

Type: Semi-hermetic twin screw compressors

Producer: Frascold

Series: R-TSL

Model: R-TSL1-100 360 Y

Technical data

Nominal motor power [kW/HP]:	74 / 100
Displacement [m ³ /h]:	360
Capacity control [%]:	100 - 75 - 50
RPM [min ⁻¹]:	2960
Weight net [kg]:	344
Weight gross [kg]:	379

Electrical data

	<u>PWS</u>
Power supply [V/~/Hz]:	400/3/50
Locked rotor current [A]:	499
Locked rotor current (D.O.L. - ΔΔ) [A]:	814
Max. operating current [A]:	185
Max. power input [kW]:	116

Connections

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

R22

Cooling capacity [W]

t _c \ t _e	-10	-15	-20	-25	-30	-35	-40	-45	-50
30	225 130	185 440	151 260	122 000	97 190	76 250	58 650	44 050	32 060
40	203 250	166 680	135 210	108 310	85 530	66 330	50 220	36 880	-
50	180 460	147 050	118 350	93 850	73 140	55 710	41 130	-	-
55	169 750	137 880	110 530	87 210	67 510	50 950	37 120	-	-

Power input [kW]

t _c \ t _e	-10	-15	-20	-25	-30	-35	-40	-45	-50
30	71.88	66.84	61.58	56.28	51.24	46.69	42.96	40.65	41.19
40	80.33	74.70	69.06	63.56	58.53	54.29	51.26	50.66	-
50	91.67	84.99	78.63	72.77	67.78	64.20	63.16	-	-
55	102.40	94.43	87.13	80.66	75.56	72.62	73.95	-	-

Current [A]

t _c \ t _e	-10	-15	-20	-25	-30	-35	-40	-45	-50
30	117.20	109.60	101.90	94.50	87.60	81.20	76.10	73.10	73.80
40	130.50	121.60	112.90	104.80	97.60	91.70	87.70	86.90	-
50	147.70	137.50	127.80	118.60	111.00	105.70	104.20	-	-
55	164.20	151.90	140.80	131.00	122.90	118.40	120.40	-	-

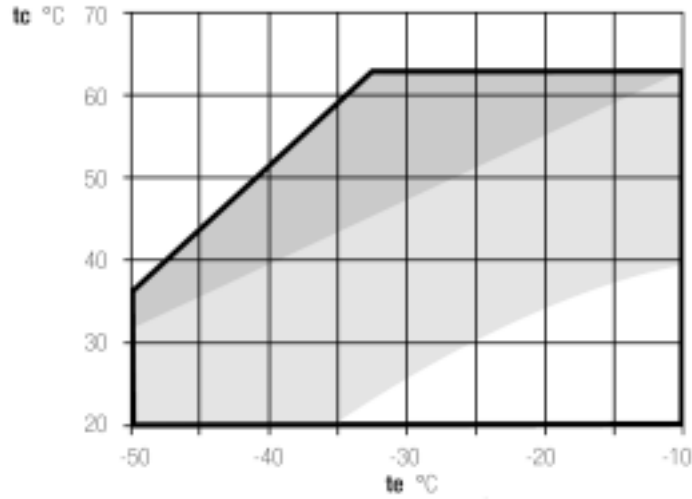
Mass flow [kg/h]

t _c \ t _e	-10	-15	-20	-25	-30	-35	-40	-45	-50
30	4 702	3 925	3 246	2 656	2 147	1 711	1 337	1 021	755
40	4 591	3 819	3 145	2 559	2 054	1 619	1 247	932	-
50	4 458	3 690	3 019	2 436	1 932	1 499	1 128	-	-
55	4 411	3 642	2 971	2 387	1 882	1 449	1 077	-	-

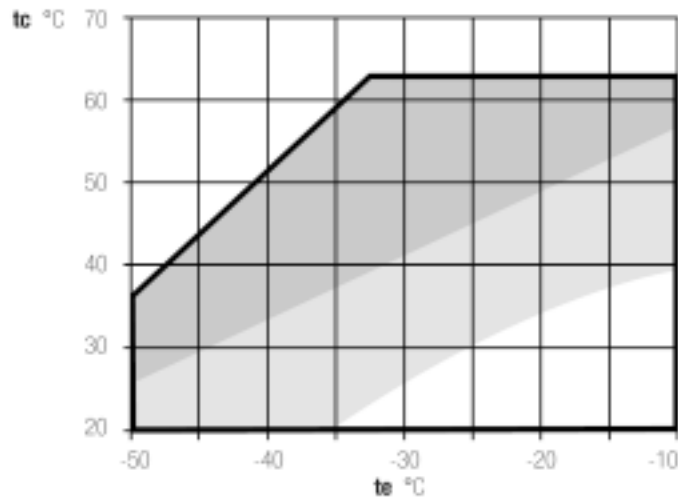
Operating conditions: suction gas overheating 10K, 0K subcooling

Application limits

Full load operation



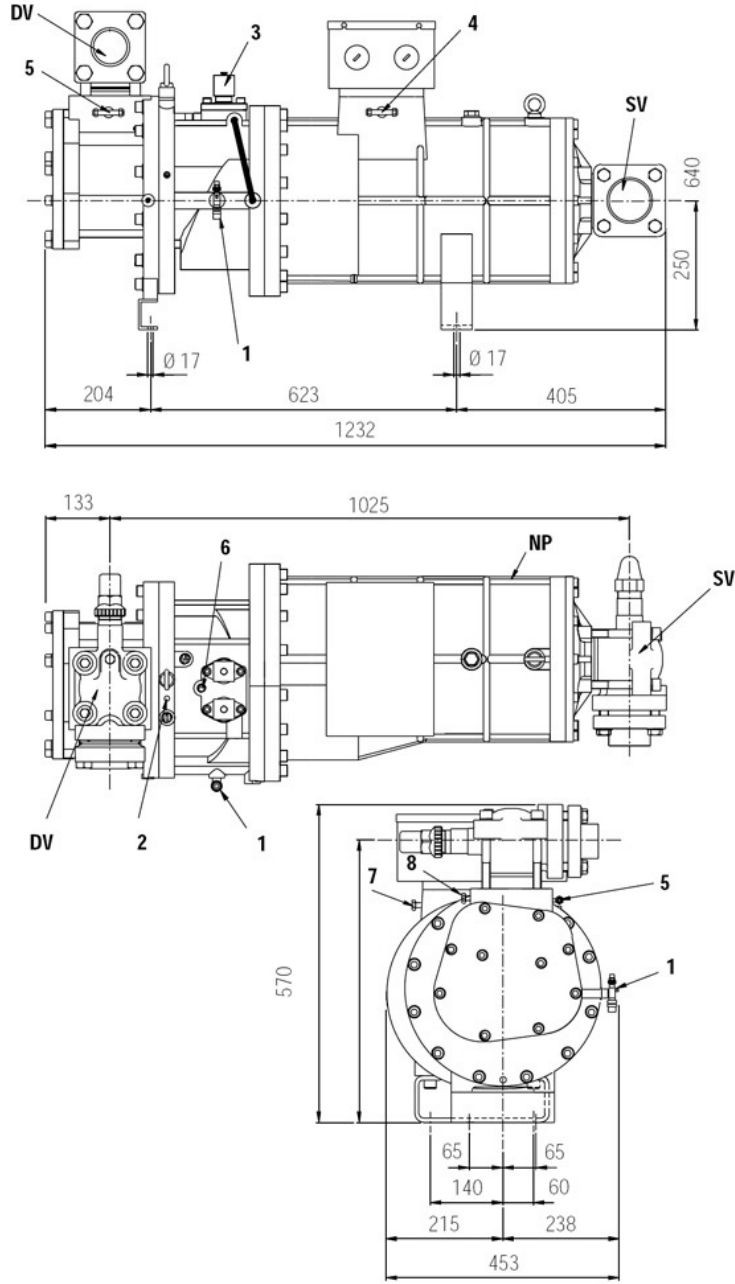
Capacity control



- With oil cooler
- With liquid injection and oil cooler

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]



1: connection of oil return valve
 3: capacity control valve
 5: high pressure plug
 7: plug for low pressure connection
 DV: discharge valve
 SV: suction valve

2: max. discharge temperature sensor
 4: low pressure plug
 6: liquid injection/economizer conn.
 8: plug for high pressure connection
 NP: name plate

