

Type: Semi-hermetic piston two stage compressors

Producer: Frascold

Series: S,V,Z

Model: V 10 42 29 Y SBC

Technical data

	<u>stage I</u>	<u>stage II</u>
Cylinder bore [mm]:	74	62
Cylinder count:	2	2
Displacement [m ³ /h]:	41,91	29,42
Cylinder capacity [cm ³]:	240,85	169,07
Nominal motor power [kW]:		7,5
Nominal motor power [HP]:		10
Cylinder stroke [mm]:		56
RPM [min ⁻¹]:		1450
Oil charge [dm ³]:		4,5
Weight net [kg]:		173
Weight gross [kg]:		190
Packing volume [dm ³]:		355

Electrical data

	<u>DOL Y Y</u>	<u>PWS Y / YY</u>
Power supply [V/~ / Hz]:	400/3/50	400/3/50
Locked rotor current [A]:	87,6	53,9
Max. operating current [A]:	23	23

Connections

	<u>milimeters</u>	<u>inches</u>
Króciec ssawny:	35	1 3/8"
Discharge line:	28,6	1 1/8"

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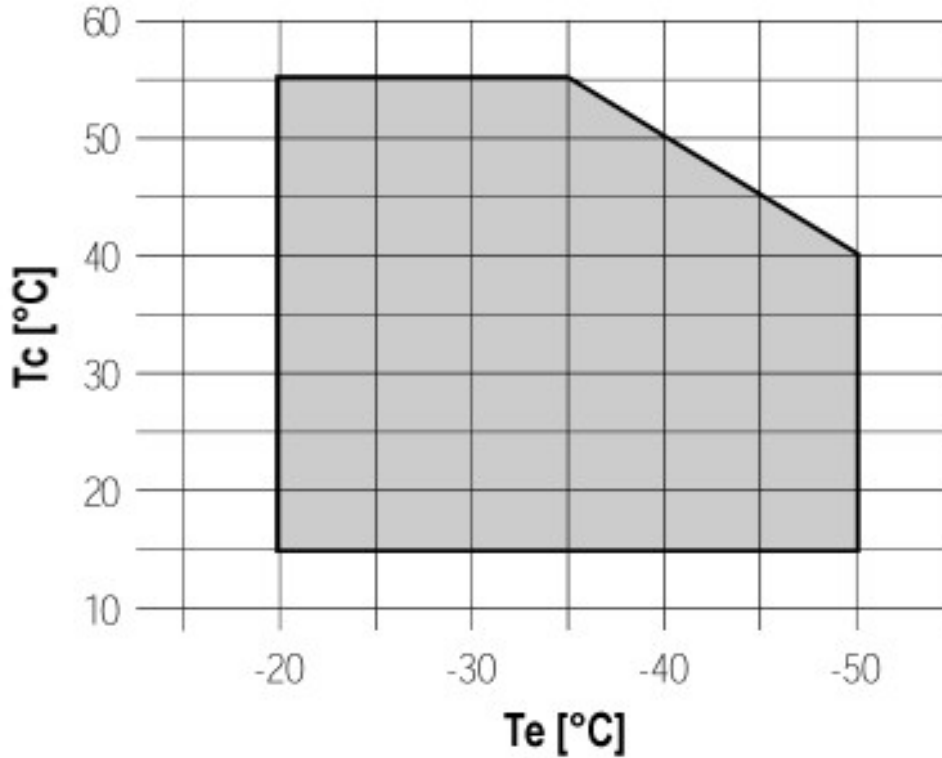
Cooling capacity [W]

$t_c \setminus t_e$	-20	-25	-30	-35	-40	-45	-50
30	21 510	17 720	14 460	11 680	9 320	7 360	5 730
35	21 210	17 490	14 290	11 560	9 240	7 300	5 690
40	20 900	17 250	14 110	11 430	9 150	7 230	5 650
45	20 580	17 010	13 930	11 290	9 050	7 170	-
50	20 240	16 750	13 740	11 150	8 950	-	-

Power input [W]

$t_c \setminus t_e$	-20	-30	-40	-50
40	10 520	9 020	7 340	5 690

Application limits



Operating conditions: suction gas temperature 20°C, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

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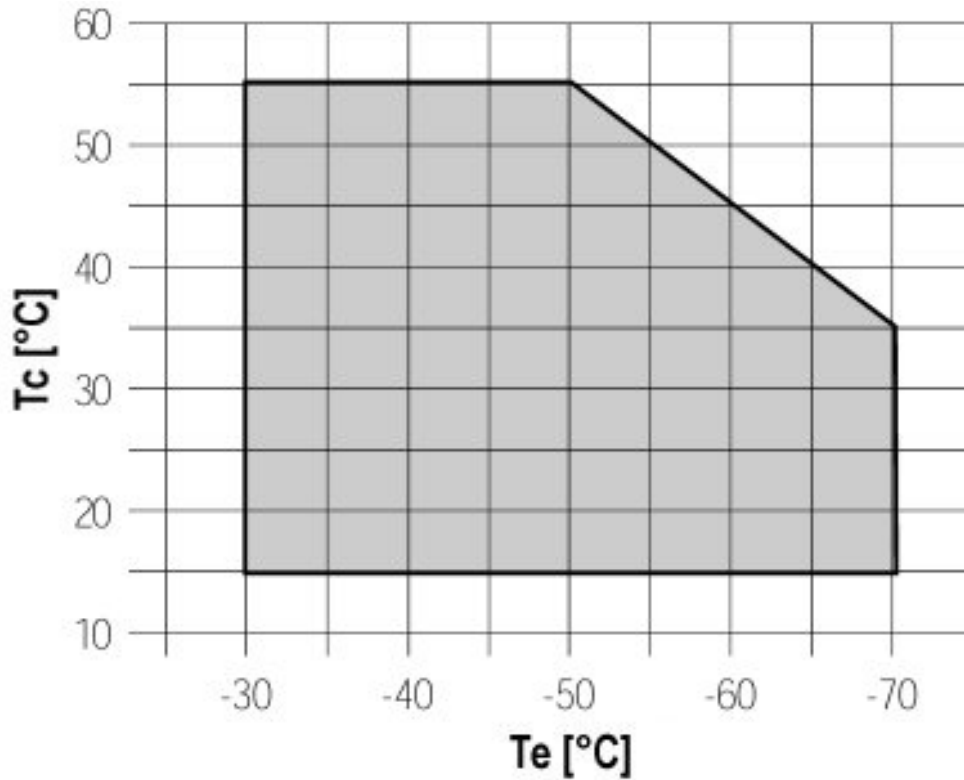
Cooling capacity [W]

$t_c \setminus t_e$	-30	-35	-40	-45	-50	-55	-60	-65	-70
30	16 270	13 620	11 320	9 150	7 160	5 590	4 330	3 340	2 630
35	16 020	13 420	11 170	9 030	7 070	5 520	4 270	3 300	2 600
40	15 710	13 170	10 970	8 890	6 960	5 430	4 200	3 240	-
45	15 380	12 900	10 760	8 720	6 830	5 330	4 120	-	-
50	12 560	10 480	8 500	6 660	5 190	-	-	-	-

Power input [W]

$t_c \setminus t_e$	-30	-40	-50	-60
40	11 040	9 200	7 220	5 640

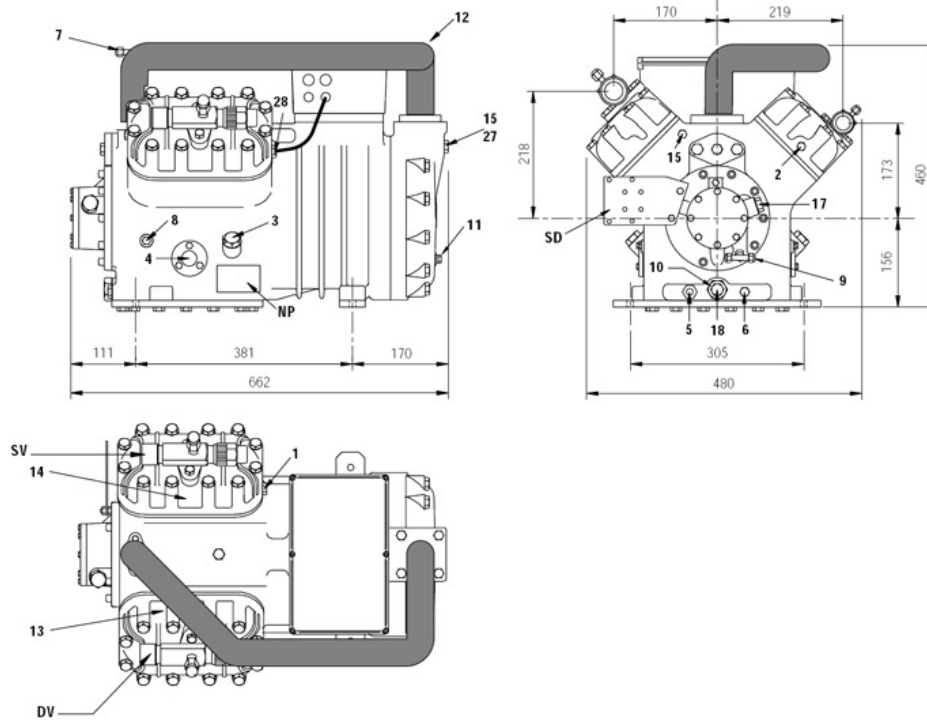
Application limits



Operating conditions: suction gas temperature 20°C, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]



A - mm

- | | |
|---|--|
| 1: low pressure plug | 2: high pressure plug |
| 3: oil charge plug | 4: oil level sight glass |
| 5: crankcase heater seat | 6: oil drain |
| 7: connection for liquid injection valve | 8: oil pressure switch connection (l.p.) |
| 9: oil pressure switch connection (h.p.) | 10: oil filter |
| 11: oil return plug | 12: 1st-2nd stage manifold |
| 13: 2nd stage head | 14: 1st stage head |
| 15: mean pressure connection | 16: suction manifold |
| 17: electronic oil pressure switch connection | 18: magnetic plug |
| 27: external equalizer liquid injection | 28: maximum discharge temperature sensor |
| DV: discharge valve | NP: name plate |
| SV: suction valve | |

