



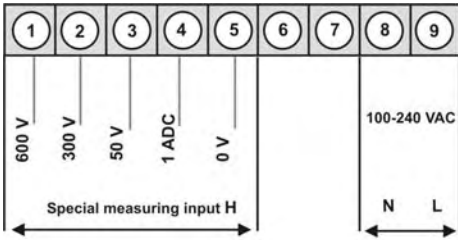
### **M3 – 5-digit digital panel meter 96x48 (BxH) Direct voltage / direct current signals 50 VDC, 300 VDC, 600 VDC, 1 ADC**

- red display of -19999...99999 digits (optional green, orange, blue or tricolour display)
- installation depth: 120 mm without plug-in screw terminal
- multi voltage power supply unit 100-240 VAC
- adjustment via factory setting or directly on the sensor signal
- min/max-memory with adjustable permanent display
- 30 additional adjustable support points
- display flashing at threshold value exceedance / undercut
- zero keys for the triggering of Hold, Tara, display change, setpoint setting, alarm actuation
- flexible alarm system with adjustable delay times
- volume measurement (Totaliser)
- mathematical functions like reciprocal value, square root, square and rounding
- constant setting / setpoint setting
- sliding averaging
- brightness control via parameter or front keys
- programming interlock via access code
- protection class IP65 at the front
- plug-in screw terminal
- optional: 2 or 4 relay outputs or 8 PhotoMos-outputs
- optional: 1 or 2 independently scalable analog outputs
- optional: galv. isolated digital input for the triggering Tara, Hold, display change
- optional: interface RS232 or RS485
- accessories: pc-based configuration-kit PM-TOOL with CD & USB adapter
- on demand: devices for working temperatures of -20°C...60°C or -40°C...70°C

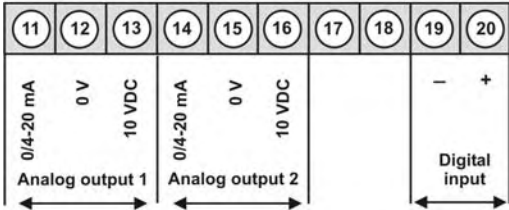
• Direct voltage, direct current – special measuring input H

Supply 100-240 VAC, DC± 10%

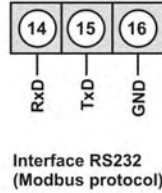
M3-1VR5B.0H01.S70BD



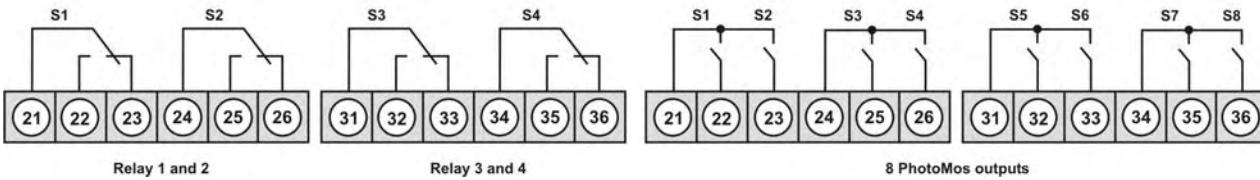
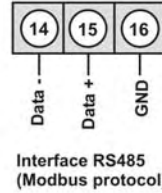
Options:



alternative for analog output 2



or



• Order key options

M 3- 1 V R 5 B. 0 H 0 1. S 7 0 B D

EUR

2	2 relay outputs
4	4 relay outputs
8	8 PhotoMos-outputs
1	without keypad, operation on the back
X	Analog output 0/4-20 mA, 0-10 VDC galv. isolated
Y	2 analog outputs galv. isolated
3	Interface RS232 galv. isolated
4	Interface RS485 galv. isolated
I	Digital input galv. isolated
B	Blue
G	Green
Y	Orange
T	Tricolour (Red-Green-Orange)

On demand state dimension unit on order, e.g. V.

• Parameterisation software

PC based configuration software PM-Tool for devices without keypad, for a simple adjustment of standard devices, incl. CD & USB-adapter. Programming is made via an interface on the back.

PM-TOOL-MUSB4

• **Technical data**

<b>Dimensions</b>	Housing	B96 x H48 x D120 mm, (incl. plug-in terminal D = 139 mm)
	Panel cut-out	92.0 <sup>+0.8</sup> x 45.0 <sup>+0.6</sup> mm
	Fixing	screw elements for insulation thickness up to 15 mm
	Housing material	PC Polycarbonate, black
	Sealing material	EPDM, 65 Shore, black
	Protection type	front side IP65 standard, back side IP00
	Weight	approx. 350 g
	Connection	plug-in terminal; line cross-section up to 2.5 mm <sup>2</sup>
<b>Display</b>	Display	5-digit
	Digit height	14 mm
	Segment colour	red (standard), optional available in green, blue, orange or tricolour (red/green/orange)
	Range of display	-19999 to 99999
	Threshold	optical display flashing
	Overflow	horizontal bars at the top
	Underflow	horizontal bars at the bottom
	Display time	0.1 to 10.0 seconds
<b>Messeingang</b>	Measuring span	-600...600 VDC / -300...300 VDC / -50...50 VDC / -1...1 ADC
	Mesuring range	0...600 VDC / 0...300 VDC / 0...50 VDC / 0...1 ADC
	Input resistance	Ri at ~ 2 MΩ / Ri at ~ 1 MΩ / Ri at ~ 200 kΩ / Ri at ~ 0,2 Ω
	Measuring fault	0.5% of final
	Temperature drift	100 ppm/K
	Measuring time	0.1 ... 10.0 seconds
	Measuring principle	U/F- conversion
	Resolution	approx. 18 bit at 1s measuring time
<b>Output</b>	Relays	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC
	Switching cycles	10 * 10 <sup>5</sup> at 5 AAC, 5 ADC contact rate, 10 * 10 <sup>6</sup> mechanically
	PhotoMos output	Separation in accordance with DIN EN50178 / Specifications in accordance with DIN EN 60255
	Analog output	NOC contacts: 30 VDC/AC, 4 A
	Sensor supply	0-10 VDC / burden ≥ 10 kΩ, 0/4-20 mA / burden ≤ 500 Ω, 16 bit
		24 VDC / 50 mA
		10 VDC / 20 mA
<b>Digital input</b>	Input galv. isolated	< 2.4 V OFF; 10 V ON; max. 30 VDC, Ri ~ 5 kΩ
<b>Interface</b>	Protocol	manufacturer's specifics ASCII
	RS232	9.600 Baud, no parity, 8 DataBit, 1 StopBit, wire length max. 3 m
	RS485	9.600 Baud, no parity, 8 DataBit, 1 StopBit, wire length max. 1000 m
<b>Power pack</b>	Supply	100-240 VAC 50/60 Hz ± 10% (max. 15 VA)
<b>Memory</b>	EEPROM	Data life ≥ 100 years at 25°C
<b>Ambient conditions</b>	Working temperature	0 to + 60°C
	Storing temperature	-20 to + 80°C
	Climatic density	relative humidity 0-85% on years average without dew
<b>CE-sign</b>	Conformity to directive 2004/108/EG	
<b>EMV</b>	EN 61326, EN 55011	
<b>Safety standard</b>	according to low voltage directive 2006/95/EG	
	EN 61010; EN 60664-1	

**Housing:**

