RAP 80 F901: Snap-action relay

2pt
Y03182

Areas of application
As a pressure switching relay with variable change-over point for setting up pneumatic control systems.

Features
- On reaching the setpoint, the connected system is put under pressure or vented
- Control action can be selected
- Controller front panel is printed with circuit diagram for rapid identification of function
- Thermoplastic housing suitable for wall or top-hat rail mounting
- Compressed air connections with Rp 1/8" female thread
- Complies with directive 97/23/EC Art. 3.3 on pressure equipment

Technical description
- Supply pressure 1.3 bar ± 0.1
- Switching difference 0.04 bar
- 1 input
- 1 output
- 1 setpoint adjuster

Type	Description	Air output	Air consumption	Weight kg
RAP 80 F901	snap-action relay	400 l_n/h	6 l_n/h	0,15

Supply pressure [1]	1,3 bar ± 0,1	Permissible ambient temp.	0...55 °C
Input pressures	0...1,4 bar		
Output pressure	0...1,4 bar	Connection diagram	A02894
Setpoint X_S	0...100%	Dimension drawing	M297107
Switching difference	0,04 bar (fixed)	Fitting instructions	MV 3281

Accessories
0296936 000* Fixing bracket for rail EN 60715 35 × 7,5 and 35 × 15

*) Dimension drawing or wiring diagram are available under the same number

1) See Section 60 on regulations concerning the quality of supply air, especially at low ambient temperatures

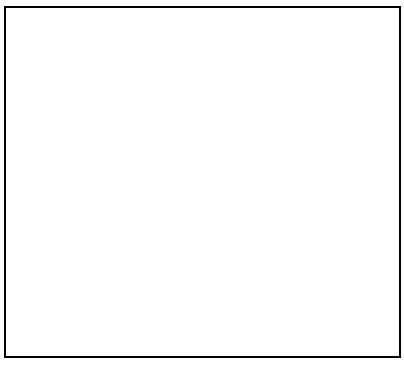
Operation

Control action A (factory setting)
If the pressure at connection no. 6 is higher than the setpoint, then the pressure is transmitted via connection no. 3. If it is lower, then the output pressure at connection no. 2 is vented.

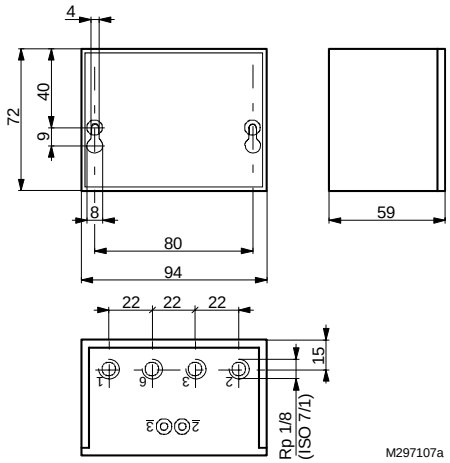
Control action B (change-over option)
If the pressure at connection no. 6 is lower than the setpoint, then the pressure is transmitted via connection no. 3. If it is higher, then the output pressure at connection no. 2 is vented.

Connection diagrams

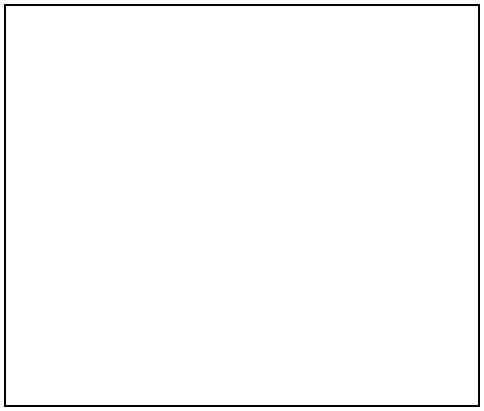
RAP 80 F901



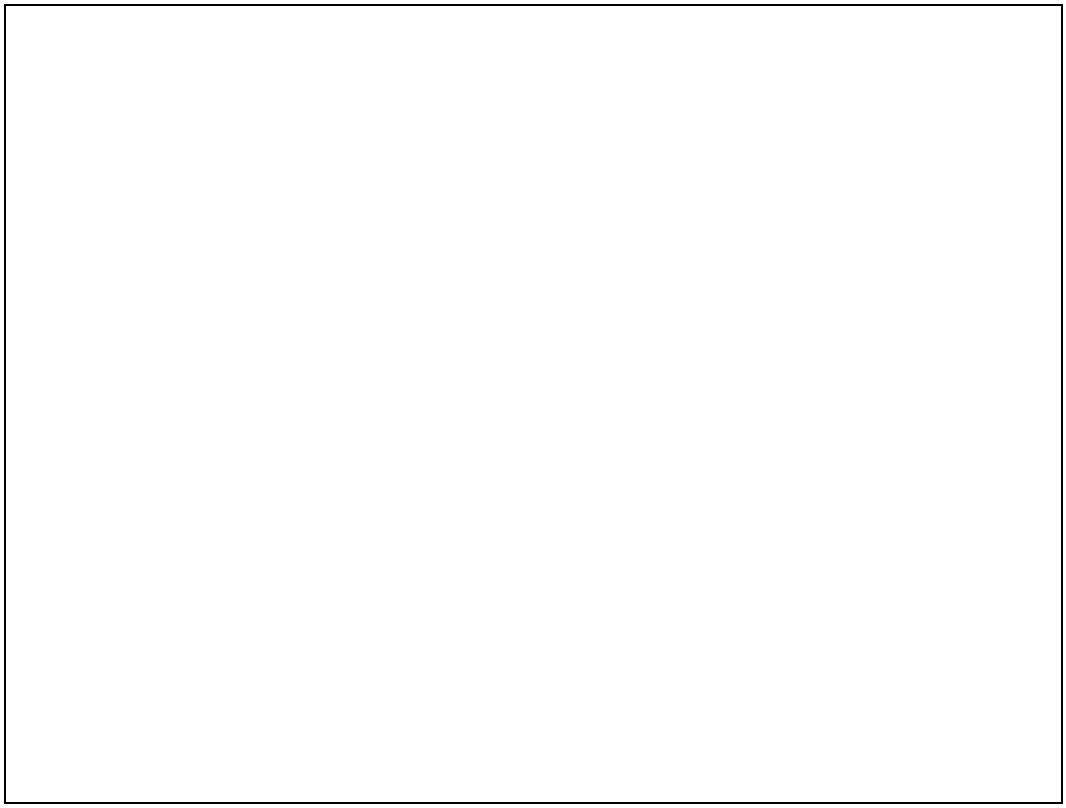
Dimension drawing



Accessories



Example of use
Pneumatic individual-room temperature control: continuous control of room temperature in accordance with the outside temperature (fixed-value + schedule control).
Application: ventilator and jet-convector plant with common heat exchanger; four-pipe system.



1	Induction device	H	=	heating	
2	Pneumatic three-way unit valve	K	=	cooling	
	BH 18 P.., B–AB normally open;	VWW		flow	warm water
	full range 0,3 – 0,9 bar	RWW		return	warm water
	(change-over valve)	VKW		flow	cold water
3	Pneumatic three-way unit valve	RKW		return	cold water
	BH 11 P.., B–AB normally open;	S	=	slope, setpoint shift	
	partial ranges 0,2 – 0,5 bar	FF	=	shift starting point, setpoint of scheduling relay	
4	Pneumatic three-way unit valve	X_S	=	setpoint	
	BK 15 P.., A–AB normally closed;	T_A	=	outside temperature	
	partial ranges 0,7 – 1,0 bar	T_R	=	room temperature	

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