microsyst

COMPETENCE IN
MEASUREMENT

TÜV
TÜV Rheinland Bulgaria
BSDS Accreditation Nr. 001.08.03.2000
EN ISO 9001:2008 Certified Quality System
Certificate Nr. 75 100 007

Microprocessor-based indicator

MS8133

TECHNICAL DESCRIPTION AND INSTRUCTION FOR USAGE

PLOVDIV 2004

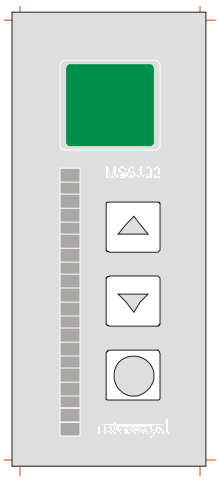
I. TECHNICAL DATA

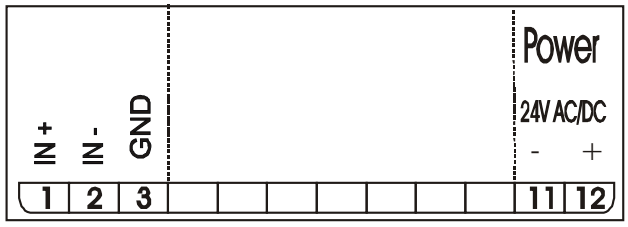
Analog inputs	1
Linear current	0 (4) ... 10 (20) mA DC
Linear voltage	0 … 1 (10) V DC
Indication and keyboard	
Display	1x2 digits LED
Range of the display	-19 ... 99
Accuracy	± 1 LSB
Format of the display	XX XX. X.X
LED scale	1x20 LED
Keyboard	folio
Power supply	
Power supplying voltage	24 V AC/DC
Operating conditions	
Operating temperature	0 … 50 °C
Operating relative humidity	0 … 80 % RH
Dimensions	
Overall dimensions (WxHxL)	77 x 35 x 62 mm
Installation	panel in a hole 29 x 71 mm
Storage	
Storage temperature	-10 … 70 °C
Storage relative humidity	0 … 95 % RH

II. DESIGNATION

The compact microprocessor-based indicators MS8133 of MICROSYST are designed for measurement and visualization of different process parameters, converted in linear analog signal. By the parameters of the device you can tune the necessary dynamics of the indications for the LED scale and the digital display, located on the front panel.

III. FRONT AND BACK PANEL





IV. OPERATING MODE

If when starting the device there are no pressed buttons, normal operating mode activates, in which the measured value appear on the digital display and on the bargraph. The symbols  and  indicate input parameter out of the range of the display – respectively more than 99 or less than -19. The keyboard is not active.

V. TUNING OF THE PARAMETERS

	– Press the button when power supplying. **Pr** appears on the display till releasing of the button.
	– You can look at the parameters and their values consecutively – Confirmation of the change – Exit from menu at indication - -
	– Change the value of the selected parameter – You can look at the parameters consecutively

Parameter	Description	Values	Factory value
Jd	Change of the input parameter in two serial values, over which the filter of the display is reinitialized.	0 ÷ 99	
Td	Time, after which reinitialization of the filter of the input parameter at jump of the signal over **Jd** will be realized. It concerns the digital display.	0÷99 x10 ms	
Fd	Coefficient of filtering of the input parameter at the digital display. The smaller is the value, the deeper is the filter.	0 ÷ 99	
JL	As **Jd,** but for the LED scale	0 ÷ 99	
tL	As **td,** but for the LED scale	0÷99 x10 ms	
FL	As **Fd,** but for the LED scale	0 ÷ 99	
dP	The decimal point.0-XX 1- XX. 2-X.X 3-X.X.	0 ÷ 99	

VI. CALIBRATION

Press the buttons  together and supply power. **d1** appears on the display till releasing of the buttons, when the indication is changed with current value of ADC. Set first standard value and confirm by  . 0 appears on the display. By the buttons  you can tune the indication of the digital display, respectively of the first standard value. Confirm by  . **L1** appears on the display – by the buttons  you can tune the LED scale, respectively for the 1st standard value. Confirm by  . **d2** appears on the display. Press , after that repeat the actions, mentioned above, but for the second standard point.

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