

Type: Semi-hermetic twin screw compressors

Producer: Frascold

Series: C-TSH

Model: C-TSH8-120 360 Y ECO

Technical data

Nominal motor power [kW/HP]:	89 / 120
Displacement [m ³ /h]:	360
Capacity control [%]:	100 - 75 - 50
RPM [min ⁻¹]:	1740
Weight net [kg]:	490
Weight gross [kg]:	525
Oil charge [dm ³]:	19

Electrical data

	<u>PWS</u>
Power supply [V/~ /Hz]:	400/3/50
Locked rotor current [A]:	647
Locked rotor current (D.O.L. - ΔΔ) [A]:	1112
Max. operating current [A]:	230
Max. power input [kW]:	138

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	80	3 1/8
Discharge line:	67	2 5/8

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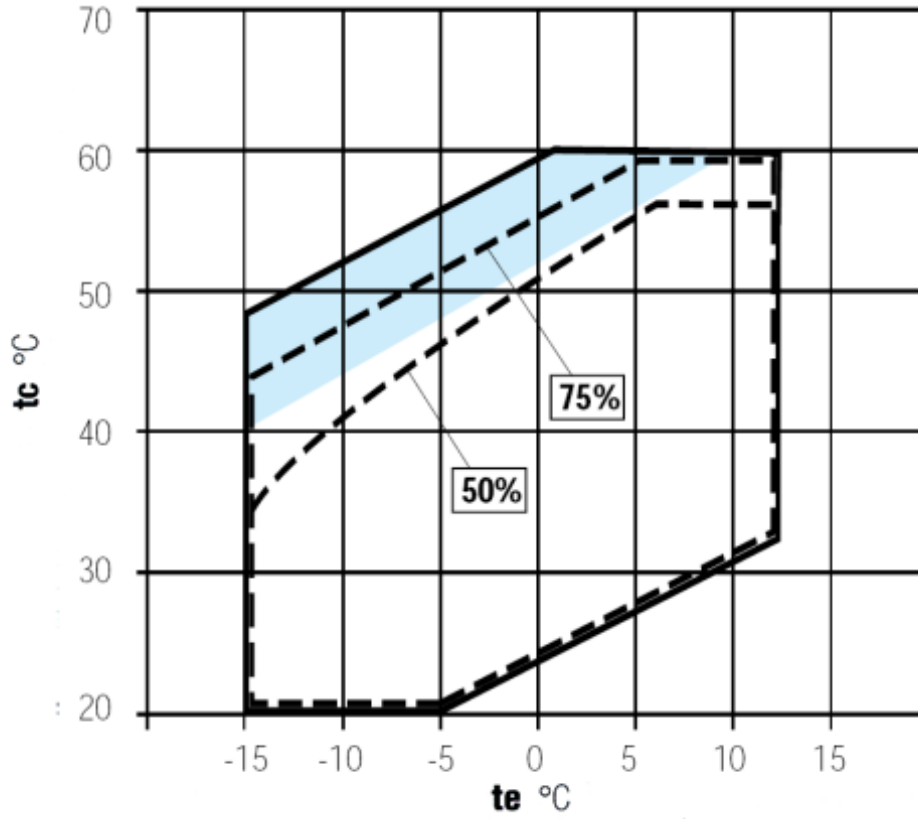
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	405 880	345 980	292 740	245 530	203 940
40	474 280	440 280	377 520	321 340	271 290	226 830	187 430
50	438 630	406 970	348 450	296 010	249 220	207 580	-
55	419 220	389 060	333 150	282 800	237 710	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	70.57	67.21	64.10	61.32	59.47
40	87.98	86.56	83.21	79.68	76.55	74.09	73.20
50	104.93	103.66	100.44	96.90	93.71	91.23	-
55	118.59	115.80	110.69	107.03	105.94	-	-

Application limits



With liquid injection or oil cooler

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

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

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

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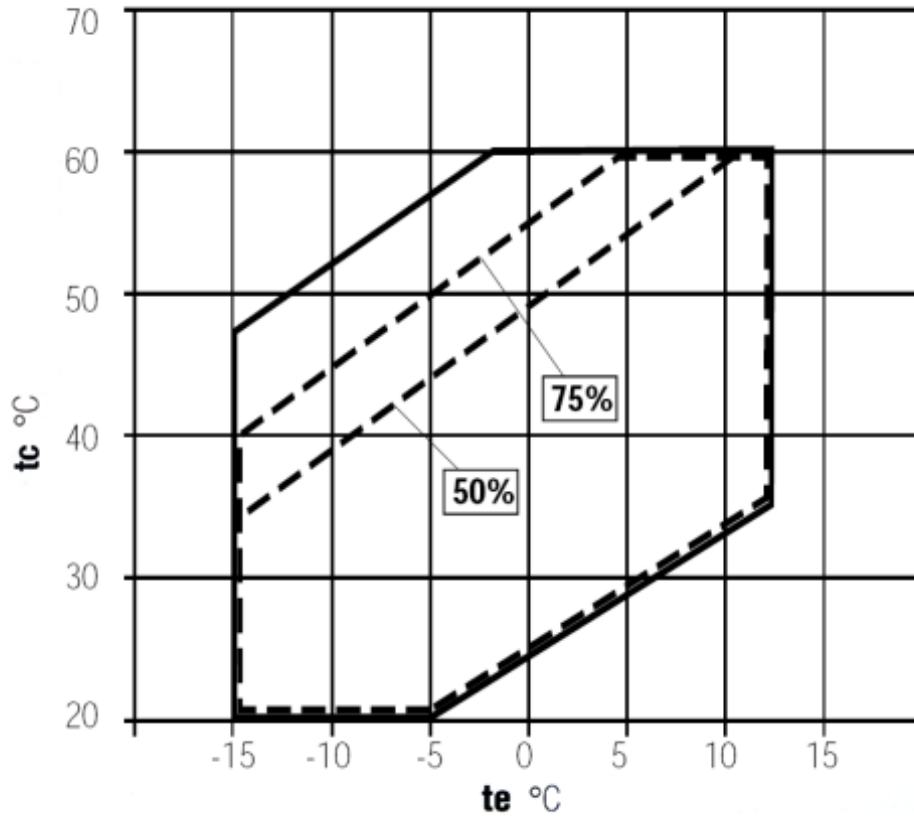
Cooling capacity [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	387 000	329 680	279 400	235 720	197 590
40	456 860	423 400	362 340	308 560	261 270	219 920	183 940
50	426 540	395 510	338 760	288 670	244 510	205 820	-
55	410 270	380 890	327 080	279 450	237 390	-	-

Power input [W]

$t_c \setminus t_e$	12.5	10	5	0	-5	-10	-15
30	-	-	66.84	63.99	61.40	59.38	58.47
40	85.76	84.51	81.47	77.95	74.57	71.68	69.88
50	102.60	101.41	98.66	95.67	93.10	91.52	-
55	114.70	112.76	109.04	105.82	104.00	-	-

Application limits

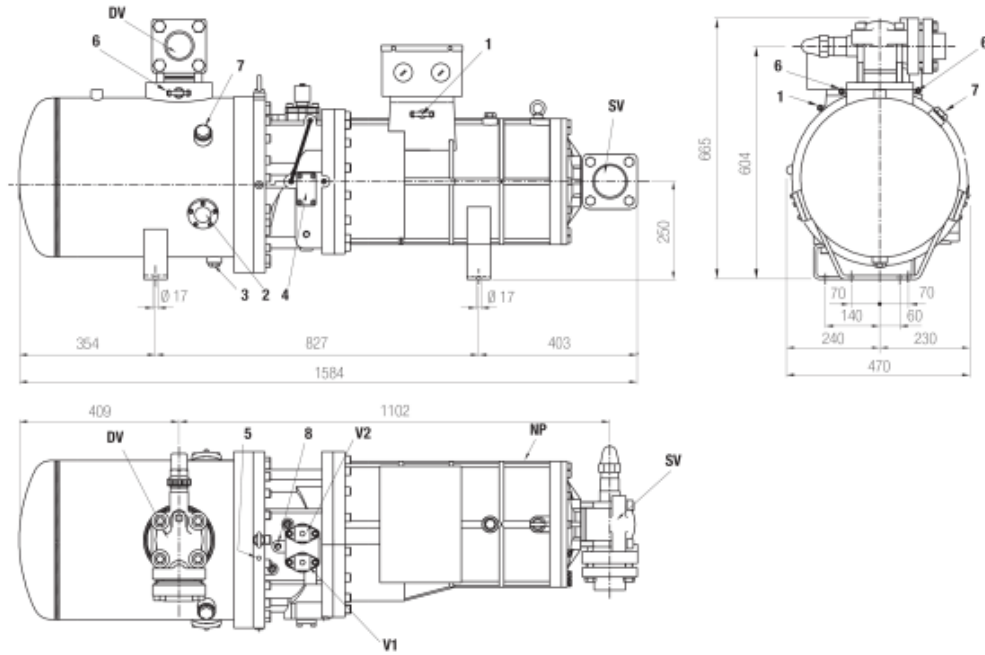


With liquid injection or oil cooler

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% |

