

Type: Semi-hermetic twin screw compressors

Producer: Frascold

Series: C-TSH

Model: C-TSH8-40 120 Y ECO

Technical data

Nominal motor power [kW/HP]:	30 / 40
Displacement [m ³ /h]:	120
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]:	218
Locked rotor current (D.O.L. - ΔΔ) [A]:	360
Max. operating current [A]:	85
Max. power input [kW]:	54

Connections

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

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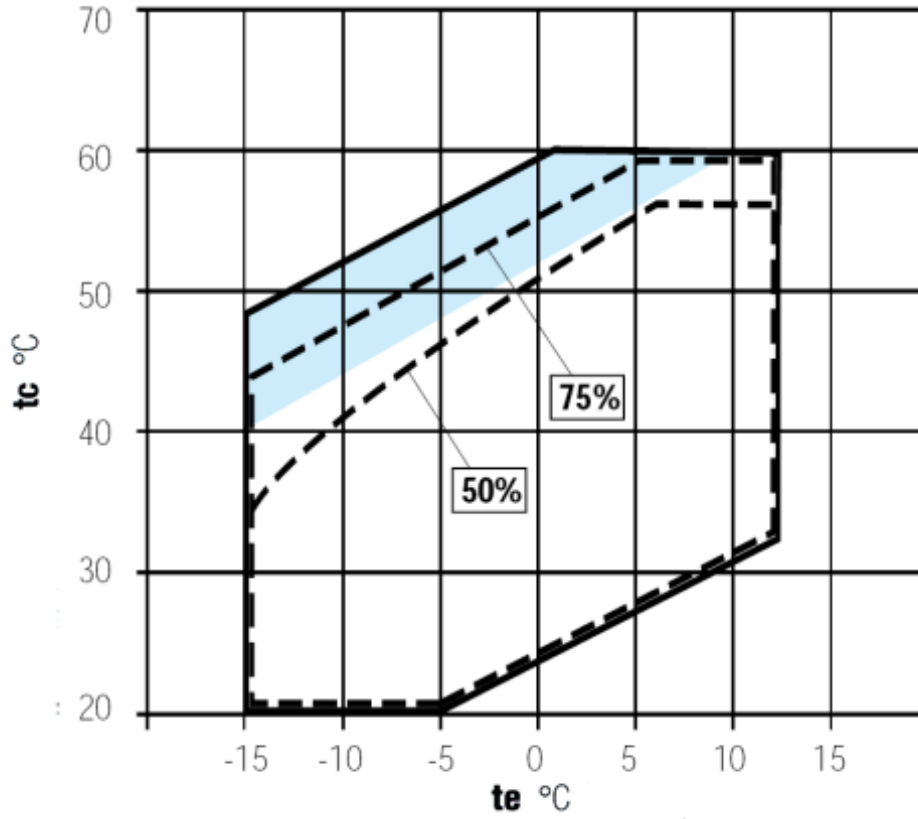
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	133 350	114 350	97 480	82 540	69 360
40	157 630	146 600	126 270	108 100	91 920	77 560	64 850
50	146 400	136 060	116 940	99 810	84 520	70 900	-
55	139 830	129 860	111 420	94 870	80 100	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	25.92	25.15	24.31	23.44	22.75
40	32.64	32.32	31.38	30.25	29.15	28.16	27.55
50	39.54	39.07	37.93	36.75	35.81	35.28	-
55	42.78	42.52	41.82	41.19	40.94	-	-

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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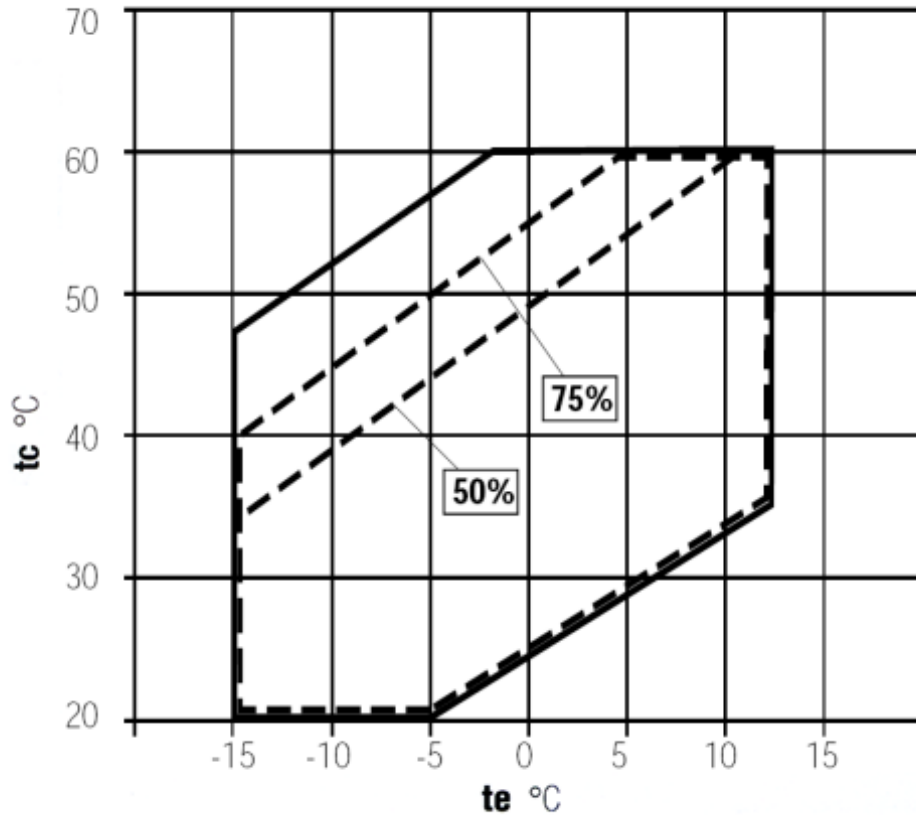
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	127 190	108 960	92 960	79 010	66 900
40	151 710	140 910	121 210	103 850	88 590	75 250	63 640
50	142 270	132 200	113 750	97 440	83 050	70 410	-
55	136 980	127 250	109 480	93 800	80 000	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	26.14	24.66	23.37	22.32	21.68
40	31.99	31.39	30.08	28.68	27.40	26.39	25.86
50	39.23	38.43	36.89	35.51	34.58	34.42	-
55	41.27	41.18	40.81	40.22	39.62	-	-

Application limits

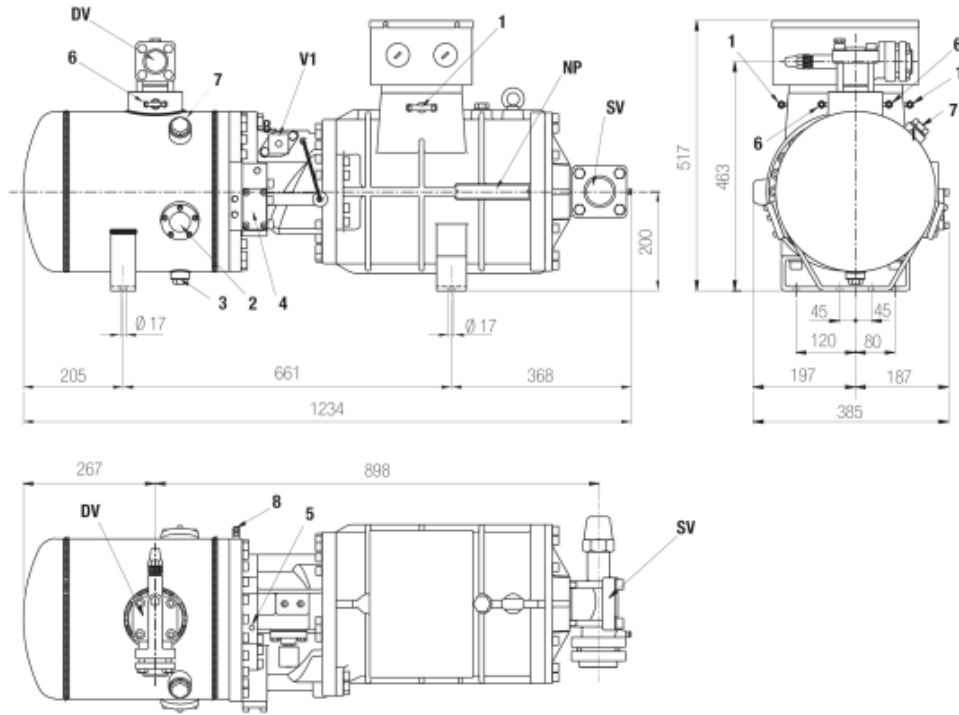


With liquid injection or oil cooler

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% |

