

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 $\pm$ 0.1
- Switching difference 0.04 bar
- 1 input
- 1 output
- 1 setpoint adjuster



T03048



Y03182

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 $\pm$ 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)

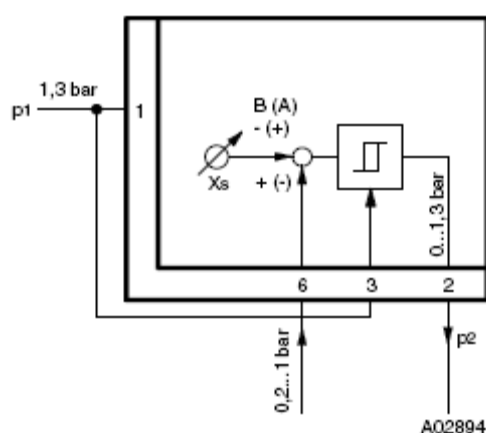
If the pressure at connection no. 6 is higher than the setpoint, then the pressure is transmitted via connection no. 3. If it is lower, then the output pressure at connection no. 2 is vented.

Control action B (change-over option)

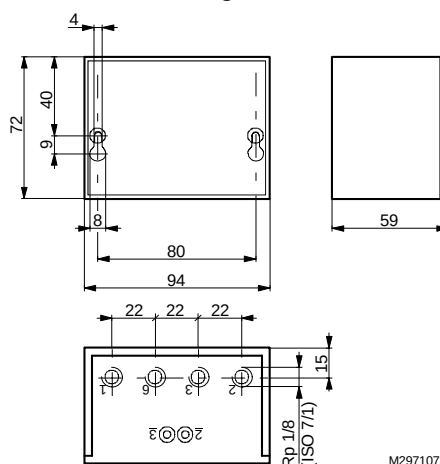
If the pressure at connection no. 6 is lower than the setpoint, then the pressure is transmitted via connection no. 3. If it is higher, then the output pressure at connection no. 2 is vented.

Connection diagrams

RAP 80 F901

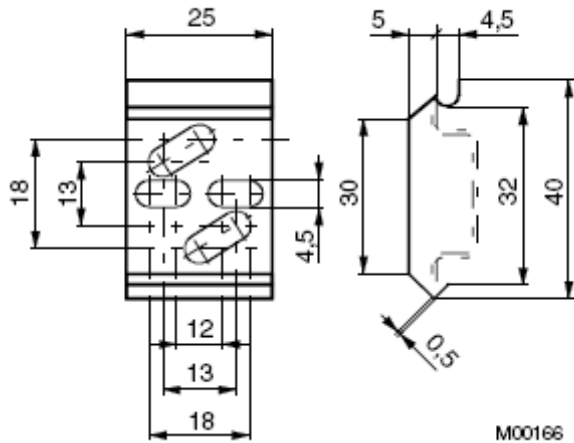


Dimension drawing



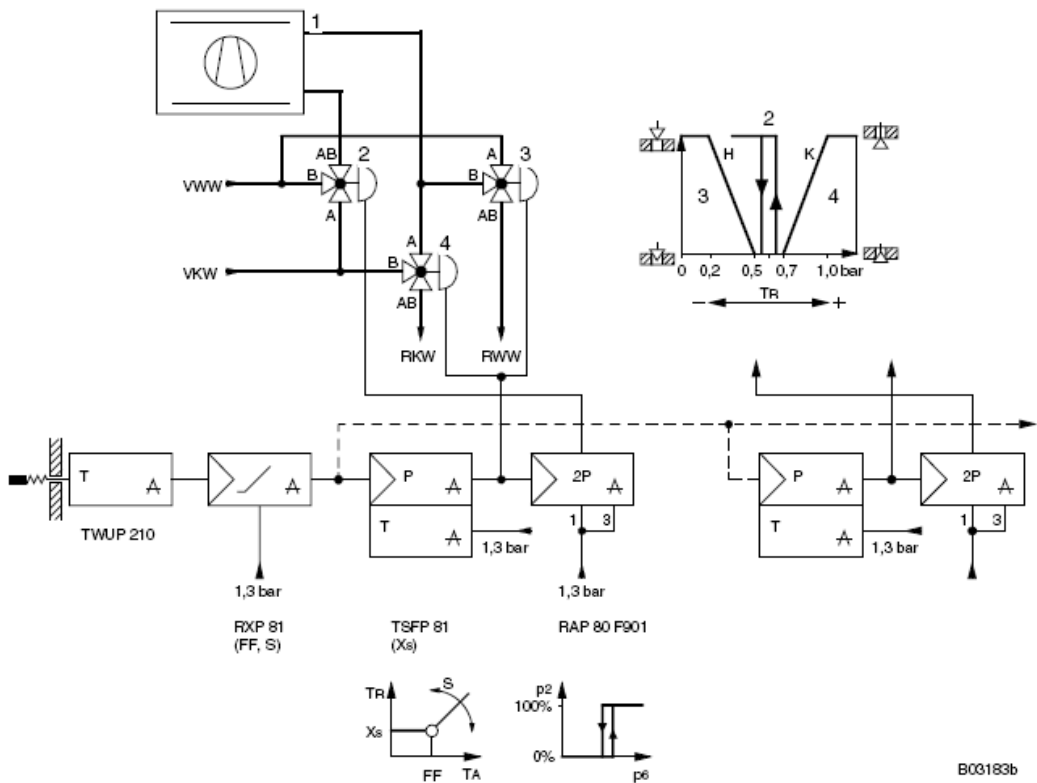
Accessories

296936



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 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
4	Pneumatic three-way unit valve BK 15 P., A–AB normally closed; partial ranges 0,7 – 1,0 bar	RWW	=	return
		VKW	=	flow
		RKW	=	return
		S	=	slope, setpoint shift
		FF	=	shift starting point, setpoint of scheduling relay
		X _S	=	setpoint
		T _A	=	outside temperature
		T _R	=	room temperature