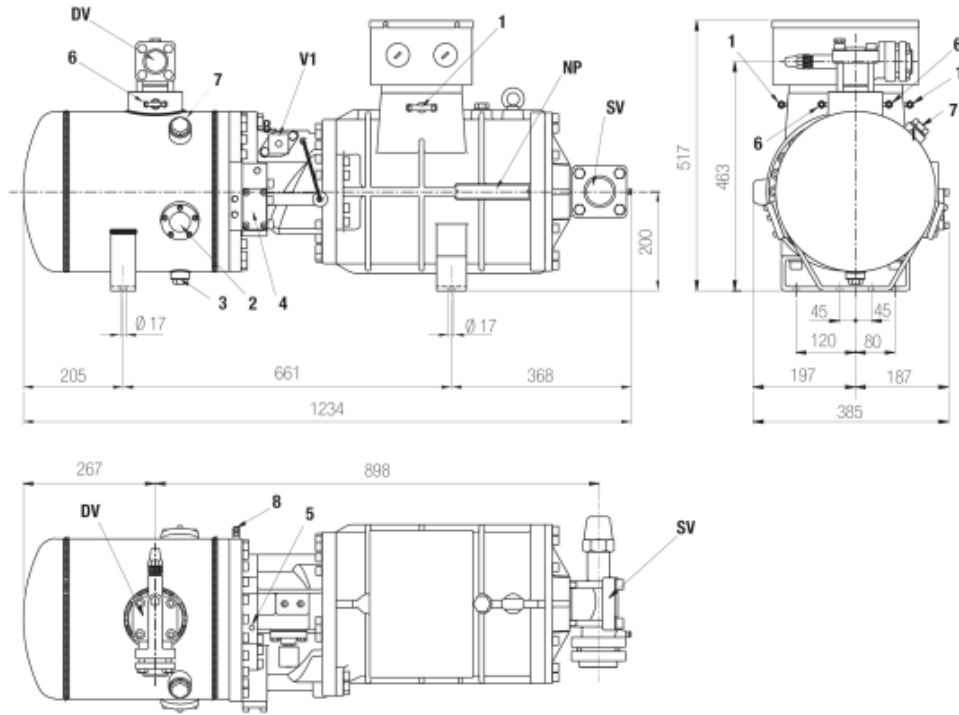


With liquid injection or oil cooler

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% |

