

**Analog conditioner for alternative current and voltage,
shunt, current transformer or Rogowski coil** **CAL35CAD**



• **CAL35CAD**

Converter for sinusoidal AC signal.

• **CAL35CAD-RMS** (True RMS version)

PWM, phase angle variation,
wave train,
and signal with high harmonics level

• **Option embedded through hole CT**

measure up to 50Aac

• **CAL35CAD-ROGO**

Input for Rogowski coil sensor up to 100 kA



The transducer CAL35CAD transforms AC voltages or currents into a standard analog output (0 ... 4 ... 20 mA or 0 ... 10 V) proportional to RMS value of input .
The use of through hole current transformers (option) or Rogowski coil sensor allows a direct measure without external transformer.

DESCRIPTION:

Measures:

- Alternative voltage from 50mV to 1000V (45 to 500 Hz frequency range)
- Alternative current from 100mA to 10A on terminal blocks (45 to 500 Hz frequency range)
- Alternative current up to 50A with through hole toroidal core current transformer. 9 mm hole diameter. (45 to 500 Hz frequency range)
- Current up to 100KA with Rogowski coil (45Hz to 65Hz frequency range or 400Hz)

Option:

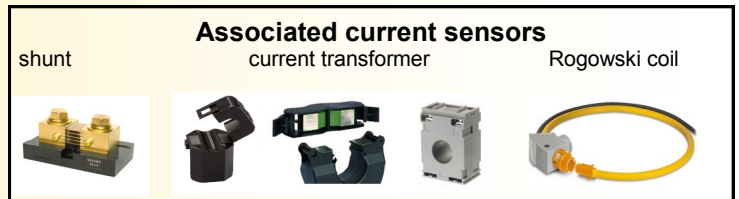
- Up to 60 seconds integration time for low wave train applications.
- Output of Instantaneous value for measure and waveform monitoring application.

Analog output:

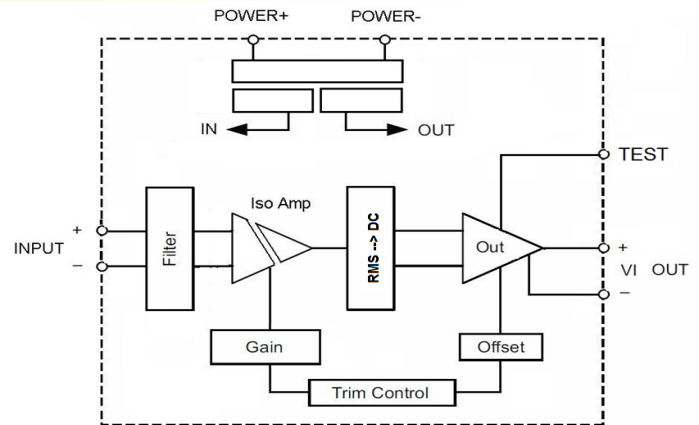
- Current 0...4...20 mA, active or passive mode
 - Voltage 0...10 V
 - +/- 10V (instantaneous measure output)
- Other outputs on request.

Feature:

- DIN rail mounting (IP20 box),
- connection on pluggable screw terminal blocks (2,5 mm² max),
- wide range universal power supply,
- customized measure scale at the end of manufacturing,
- low and high scale readjustment is possible with multi-turn potentiometers (under de cover),
- output current control Led,
- test terminal block for measuring the output current without opening the loop,
- active or passive current output,
- conformal coating.



Synoptic:



Version and order code:		Request a quote
CAL35CAD :	- Sinusoidal signal measurement	
CAL35CAD-RMS:	- True RMS measurement (AC) for distorted signals, suppression of DC component	
CAL35CAD / ti :	- up to 50A input with embedded toroidal core through hole current transformer (9mm hole diameter)	
CAL35CAD-ROGO	- Current measurement by Rogowski coil from 1kA to 100kA	

INPUT	
Voltage (ac)	100mV to 1000 V
Impedance	> 1 Mohms @ 1000V
Continuous overload	2 x UN @ 1000V
Absorbed power	< 0.25 W
Direct Current (ac)	10mA to 10 A
Impedance	< 0.25 Ohms @ 1A; < 0.05 Ohms @5A
Peak overload	6 x IN during 3 s @5A
Current (ac)	50 A on embedded CT. 9mm aperture
Peak overload	6 x IN during 5 s
Absorbed power (CAL35CAD only)	0.25 W
Using frequency range	50Hz / 60Hz - 400 Hz on request
Current (Rogowski coil)	sensitivity 100mV/kA @ 50hz
OUTPUT	
Current	0... (4) ... 20 mA
Max. load	1500 Ohms
Voltage	0 - 10 V
Impedance	500 Ohms
Accuracy	+/- 0.5 %
Response time	< 300ms typical
Ripple (noise)	< 30mV

POWER SUPPLY	
20.....265 Vac-dc or 9 to 30 Vdc, 2 W	
Protection against reverse polarity	
ENVIRONMENT	
Operating temperature	-10 to 60 °C
Storage temperature	-20 to +85 °C
Thermal drift (% of the full scale)	0.05 % / °C
Humidity	85 % not condensed
Weight	200 g
Resistance to vibrations	>2 g at 100 Hz
Protection rating	IP20
Recommended mounting direction	Vertical
Dielectric strength	5000 Vac (Inputs / Outputs , Power) 2500 Vac (Outputs / Power)
MTBF (MIL HDBK 217F)	> 4 000 000 Hrs @ 25°C
Life time	> 170 000 Hrs @ 30°C

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE		
Immunity standard for industrial environments EN 61000-6-2	Emission standard for industrial environments EN 61000-6-4	
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011 group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5 CWG	EN 61000-4-12 ring wave	
EN 61000-4-6 RF	EN 61000-4-29 DC dips	



WIRING AND OUTLINE DIMENSIONS:

