

---

**Type: Semi-hermetic twin screw compressors**

**Producer: Frascold**

**Series: R-TSL**

## **Model: R-TSL1-60 210 Y ECO**

### **Technical data**

Nominal motor power [kW/HP]:	44,5 / 60
Displacement [m <sup>3</sup> /h]:	210
Capacity control [%]:	100 - 50
RPM [min <sup>-1</sup> ]:	2960
Weight net [kg]:	290
Weight gross [kg]:	320

### **Electrical data**

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

### **Connections**

	<u>millimeters</u>	<u>inches</u>
Suction line:	80	3 1/8
Discharge line:	54	2 1/8

---

## R404A/R507

### **Cooling capacity [W]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-25</b>	<b>-30</b>	<b>-35</b>	<b>-40</b>	<b>-45</b>
<b>30</b>	112 340	92 850	76 270	61 550	48 990	37 380
<b>40</b>	102 120	83 840	68 070	54 110	42 180	30 990
<b>50</b>	89 340	73 000	58 900	46 270	-	-
<b>55</b>	87 110	70 770	56 730	-	-	-

### **Power input [kW]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-25</b>	<b>-30</b>	<b>-35</b>	<b>-40</b>	<b>-45</b>
<b>30</b>	42.70	40.63	38.56	36.35	34.29	32.21
<b>40</b>	51.56	48.74	45.93	42.99	40.26	37.39
<b>50</b>	61.56	58.06	54.78	51.41	-	-
<b>55</b>	68.49	64.11	60.25	-	-	-

### **Current [A]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-25</b>	<b>-30</b>	<b>-35</b>	<b>-40</b>	<b>-45</b>
<b>30</b>	74.00	71.10	68.30	65.30	62.50	59.80
<b>40</b>	86.80	82.50	78.50	74.40	70.60	66.70
<b>50</b>	102.90	97.10	91.90	86.60	-	-
<b>55</b>	113.40	106.10	99.90	-	-	-

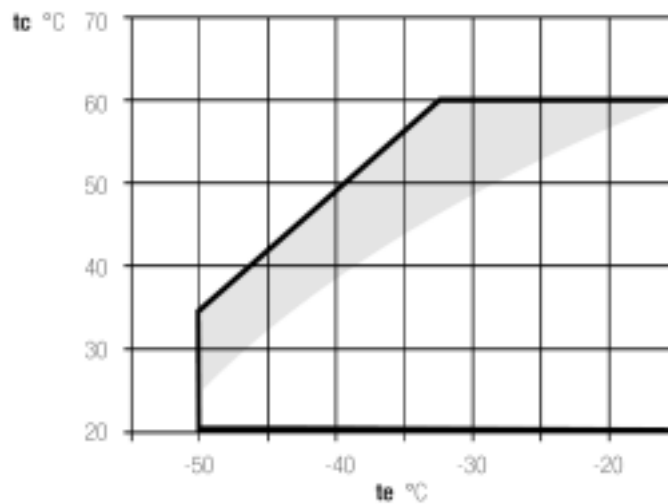
### **Mass flow [kg/h]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-25</b>	<b>-30</b>	<b>-35</b>	<b>-40</b>	<b>-45</b>
<b>30</b>	2 765	2 274	1 857	1 491	1 182	890
<b>40</b>	2 618	2 132	1 721	1 358	1 051	762
<b>50</b>	2 391	1 934	1 546	1 204	-	-
<b>55</b>	2 345	1 887	1 499	-	-	-

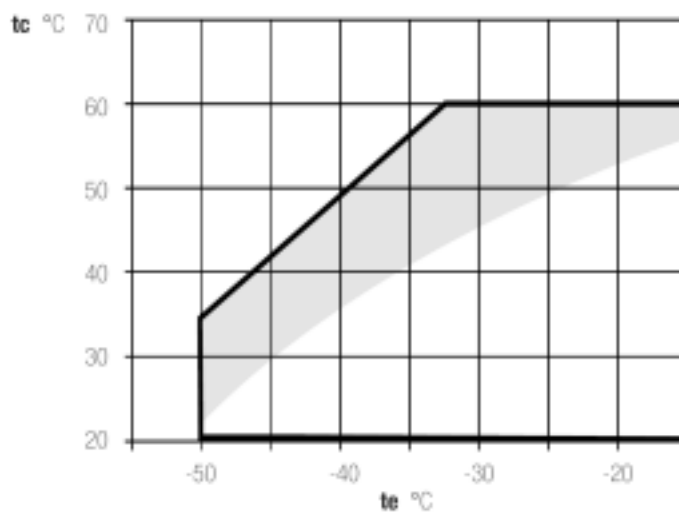
Operating conditions: suction gas overheating 10K, 10K subcooling

## Application limits

Full load operation



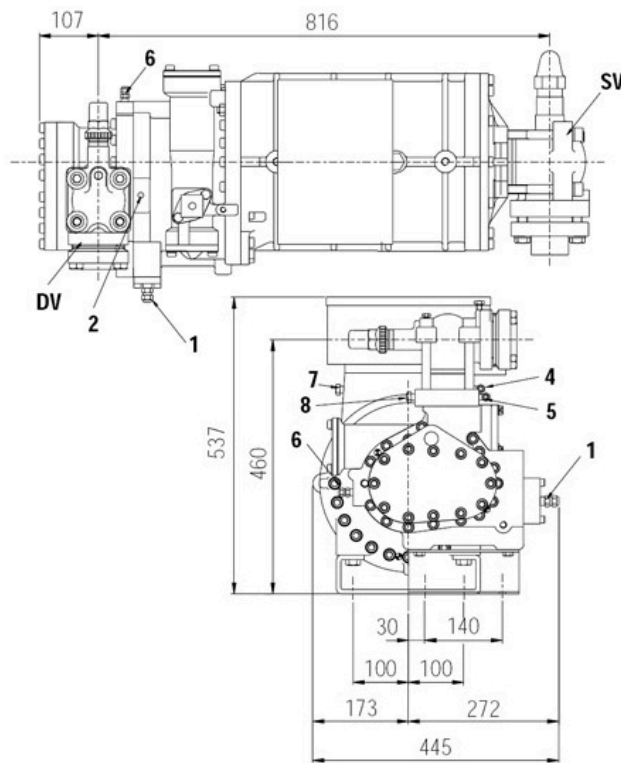
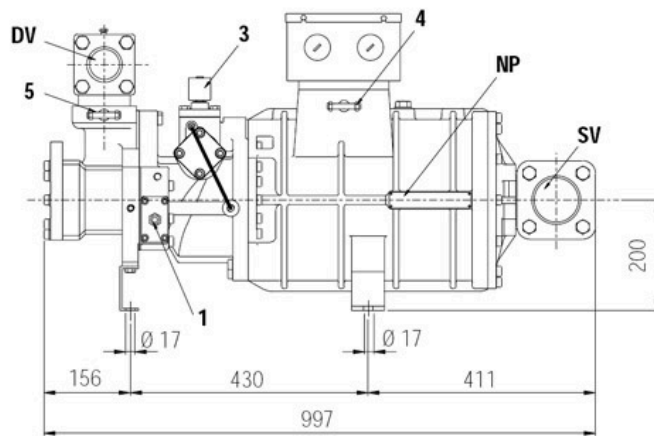
Capacity control



- 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   | 2:  | max. discharge temperature sensor |
| 3:  | capacity control valve           | 4:  | low pressure plug                 |
| 5:  | high pressure plug               | 6:  | liquid injection/economizer conn. |
| 7:  | plug for low pressure connection | 8:  | plug for high pressure connection |
| DV: | discharge valve                  | NP: | name plate                        |
| SV: | suction valve                    |     |                                   |

