



# Model: S 7 33 Y

Data

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: S

## Model: S 7 33 Y

### Technical data

Nominal motor power [kW/HP ]:	5,5 / 7,5
Cylinder count:	4
Displacement [m <sup>3</sup> /h ]:	32,8
RPM [min <sup>-1</sup> ]:	1450
Weight net [kg ]:	117
Weight gross [kg ]:	131
Oil charge [dm <sup>3</sup> ]:	3,3

### Electrical data

	<u>DOL Y/Y</u>	<u>PWS Y/Y</u>
Power supply [V/~/Hz ]:	400V/3/50	400V/3/50
Locked rotor current [A]:	75	47
Max. operating current [A]:	20,4	20,4

### Connections

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

R22

**Cooling capacity [W]**

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
<b>30</b>	46 120	38 320	34 860	28 680	23 400	18 970	15 180	11 940	9 200	6 910
<b>40</b>	40 630	33 700	30 610	25 100	20 370	16 520	13 180	10 310	7 860	5 810
<b>45</b>	37 960	31 450	28 550	23 350	18 890	15 310	12 180	9 490	7 190	5 260
<b>50</b>	35 310	29 190	26 480	21 610	17 420	14 100	11 200	8 680	6 520	4 710

**Power input [W]**

$t_c \setminus t_e$	5	-10	-20	-30
<b>40</b>	6 950	6 180	5 310	4 030

With head cooling

With liquid injection or oil cooler

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

$t_c$  - Condensing temperature [°C ]

$t_e$  - Evaporating temperature [°C ]



R134a

**Cooling capacity [W]**

$t_c \setminus t_e$	<b>12.5</b>	<b>7.5</b>	<b>5</b>	<b>0</b>	<b>-5</b>	<b>-10</b>	<b>-15</b>	<b>-20</b>
<b>50</b>	23 850	19 730	17 890	14 580	11 740	9 310	7 230	5 460
<b>60</b>	20 500	16 930	15 320	12 430	9 930	7 780	5 940	4 370
<b>70</b>	17 110	14 090	12 720	10 250	8 100	6 250	4 650	3 290
<b>80</b>	13 670	11 200	10 090	8 050	6 270	4 730	3 390	2 250

**Power input [W]**

$t_c \setminus t_e$	<b>12.5</b>	<b>5</b>	<b>0</b>	<b>-10</b>
<b>60</b>	6 980	6 190	5 610	4 380

-  With head cooling
-  With liquid injection or oil cooler

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

$t_c$  - Condensing temperature [°C ]

$t_e$  - Evaporating temperature [°C ]

R404A/R507

**Cooling capacity [W]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>7.5</b>	<b>5</b>	<b>0</b>	<b>-5</b>	<b>-10</b>	<b>-15</b>	<b>-20</b>	<b>-25</b>	<b>-30</b>
<b>30</b>	40 290	36 940	30 950	25 780	21 300	17 430	14 090	11 210	8 750
<b>40</b>	34 560	31 710	26 560	22 100	18 230	14 850	11 930	9 390	7 220
<b>45</b>	31 640	29 050	24 360	20 250	16 660	13 540	10 830	8 470	6 450
<b>50</b>	-	26 350	22 110	18 370	15 080	12 210	9 720	7 550	5 670

**Power input [W]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>5</b>	<b>-10</b>	<b>-20</b>	<b>-30</b>
<b>40</b>	8 450	7 210	6 000	4 680

- With head cooling
- With liquid injection or oil cooler

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

t<sub>c</sub> - Condensing temperature [°C]

t<sub>e</sub> - Evaporating temperature [°C]

R407C

**Cooling capacity [W]**

$t_c \setminus t_e$	<b>12.5</b>	<b>7.5</b>	<b>5</b>	<b>0</b>	<b>-5</b>	<b>-10</b>	<b>-15</b>	<b>-20</b>	<b>-25</b>
<b>30</b>	46 730	38 730	35 200	28 900	23 520	18 930	15 030	11 710	8 910
<b>40</b>	41 080	34 010	30 870	25 270	20 460	16 340	12 830	9 830	7 290
<b>45</b>	38 170	31 580	28 650	23 410	18 890	15 010	11 700	8 860	6 460
<b>50</b>	35 270	29 150	26 420	21 500	17 290	13 660	10 560	7 890	5 630

**Power input [W]**

$t_c \setminus t_e$	<b>7.5</b>	<b>0</b>	<b>-10</b>	<b>-20</b>
<b>40</b>	7 200	6 840	6 000	4 960

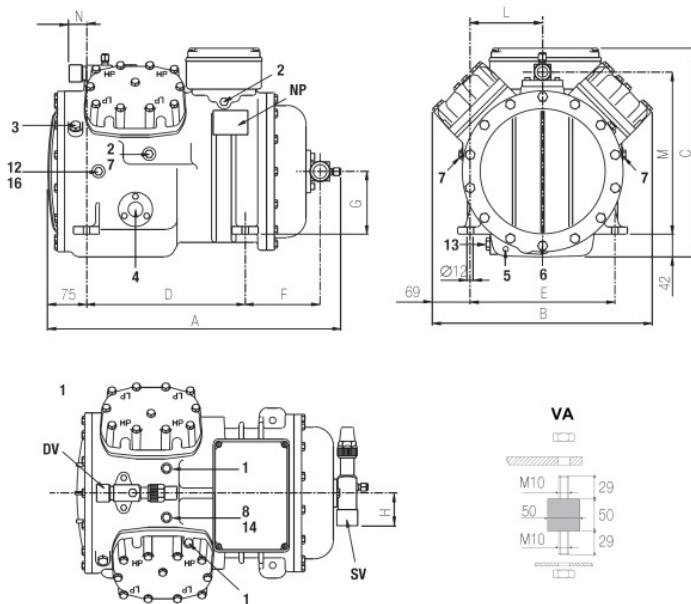
With head cooling

With liquid injection or oil cooler

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]



A	550 mm
B	405 mm
C	382 mm
D	292 mm
E	266 mm
F	147 mm
G	115 mm
H	58 mm
L	133 mm
M	298 mm
N	23 mm

1: high pressure plug

3: oil charge plug

5: crankcase heater seat

7: liquid injection valve plug

12: oil return plug

14: max. discharge temperature sensor plug

DV: discharge valve

SV: suction valve

2: low pressure plug

4: oil level sight glass

6: oil drain plug

8: liquid injection sensor plug

13: magnetic plug

16: crankcase pressure plug

NP: name plate

