

# Model: D 3 13.1 Y

## Data

---

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: D

## Model: D 3 13.1 Y

### Technical data

Nominal motor power [kW/HP]:	2,2 / 3
Cylinder count:	2
Displacement [m <sup>3</sup> /h]:	13,15
RPM [min <sup>-1</sup> ]:	1450
Weight net [kg]:	49
Weight gross [kg]:	50
Oil charge [dm <sup>3</sup> ]:	1,2

### Electrical data

Power supply [V/~/Hz]:	230V/3/50 Δ	400V/3/50 Y
Locked rotor current [A]:	75,9	43,7
Max. operating current [A]:	15,3	8,8

### Connections

	<u>millimeters</u>	<u>inches</u>
Suction line:	28,6	1 1/8
Discharge line:	15,8	5/8

# Model: D 3 13.1 Y

## Capacity

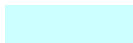
R22

### Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	18 370	15 340	14 000	11 630	9 590	7 840	6 330	5 040	3 930	2 990
40	16 320	13 640	12 450	10 320	8 480	6 900	5 540	4 360	3 350	2 500
45	15 350	12 820	11 680	9 680	7 940	6 440	5 140	4 020	3 060	2 250
50	14 350	11 970	10 910	9 030	7 390	5 970	4 740	3 680	2 770	2 010

### Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	2 980	2 710	2 290	1 740

 With head cooling

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

# Model: D 3 13.1 Y

## Capacity

R134a

### Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20
50	9 360	8 480	6 880	5 510	4 350	3 370	2 570	1 920
60	7 890	7 120	5 730	4 550	3 560	2 730	2 050	1 510
70	6 430	5 770	4 600	3 620	2 800	2 120	1 580	1 140
80	4 990	4 450	3 500	2 720	2 080	1 560	-	-

### Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	2 960	2 630	2 380	1 890

With head cooling

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

# Model: D 3 13.1 Y

## Capacity

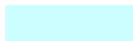
R404A/R507

### Cooling capacity [W]

$t_c \setminus t_e$	7.5	5	0	-5	-10	-15	-20	-25	-30
30	16 490	15 120	12 640	10 450	8 550	6 910	5 490	4 280	3 260
40	13 870	12 710	10 600	8 760	7 150	5 760	4 560	3 530	2 640
45	12 590	11 540	9 620	7 940	6 490	5 230	4 130	3 180	2 350
50	11 350	10 390	8 660	7 150	5 840	4 710	3 720	2 850	2 090

### Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	3 510	3 000	2 510	1 980

 With head cooling

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

# Model: D 3 13.1 Y

## Capacity

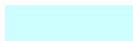
R407C

### Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25
30	17 810	14 810	13 480	11 110	9 070	7 330	5 840	4 570	3 490
40	15 680	13 040	11 860	9 750	7 920	6 350	5 010	3 860	2 880
45	14 600	12 140	11 030	9 050	7 330	5 850	4 580	3 490	2 560
50	13 510	11 210	10 190	8 340	6 730	5 340	4 140	3 120	2 240

### Power input [W]

$t_c \setminus t_e$	7.5	0	-10	-20
40	3 320	2 960	2 460	1 990

 With head cooling

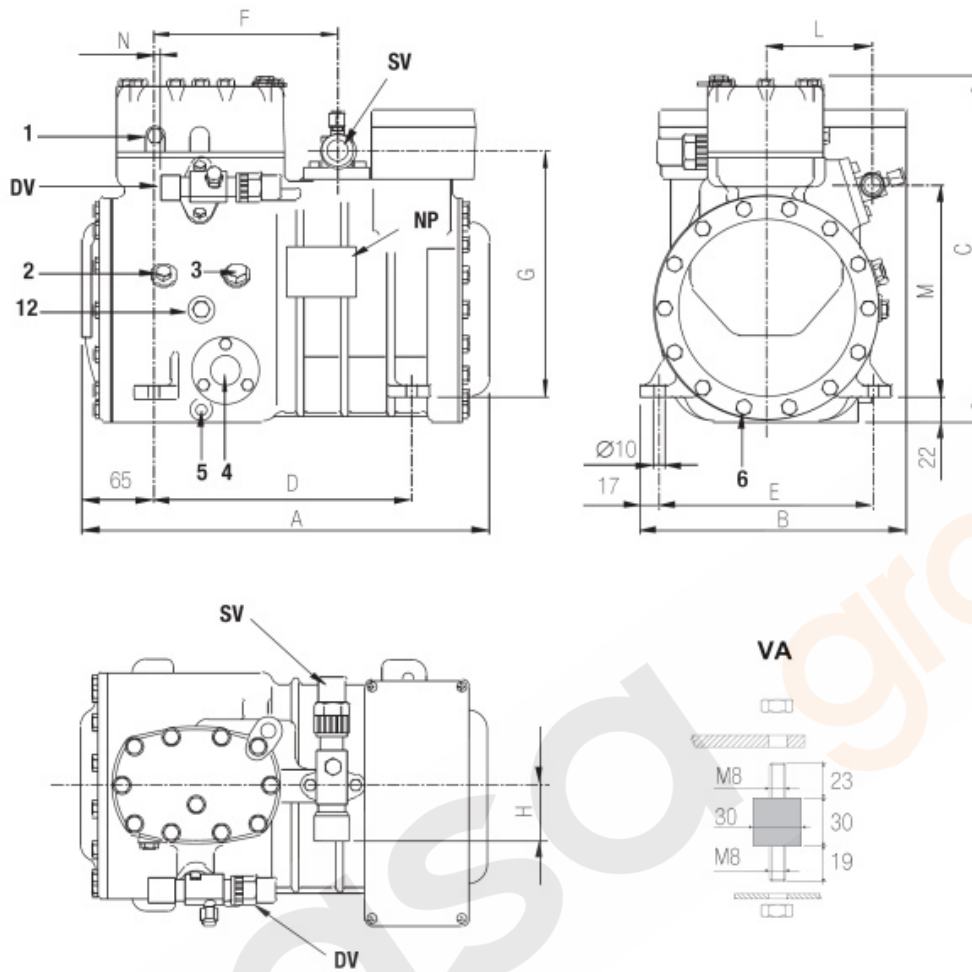
Operating conditions: suction gas temperature 20°C, 0K subcooling

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

# Model: D 3 13.1 Y

## Dimensions



A	374 mm
B	242 mm
C	317 mm
D	234 mm
E	194 mm
F	165 mm
G	220 mm
H	53 mm
L	94 mm
M	192 mm
N	13 mm

1: high pressure plug  
3: oil charge plug  
5: crankcase heater seat  
12: oil return plug  
NP: name plate

2: low pressure plug  
4: oil level sight glass  
6: oil drain plug  
DV: discharge valve  
SV: suction valve

**Model: D 3 13.1 Y**

**Image**

---



eundaSa group