

# Universal digital display Type M3605

- ✓ 5 alarm contacts
- ✓ Input signals for current & voltage
- ✓ Signal output (current or voltage)
- ✓ Universal supply 20...253VAC/DC
- ✓ Optical alarm contact
- ✓ Flush mounting 96mm x 96mm
- ✓ USB – logger (optional)
- ✓ Modbus (optional)
- ✓ Various custom specific input signals(optional)



## Technical description

The digital display M3605 is used to indicate or monitor any sensor signal. It converts the input signal to an internal standard signal of for example 0 to 100.0%. In this range five alarm contacts can be set independently. The 4-digit measuring value, as well as the status of the alarm contacts, is shown on an easy to read LCD-Display.

All settings as alarm values, hysteresis, range and operating mode of the floating contacts can be set directly by the instruments keyboard.

The instrument has an intuitive and easy to use customers menu to set all parameters including the range, signal range and unit of the device.

A typical application would be to measure and monitor contents of water in a vessel. The pres-

sure transmitter converts the pressure of 0 to 0.5bar to a current signal of 4 to 20mA. The M3605 monitors five different water levels in the vessel. It converts the 4... 20mA signal current to 0%...100.0%. All five alarm contacts can be set at different water levels between 0% and 100%. With these floating alarm contacts, valves, pumps, alarms etc. are driven directly.

The galvanically isolated output signal 0...20mA or 4...20mA can be programmed to any section of the indicated measuring range.

The digital display M3605 uses a universal power supply from 20 to 253VAC/DC.

## Technical data

Input signal:	0/4...20mA; other values in these ranges are free programmable Other input signals on request
Input load / impedance:	Current signal = 51Ω ; voltage signal = 1MΩ
2-Wire transmitter supply:	20VDC, max. 25mA
Display:	LCD graphic display, 128 x 128 pixels 62 x 62 mm, pixel size 0.4x0.4mm
Display range:	-9999...9999
Accuracy:	±0.1% at 23°C ambient temperature
Reproducibility:	±0.1%
Temperature coefficient:	Zero drift: 30ppM/°C typical Gain drift: 25ppM/°C typical
Long-term stability:	±0.1%
Working temperature range:	-5°C to +45°C
Maximum humidity:	95%, non-condensing
ENT key:	Quick access to settings or to save parameters
ESC key:	Access to the main menu, press and hold for 3 seconds, or exit menu item User adjustable. Can be set in the instruments menu directly
+ / - key:	Set values
F1 – F4 key:	Direct access to change the set point of relais 1 - 4
Range adjustment:	User adjustable. Can be set in the instruments menu directly
Zero-/Gain adjustment:	User adjustable. Can be set in the instruments menu directly
Limit contacts:	Five floating change-over contacts may be adjusted over the full range. Each can be defined as normally open or normally closed contact in the menu via the keys. Set point adjustments directly without the use of the menu
Status:	on the LCD-Display
Hysteresis:	adjustable, factory settings is ±5 digit
Contacts rating:	2A with resistive load / 230VAC
Max. contact load:	100'000 operations at max. load
Max. contact lifecycle:	10'000'000 operations mechanically, without load
Display unit:	on the LCD-Display, 4 characters directly programmable in the menu
Option signal output:	0/4...20mA, galvanically isolated, programmable within the display range.
Max. load:	500Ω
Output impedance:	>1MΩ typical
USB:	Logger function, programmable log-time, 5 to 7200 sec. <b>Use only FAT32 formatted, empty USB flash drives.</b> Stop logging mode before removing. On the LCD-Display, 4 characters directly programmable in the menu

Power supply load:	up to 4.5W 230VAC depending on the amount of active contacts
Power supply:	20 to 253VAC or DC
Power supply load:	up to 4.5W 230VAC depending on the amount of active contacts
CE-conformity:	fulfilled
Terminals:	Plug-in screw terminals
Mounting:	2 mounting clamps
Weight:	304g
Warranty:	2 years
Options:	<ul style="list-style-type: none"> <li>- Other, user-specific in- and output signals</li> <li>- Modbus</li> <li>- Customer functions, OEM customer home screen / logo</li> <li>- Transparent cover IP55</li> </ul>

## Terminals

1	Pt100 sense	11	Contact 2 n/c	21	+ current signal or voltage signal input
2	Pt100	12	Contact 2 c/o	22	- (Gnd) current signal or voltage signal input
3	Pt100	13	PE supply	23	Contact 3 n/o
4	PE for Pt-100 and signal output	14	N supply	24	Contact 3 n/c
5	Signal output +	15	L1 supply	25	Contact 3 c/o
6	Signal output -	16	Contact 5 n/o	26	Contact 4 n/o
7	Contact 1 n/o	17	Contact 5 n/c	27	Contact 4 n/c
8	Contact 1 n/c	18	Contact 5 c/o	28	Contact 5 c/o
9	Contact 1 c/o	19	Do not use		
10	Contact 2 n/o	20	Sensor supply 20VDC, 25mA max.		

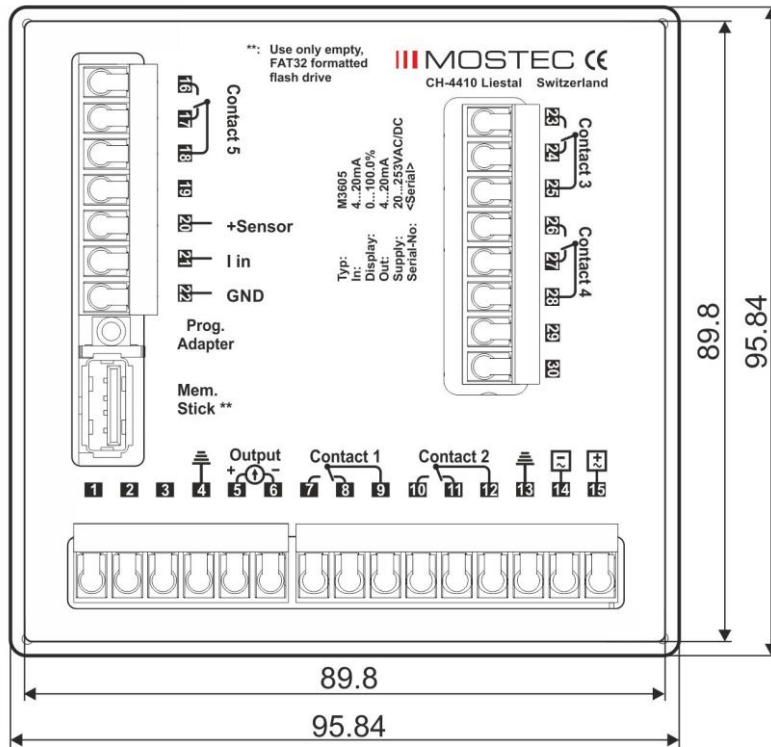
n/o = normally open contact  
n/c = normally closed contact  
c/o = change over contact

## Ordering example

Example 1:

- M3605
- Input: 4...20mA
- Display: 50.0%...100.0%
- Signal output: 50.0%...100.0% = 0...20mA

**Rear view:**



**Dimensions / Cut out dimensions**

