

DIGITAL MEASURE TRANSMITTER

for AC electrical magnitudes

μTACv60

true RMS measurement

suitable for disturbed electrical networks

Type

The **μTACv60** is a transmitter of AC current, AC voltage and frequency measure.

Programming by the PC software SlimSET via a standard USB / μUSB cable or by tactile LCD micro console.

Environment

- Operating temperature:
-10°C to +55°C.
- Storage temperature:
-25°C to +70°C.
- Marking 



Functions

Input type, programmable:
Current: 1A and 5A AC
Voltage:

- 60V L-N / 100V L-L
- 110V L-N / 190V L-L
- 250V L-N / 440V L-L
- 350V L-N / 600V L-L

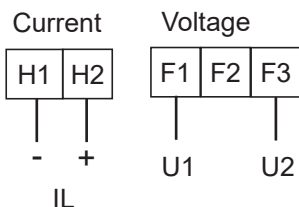
- Quick cycle time: 40ms
- Universal (switching) power supply

Options

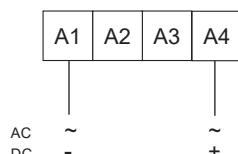
- ♦ Analog outputs (up to 2 outputs)
- ♦ 2 relay outputs
- ♦ RS485 digital communications
- ♦ Ethernet output (TCP Modbus)

Connectings

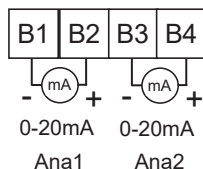
Inputs



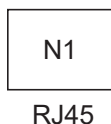
Supply



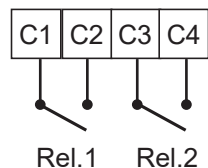
Analog outputs



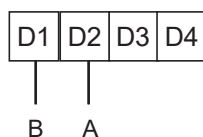
Ethernet output



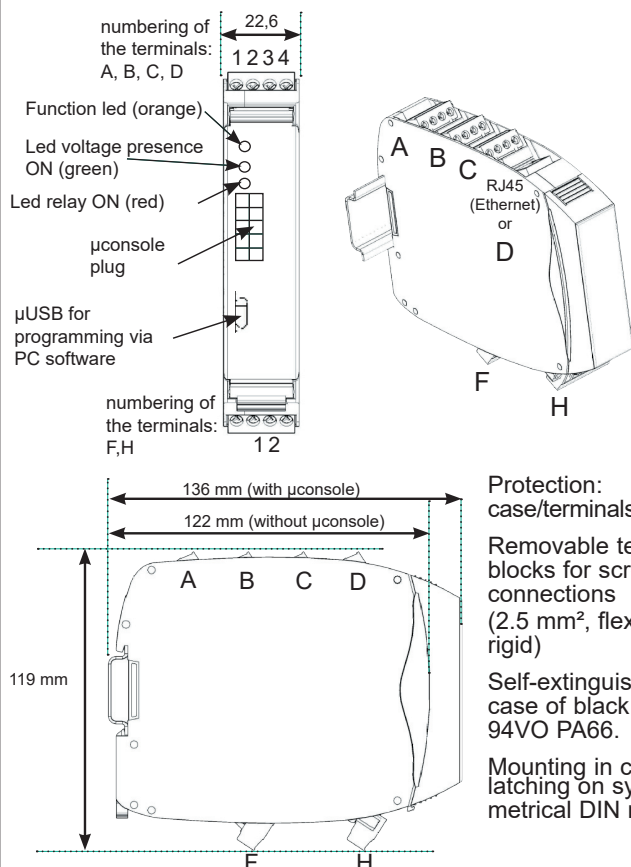
Relay outputs



RS485 output



Dimensions



The friendly interface

CA
CO154

TRANSMITTER

Technical features

Inputs

• Voltage

4 programmable ranges:
- 60V L-N / 100V L-L
- 110V L-N / 190V L-L
- 250V L-N / 440V L-L
- 350V L-N / 600V L-L

• Current

2 programmable ranges: 1 & 5A (with automatic switching of the internal calibers)

Measurable oversteppings 1.2 In; 1.2 Un

Overload permanent: 750 V, 2 In
during 10 s: 1000 V, 10 In

Power consumptions voltage input: 1.5 MΩ resistances
current input: < 0.2 VA

Test voltage 3 kV / 50 Hz / 1 min.

Frequency 10...50...65 Hz (other frequencies: consult)

Outputs

• Analog outputs (option **A** or **2A**)

Galvanic partition 1kV (between outputs)

Output signal programmable:
0/5mA 0/10mA 0/20mA 4/20mA

Scale setting 0 to 100% of the measure range (programmable)

Admissible load up to 500Ω (20mA)

Accuracy of the card < 0.1% of the up scale

Max. residual ripple <25mV (peak to peak) on 500Ω load

Response time typical 60ms, max. <100ms (input/output)

Thermic drifts < 150 ppm/°C

• Relay outputs (option **R**)

Type of contact on potent. free contact (galvanic partition: 3KV)
output 1 NO

Rated load 5A - 250 VAC

Setting of the setpoints 0 to 100% of the measure range (programmable)

Switching hysteresis 0 to 15% of the setpoint (programmable)

Time delay 0 to 15s (programmable)

• RS485 output (option **N**)

Type 2-wire with galvanic isolation

Baud rate 4800 / 9600 / 19200 bauds

Protocole Modbus / Jbus RTU 8 bits programmable parity

Format of the data Integer 16 bits (table of the units) or 32 bits
decimal points and units fixed.

• Ethernet output (option **F**)

Protocole TCP/IP (Modbus) with galvanic isolation

Speed 10 / 100M

Connecting RJ45

Embarked web server for the reading of the measures.

• Profibus or Profinet output (option **PB** or **PN**)

Supply

Universal power supply

20...250 VAC / 21,5...250 Vdc

Power draw 6 VA max. in AC, 3.5W max. in DC

Measure

Accuracy rating

Voltages, currents: 0.2 (CEI688-1)

Measuring method

Fast simultaneous sampling of the voltage and the current. Digital calculation on 32 bits. Measurement of deformed signals, pass-band 6.4KHz

Digital filtering

programmable on several levels

Wiring

With detailed manual, delivered with the instrument.

Compliance with standards

Electrical safety.....EN 61010-1

Protection class II

double isolation, voltage inputs
by protection impedance.

Environment and accuracy...IEC 61557-12

Directive EMC 2014/30/UE .. EN 61326-1

Energy counting IEC 62053-22

Pollution degree..... 2

Measure category..... CAT III 300VAC L-N

CAT II 600VAC L-N

IN/OUT test voltage 3 KVAC 50Hz 1min.

Coding

Types:

μTACv60

Options:

R 2 relay outputs

A 1 analog output

2A 2 analog outputs

N RS485 output

F Ethernet output +
embarked web server

PB Profibus output

PN Profinet output

Order example:

• For a μTACv60 with 2 relay outputs, 2 analog outputs request the reference:

μTACv60 2AR

• For a μTACv60 with 1 analog output and 2 relay outputs request the reference:

μTACv60 AR

This appliance is designed for industrial applications. It has to be installed in an electrical cabinet, or equivalent.

SFERE . Société Française d'Etudes et de Réalisations Electroniques

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