

# RAP 80 F901: Snap-action relay

## 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
<b>RAP 80 F901</b>	snap-action relay	400 l <sub>n</sub> /h	6 l <sub>n</sub> /h	0,15
Supply pressure <sup>1)</sup>	1,3 bar ± 0,1	Permissible ambient temp.		0...55 °C
Input pressures	0...1,4 bar	Connection diagram		<a href="#">A02894</a>
Output pressure	0...1,4 bar	Dimension drawing		<a href="#">M297107</a>
Setpoint X <sub>S</sub>	0...100%	Fitting instructions		<a href="#">MV 3281</a>
Switching difference	0,04 bar (fixed)			

## Accessories

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

<sup>\*)</sup> Dimension drawing or wiring diagram are available under the same number

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

## Operation

### Control action A (factory setting)

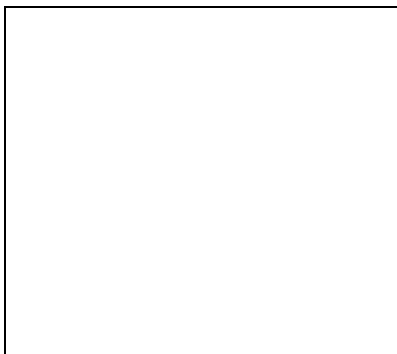
If the pressure at connection no. 6 is higher than the setpoint, then the pressure is transmitted via connection no. 3. If it is lower, then the output pressure at connection no. 2 is vented.

### Control action B (change-over option)

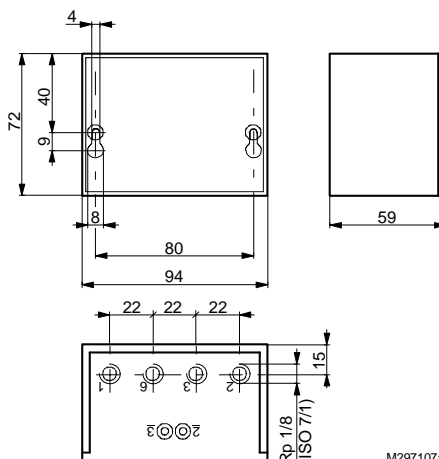
If the pressure at connection no. 6 is lower than the setpoint, then the pressure is transmitted via connection no. 3. If it is higher, then the output pressure at connection no. 2 is vented.

## Connection diagrams

RAP 80 F901



## Dimension drawing



M297107a

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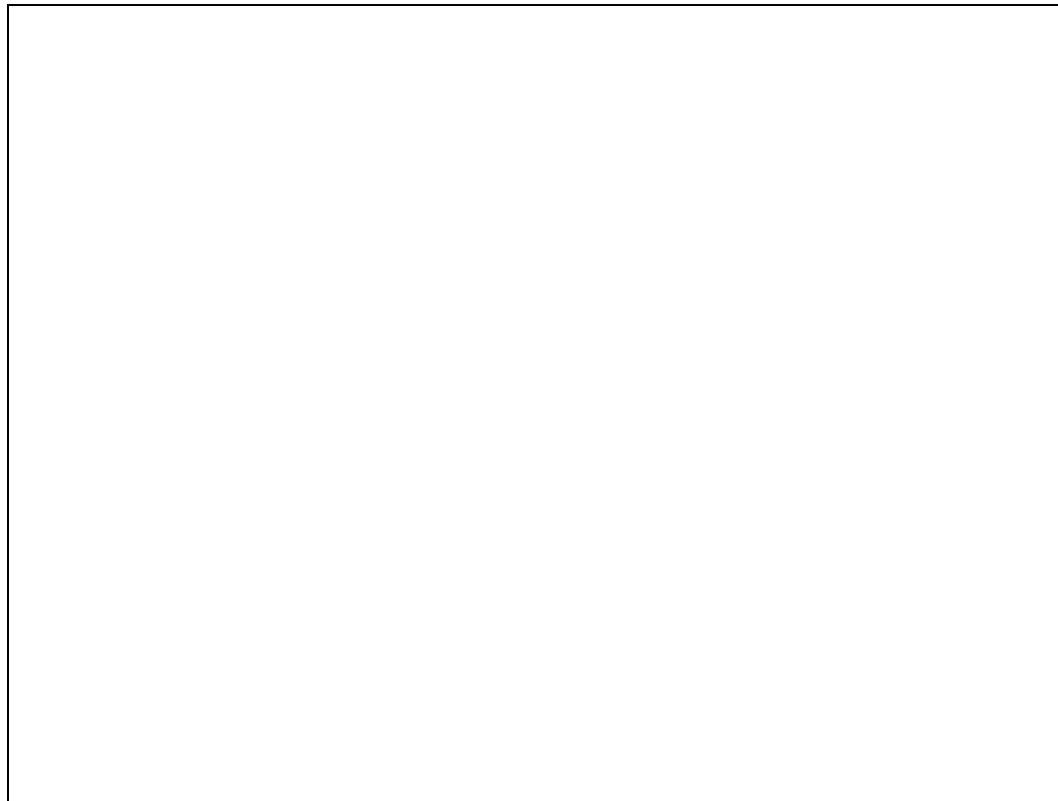
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## Accessories

## 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-convactor plant with common heat exchanger; four-pipe system.



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

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