

Current converter CAL35CC



• input:

from 5A to 50 Adc (or +/- 5A to +/- 50A)
Up to 50kHz bandwidth.
Screw terminal blocks (5A.....50A maxi).

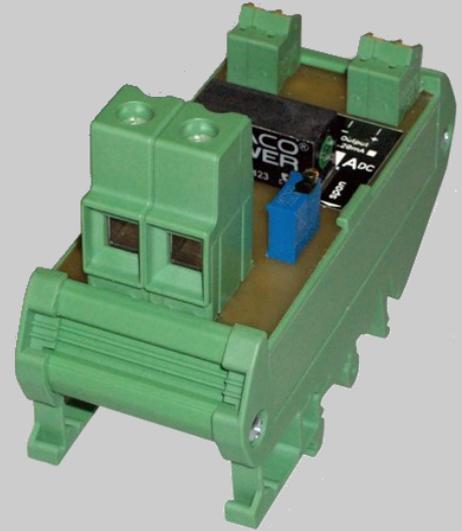
• Current or Voltage Output

Unipolar or bipolar: 0 .. 4 .. 20mA, +/-20mA, +/-10V, ...
isolated from power supply.

• Direct shunt replacement

isolated mV output (no heat dissipation);

• Power supply: 4.5...18Vdc, 18...36Vdc, 9...36Vdc, 18...75Vdc, ...



The CAL35CC transducer allows direct current measurement up to 50 A, replacing favorably shunts, reducing insertion losses and providing a formatted output signal (4..20mA, 0...10 V or mV).

Application: solar farm, wind power, batteries

- Defective solar panels detection
- Panels output power measurement
- Panels orientation regulation
- Battery Monitoring, motors DC current monitoring
- Welding

Description:

- Inputs:

Direct Current: unipolar or bipolar (all input range on demand)
Minimum range: 5 Adc (+/- 5 Adc)
Maximum range: 50 Adc (+/- 50 Adc)

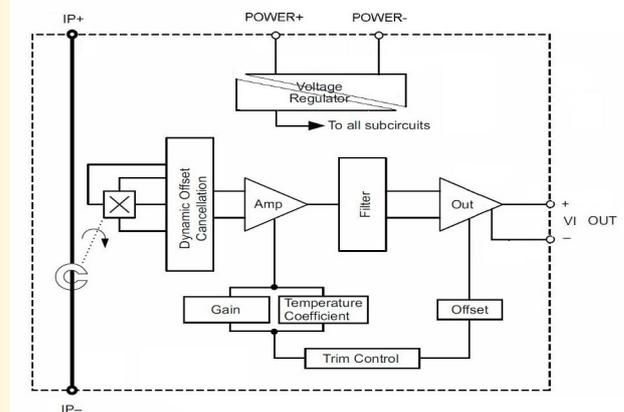
- Output signal:

Unipolar or bipolar (mirror of the instantaneous input value except for the TRMS version: output of effective value)
- Output voltage, all range up to 10V max (+/-10V)
(possibility of mV output for direct shunt substitution with isolation)
- Current output: 0 ... 4 20mA (+/- 20mA)

Feature:

- Plastic profile for symmetrical DIN rail mounting.
Protection rating IP20
- Connection:
 - * Power supply and output on spring terminal
(1 mm² Max for wire section)
 - * Current circuit measurement:
25 mm² maxi for screw terminals
- Green LED for indication of supply voltage.
- Trimmer for offset and span re-adjustment.
- Power supply protected against reverse polarity.
- Conformal coating.

Synoptic



Version and order code:

[Request a quote](#)

CAL35CC current input on terminal block 25mm²

Standard power supply : 18Vdc 36Vdc (default supply range)
Low voltage : 4.5Vdc.....18Vdc Ref. option: **-LWi**
extended standard : 9Vdc.....36Vdc Ref. option: **-Wi**
High voltage : 18Vdc.....75Vdc Ref. option: **-HWi**
other supply voltage on request (230Vac,...)

INPUT

Current +/- 5Adc... +/- 50Adc
 Input impedance ~ 200 uOhms
 Accuracy +/- 0.7 % of full scale
 Standard response time < 50 ms
 In option, bandwidth up to 5KHz (-3 dB, 50Khz for mV)
 Typical response time at 90% 0.4 / cutoff frequency
 Admissible overcurrent (maxi.) 6 x I_N for 5 seconds

OUTPUT

TYPE SCALE
 Current 0 ... 4 ... 20 mA or +/- 20mA, ...
 Load 0500 Ohms
 Voltage (volts) 0 ..1...5....10 V or +/- 10V, ...
 output impedance 500 Ohms for 10V
 Voltage (mV) 0...50...100...500 mV
 output impedance 1 Kohms
 (Other output range on request)

POWER SUPPLY

standard: 18 to 36 Vdc Consumption: <1.5 VA
 (All possible nominal voltage from 5Vdc to 300 Vdc or Vac)
 reverse polarity protected.

ENVIRONMENT

Operating temperature: - 25 °C+ 65 °C
 Storage temperature: - 40 °C+85 °C
 drift: ~ 0.015% / ° C
 Humidity 85% non condensed
 Weight ~ 150 gr.
 Protection rating IP20
 Dielectric Strength:
 (Input / Power supply / Output) 2000 Vrms continuous
 (3500 Vrms / 1 min)
 (Power supply / Output) 500 Vrms continuous (24Vdc)
 (3500 Vrms / 1 min) (230Vac)
 MTBF (MIL HDBK 217F) > 1 200 000 Hrs @ 25°C
 MTBF (MIL HDBK 217F) > 1 000 000 Hrs @ 40°C
 Life time > 200 000 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:

