

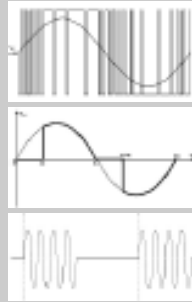
• **CAL35CA**

Measure converter for sinusoidal alternative signals (voltage or current)

• **CAL35CA/A: self-powered version**
(by measured signal)

• **CAL35 RMS (TRUE EFFECTIVE VERSION)**

*MLI, PWM
 Phase angle variation
 Wave train*



• **CAL35 TRMS**

TRMS measure (AC + DC)

• **Fully galvanic insulation**

• **Accuracy: +/- 0,5 %**



The CAL35CA measurement converter allows to transform alternative voltages or currents into a current (0 ... 4 ... 20 mA) or a voltage (0.....10 V) proportional to the input value.

FUNCTIONALITY:

Measures:

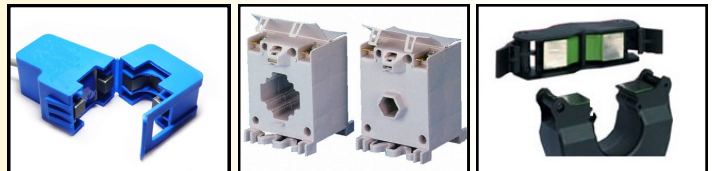
- Alternative voltages from 250 mV to 1000V.
- Alternative currents from 100uA to 5A on screw terminals
- Alternative currents from 5A to 150A on small opening CT type: Tio (frequency range, 45 to 500 Hz).

Outputs:

- Current 0...4...20 mA.
- Voltage 0...10 V.
- (Other outputs on request).

General characteristics:

- DIN rail mounting (IP20 box).
- Connecting on screw terminals 2,5 mm².
- Triple galvanic insulation (input/output/power supply).
- Standard linear or broad range switching power supply.
- Personalized measure scale at the end of fabrication.
- Start and end scale readjustment is possible by multi-turn potentiometer.
- Protection against overvoltage's or over currents.



Version and order code	
CAL35CA :	- Standard version, with linear auxiliary power supply connector not demountable - to measure sinusoidal alternative signals
CAL35CA-A:	- Self-powered by measure signal version - output type 0...10...20 mA, maximum load of 550 Ohms or 0 ..10 V,....
CAL35 RMS:	- True effective measure version (AC+DC) for all not sinusoidal or needing a broad band-pass applications (0.25Khz to 100Khz)
CAL35 TRMS:	- True effective measure (AC+DC) version for all not sinusoidal or needing a broad band-pass applications (0Hz to 500Khz)

INPUT

TYPE	VALUE
Voltage (ac)	500 V
Impedance	> 1 MOhms
Continuous overload	2 VN
Absorbed power	0.25 W
Current (ac)	5 A
Impedance	0.05 Ohms
Continuous overload	1.5 IN
Peak overload	6 IN during 3 s
Absorbed power	1.25 W
Current (ac)	1 A
Impedance	0.25 Ohms
Continuous overload	3 IN
Peak overload	6 IN during 5 s
Absorbed power	0.25 W
Current (ac)	50 A on crossing CT
Continuous overload	6 IN
Peak overload	6 IN during 5 s
Absorbed power (CAL35CA-D only)	0.25 W
Using frequency range	15 - 500 Hz (CAL35CA) 0.25hz to 100khz (CAL35RMS) Dc to 100khz (CAL35TRMS)

OUTPUT

TYPE	VALUE
Current	0... (4) ... 20 mA
Max. load	800 Ohms
Voltage	0 - 10 V
Impedance	500 Ohms
Accuracy	+/- 0.5 %
Response time	<300 ms(CAL35ca) from 5 mS to 60 S (cal35rms and Trms) according application
Residual ripple (noise)	< 30 mV

POWER SUPPLY

(to be specified at the order)

230 Vac 50-60 Hz +/- 10 %, 2.3 VA
 115 Vac 50-60 Hz +/- 10 %, 2.3 VA
 20 to 70 Vac / Vdc, 2.3 VA
 80 to 265 Vac / Vdc, 2.3 VA
 20.....265 Vac-dc (CAL35CA-D)
 9 to 30 Vdc, 2 W
 Protection against reverse polarity

RECOMMENDED OPERATING CONDITIONS

Temperature	
Operating	-10 to 60 °C
Storage	-20 to +85 °C
Influence (% of the full scale)	0.05 % / °C
Relative humidity	85 % not condensed
Weight	200 g
Vibrations holding	2 g p.t.p. at 100 Hz
Tightness	IP20
Recommended mounting direction	Vertical
Dielectric strength	1500 Vac continuous 5000 Vac (CAL35CA-D) (Inputs/Outputs)

Electromagnetic compatibility

Generic standards: **NFEN50081-2 / NFEN50082-2**



EN55011	meet	group 1 / class A		
EN61000-4-2	no influence	B	ENV50140	< +/- 5 % A
EN61000-4-4	< +/- 5 %	B	ENV50141	< +/- 10 % A
EN61000-4-5	< +/- 5 %	B	ENV50204	no influence A
EN61000-4-8	no influence	A		
EN61000-4-11	< +/- 5 %	B	DBT	73/23/CEE

WIRING AND OUTLINE DIMENSIONS:

