



- 4-DIGIT PROGRAMMABLE PROJECTION
- MULTIFUNCTION INPUT (DC, PM, RTD, T/C, DU)
- 4 I/O OUTPUTS
- RTC DATA RECORDING FACILITY
- DIGITAL FILTERS, TARE, LINEARIZATION
- SIZE OF DIN 96 x 48 MM
- POWER SUPPLY 80...250 V AC/DC
- Option
Data output • Analog output • Power supply 10...30 V AC/DC

OM 402PID

OMLINK

OM 402PID is a 4-digit versatile panel mount PID regulator designed for maximum flexibility and user comfort while maintaining a low price.

Type OM 402PID is a multifunction instrument with the option of configuration for 8 various input options, easily configurable in the instrument menu. In its basic configuration the OM 402PID has two regulatory relays and two relay alarm outputs. Desired value can either be constant, or defined by one of 14 programmes.

The instrument is based on a 8-bit microcontroller and a multichannel 24-bit sigma-delta converter, which secures high accuracy, stability and easy operation of the instrument.

OM 402PID
VERSATILE PID REGULATOR

OPERATION

The instrument is set and controlled by five control keys located on the front panel. All programmable settings of the instrument may be performed in three adjusting modes:

LIGHT MENU is protected by optional number code and contains solely items necessary for instrument setting

PROFI MENU is protected by optional number code and contains complete instrument setting

USER MENU may contain arbitrary items from the programming menu (LIGHT/PROFI), which determine the right (see, change). Access w/o password.

Standard equipment is the OM Link interface, which together with operation program enables modification and filing of all instrument settings as well as perform firmware updates (with OML cable). The program is also designed for visualization and filing of measured values from more instruments.

All settings are stored in the EEPROM memory (they hold even after the instrument is switched off).

OPTION

INPUT OF DESIRED VALUE enables the regulator to be used for follow-up control. Both current and voltage inputs can be used.

DATA OUTPUTS are for their rate and accuracy suitable for transmission of the measured data for further projection or directly into the control systems. We offer isolated RS232 and RS485 with the ASCII/MESSBUS/MODBUS/PROFIBUS protocol.

STANDARD FUNCTIONS

PROGRAMMABLE PROJECTION

Selection: of input type and measuring range

Setting: manual, in menu optional projection on the display may be set for both limit values of the input signal, e.g. input 0...39,99 V > 0...850,0

Projection: -999...9999

PID REGULATOR

Execution: parallel PID, PI or proportional

Relay output: double, two-state, PWM

Analogue output: electrically isolated, modes: heating, cooling, both

Required value: set, from the analogue output, from program

Number of programs/steps: 14/64

Launching: time - one off/weekly, by external input, by buttons

RELAY OUTPUTS

Type: digital, settable in the menu

Outputs: relays L1, L2 are alarm outputs, relays L3, L4 are intended as regulatory but can be also used as alarms

ANALOG OUTPUT

Usage: where this type of signal is requested by action devices, or it can be used for processing of the measured value by external devices.

Type: electrically isolated, programmable with a 12 bit D/A converter. Functions, type and range of the output are selectable in the instrument's menu

COMPENSATION

of conduct (RTD, OHM): automatic (3- and 4-wire) or manual in menu (2-wire)

of conduct in probe (RTD): internal connection (conduct resistance in measuring head)

of CJC (T/C): manual or automatic, in menu it is possible to perform selection of the type of thermocouple and compensation of cold junctions, which is adjustable or automatic (temperature at the input brackets)

DIGITAL FILTERS

Floating/Exp./Arithmetic average: from 2...30/100/100 measurements

Rounding: setting the projection step for display

MATHEMATIC FUNCTIONS

Min/max. value: registration of min/max. value reached during measurement

Tare: designed to reset display upon non-zero input signal

Peak value: the display shows only max. or min. value

Mat. operations: polynom, odmocnina

Linearization: through linear interpolation in 50 points (solely via OM Link)

