Micatrone®

Product data sheet

Differential 3-point pressure controller

MRP-2000

Dok.nr: Md-1314gb / 2006-10-23

- ✓ **Digital 3-point pulse zone controller with built in pressure sensor**
- ✓ **Adapted for control of positive-, negative- or differential pressure on air and other gases**
- ✓ **Two set values**
- ✓ **Digital display of actual value and programmed parameters**
- ✓ **Hand/Auto - function**
- ✓ **High degree of protection, IP 65**

APPLICATION.

MRP-2000 is a differential pressure controller with two set values adapted for control of positive-, negative- or differential pressure on air and gases in combustions plants and air handling systems.
MRP-2000 is a 3-point controller with increase-, no- or decrease-signal.

FUNCTION

MRP-2000 has a special "Pulse zone" controller developed by Micatrone to handle the rapid changes in the pressure measurement without the problem of self-oscillation around the set value.

- Neutral zone around set value: the controller remains passive (no output).
- Pulse zones on each side outside the neutral zone: the controller gives short pulses.
- Pulse length: the length in time of the pulse.
- Pulse pause: the time between pulses.

By giving pulse signals to the actuator within the Pulse zone (outside the neutral zone) the speed of the actuator is reduced and the pressure slowly reaches the set value. Both the time for each pulse and the pause between are possible to adjust to suit different control cases.

The LED's show which set value is activated. Without a live connection on terminal 3 set value 1 is activated. With a live connection on terminal 3 set value 2 is activated. LED "increase" alt. "decrease" indicates the control output.

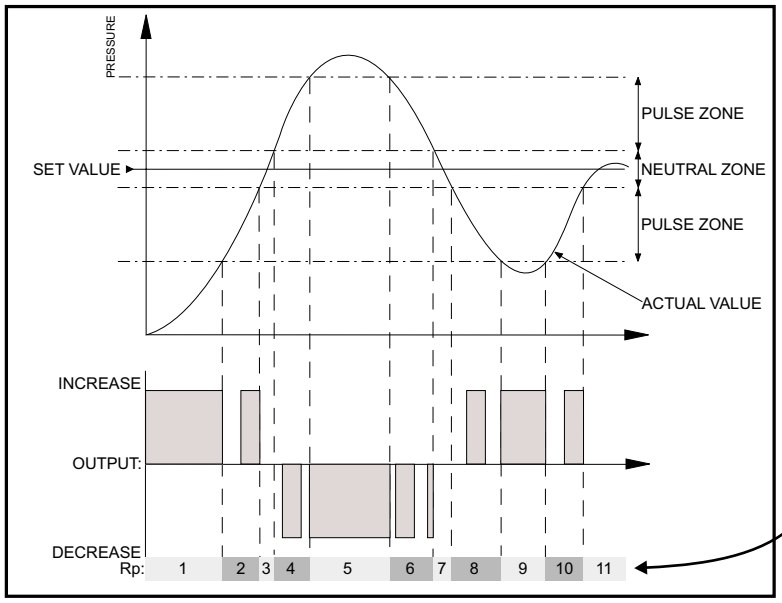
- Outside the pulse zone the controller gives a continuous signal.

INSTALLATION

MRP-2000 is designed for wall mounting.

ACCESSORIES

- DIN-rail mounting kit
- Pressure connecting kit



Pulse-zone controller:

Rp	Description
1, 5, 9	Outside pulse zone continuos signal
2, 4, 6, 8, 10	Within pulse zone the control signal "pulses"
3, 7, 11	Within Neutral zone no control output signal

TECHNICAL DATA

Supply voltage:	See label on the outside of the enclosure (24/230 VAC +-10%) (50/60Hz)
Power consumption:	7.5 VA
Connection set value 2:	24 or 230 VAC (Same phase as terminal 1)
Ambient temperature:	0...55 °C
Measuring range:	See label on the outside of the enclosure. (-300...+300 Pa) (-3000...+3000 Pa) (-7500...+7500 Pa)
Measurement error:	$\leq \pm$ 1 % FS
Set value range:	0...100% of the measuring range
Max overload:	25 kPa
Output relays:	2 pcs.
Max load:	24/230 VAC, 2 A cos φ = 1
El-connections:	
- Supply voltage:	Max. 2x1,5 mm^2
- Relays:	Max. 2x1,5 mm^2
- Reset signal	Max. 1x1,5 mm^2
Cable entries:	2 pcs M16 + 2 pcs M20
Degree of protection:	IP 65
Pressure connections:	8/6 plastic tube
Dimensions [HxWxD]:	120 x 200 x 57mm (excl pressure connections)
Weight:	0,75 kg

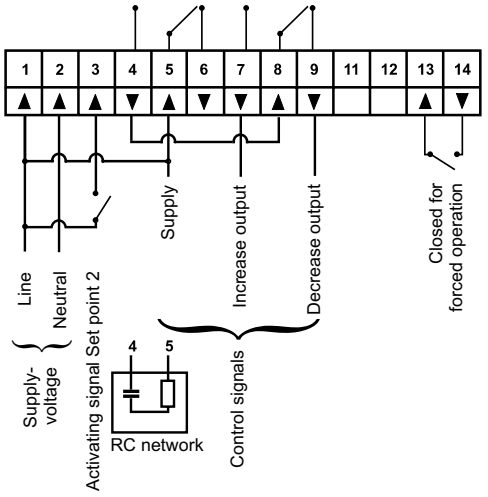
Complies with standards

-EMC:	SS-EN 50081-1 SS-EN 50082-2
-LVD:	SS-EN 61010-1

MAINTENANCE

It is recommended to adjust the zero-point twice a year.

ELECTRICAL CONNECTION



AB Micatrone
Åldermansvägen 3
SE-171 48 SOLNA
SWEDEN

Telephone: +46 8-470 25 00
Fax: +46 8-470 25 99
Internet: www.micatrone.se
E-mail: info@micatrone.se