

CURRENT AND VOLTAGE TRANSDUCERS

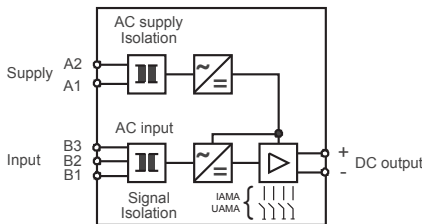
Type: IAMA, UAMA
IAMB, UAMB

FEATURES

- **Standard dual range. Current: 1A and 5A or Voltage: 250V and 500V**
- **All ranges class 0.5 according to EN60688. Class 0.2 on request**
- **8 outputs available on IAMA and UAMA**
- **Isolation > 4kV. Input, output and supply.**
- **All standard AC voltages for power supply. Combined AC and DC supply as option**
- **Version with plug-in supply modules for easy stocking**

FUNCTION DIAGRAM

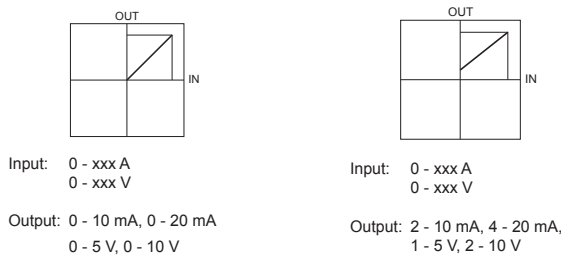
AC Supply



Standard range B1-B2/B3 IAMx 0-1A/5A
B1-B2/B3 UAMx 0-250V/500V

Other ranges B1-B3 IAMx 0-0.5 to 10A
B1-B3 UAMx 0-10V/500V

OUTPUT CHARACTERISTICS



Description:

The transducers type IAMA for current and UAMA for voltage are developed to meet high demands for quality and by offering 8 selectable outputs it covers a broad range of applications. IAMB and UAMB are reduced versions with 4 to 20mA output only.

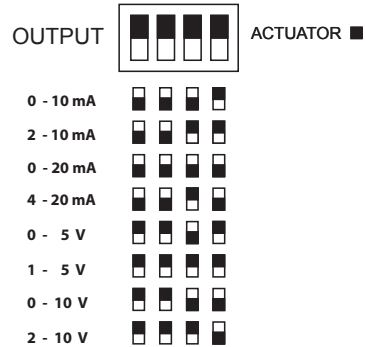
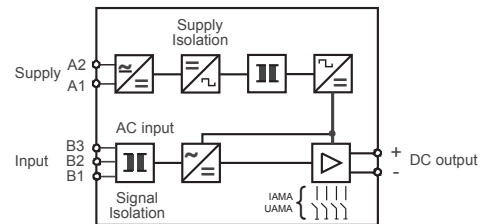
Operation:

The input current or voltage is, by means of a high-grade transformer (class 0.2) with an isolation voltage of more than 4kV, galvanic isolated from the transducer circuitry and the output. After the transformer the measured signal is rectified, averaged and corresponding to the DIP-switch settings, converted to the required current or voltage output signal.

Application:

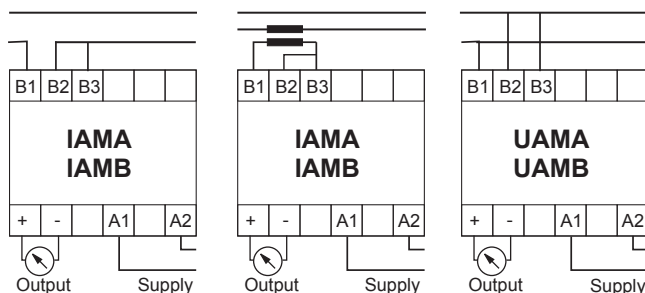
PLC, PC and microprocessor controlled Instrumentation.

AC/DC Supply

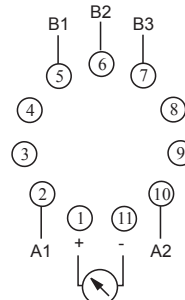


CONNECTION DIAGRAM

Rail mounting



Socket mounting



SPECIFICATIONS

INPUT IAMA, IAMB

AC current	
Nominal input I_N	Specify from 0,5 to 10 A
Max. continuous input	$1,5 \times I_N$ or max. 10 A
	$20 \times I_N$ in 1 sec.
Input resistance approx.	$0,05 W / I_N$
AC frequency range	45 to 65 Hz

INPUT UAMA, UAMB

AC voltage	
Nominal input V_N	Specify from 10 to 600 V
Max. continuous input	$40 \sqrt{U_N}$ V rms. $10 V < U_N < 300 V$
	$720 V$ rms. $U_N > 300 V$
	2 K W / V
Input resistance approx.	
AC frequency range	45 to 65 Hz

PERFORMANCE PARAMETERS

TIMING	
Response time	< 200 msec. 0-90% or 100-10%
ELECTRICAL	
Precision	Class 0.5
Linearity	< 0.2 %
Supply dependence	< $\pm 0,01 \% / \% \Delta U$ supply
Temp. dependence	< $\pm 0,01 \% / ^\circ C$
Ripple	< 1 % pp

OUTPUT

The output amplifier is protected against open and short circuit.

SUPPLY

AC and DC	18-360 VDC and 20-264 VAC
With isolated switchmode supply	
AC Supply	
Transformer supply	24, 48, 110, 230, 400, 460 V
Voltage range	- 20 % to + 20 %
Frequency range	45 to 440 Hz
Power consumption	4 VA, 3 W

GENERAL

Temperature range	- 25 °C to + 55 °C
Humidity	Up to 90 % RH non-condensing
Dielectric test voltage	Input to output 4000 VAC
	Input to supply (internal) 4000 VAC
	Output to supply (internal) 4000 VAC
Weight	0.20 kg with internal supply
	0.10 kg with plug-in supply module



EMC directive 89/336:

International Standards

EN50081 - Emission

EN50082 - Immunity

Low voltage directive 73/23:

EN60255 - Electrical Relays

EN60688 - Measuring transducers

ORDERING INFORMATION

EXAMPLE:

TYPE

Current measuring transducer

Voltage measuring transducer

CURRENT RANGE - IAMA & IAMB

Standard 0 - 1A & 0 - 5 A

Specified current xxxY
 Y = Multiplier 0 = x 1,0
 9 = x 0,1

e.g. 0 - 1,5 A
 e.g. 0 - 500mA

VOLTAGE RANGE - UAMA & UAMB

Standard 0 - 250 V & 0 - 500 V

Specified Voltage xxxY
 Y = Multiplier2= x 100
 1= x 10

e.g. 0 - 150 V
 e.g. 0 - 60V

SUPPLY VOLTAGE

18-360 VDC and 20-264 VAC
 19,2-28,8 VAC
 38,4-57,6 VAC
 88-132 VAC
 184-276 VAC
 342-484 VAC
 368-552 VAC

ADJUSTMENT

Input offset & gain fixed

HOUSING

Rail mounting with internal supply
 Socket 11 pin with internal supply

SIZE

35 mm.

CODE

Code end
 Extended code

