EAS - Low Power Current Sensor

Technical Catalogue





Description

EAS low-power current sensors are LPCT type current transformers used in medium voltage protection and measurement applications.

Applications

Low power current sensors, can measure excessive currents with high accuracy and without saturation due to the low total power consumption. Used in medium volt-

age cubicles instead of conventional current transformers for protection and measurement purposes.

Features

- Suitable for using with protection relays with 100A/22.5mV inputs.
- · Lightweight and compact
- Rated primary current up to 1250A
- High accuracy
- Compatible with IEC 60044-8 Standard

Structure and Operating Principles

EAS, is an inductive current transformer consisting of a small toroid type core and a shunt resistor connected secondary winding with minimized losses. The output resistor is an integral part of the transformer in terms of functionality and stability. In principle, due to shunt resistor, EAS produces an output voltage.

Shunt resistor is designed for the power consumption of the transformer to be nearly zero. Secondary current generates a voltage drop over the shunt resistor in phase with the primary current and proportional to the amplitude of the primary current. Moreover, due to low secondary load and low internal losses, transformer is close to ideal in the measuring range and works with high accuracy.

Safety Instructions and Installation

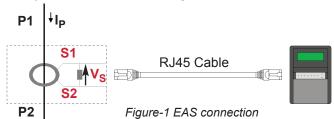
In EAS current sensor, the open secondary windings do not cause any failure.

EAS current sensors should be used only with protection and measurement devices with appropriate inputs.

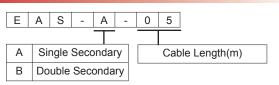
A 5 m long cable with RJ45 connectors in double-side is supplied with the transformer. According to the needs, cable length or number of secondary output is specified in the order.

It is recommended to fix the transformer to the entrance of the panel for avoiding the sensor to dislodge in the case of excessive current pulses.

Install your device as shown in figure-1.



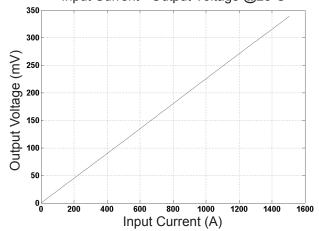
Ordering Information

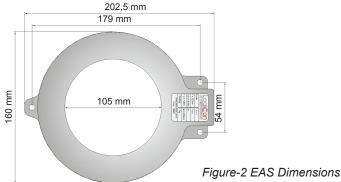


Technical Specifications

Rated Primer Current	1250A
Output Voltage	100A/22.5 mV
Operating Frequency	50-60Hz
Short Circuit Withstand Current	31.5 kA/3S
Accuracy	Class 1
Operating Temperature	-20°C +50°C
Weight	Single Secondary: 1.7kg Double Secondary: 1.8kg
Dimesinons (mm)	Diameter:160 , Inner Dia.:105
Degree of Protection	IP40

Input Current - Output Voltage @25°C





Warranty Terms and Conditions

Elektrolojik Energy Tech. Ltd. Co. warrants a trouble free operation of the EAS device within 24 months from the date of sale, on condition that following terms are provided:

• the proper connection and operation

- · the safety of the quality control seal
- the integrity of case, no trace of opening, cracks, spalls etc.

The warranty shall not apply to malfunctions or damages resulting from accidents or user supplied faults.

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