DC VOLTAGE MEASUREMENT TRANSDUCER ATUcaP

DESCRIPTION

ATUcaP transducer measures DC voltage and outputs a proportional dc analogue current or voltage. The analogue output is isolated from the input signal. The transducer is locally supplied with an isolated universal power supply.

This transducer incorporates communications ports RS485 and USB, for configuration and data reading.

SAFETY INDICATIONS

Before installing the transducer read this instruction manual completely.

- Serious injury, or fire hazard could result from improper connection of this instrument. Installation and mounting of this instrument must be performed by qualified personnel only.

- Do not connect the transducer without disconnecting mains voltage. Avoid field work unless another person can assist you
- If the equipment is handled in a way not specified by the manufacturer, the equipment's protection may be compromised.
- Do not use the transducer if its plastic case is damaged and return it to your supplier. The transducer must not be opened. No preventive maintenance is required. In case of failure it must be sent to our facilities for repair and calibration.
- Power supply and voltage input of the device have to be provided with a miniature circuit breaker to be disconnected. The fuses have to be type gl (IEC 269) or type M from 0.5 A to 2 A
- Do not use the transducer in explosive atmospheres, or in humid environments with possibility of condensation.

MOUNTING INSTRUCTIONS

This unit must be installed inside an electrical cabinet, so that the temperature and humidity do not exceed the working limits.

The plastic case is designed to be mounted in DIN rail of 35 mm x 7,5 mm. To release it from the rail, pull the clip and extract the transducer from the rail.

CONNECTION

The transducer is connected via screw terminals. The connection must be made according to its wiring diagram, indicated on the transducer label.

CONFIGURATION

The following parameters can be settled in the ATUcaP transducer through communication ports. When configuring through USB it is not necessary to supply the transducer, it is necessary when configuring through RS485

Communications:

-Baud rate and MODBUS Identity.

Input:

-Input connection up to 100 or 600V.

Output:

-Initial and final values of analogue output expressed as percentages of nominal input.

-Inflection points for kin ked.

-Allowed overrange 100%, 120%, 150% or hardware default. For 150% specific hardware is required.

For transducer setting it is available the software tool **"ATIcaP ATUcaP"** and the **"USER MANUAL ATIcaP_ATUcaP.pdf",** both in "www.saci.es"

Factory configuration is:

Io: 4..20 mA. 0..100% Un.

Serial ports: ID = 1; baud rate 9600.

With the transducer we attach a sticker for recording modifications of configuration.

TECHNICAL FEATURES:

GENERALS:

Accuracy	0.2
Isolation	3.7 kV, 50Hz 1 min.
Installation category	III 300.
Pollution degree	2
Protection	IP51, IK08
Reference temperature:	23ºC± 1ºC
Operating:	-10..55º C
Storage:	-30..70º C

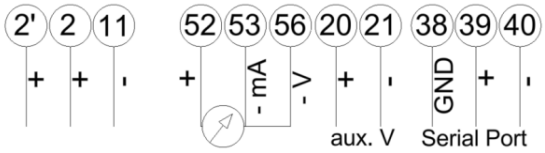
STANDARD INPUT
0-100 V or 0-600 V (two inputs).
Burden: < Un x 0.5 mA

ANALOGUE OUTPUT
Zero and Span values and overrange settable.
Isolated from signal input, power supply, RS485 port and USB port.
Standard values
Current output: 4..20 mA and 0..5 Ma
Other values under request.
Burden:
Ro (kΩ) = 12 / Io (mA) Max. For mA.
Ro (kΩ) = Vo / 25 mA Min. For V.
Saturation limit: <25 mA
Maximum voltage on open circuit 16 V

SERIAL PORT
RS485 and USB serial port (isolated from each other and from power supply and analogue output)
MODBUS/RTU protocol.
Settable parameters through serial port:
MODBUS Identity, default 1
Baud rate, 2400, 4800 or 9600, default 9600.
Selection of input connection.
Analog output configuration.

AUXILIARY SUPPLY:
Universal power supply
Voltage: 40..275 V ~ ac dc. 50–60 Hz
Burden: 1.37..2.2 VA. 0.63..1W.

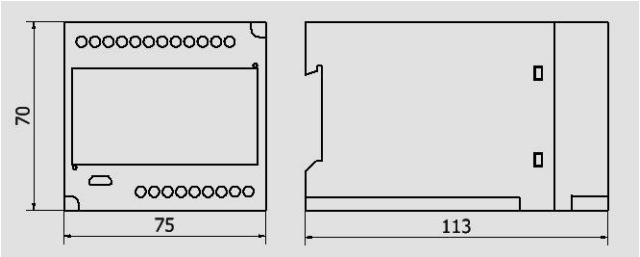
CONNECTION DIAGRAM



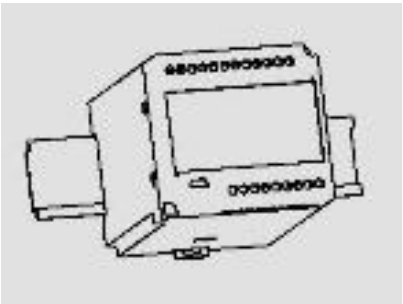
USB port in front of transducer.

DIMENSIONS

High:	70 mm.
Width:	75 mm.
Depth:	113 mm.
Wire diameter:	up to 2.5 mm



DIN RAIL INSTALLATION



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