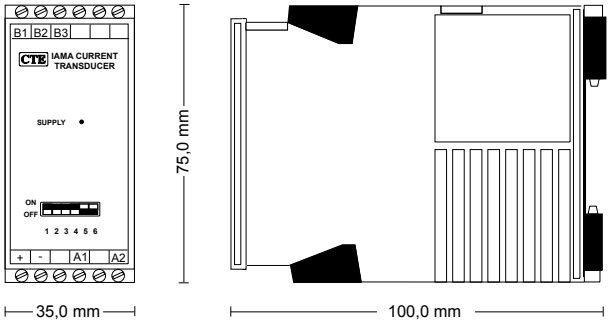


CURRENT AND VOLTAGE TRANSDUCERS

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**

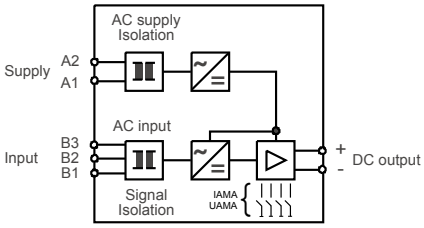
Description:
The transducers type IAMA for current and UAMA for voltage are developed to meet high demands for quality and by offering 8 selectable outputs it covers a broad range of applications. IAMB and UAMB are reduced versions with 4 to 20mA output only.

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.

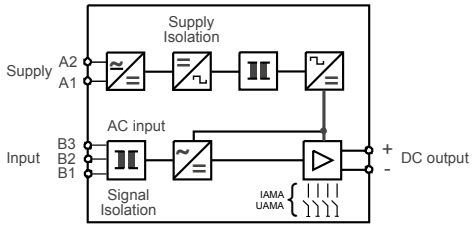
Application:
PLC, PC and microprocessor controlled Instrumentation.

FUNCTION DIAGRAM

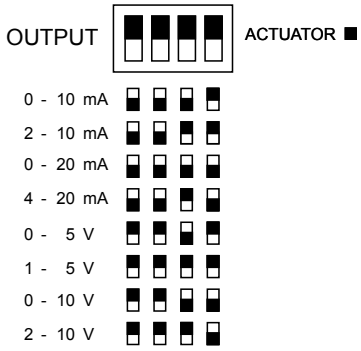
AC Supply



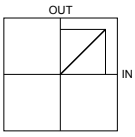
AC/DC Supply



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

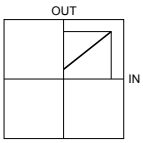


OUTPUT CHARACTERISTICS



Input: 0 - xxx A
0 - xxx V

Output: 0 - 10 mA, 0 - 20 mA
0 - 5 V, 0 - 10 V

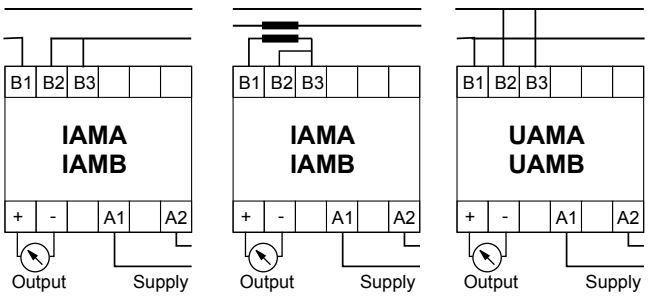


Input: 0 - xxx A
0 - xxx V

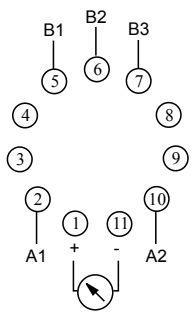
Output: 2 - 10 mA, 4 - 20 mA,
1 - 5 V, 2 - 10 V

CONNECTION DIAGRAM

Rail mounting



Socket mounting



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2730 Herlev - Denmark
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Webshop: shop.thiim.com

SPECIFICATIONS

INPUT IAMA, IAMB AC current
- Nominal input I_N — Specify from 0,5 to 10 A
- Max. continuous input — 1,5 x I_N or max. 10 A; 20 x I_N in 1 sec.
- Input resistance approx. — 0.05 W / I_R
- 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
- Input resistance approx. — 2 K W / V
- 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 — < ± 0.01 % / % ΔU supply
- Temp. dependence — < ± 0.01 % / °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

CE — International Standards
- EMC directive 89/336: — EN50081 - Emission; EN50082 - Immunity
- Low voltage directive 73/23: — EN60255 - Electrical Relays; EN60688 - Measuring transducers

ORDERING INFORMATION

EXAMPLE: IAMA 5000 E400 F A 3 C

TYPE
- Current measuring transducer — IAMA, IAMB
- Voltage measuring transducer — UAMA, UAMB

CURRENT RANGE - IAMA & IAMB
- Standard 0 - 1A & 0 - 5 A — 5000

Specified current xxxY
Y = Multiplier 0 = x 1.0; 9 = x 0.1
- e.g. 0 - 1.5 A — 1500
- e.g. 0 - 500mA — 5009

VOLTAGE RANGE - UAMA & UAMB
- Standard 0 - 250 V & 0 - 500 V — 5002

Specified Voltage xxxY
Y = Multiplier2= x 100; 1= x 10
- e.g. 0 - 150 V — 1502
- e.g. 0 - 60V — 6001

SUPPLY VOLTAGE
- 18-360 VDC and 20-264 VAC — E400
- 19,2-28,8 VAC — B024
- 38,4-57,6 VAC — B048
- 88-132 VAC — B110
- 184-276 VAC — B230
- 342-484 VAC — B400
- 368-552 VAC — B460

ADJUSTMENT
- Input offset & gain fixed — F

HOUSING
- Rail mounting with internal supply — A
- Socket 11 pin with internal supply — E

SIZE
- 35 mm. — 3

CODE
- Code end — C
- Extended code — E