

RPJP: PI relay

Areas of application

Pneumatic control in combination with appropriate transducers of temperature, pressure, differential pressure, humidity and flow rate.

Features

- Conversion of a proportional (P) controller into a proportional integral (PI) controller.
- Controller front panel is printed with circuit diagram for rapid identification of function
- Reversible control action
- 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
- Two input signals
- One output signal



T03078



Y03177

Type	Description	Air output	Air consumption ¹⁾	Weight kg
RPJP 80 F001	PI function	400 l _n /h	27 l _n /h	0,2
Supply pressure ²⁾	1,3 bar $\pm$ 0,1	Permissible ambient temp.		0...55 °C
Input pressure	0,2...1,0 bar	Connection diagram Dimension drawing Fitting instructions		A02885
Output pressure	0,2...1,0 bar			M297107
Setpoint X _S	0...100%			MV 3254
Setpoint remote adjustment	0...100%			
Reset time	0,2...3 min			
with accessory 297277	3...6 min			

Accessories

- 0296936 000*** Fixing bracket for rail EN 60715, 35 × 7,5 and 35 × 15
- 0297103 000** Bag of ten scales, for use according to transducer
- 0297113 000*** Manometer bracket for fitting two XMP includes kit; MV 3255
- 0297091 000*** Cover for spare apertures (for manometers), when 0297113 is used
- 0297277 000** Resistor and scale for increasing the reset time

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

- 1) Without transducer. Air consumption for transducer: an additional 33 l_n/h for connection 3
- 2) See Section 60 on regulations concerning the quality of supply air, especially at low ambient temperatures

Operation

The change of input pressure occurring at connection 3 is transferred to connection 2.

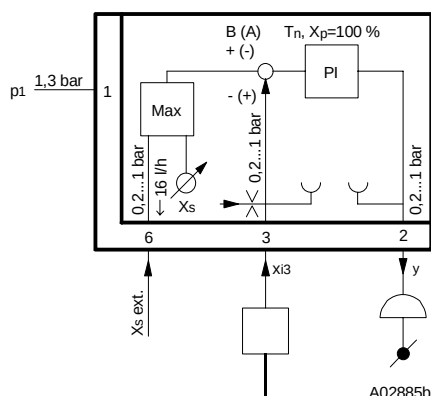
The setpoint and reset time can be set at the relay.

Control action A (factory setting): rising input pressure produces rising output pressure.

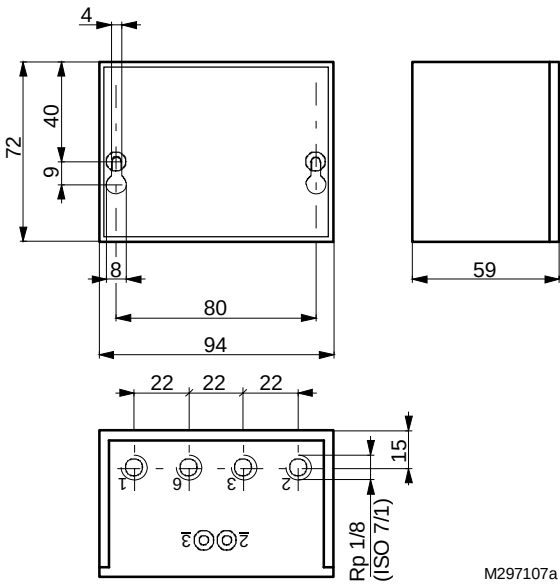
Control action B (reversible): rising input pressure produces falling output pressure.

A variable pressure applied to connection 6 allows remote adjustment of the setpoint. The in-built set-point adjuster then acts as a minimum limiter. There is an integrated restrictor (Ø 0,2 mm) for supplying the transducer.

Connection diagram



Dimension drawing



Accessories

