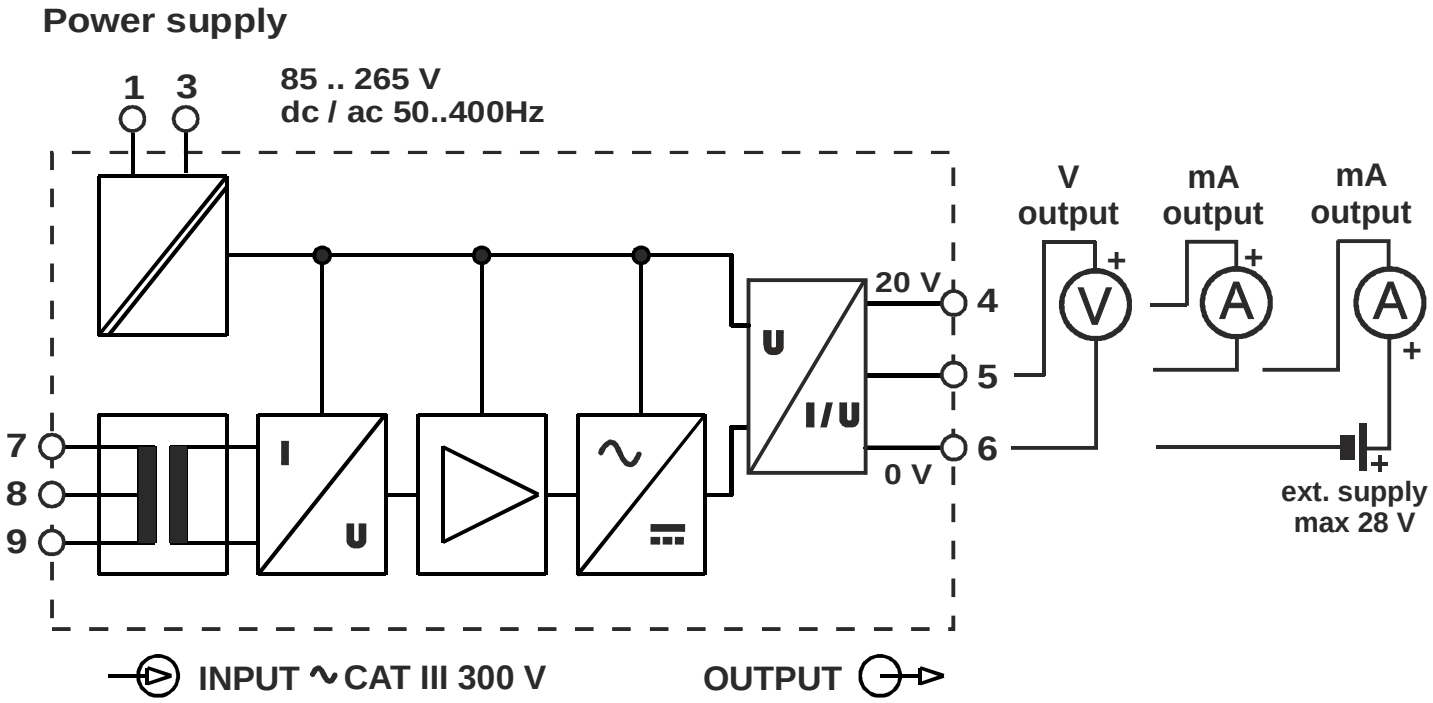
Z201-H
Ac CURRENT TRANSMITTER

GENERAL SPECIFICATIONS

The Z201-H current converter measures the simple harmonic alternating current applied at the input point and generates a standard mA or V signal directly proportional to the current measured.

- 5 or 10 Aac f.s. current input.
- 0..20 mA or 4..20 mA output with active or passive connection; 0/2..10 V_{dc} or 0/1..5 V_{dc} settable by internal jumper and dip-switch.
- High class precision: 0.3.
- Power supply presence indication on front panel.
- 3-point insulation: 4000 Vac between power supply / input and output ports.

BLOCK DIAGRAM



TECHNICAL SPECIFICATIONS

Power Supply Specifications

Power Supply:	85..265 Vac or ac from 50 to 400Hz; Insulation towards input / output ports: 4000 Vac.
Consumption:	< 2 W at full load; < 20 mA @ 230 Vac.

Input Specifications

Current Input:	Alternate Current: 0..5 Aac or 0..10 Aac, selectable by terminals.

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Frequency	20 Hz..1 kHz.
Insulation:	4000 Vac towards power supply / output ports.
Overvoltage measurement Class:	CAT III 300 V, for installation on 3-phase lines up to 500 Vac f-f, 300 Vac f-n.

Output Specifications

Current Output:	Active or passive: 0..20 mA or 4..20 mA selectable by internal Jumper and DIP-switch. Maximum load resistance : 600 Ω. Protection : 400 W/ms. Available Voltage: < 21 V. Maximum applicable external voltage (if passive output): 28 V. Insulation towards power supply / input ports: 4000 Vac.
Voltage Output:	Continuos Voltage: 0..5 V, 1..5 V, 0..10 V or 2..10 V selectable by internal Jumper and DIP-switch. Minumum load resistance: 2500 Ω. Protection : 400 W/ms. Insulation towards power supply / input ports: 4000 Vac.

Precision Specifications

Precision @ 25ºC (1)			***Other* (2)**
20..400 Hz (3)	0.2 % om	0.1 % ots	< 0.1 % ots
400..1000 Hz (3)	0.4 % om	0.2 % ots	< 0.1 % ots
Thermal Stability:	200 ppm/K.		

Other Specifications

Response Time:	For a stepped variation: max 100 ms from 10 to 90 %.
Operating conditions:	Temperature: -10..65°C, humidy 30..95 % @ 40°C not-condensing. Group III. Storage Temperature : -20..85 °C. Altitude: up to 2000 m a.s.l.
LED signalling:	Presence of power supply (green).
Protection degree:	IP20.
Weight, Dimensions:	140 g, 100 x 112 x 17.5 mm.
Standards: CE	EN60688/1997 + A1 + A2. EN61000-6-4/2002-10 (electromagnetic emission, industrial environment). EN61000-6-2/2006-10 (electromagnetic immunity, industrial environment). EN61010-1/2001 (safety).

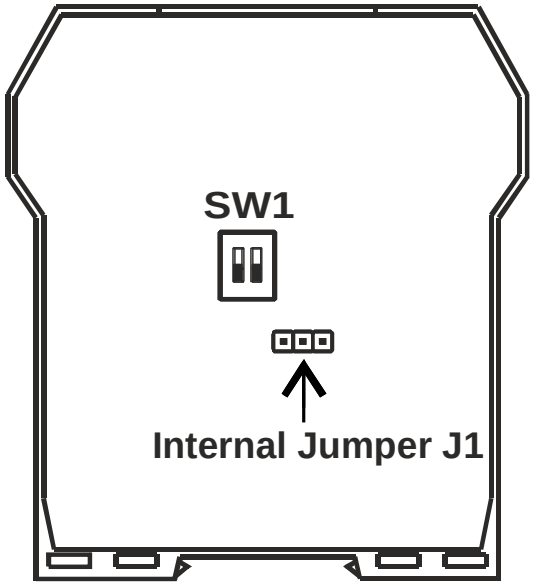
(1): These acronyms apply: om = of measurement, ots = of the scale.
(2): Error caused by electromagnetic disturbances (EMI).
(3): The precision values are indicated for a sinusoidal signal with distortion of < 1%, on current reading 4..20 mA; errors on the other output scales are increased as follows: by 0.1 % for zero offset (0 mA, 0 V), by 0.1 % on fs 5 V and by 0.15 % on fs 10 V.
The precision indicated in the table can, on request, be provided on another specified scale.
Remember that the instrument indicates the average adjusted value in relation to the RMS value.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

INSTALLATION RULES

The module is designed to be installed on a DIN 46277 guide, and wired only by front terminals.
We suggest you to install the instrument vertically in order to arrange the ventilation of the module and pay attention to do not fit any objects or canals that can obstruct its ventilation louvers. Avoid fitting modules above equipment that generates heat; you are advised to fit them at the bottom of the panel or on the enclosing compartment.

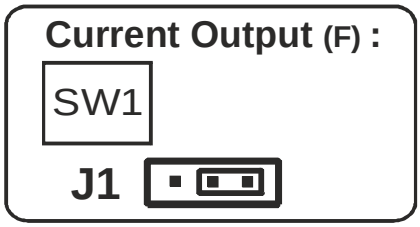
DIP-SWITCH AND INTERNAL JUMPER POSITION

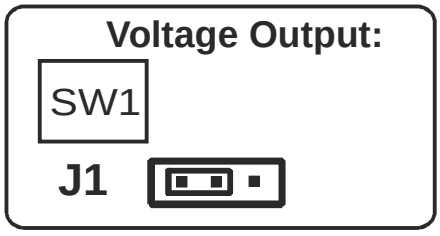


OUTPUT SIGNAL SETTINGS

The Z201-H instrument transmits a voltage or a current signal.
The internal Jumper, accessible under the rear side of the the case, allows to select the type of the output (voltage or current).
The signal ranges instead can be set through the double DIP-switch SW1.

Current or Voltage Output Selection





(F) : Factory settings.

Output Range Settings

Switch 1	*Position*	*Effect*
SW 1.**1**	0 - OFF	The full scale of the voltage output is **5 V**.
	1 - ON (F)	The full scale of the voltage output is **10 V**.
SW 1.**2**	0 - OFF	The start of scale offset is disabled (**0**..20 mA**, 0**..5/10 V scale).
	1 - ON (F)	The start of scale offset is enabled (**4**..20 mA, **1**..5 o **2**..10 V

(F) : Factory settings.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

ELECTRICAL CONNECTIONS

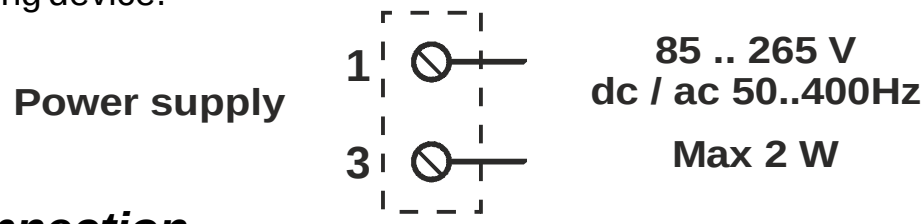
We recommend using shielded cables for signal connections; the shield must be connected to a preferential earth connection for instrumentation. We also recommend never positioning these wires near power installation cables such as those for inverters, motors, or induction ovens, etc.

Power Supply Connection

The power supply voltage must be in the range of 85..265 Vac\Vdc.

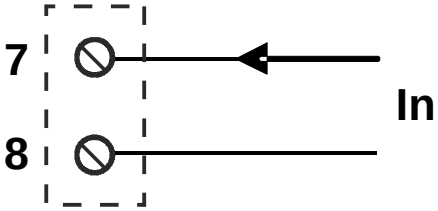
The upper limits must not be exceeded as this can seriously damage the module.

The power supply source must be protected from any failures in the module by means of a suitable limiting device.

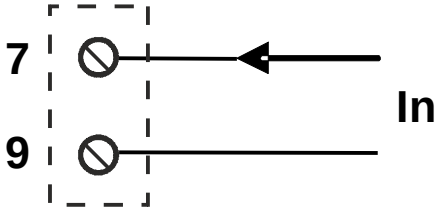


Input Connection

Input for In < 10 A



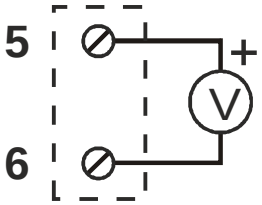
Input for In < 5 A



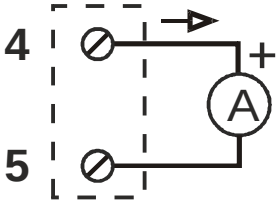
When connected to a transformer, one of the two wires must be grounded.

Output Connection

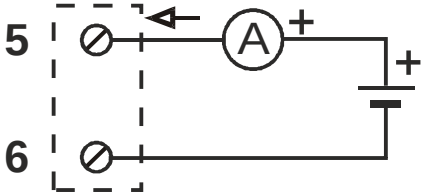
Voltage



Applied Current



External Power Supply



Disposal of Electrical & Electronic Equipment (Applicable throughout the European Union and other European countries with separate collection programs)

This symbol, found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources. For more detailed information about the recycling of this product, please contact your local city office, waste disposal service or thè retail store where you purchased this product.

This document is property of SENECA srl. Duplication and reprodution are forbidden, if not authorized. Contents of the present documentation refers to products and technologies described in it. All technical data contained in the document may be modified without prior notice Content of this documentation is subject to periodical revision.

CERTIFICATE N. 9115.SENE - REGISTRATION NUMBER IT-827
azienda con sistema di gestione per la qualità certificato
ISO 9001:2008

SENECA s.r.l.
Via Austria, 26 - 35127 - PADOVA - ITALY
Tel. +39.049.8705355 - 8705359 - Fax +39.049.8706287
e-mail: info@seneca.it - www.seneca.it

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000