

SURETECH™

Hall Effect Current Sensor

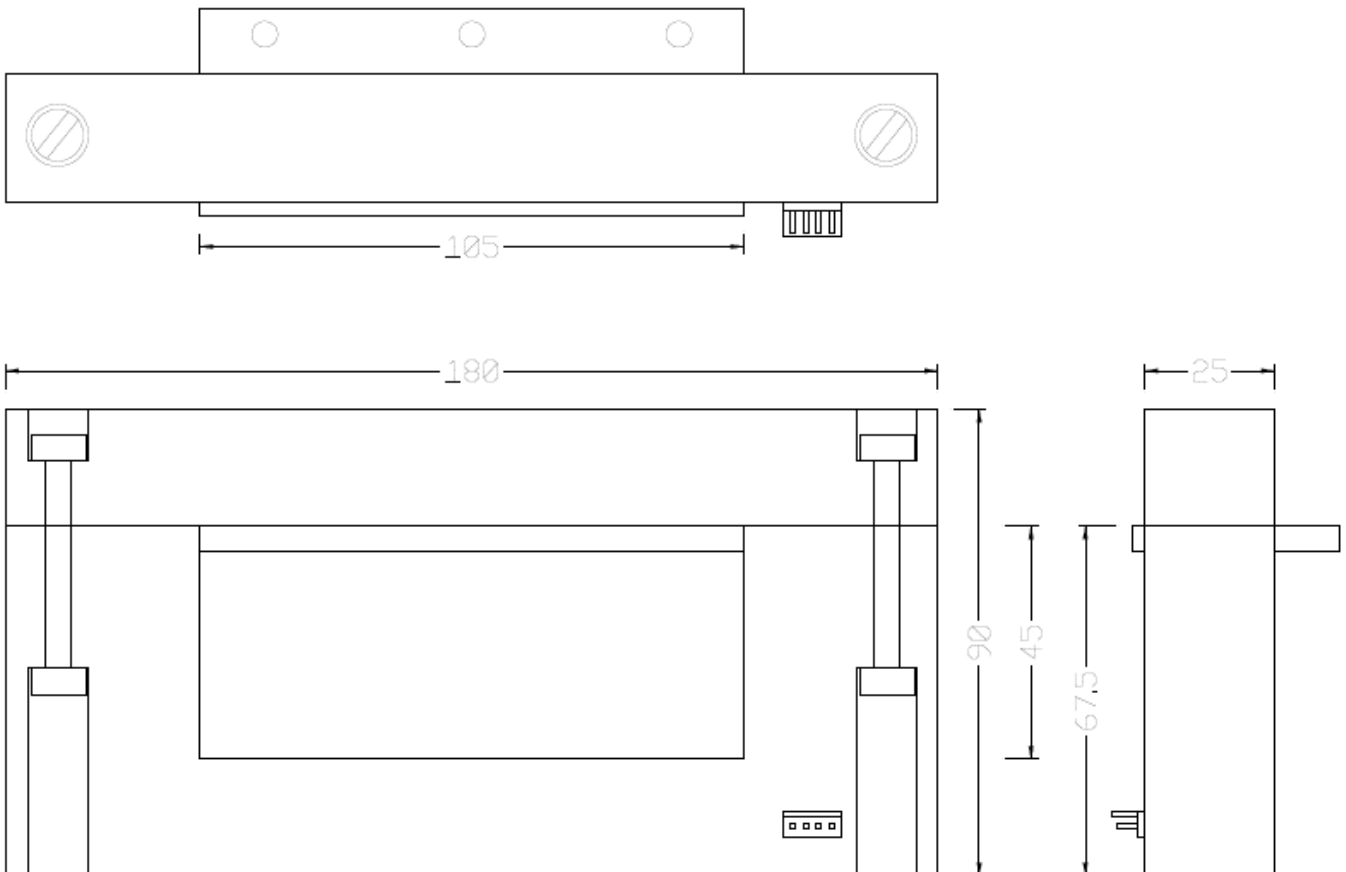
HECS 1k_105_40

General:

The **SURETECH HECS** (Hall Effect Current Sensor) measures DC or AC current on bus-bars, switchgear, cables etc. SURETECH HECS can be specified to measure a wide range of currents, from less than an amp up to tens of thousands of amps. The bandwidth characteristics of the SURETECH HECS are superior to normal magnetic core CT technology, and so can be deployed on Quality Of Supply applications as well. The SURETECH HECS can provide a range of outputs such as 0-5V, 0-10V, +/-10V, 0-20mA, 4-20mA, true rms, instantaneous, relay contacts, LCD display, RS232, RS485 etc. The SURETECH HECS can optionally be fitted with signal processing options for a wide range of smart applications, including controllers.

Technology:

The SURETECH HECS uses Hall effect to sense a magnetic field resulting from the current. Hall Effect sensor measures the magnetic field within GOSS core (Grain Oriented Silicon Steel). Input and output current has galvanic isolation. In the event of fault conditions, the magnetic core saturates but does not damage the sensor. HECS sensors are hermetically sealed and encapsulated in resin for improved stability and durability.



General Features available on HECS transducers:

- ✓ Linear measurement circuits
- ✓ Optional LCD readout available
- ✓ Wide selection of input and output options including, logic, analogue, RS232 and human
- ✓ Noise filtering available
- ✓ Dimensions and configuration: User can specify
- ✓ LV enclosure is available for panel mount flush or top-hat rail
- ✓ Transient suppression on input and outputs
- ✓ Wide selection of auxiliary power supply options available
- ✓ Galvanic isolation from HV source (optional)
- ✓ Engineering backup to provide you support for design, applications information, installation & calibration, maintenance
- ✓ All current sensing applications, both AC and DC
- ✓ HV and LV Laboratory and Test system instrumentation
- ✓ HV and LV panel current measurements
- ✓ HV and LV current alarms (upper & lower thresholds settable)

Specification HECS1k_105_40:

<i>Parameter</i>	<i>Value</i>
Type	Split core using M5 nut & bolt fixing either way to facilitate installation
Material type	Precision machined Nylon, ultra robust, with PU resin for encapsulation
Mounting	Either directly on bus-bar, or panel mount (user can specify)
Aperture window for input	105mm x 40mm
Input current	+/- 1000A DC or AC
Output voltage	+/- 4V DC or AC rms
Input current max	+/- 2000A DC +/- 1414A AC rms
Output voltage max	+/- 8V DC +/- 8V AC Peak
Temperature range	0 / 65 degr C
Bandwidth	DC - 10kHz
Overload capability	30kA
Output load min	10kOhm
Aux Power Supply	+/- 12V DC +/-5%
Termination electrical interface	+12V, -12V, 0V, Output
Termination mechanical interface	Molex connector (Mating connector provided)
Isolation from input	3kV @ 50Hz / 1 min
Accuracy	<2%
Linearity	<1%
Mass	<1kg
Current direction	Marked on body

NB SPECIFICATIONS CAN CHANGE WITHOUT PRIOR NOTICE



SURE Engineering CC
 PO Box 63, Steenberg, Cape Town 7947
 South Africa
 Reg CK 87/11172/23

Website: <http://www.suretech.co.za>
 email: info@suretech.co.za
 Tel: +27-21-701-8529 Fax: +27-21-701-9183
 Cell: +27-83-555-0149