

2012 Panelmeter for process inputs

- Process input 0/4..20 mA, 0..5/10 V, potentiometer
- 6-digit processor-based LED display
- 10 point linearisation
- Maximum of 6 adjustable alarm limits
- Alarm reset, display hold and taring by external contact
- Wide power supply range 85..240 VAC or 12..32 VDC/ 24 VAC
- Front panel protection IP65



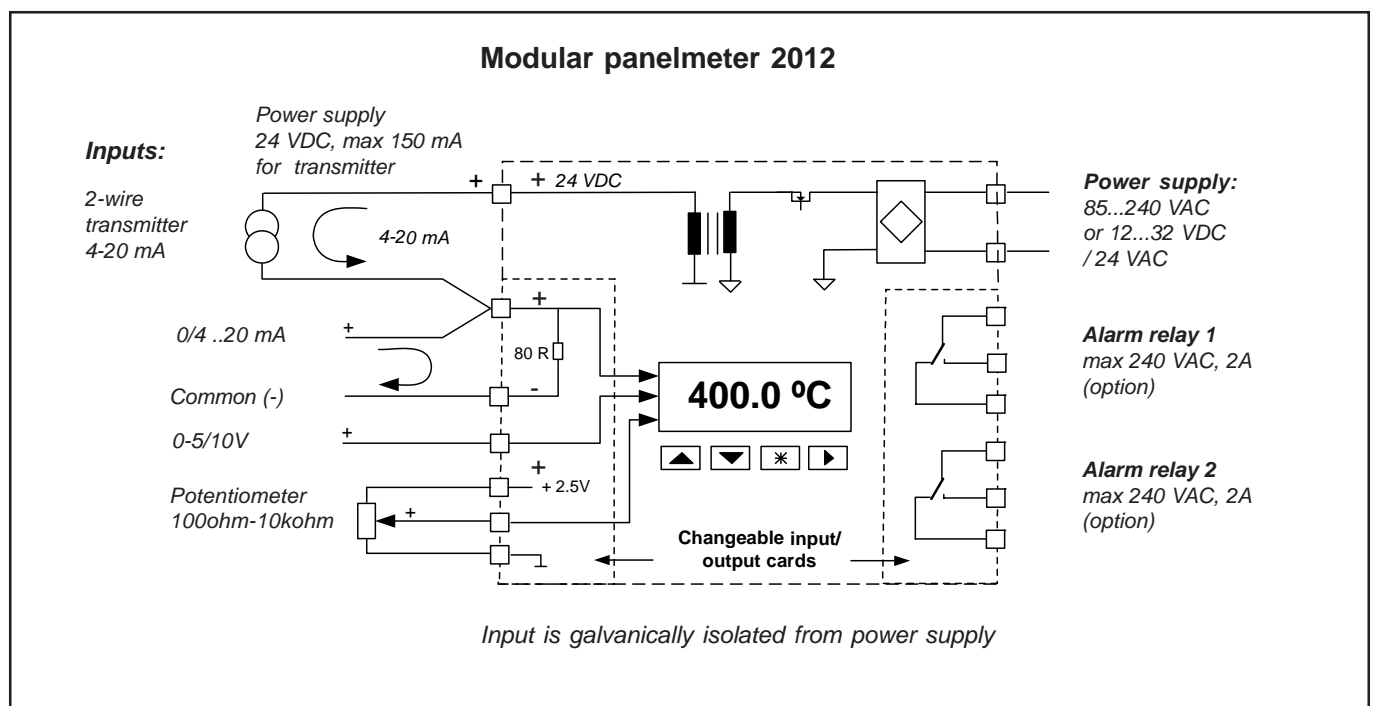
The panelmeter 2012 is designed for usual process inputs 0/4..20 mA, 0..5/10 V and for potentiometers 100 ohm.. 10 kohm. Selection of the sensor type and display scaling is easy via front panel keys. 4 alarm relays with change-over contacts or 6 closing contacts are available as an option. Alarm limits and hysteresis are freely adjustable via front panel keys. The display can be damped by a digital filter if necessary. The number of decimals is selectable. The brightness of the display can be adjusted as well.

There are two power supply alternatives: one for line voltage 85..240 VAC and the other 12..32 VDC or 24 VAC, both galvanically isolated from input and output. The panelmeter provides a voltage supply of 24 VDC, 150 mA for sensors.

Analog conversion is done by a 24-bit AD-converter and the number of measurements is 15 per second. Separate passwords can be set for access to the configuration menu and alarms. Front panel protection rating is IP65.

The panelmeter series 2000 is very flexible and easy to modify by changing input cards for different kinds of sensors, such as temperature sensors, pulse sensors, serial inputs etc. The modification does not require any calibration. The optional cards are the same for all the instruments in this product family. Each panelmeter type has a datasheet of its own.

Separate field enclosures can be supplied for 1 to 3 panelmeters. The 2012 is also available in the field display series, model 2800-2012.



Technical specifications:

Process inputs: 0..20 mA, 4..20 mA, 0..5 V and 0..10V
 Display scaling freely between -99999...999999
 Input resistance current input 80Ω, voltage input 1.1 MΩ
 Accuracy ±8μA current input, ±5mV voltage input
 Linearity ±3μA current input, ±2mV voltage input
 Temperature drift ±100 ppm/°C
 Supply for transmitter 24 VDC ±20%, max. 150 mA

Potentiometer input: 100Ω -10kΩ
 Reference voltage 2,5 V, max load 25 mA
 Voltage stability 150 ppm/°C

Alarms (optional): 4 alarms with change-over contacts,
 6 alarms with closing contacts relays max
 240 VAC, 2 A, hysteresis 0..100%; Alarm
 reset: automatic or manual via front panel
 key or external contact. Choice of direction
 for the function of relays and signal lights.

General:
 Display 6 digits, bright red (or green) LED; digit
 height 14,5 mm; brightness selectable

Input filter adjustable digital filter, 3th degree
 External contact display hold, reset of alarms or display
 taring
 AD-conversion 24 bits

Thermal drift 0,002 °C/°C
 Operating temperature -10..+60 °C
 Signal lights alarm levels 1 and 2
 Terminals removable, wire 2,5 mm²
 Case material plastic, colour black, max 120°C
 Front panel protection IP65 with a rubber gasket provided
 Power supply 85..240 VAC or 12..32 VDC / 24 VAC
 Consumption 2.5 VA, 70..110 mA (24 VDC)
 Weight 240 g

How to order:

2012-REL2-24VDC

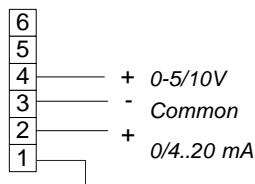
Type 2012
 Alarm card REL2
 Power supply
 12..32 VDC, 24 VAC or
 85..240 VAC



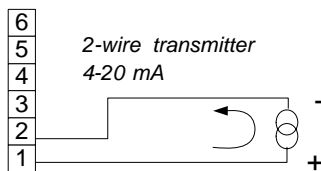
The panelmeter is also available with a green LED display: please
 specify 2011GR in the order code.

Connections:

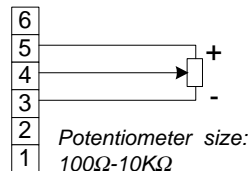
Voltage / current-input



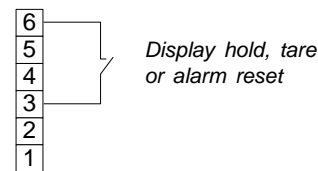
2-wire transmitter



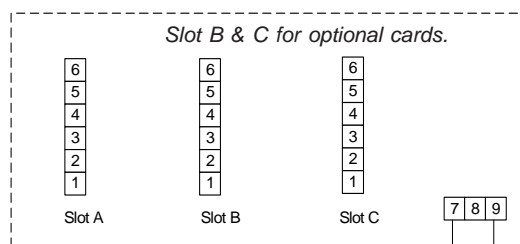
Potentiometer



External contact



Power supply for transmitter 24 V max. 150 mA



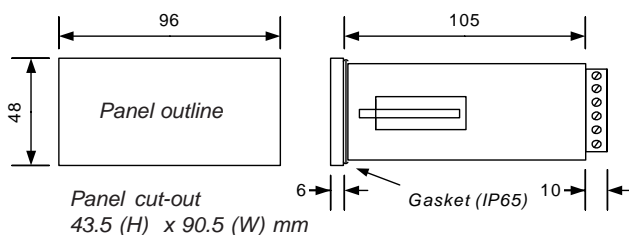
Power supply 85..240 VAC (grey
 connector) or 12..32 VDC /
 24VAC (green connector). No
 polarity.

2012 Display can be installed following cards:

- 1 or 2 pcs 2000-OUT analog output card(s)
- 1 or 2 pcs 2000-REL2 alarm card(s) (change over contacts)
- 1 or 2 pcs 2000-REL3 alarm card(s) (closing contacts)
- 1 pcs 2000-RS serial data card

Panelmeter have 3 slots (A, B ja C) which can all be used.
 However one input card is required for display operations. See
 users manual for detailed installation information

Case dimensions:



Changing cards is fast and
 simple without any tools

