

MICRA-E

DESCRIPTION

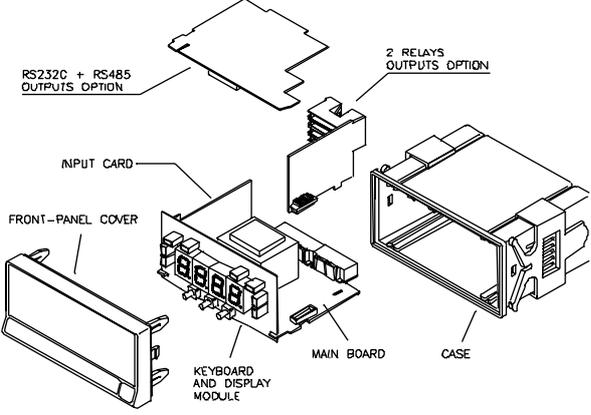
The MICRA-E model is an instrument that admits AC and DC voltage signals up to 600V or current signals up to 5A directly or up to 9999 through an external shunt or current transformer.

By connection to a tachogenerator or an alternator, this model can display velocity in engineering units.

Totally keyboard programmable, the MICRA-E provides selectable input, two scaling methods (by keyboard or by applying input levels) and selectable display resolution.



STRUCTURE



STANDARD

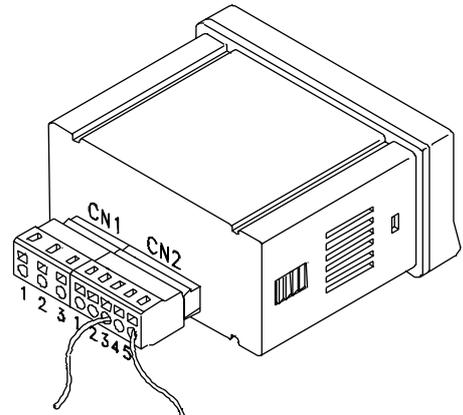
- Panel-mounting 1/8 DIN case, depth 60 mm.
- Electronics assembly :
 - Main board.
 - Input card specific for electrical signals (V AC, V DC, A AC and A DC)
 - Keyboard and display module.
- Fixing clips for panel mounting.
- Frontal sealing gasket.
- Plug-in terminal block connectors.

OPTIONS

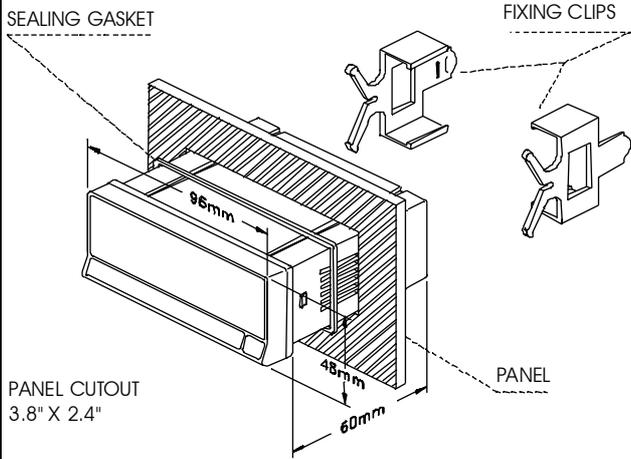
The MICRA models can incorporate, as an option, a 2 relay control card and a communication outputs card or analog output card.

- RS232C + RS485 serial outputs card ref.**RS6**
- 2 SPDT relays rated 8A @ 250V AC ref.**2RE**
- Analog Output 4-20mA ref.**MAN**

CONNECTIONS



DIMENSIONS AND MOUNTING



CN1	POWER SUPPLY	
	AC VERSION	DC VERSION
PIN		
1	AC PHASE	DC POSITIVE
2	GND (GROUND)	-
3	AC NEUTRAL	DC NEGATIVE
CN2	INPUT SIGNAL	
PIN		
1	COMM	
2	SHUNT	
3	200mA	
4	5A max.	
5	600V max.	

MICRA-E

KEYBOARD FUNCTIONS

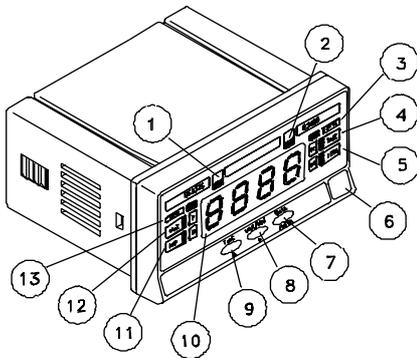
PEAK & VALLEY

The instrument detects and memorizes the maximum and minimum values reached for the variable after the last reset (peak and valley).

The peak and valley values can be displayed at any moment during the normal operation by pressing MAX/MIN.

While viewing the peak or valley values, hold down the MAX/MIN key for 5s to clear back its memory. The indication -999 appears if the peak value has been reset and 9999 if the valley has been reset.

FRONT-PANEL FUNCTIONS



MODE	RUN	PROG
LED RS232C	1 Indicates RS232C output selected	Indicates programming of the RS232C output
LED RS485	2 Indicates RS485 output selected	Indicates programming of the RS485 output
LED SET2	3 Indicates setpoint 2 activated	Indicates programming of the setpoint 2
LED TARE	4 Indicates tare in the memory	Indicates programming of the RS option
LED PROG	5 -	Indicates programming mode
LABEL	6	Measurement unit
ENTER key	7 Enters in PROG mode. Displays data	Accepts data. Advances program
MAX/MIN key	8 Recalls peak/valley values	Moves to the right
TARE key	9 Takes the display reading as tare	Increments the flashing digit value
DISPLAY	10 Displays the input variable	Displays programming parameters
LED MIN	11 Indicates valley displayed	Indicates display programming
LED MAX	12 Indicates peak displayed	Indicates input programming
LED SET1	13 Indicates setpoint 1 activated	Indicates programming of the setpoint 1

INPUT SIGNAL

• Configuration	differential asymmetrical
Input	Resolution Input impedance
600V.....	1V3MΩ
200V.....	100mV3MΩ
20V	10mV3MΩ
2V	1mV3MΩ
5A	2.5mA 0.01Ω
1A	0.5mA 0.01Ω
0.2A	0.1mA 3.3Ω
Shunt 100mV	50μV 60KΩ
Shunt 60mV	30μV 60KΩ
Shunt 50mV	25μV 60KΩ

POWER SUPPLY

- AC voltages 115V/230V 50/60Hz (±10%)
24V/48V 50/60Hz (±10%)
- DC voltages 12V (10.5 to 16V)
24V (21 to 32V)
48V (42 to 64V)
- Consumption 3W

ACCURACY

- Max error AC
from 30% to 100% F.S. ± (0.3% of the reading +2 count)
from 0 to 30% F.S. ± (0.3% of F.S. +2 count)
- Max error DC..... ± (0.1% of the reading +2 count)
- Temperature coefficient..... ±100ppm/°C
- Warm-up time5 minutes

FUSES (DIN 41661) (Recommended)

- MICRA-C (115/230V AC) F 0.1A/ 250V
- MICRA-C2 (24/48V AC)..... F 0.2A/ 250V
- MICRA-C3 (12V DC)..... F 1A/ 250V
- MICRA-C4 (24V DC)..... F 0.5A/ 250V
- MICRA-C5 (48V DC) F 0.5A/ 250V

A/D CONVERSION

- Technique dual slope
- Resolution ±11 bits
- Read rate 12/s

DISPLAY

- Type 999/9999, 14 mm red digits
- LEDs 4 for control, 4 for output status
- Display update time 83ms
- Overrange indication OVE

ENVIRONMENTAL

- Operating temperature -10 °C to 60 °C (0 °C to 50 °C) s/UL
- Storage temperature -25 °C to +80 °C
- Relative humidity <95% at 40 °C
- Max. Altitude 2000 m

MECHANICAL

- Dimensions..... 1/8 DIN case, depth 60 mm
- Weight 250g
- Case material..... UL 94 V-0 polycarbonate
- Sealed front panelIP65 (indoor use)

ORDERING REFERENCES

- 115/230V AC 50/60Hz powered MICRA-E
- 24/48V AC 50/60Hz powered MICRA-E2
- 12V DC powered MICRA-E3
- 24V DC powered MICRA-E4
- 48V DC powered MICRA-E5