

## ● Characteristics



- Input 1: 4...20 mA HART (current loop)
- Supply 1: out of current loop
- Supply 2: 24 VDC (for additional load)
- Supply 2: no galvanical insulation
- Limit contacts: 2 open collectors (36 VDC, 150 mA)
- Display range: -999...9999
- Memory: minimum/maximum
- Measuring fault:  $\pm 0,2\%$  of range,  $\pm 1$  digit
- Enclosure: for mounting in devices of MH series
- Protection: IP 20 (PCB)
- Connection: plug-in terminal strip (up to 1,5 mm<sup>2</sup>)

## ● Technical data

### Input

- Current loop: 4...20 mA HART
- Input resistance Ri : approx. 160 ohms (U= 3,2 V)

### Accuracy

- Resolution: -999...+9999 digit
- Measuring fault:  $\pm 0,2\%$  of measuring range,  $\pm 1$  digit
- Temperature drift: 100 ppm/K

### Indication

- Display: 7 segments, 8 mm red, 4 digits
- Time of indication: 0,1 s - 1 s - 10 s (adjustable)
- Memory: minimum / maximum values
- Overflow/underflow: to HI / to LO

### Electronical limit contacts

- 2 open collectors: 36 VDC, 150 mA
- leakage current: approx. 0,1 mA
- Indication: limit value reached: LED red
- Indication: limit value not reached: LED green
- Adjustment: with 3 keys
- Fail-safe function: voltage supply "ON" = contacts active

### Ambient conditions

- Operating temperature: 0...+60°C
- Storing temperature: -20...+80°C

### Supply

- Current loop: 4...20 mA
- Voltage supply: 24 VDC  $\pm 5\%$  (maximum 50 mA)  
(for additional load, without galvanical insulation)

### Mechanics

- Connection: plug-in terminal strip 2x 4-pole, 1x 3-pole, 1x 2-pole, up to 1,5 mm<sup>2</sup>
- PCB: dimension: 60 x 48 x 33 mm
- Fastening: plugable, 2 mounting holes
- Weight: approx. 35 g
- Protection: IP 20

### Programmable features

range of indication / refresh display / decimal point / (unit (°C/°F) / stabilisation zero point / limit value 1 + 2 / hysteresis value 1 + 2 / delay times 1 + 2 / locking of programming / calibration points / TAG number

### Possibilities of indication

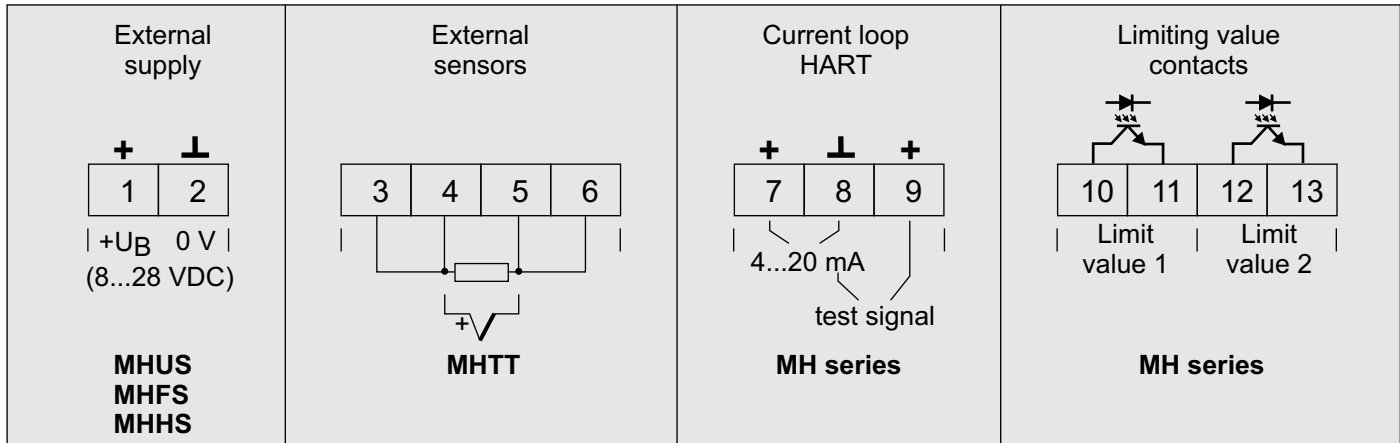
Programming the decimal point and unit the following scope of representation is possible: xxxx / xxx.x / xx.xx / x.xxx / (xxx°C / xxx°F)

## ● Applications

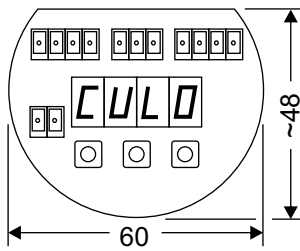
With this PCB the devices of MH series can be upgraded with 2 electronical limit value contacts. The settings can be done with keys which are mounted on PCB.



## ● Electrical connection



## ● Dimensions



## ● Configuration

When the MH-device is ordered with factory configuration this limiting value unit will have the following settings:

- Range of indication: 4,00...20,00
- Decimal point: without
- Stabilisation zero point: 2
- Hysteresis value 1: 11 mA / delay time: 1 s
- Hysteresis value 2: 18 mA / delay time: 1 s
- Calibration points: without
- Refresh display: 1 s
- Unit: without
- Limit value 1: 12 mA / delay time: 0 s
- Limit value2: 16 mA / delay time: 0 s
- Locking of programming: without
- TAG number: 0

When the MH-device is ordered with customized configuration, the possibilities of the technical data of this data sheet can be selected for the settings of this limiting value unit.