

DC CURRENT MEASUREMENT TRANSDUCER ATIcaP

DESCRIPTION

ATIcaP transducer measures DC voltage from a shunt 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. For a real reading of the measured value, it can be configured the rated current value of the shunt.

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 ATIcaP 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 60 mV.

-Rated value of shunt

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:

Adjust: Un:60 mV. 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:	23°C± 1°C
Operating:	-10..55° C
Storage:	-30..70° C

STANDARD INPUT

60 mV.

Burden: In x 60 mV

ANALOG OUTPUT

Zero and Span values and overrange settable.

Isolated from signal input, power supply and RS485 port.

Standard values

Current output: 4..20 mA and 0..5 mA

Maximum load: 12 V / I_o Ω

Voltage: 0..10 V

Minimum load: 4 kΩ

Saturation limit: <25 mA

Open circuit maximum voltage 16 V

SERIAL PORT

RS485 and USB serial port (isolated from each other and from the power supply and measurement current)

MODBUS/RTU protocol.

Settable parameters through serial port:

MODBUS Identity, default 1

Baud rate, 2400, 4800 or 9600, default 9600.

Nominal secondary voltage.

Rated shunt value, for serial port reading.

Analogue output configuration.

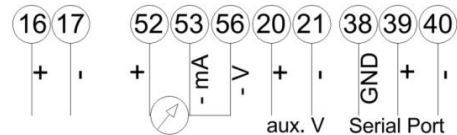
AUXILIARY SUPPLY:

Universal power supply

Voltage: 40..275 V $\overline{\sim}$ ac dc. 50-60 Hz

Burden: 1.37..2.2 VA. 0.63..1W.

CONNECTION DIAGRAM



USB port in front of transducer.

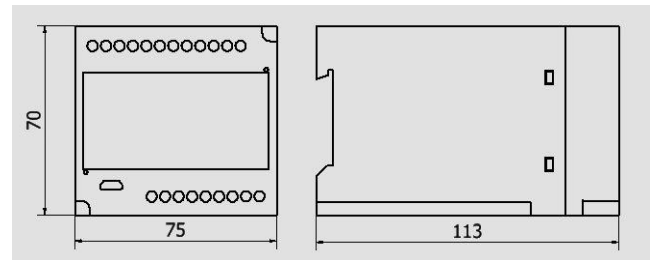
DIMENSIONS

High: 70 mm.

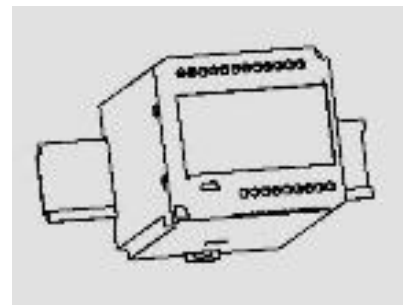
Width: 75 mm.

Depth: 113 mm.

Wire diameter: up to 2.5 mm



DIN RAIL INSTALLATION



S.A. DE CONSTRUCCIONES INDUSTRIALES

C/ Aragoneses, 15. 28108 Alcobendas. Madrid. España

Tel.: 34 91 - 519.02.45 Fax. : 34 91 416.96.46

<http://www.saci.es>

email : saci@saci.es



SACI can modify this manual without previous notice..