

RPJP 80: PI relay

Used for converting a proportional control system (P) into a proportional-integral control system (PI); or used as a PI controller with fixed P-band (100%) in conjunction with the appropriate transducers for the control of temperature, humidity, pressure and flow. Conforms to the regulations on pressure equipment (97/23/EG Art. 3.3).

Housing of thermoplastic; front plate with adjusters for setpoint and reset time, inscribed with connection diagram and description of operation settings are made using a coin and the %-scale; control action can be changed over (factory setting is A). Suitable for mounting on walls or rails (as per C EN 50024, C EN 50022; see *Accessories*). Compressed-air connection Rp 1/8 female thread; measuring connections M4.



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 ± 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 50022, 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.

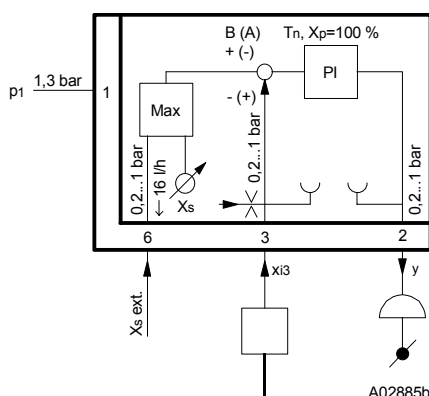
The setpoint and reset time can be set at the relay.

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

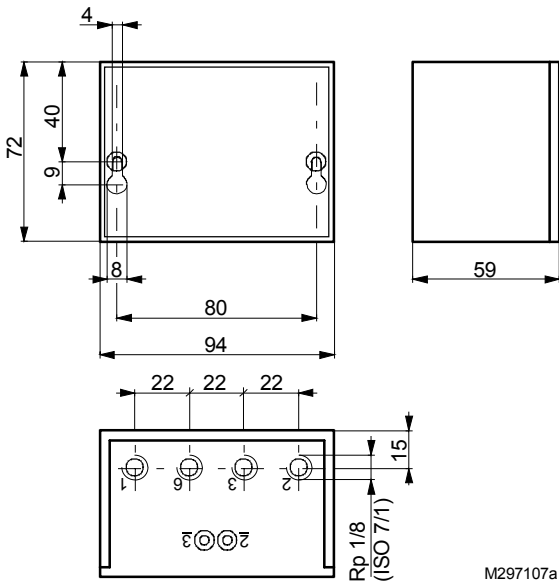
Control action B (reversible): rising input pressure produces falling output pressure.

A variable pressure applied to connection 6 allows remote adjustment of the setpoint. The in-built setpoint 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

