DC Current Transducer
CAL35CC

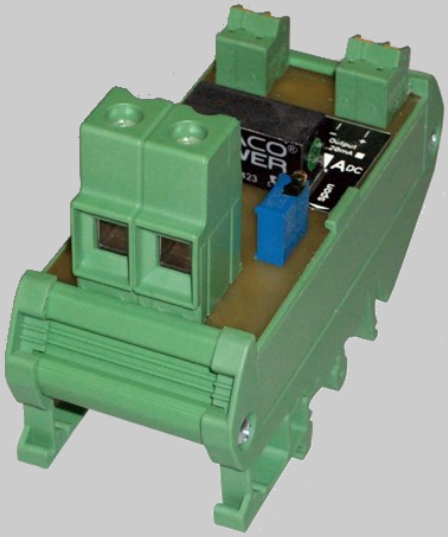
- ***DC Current input:***
  from 1A to 100 Adc (or +/- 1A to +/- 100A)
  Up to 50kHz bandwidth.

- ***Hall effect Technology :***
  Screw terminal blocks (5A…..100A 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 100 A, replacing favorably shunts, reducing insertion losses and providing a formatted output signal (4..20mA, 0...10 V or mV).

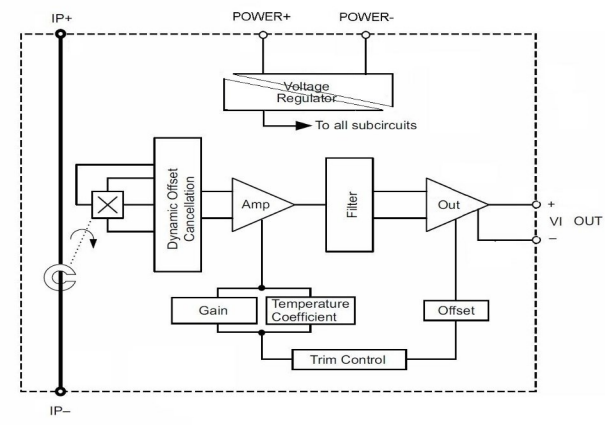
Application: solar farm, wind power, batteries
- Defective solar panels detection
- Panels output power measurement
- Panels orientation regulation
- Battery Monitoring, motors DC current monitoring
- Welding

Description:
- Inputs:
Direct Current: unipolar or bipolar (all input range on demand)
Minimum range: 5 Adc (+/- 5 Adc)
Maximum range: 100 Adc (+/- 100 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 (100A max)

CAL35CC-TRMS TRMS measurement version

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,…)

90 days accuracy (20 °C +/- 2 °C) *DATA SHEET CAN BE DOWNLOADED ON* WWW.LOREME.FR

TECHNICAL SPECIFICATIONS

INPUT

Current	+/- 5Adc….+/- 100Adc
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	0 .....500 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*
EN 61000-4-3 RF	*EN 61000-4-9 pulse MF*	
EN 61000-4-4 EFT	*EN 61000-4-11 AC dips*	*group 1 class A*
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: