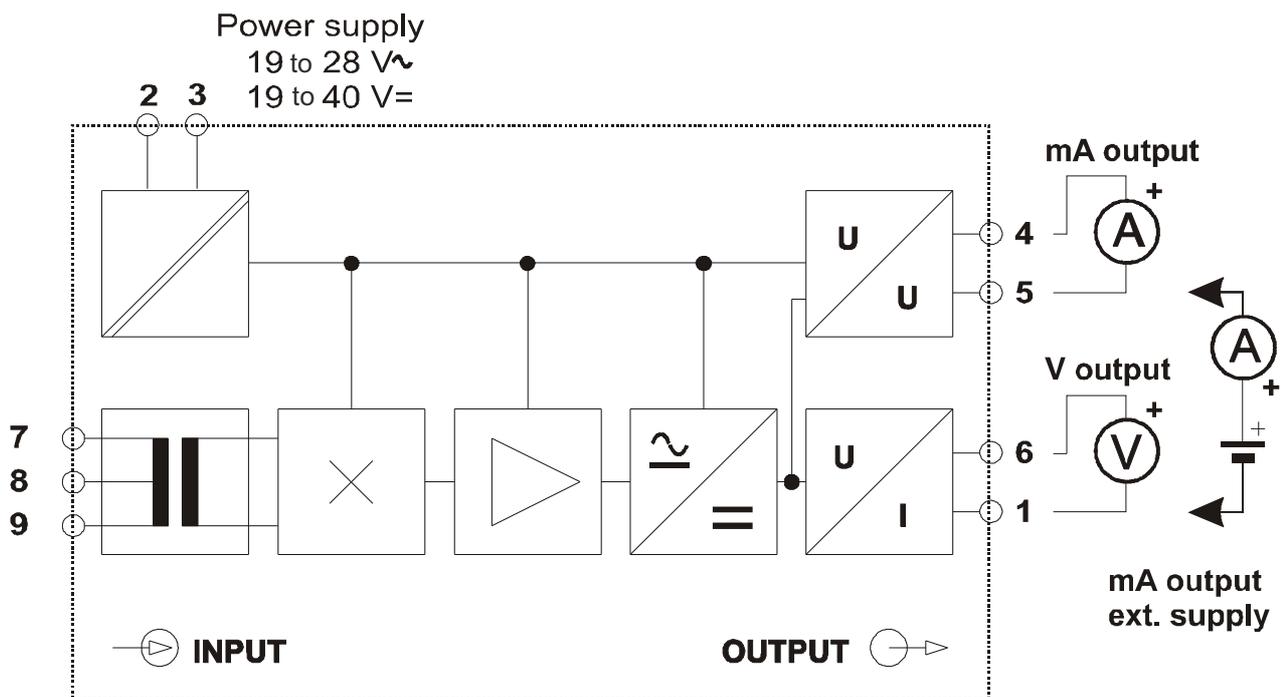


GENERAL SPECIFICATIONS

The Z201 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 AAC or 10 AAC full scale current input.
- 0-20 mA or 4-20 mA output with active or passive connection; 0-10 VDC, 2-10 VDC, 0-5 VDC, or 1-5 VDC settable by dip-switch.
- High conversion precision: 0.3% FS starting from 10% of the scale. Power supply presence indication on front panel.
- 3-way isolation: 1500 VAC between power supply and output;
- 3700 VAC between input and power supply/output.

BLOCK DIAGRAM



TECHNICAL SPECIFICATIONS

Power supply:	19-40 VDC, 19-28 VAC 50-60 Hz, max 2.5W			
Input:	Current: 0-5 AAC or 0-10 AAC via terminal selection Isolation 3700 VAC			
Output:	Current 0-20 or 4-20 mA, maximum load 600 Ohms; Voltage 0-10 or 0-5V DC, 2-10 or 1-5 VDC. Minimum load 2500 Ohms.			
Ambient conditions:	Temperature: 0-55°C, Min. humidity: 30%, max 90% at 40°C non-condensing (see installation section).			
Errors regard field of input measurement and with input > 10% of the scale.	Calibration error	Thermal coefficient	Linearity error	Other
20-400 Hz simple harmonic	0.3%	0.02%/°C	0.1%	1% max for EMC
400-1000 Hz simple harm.	0.5%	0.02%/°C	0.2%	1% max for EMC
Response time:	< 200 ms			
Permissible overload:	12 A continuous, 30 A for 1 sec.			
Power supply/output protection:	Impulse voltage overload 400W/ms.			
Insulation class:	III, can be used on a three-phase system of up to 500 VAC phase-phase, 300 VAC phase-ground.			
Standards:	<p>The instrument complies with the following standards: EN50081-2 (electromagnetic emission, industrial environment) EN50082-2 (electromagnetic immunity, industrial environment) EN61010-1 (safety) All low-voltage circuits must be provided with double insulation protection against high voltage circuits. The power supply transformer must comply with EN60742 standards for isolation transformers and safety transformers</p>			



INSTALLATION

The module has been designed for vertical installation on a DIN 46277 rail.

For optimal operation and long life, adequate ventilation must be provided for the module(s), which must be positioned vertically. Avoid positioning wiring channels or other objects nearby that obstruct the ventilation louvers.

Avoid installing modules above equipment that generates heat; you are advised to install modules near the bottom of the panel.

HARSH OPERATING CONDITIONS:

The following constitute harsh operating conditions:

- *High power supply voltage (> 30 VDC / > 26 VAC).*

When the modules are fitted side by side it may be **necessary to separate them by at least 5 mm** in the following cases:

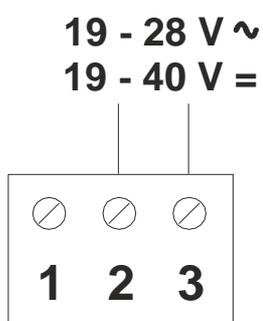
- Panel temperature above 45°C in at least one of the above harsh operating conditions.

ELECTRICAL CONNECTIONS

We recommend using shielded cables for signal connections; the shield must be connected to a instrumentation earth connection.

We also recommend never positioning signal wires near power cables such as those for inverters, motors, or induction ovens, etc.

POWER SUPPLY



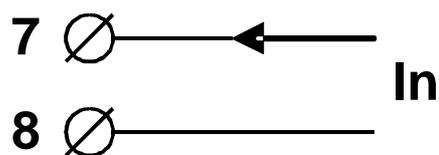
The power supply voltage must be in the range of 19 to 40 VDC (any polarity or 19 and 28 VAC; also see ***INSTALLATION*** section.

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

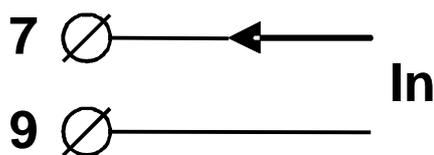
The power supply source must be protected from any failures in the module by means of a suitably sized fuse.

INPUT

Input for $I_n < 10\text{ A}$



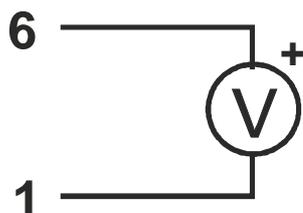
Input for $I_n < 5\text{ A}$



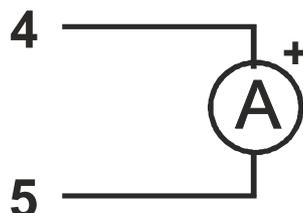
When connected to a current transformer, one of the two wires must be grounded.

OUTPUT

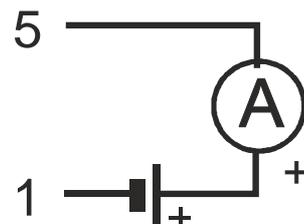
Voltage



Applied current



External power supply



OUTPUT SIGNAL PRE-SETTING

Pre-set the dip-switches on the side of the instrument marked "SW1" as shown in the figure below:

1 2 3 4



0-20 mA



4-20 mA



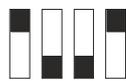
0-5 V



1-5 V



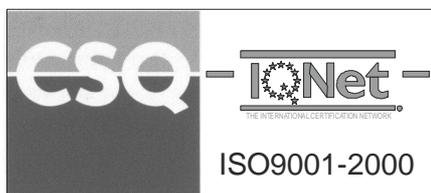
0-10 V



2-10 V

Key: \uparrow ON

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