



Danfoss RT 6W Pressure Switch Installation Guide

[Home](#) » [Danfoss](#) » Danfoss RT 6W Pressure Switch Installation Guide

Danfoss RT 6W Pressure Switch Installation Guide



Contents [[hide](#)]

- [1 Installation guide](#)
 - [1.1 Pressure switch](#)
- [2 Pressure switches](#)
- [3 Technical data](#)
- [4 Fitting](#)
- [5 Electrical connection](#)
- [6 Setting](#)
- [7 Accessories](#)
- [8 Documents / Resources](#)
 - [8.1 References](#)
- [9 Related Posts](#)

Installation guide

Pressure switch

RT 6W, RT 6B, RT 6S, RT 6AW, RT 6AB, RT 6AS, RT 30AW, RT 30AB, RT 30AS with EN 12263 approval and CE marked acc. to PED (Pressure Equipment Directive)

Refrigerants*):

R22, R134a, R404A, R407A, R407C, R407F, R422B, R422D, R507A, R717**)

RT 6W, RT 6B, RT 6S

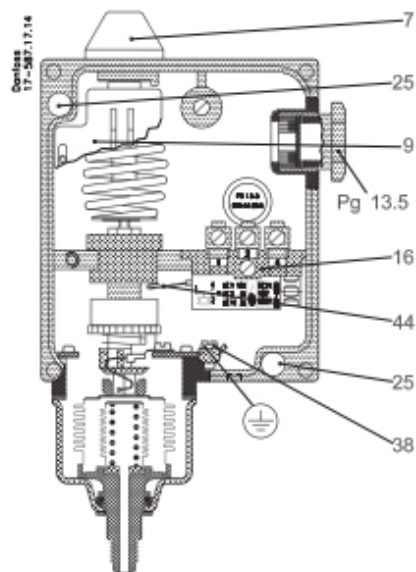


Fig. 1

RT 6AW, RT 6AB, RT 6AS

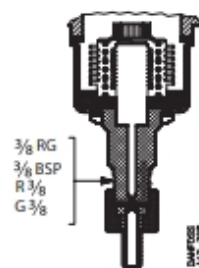


Fig. 2

RT 30AW, RT 30AB, RT 30AS

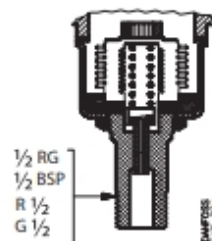


Fig. 3

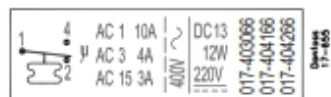


Fig. 4

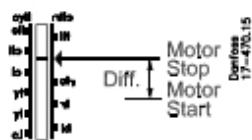


Fig. 5

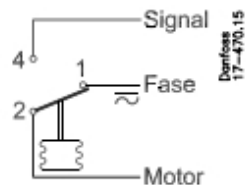


Fig. 6

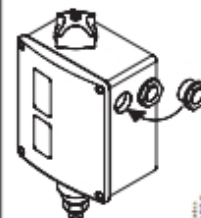


Fig. 7

RT 6, RT 36:

1m, 3/4 in x 1/4 in flare

Code no.

060-007166



Fig. 8a

RT 6, RT 36:

1m, 3/4 in x M10 - 0.75

Code no.

060-008266



Fig. 8b

Code no.

017-425166



Fig. 9

Type / Typ	Enclosure "Taethedsgradm Schutzart") Degre d'etanch eitem	Reset	Pressure range Trykområde Druckbereich Plage de pression [bar)	Differential (fixed) Differens (fast) Different (fast) Difference (fix) Ap [bar)	Refrigerants Kältemittel Refrigerants	Max. working press. Till. driftstryk Zul. Betriebsüberdruck Press. de service max. PB /MVVP [bar) / [psigl	Max. test pressure. Max. prøvetryk Max. Prüfdruck Press. d'essai [bar) / [psigl	Ambient temperature. Omgivelsestem. Umgebungstemp. Temp. ambiante [°C]
RT 6 W	IP66	automatic.	5 – 25	3.0	fluorinated refrigerants fluorierte Kältemittel refrigerants fluores	28 / 406	38 / 551 II	-40 – 70
RT 6 B	IP54	man. ext.	10 – 28	fluorinated keleimidler max. 1.0				
RTES	IP66	man. int.						
RT 6 AW	IP66	automatic.	5 – 25	3.0	R 717 (NH3) + fluorinated refrigerants + fluorerede kølemidler + fluorierte Kältemittel + refrigerants fluores	22 / 319	25 / 363	
RT 6 AB	IP54	man. ext.	10 – 28	max. 1.5				
RT 6 AS	IP66	man. int.						
RT 3 0AW	IP66	automatic.	1 -10	0.8		22 / 319	25 / 363	
RT 3 0AB	IP54	man. ext.		max. 0.4				
RT 3 0AS	IP66	man. int.						

Fig. 10 (1) according to / i.h.t. / nach / conformément à EN 60529 / IEC 529 (2) -50 – 70 °C without PED

Pressure switches

- *) For complete list of approved refrigerants, www.products.danfoss.com and search for individual code numbers, where refrigerants are listed as part of technical data.
- **) Only for RT 6AW, RT 6AB, RT 6AS, RT 30AW, RT 30AB, RT 30AS

Tested and approved by TÜV (Technischer Überwachungs Verein).

- **W** = Druckwächter (pressure control)
- **B** = Druckbegrenzer (pressure limiter)
- **S** = Sicherheitsdruckbegrenzer (safety pressure limiter)

In accordance with EN 12263 regulations, rupture of the control regulating bellows will have the effect that the refrigeration compressor stops, and cannot be restarted until the pressure control has been replaced. If the outer bellows ruptures, the control cut-out pressure falls by approx. 4 bar below the setting. The control therefore breaks the circuit at a normal condensing pressure, resulting in fail-safe function.

Common features of all designs

When the pressure in the system exceeds the setting, the control automatically stops the system.

In particular

RT 6W, RT 6AW, RT 30AW cut in automatically when the pressure has fallen below the setting with Δp differential (fixed) value. RT 6B, RT 6AB, RT 30AB can be reset by depressing the external reset button when the pressure has fallen below the setting with Δp differential value (fixed). RT 6S, RT 6AS, RT 30AS can be reset by depressing the internal reset button when the pressure has fallen below the setting with Δp differential value (fixed). Δp – differential values (fixed) – according to the table fig. 10 (see also fig. 5)

Technical data

See fig. 10. Contact load: see switch cover or fig. 4. E.g. marking 10 (4) A, 400 V ~ means that a max. load of 10 A ohmic and 4 A inductive may be connected on 400 V. The max. starting current on motor cutin (L.R.) may be up to seven times the inductive load, RT complies with conditions as specified in VDE* 0660, Test Class II. *VDE = Verband Deutscher Elektrotechniker

Fitting

A set of Pg13.5 cable gland is attached to the RT in a separate bag. To ensure IP66 (units with automatic reset) or IP54 (units with external reset) grade of RT enclosure it is necessary to assemble this gland as shown in the fig. 7. If this gland is not used with a cable, a metal blinding should be also assembled.

Use the mounting holes 25, $\varnothing 5$ mm. The pressure control can be mounted on the valve panel or on the compressor itself. If the control is likely to be subjected to vibration, it should be mounted on a resilient base.

If pressure pulsations occur in the system at the point where the pressure control is connected, these should be effectively damped, as for example, by connecting the RT unit to the system via capillary tubing. See fig. 8.

Electrical connection

See fig. 6.

FASE = phase.

Cable diameter: 6 – 14 mm.

Earth connection to earth terminal 38.

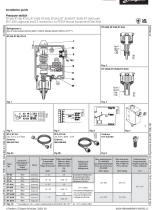
Setting

After removing the seal cap 7, set the cut out pressure with the uncovered range spindle while reading the scale 9. Turning the range screw clockwise increases setting of the cut out pressure, turning it anticlockwise decreases setting of the cut out pressure.

Accessories

See figs. 8 and 9

Documents / Resources

	<p>Danfoss RT 6W Pressure Switch [pdf] Installation Guide RT 6W, RT 6B, RT 6S, RT 6AW, RT 6AB, RT 6AS, RT 30AW, RT 30AB, RT 6W Pressure Switch, RT 6W, Pressure Switch, Switch</p>
---	--

References

-  [Danfoss - Engineering Tomorrow | Danfoss](#)
-  [Danfoss Global Product Store | Homepage](#)