RPJP: PI relay

Y03177

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 ± 0.1
- Two input signals
- One output signal

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		
Output pressure	0,2...1,0 bar	Connection diagram	A02885
Setpoint X_S	0...100%	Dimension drawing	M297107
Setpoint remote adjustment	0...100%	Fitting instructions	MV 3254
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

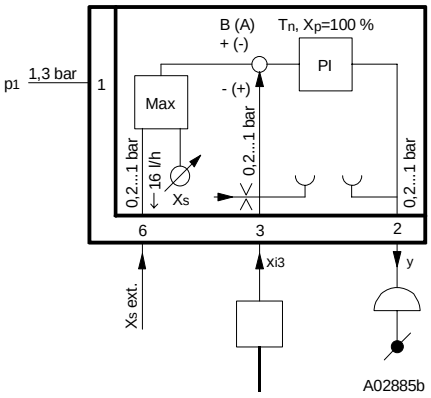
*) Dimension drawing or wiring diagram are available under the same number

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

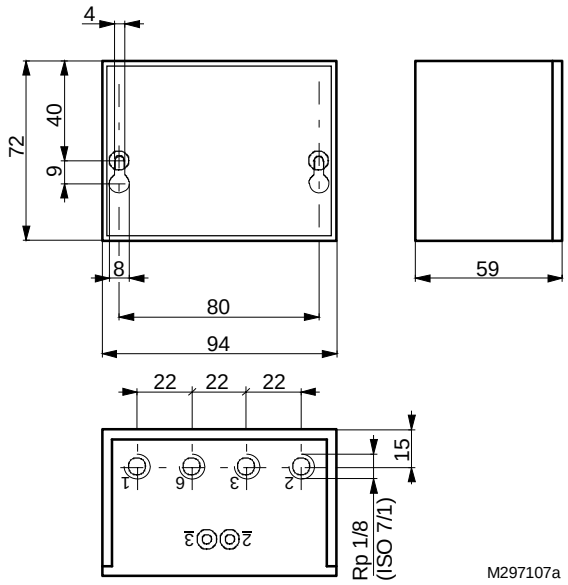
Operation

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

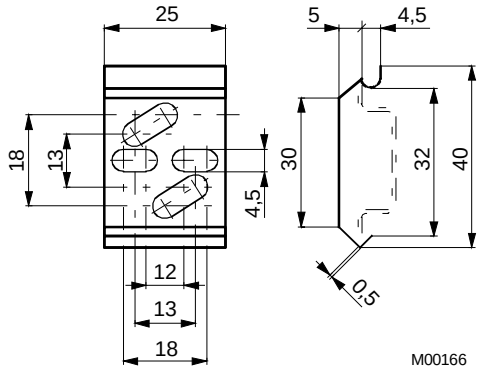


Dimension drawing

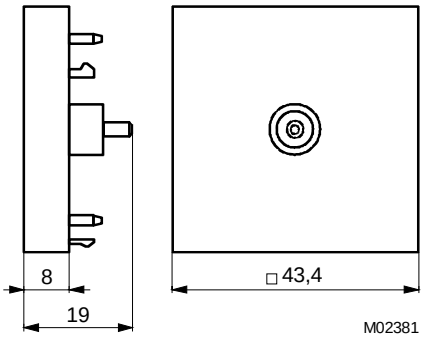


Accessories

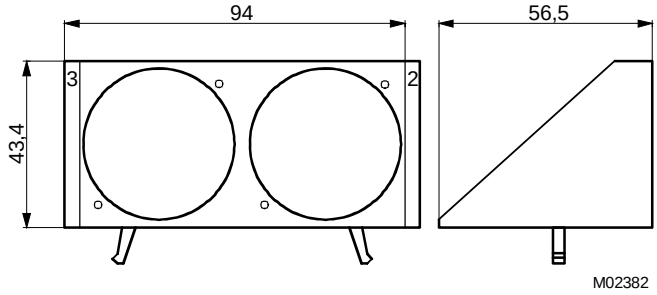
296936



297091



297113



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