



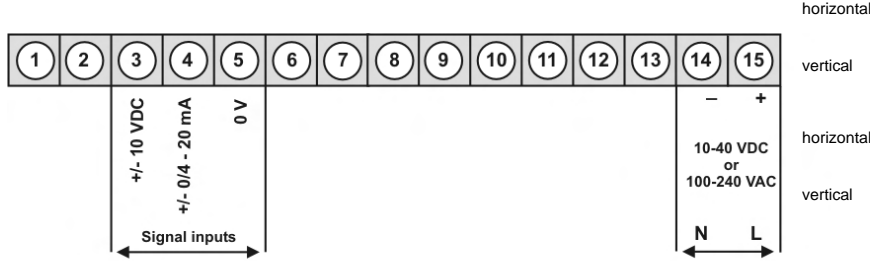
MB3 – 3-digit digital panel meter in 96x24 mm with bargraph Direct current/direct voltage signals 0/4-20 mA, 0-10 VDC

- red 3-digit digital display -199...999 Digits (optional green display)
- 30-points-bargraph tricolour
- adjustable bargraph or dot operation or operation with permanent display of the midpoint
- installation depth: 120 mm without plug-in screw terminal
- multi voltage power supply units 100-240 VAC, alternatively 10-40 VDC, galvanic isolated
- display adjustment via factory setting or directly via sensor signal
- min-/max-memory with adjustable permanent display
- 30 additional adjustable supporting points
- display flashing at threshold value exceedance/undercut
- zero key for the triggering of Hold, Tara, display change, setpoint setting, alarm actuation
- flexible alarm system with adjustable delay times
- volume metering (Totaliser)
- mathematic functions like reciprocal value, root extraction, squaring and rounding
- sliding averaging
- programming interlock via access code
- protection class IP65 at the front
- plug-in screw terminal
- optional: 1 or 2 relay outputs
- optional: sensor supply
- optional: 1 independently scalable analog output
- optional: galv. insulated digital input for the triggering of Tara, Hold or 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 -25°...60°C

ORDER NUMBER
(without options)

EUR

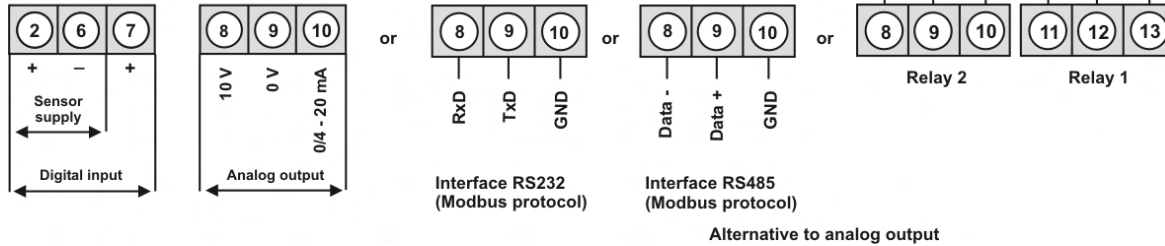
• **Direct current, direct voltage**



MB3-3VT3HR.0001.S70AD
MB3-3VT3VR.0001.S70AD
Supply 100-240 VAC

MB3-3VT3HR.0001.W70AD
MB3-3VT3VR.0001.W70AD
Supply 10-40 VDC

Options:



• **Product key options**

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

Device with a supply of 100-240 VAC

EUR

Device with a supply of 10-30 VDC

1	1 relay output (only 1 switching output possible with option analog output)
2	2 relay outputs
X	Analog output 0/4-20 mA, 0-10 VDC
2	Sensor supply 10 VDC / 50 mA incl. digital input
3	Sensor supply 24 VDC / 50 mA incl. digital input
I	Digital input
3	Interface RS232 galv. isolated
4	Interface RS485 galv. isolated
G	Green display, 8 mm height

Please state physical unit in order, e.g. %.

ORDER NUMBER

EUR

• **Parameterisation software**

Parameterisation 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

Dimensions	Housing Panel cut-out Fixing Housing material Sealing material Protection class	B96 x H24 x T120 mm (T=144 mm incl. plug-in terminal) 92.0 ^{+0.8} x 22.0 ^{+0.3} mm screw elements for a wall thickness of up to 3 mm PC Polycarbonate, colour black UL94V-0 EPDM, 65 Shore IP65 standard at the front IP00 at the back
	Weight Connection	approx. 200 g plug-in terminal; wire cross section up to 2.5 mm ²
Display	Display Display Bargraph Segment colour Overflow Underflow Display time	3-digit, 8 mm high -199...999 30 digit, tricolour red, optional green flashing of the two upper bargraph elements flashing of the two lower bargraph elements 0.01...10.0 seconds
Measuring input	Measuring span Measuring range Input resistance Measuring error Temperature drift Measuring time Measuring principle Resolution	-12...12 V / -22 mA...24 mA 0...10 V / 0/4...20 mA Ri at ~200 kΩ / Ri at ~100 Ω 0,1% of measuring range, ± 1 digit / 0,1% of measuring range, ± 1 Digit 100 ppm/K 0.1...10.0 seconds U/F-converter approx. 18 bit at 1 second measuring time
Output	Relay Switching cycle Analog output Sensor supply	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC 30 * 10 ³ at 5 AAC, 5 ADC ohm resistive load, 10 * 10 ⁶ mechanically Separation according to DIN EN50178 / Specific values according to DIN EN 60255 0-10 VDC / burden ≥ 10 kΩ, 0/4-20 mA / burden ≤ 500 Ω, 16 Bit 24 VDC / 50 mA 10 VDC / 50 mA
Digital input	Input	< 2.4 V OFF; >10 V ON; max. 30 VDC Ri ~ 5 kΩ
Interface	Protocol RS232 Wire length RS485 Wire length	manufacturer-specific ASCII 9.600 baud, no parity, 8 dataBit, 1 stopBit max. 3 m 9.600 baud, no parity, 8 dataBit, 1 stopBit max. 1000 m
Power pack	Supply	100-240 VAC 50/60 Hz / DC +/- 10% (max. 10 VA) 10-40 VDC, galvanic insulated, 18-30 VAC 50/60Hz (max. 10 VA)
Memory	EEPROM	Data life ≥ 100 years at 25°C
Ambient conditions	Working temperature Storing temperature Climatic density	0 to + 50 °C -20 to + 80 °C relative humidity 0-85% on years average without dew
CE-marking	Conformity according to directive 2004/108/EG	
EMV	EN 61326, EN 55011	
Safety standard	according to directive 2006/95/EG EN 61010; EN 60664-1	

Housing:

