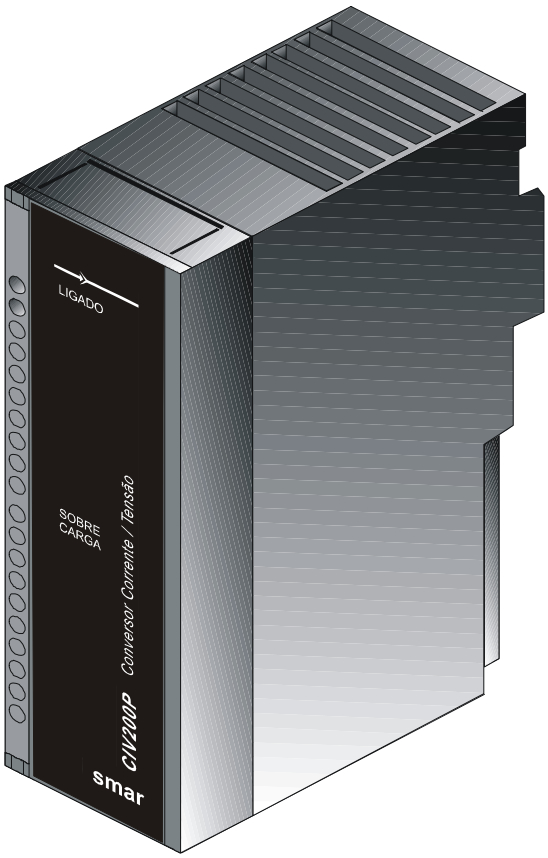
CIV200P

smar
FIRST IN FIELDBUS

INSTALLATION MANUAL

CURRENT / VOLTAGE CONVERTER



DEC / 03

CIV200P

CI V200PME

smar

www.smar.com

Specifications and information are subject to change without notice.
Up-to-date address information is available on our website.

web: www.smar.com/contactus.asp

Chapter 1

Functional Description

The **CIV200P** is a current/voltage converter, non-insulated. It converts a 4-20 mA current into a voltage output, which range is determined by an internal jumper selection. An adjustable resistor can be used as input, in manual mode, to generate the voltage output.

Technical Characteristics

Electrical Characteristics

Power Supply
The **CIV200P** Power supply is configurable. Can be 110 / 220 Vac selectable by an internal board jumper. (See Figure 1.1).

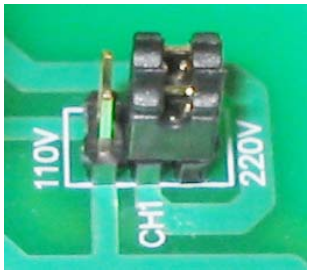


Figure 1.1 – Power Supply Configuration Jumper

The maximum power consumption (maximum current) is 150 mA.

Input
The input can be selected by AUTO / MANUAL mode.
The AUTO / MANUAL mode selection is done by an external jumper. (See Figure 1.2).

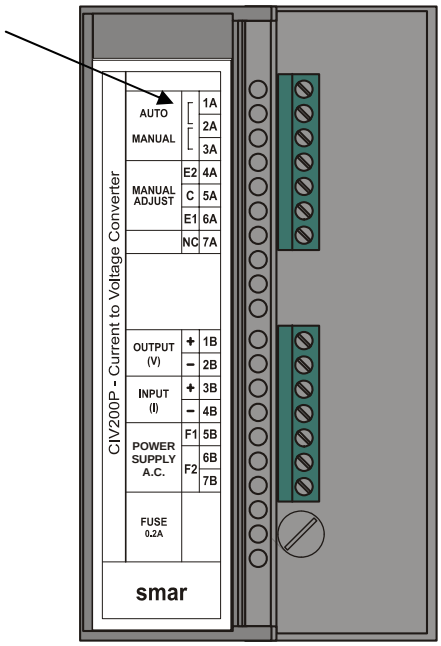


Figure 1.2 - AUTO / MANUAL Mode Selection

If the **CIV200P** is used in Automatic mode, it can generate an output ranging from 4 to 20 mA.

Operating in Manual mode, the input value is configurable by a **5 kΩ** adjustable resistor (potentiometer), connected to the terminals.

The potentiometer has to be connected as showed below. (See Figure 1.3).

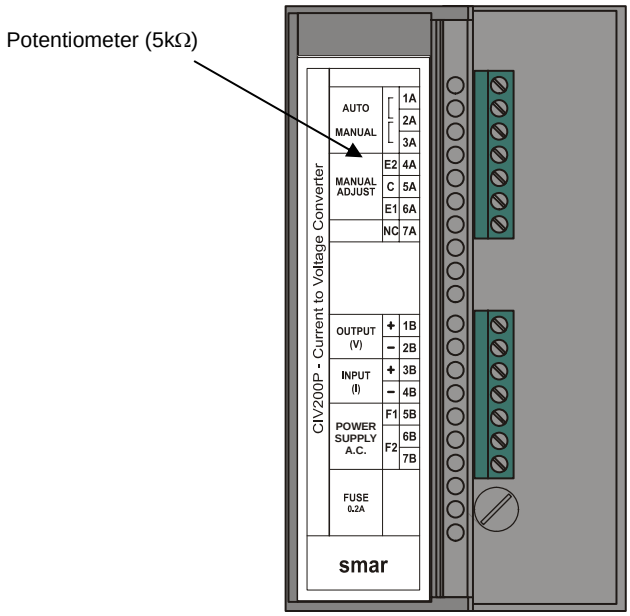


Figure 1.3 – MANUAL Adjustment

Output
The **CIV200P** output can be selected via "jump". (See Figure 1.4). The following output configurations are possible:

- 0-9 Vcc
- 0-10 Vcc
- 0-12 Vcc
- 0-15 Vcc
- 0-20 Vcc

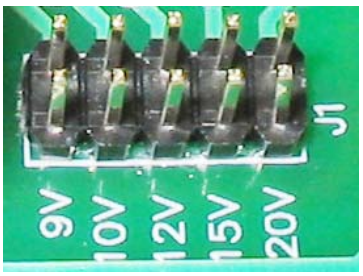


Figure 1.4 – Output Selection Jumpers

In special case, **CIV200P** can work without voltage output option. This case is valid when the converter is used as an Automatic / Manual station. Specifically, in this case, the configuration jumpers inside the module have no functionality and the converter must be configured in factory according to the client specification.

The precision offered by **CIV200P** is 0.25% of span.

Environmental conditions

Operation environmental conditions: 0 °C to 50 °C

Security characteristics

CIV200P presents some security mechanisms. **CIV200P** has a 0.2A protection fuse at power supply input.

There are two indicative leds. The first led (green light) is indicator of module activation (power-on). The second one (red light), overload indicator. (See Figure 1.5).

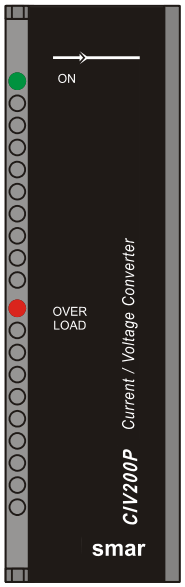


Figure 1.5 – Indicative Leds

Dimensional Drawing

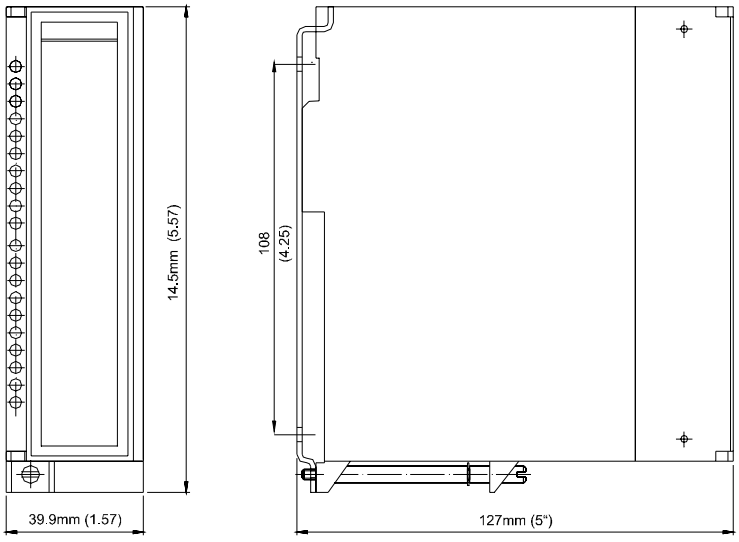


Figure 1.6 – Dimensional Drawing

Dimensions are in mm (in).

Appendix A

smar	SRF – Service Request Form	
	CIV200P	**Proposal Nº:**

COMPANY INFORMATION

Company:

Unit/Department:

Invoice:

COMMERCIAL CONTACT

Full Name:
Phone: _____ _____ _____ _____ **Fax:** _____
Email: _____

TECHNICAL CONTACT

Full Name: _____
Phone: _____ _____ _____ _____ **Extension:** _____
Email: _____

EQUIPMENT DATA

Model: _____
Serial Number: _____

PROCESS DATA

Process Type: _____
Operation Time: _____
Failure Date: _____

FAILURE DESCRIPTION

(Please, describe the observed behavior, if it is repetitive, how it reproduces, etc.)

_____
_____
_____
_____

OBSERVATIONS

_____
_____
_____

USER INFORMATION

Company: _____
Contact: _____
Title: _____
Section: _____
Phone: _____ _____ _____ _____ **Extension:** _____
E-mail: _____ **Date:** _____/ _____/ _____

For warranty or non-warranty repair, please contact your representative.
Further information about address and contacts can be found on www.smar.com/contactus.asp.

SMAR WARRANTY CERTIFICATE

1. SMAR guarantees its products for a period of 24 (twenty four) months, starting on the day of issuance of the invoice. The guarantee is valid regardless of the day that the product was installed.

2. SMAR products are guaranteed against any defect originating from manufacturing, mounting, whether of a material or manpower nature, provided that the technical analysis reveals the existence of a quality failure liable to be classified under the meaning of the word, duly verified by the technical team within the warranty terms.

3. Exceptions are proven cases of inappropriate use, wrong handling or lack of basic maintenance compliant to the equipment manual provisions. SMAR does not guarantee any defect or damage caused by an uncontrolled situation, including but not limited to negligence, user imprudence or negligence, natural forces, wars or civil unrest, accidents, inadequate transportation or packaging due to the user's responsibility, defects caused by fire, theft or stray shipment, improper electric voltage or power source connection, electric surges, violations, modifications not described on the instructions manual, and/or if the serial number was altered or removed, substitution of parts, adjustments or repairs carried out by non-authorized personnel; inappropriate product use and/or application that cause corrosion, risks or deformation on the product, damages on parts or components, inadequate cleaning with incompatible chemical products, solvent and abrasive products incompatible with construction materials, chemical or electrolytic influences, parts and components susceptible to decay from regular use, use of equipment beyond operational limits (temperature, humidity, etc.) according to the instructions manual. In addition, this Warranty Certificate excludes expenses with transportation, freight, insurance, all of which are the customer's responsibility.

4. For warranty or non-warranty repair, please contact your representative.

   Further information about address and contacts can be found on www.smar.com/contactus.asp

5. In cases needing technical assistance at the customer's facilities during the warranty period, the hours effectively worked will not be billed, although SMAR shall be reimbursed from the service technician's transportation, meals and lodging expenses, as well dismounting/mounting costs, if any.

6. The repair and/or substitution of defective parts do not extend, under any circumstance, the original warranty term, unless this extension is granted and communicated in writing by SMAR.

7. No Collaborator, Representative or any third party has the right, on SMAR's behalf, to grant warranty or assume some responsibility for SMAR products. If any warranty would be granted or assumed without SMAR's written consent, it will be declared void beforehand.

8. Cases of Extended Warranty acquisition must be negotiated with and documented by SMAR.

9. If necessary to return the equipment or product for repair or analysis, contact us.
   See item 4.

10. In cases of repair or analysis, the customer must fill out the Revision Requisition Form (FSR) included in the instructions manual, which contains details on the failure observed on the field, the circumstances it occurred, in addition to information on the installation site and process conditions. Equipments and products excluded from the warranty clauses must be approved by the client prior to the service execution.

11. In cases of repairs, the client shall be responsible for the proper product packaging and SMAR will not cover any damage occurred in shipment.

12. In cases of repairs under warranty, recall or outside warranty, the client is responsible for the correct packaging and packing and SMAR shall not cover any damage caused during transportation. Service expenses or any costs related to installing and uninstalling the product are the client´s sole responsibility and SMAR does not assume any accountability before the buyer.

13. It is the customer's responsibility to clean and decontaminate products and accessories prior to shipping them for repair, and SMAR and its dealer reserve themselves the right to refuse the service in cases not compliant to those conditions. It is the customer's responsibility to tell SMAR and its dealer when the product was utilized in applications that contaminate the equipment with harmful products during its handling and repair. Any other damages, consequences, indemnity claims, expenses and other costs caused by the lack of decontamination will be attributed to the client. Kindly, fill out the Declaration of Decontamination prior to shipping products to SMAR or its dealers, which can be accessed at www.smar.com/doc/declarationofcontamination.pdf and include in the packaging.

14. This warranty certificate is valid only when accompanying the purchase invoice.