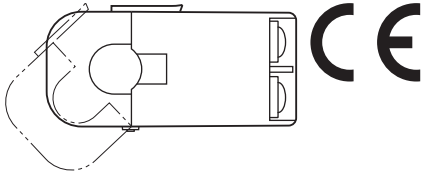


CLAMP-ON CURRENT SENSOR

Functions & Features

- Easy-to-install, spring-loaded, clamp-on type current sensor
- Over-voltage clamp element for safety in open circuit
- Wide frequency band
- Screw terminal connection



MODEL: CLSE-[1][2]

ORDERING INFORMATION

- Code number: CLSE-[1][2]

Specify a code from below for each of [1] and [2].

(e.g. CLSE-R5/CE)

Confirm the correct sensor type described on the data sheet of the combined transducer/transmitter module.

[1] POWER INPUT

R5: 5 A

05: 50 A

10: 100 A

20: 200 A

40: 400 A

60: 600 A

[2] OPTIONS

Standards & Approvals

blank: Without CE

/CE: CE marking

RELATED PRODUCTS

- Special cable (model: CLS-CN)
(Used in combination with the CLSA-08C.)
- Special cable (model: CLSA-08C)

GENERAL SPECIFICATIONS

Construction: Clamp

Connection: M3 screw terminals (torque 0.3 N·m)

Housing material: Flame-resistant resin (black)

Applicable wire size: AWG22 or thicker (0.6 dia. or 0.3 mm² or thicker; Max. 30 meters, twisted)

Detachable number of times: Approx. 100 times

INPUT SPECIFICATIONS

Maximum working voltage: 480 V AC (primary side)

Operational range & overload capacity

	OPERATIONAL RANGE	OVERLOAD CAPACITY *
CLSE-R5	5 A maximum	10 A continuous
CLSE-05	50 A maximum	60 A continuous
CLSE-10	100 A maximum	120 A continuous
CLSE-20	200 A maximum	240 A continuous
CLSE-40	400 A maximum	480 A continuous
CLSE-60	600 A maximum	720 A continuous

*4000% of rating for 1 second

Caution 1: The output values may vary depending on the accuracy of engagement at the clamp connection.

Caution 2: The sensor's mechanical construction may cause it to generate resonance sound. However, it does not affect the performance of the sensor.

INSTALLATION

Operating temperature: -10 to +55°C (14 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Weight:

CLSE-R5: 45 g (1.6 oz)

CLSE-05: 40 g (1.4 oz)

CLSE-10: 75 g (2.6 oz)

CLSE-20: 180 g (6.3 oz)

CLSE-40: 300 g (10.5 oz)

CLSE-60: 330 g (11.6 oz)

PERFORMANCE in percentage of span

Frequency: 45 - 65 Hz (including the harmonic current up to 20 kHz)

For 65.1 Hz - 1.2 kHz, ratio error is $\pm 2\%$ /In.

Maximum load: 10 Ω

Insulation resistance: ≥ 100 M Ω with 500 V DC
(sensor core to output terminal)

Dielectric strength: 2000 V AC @ 1 minute
(sensor core to output terminal)

MODEL	PRIMARY RATING	SECONDARY RATING	RATIO ERROR	PHASE DISPLACEMENT ERROR
CLSE-R5	5 A	1.65 mA	$\pm 1\%/I_n, \pm 2\%/0.2 I_n$	$\pm 1.5 \pm 1^\circ$
CLSE-05	50 A	20 mA	$\pm 1\%/I_n, \pm 2\%/0.2 I_n$	$\pm 1 \pm 1^\circ$
CLSE-10	100 A	20 mA	$\pm 1\%/I_n, \pm 2\%/0.2 I_n$	$\pm 0.5 \pm 1^\circ$
CLSE-20	200 A	20 mA	$\pm 1\%/I_n, \pm 2\%/0.2 I_n$	$\pm 1^\circ$
CLSE-40	400 A	20 mA	$\pm 1\%/I_n, \pm 2\%/0.2 I_n$	$\pm 1^\circ$
CLSE-60	600 A	20 mA	$\pm 1\%/I_n, \pm 2\%/0.2 I_n$	$\pm 1^\circ$

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EN 61326-1

Low Voltage Directive

EN 61010-1

EN 61010-2-032

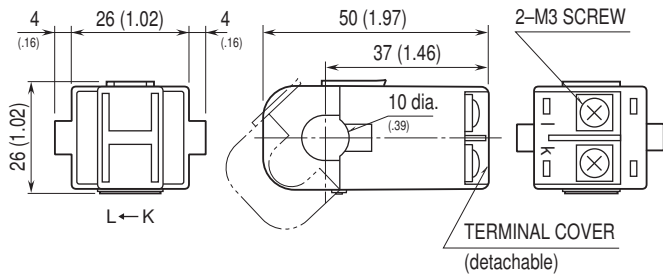
Measurement Category III (input)

Pollution Degree 2

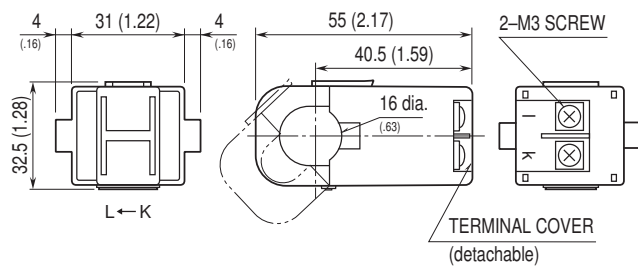
RoHS Directive

EXTERNAL DIMENSIONS unit: mm (inch)

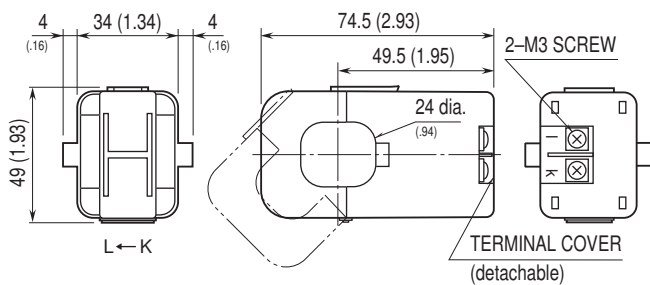
■ Sensor model No.: CLSE-R5, CLSE-05



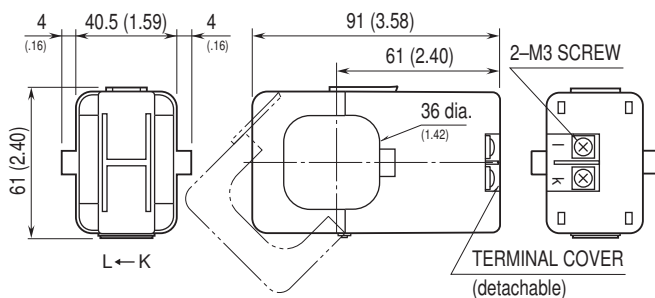
■ Sensor model No.: CLSE-10



■ Sensor model No.: CLSE-20



■ Sensor model No.: CLSE-40, CLSE-60



Specifications are subject to change without notice.