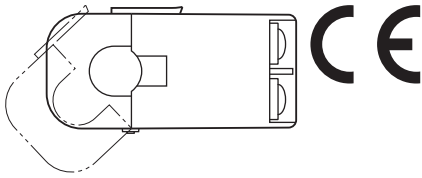


## CLAMP-ON CURRENT SENSOR

### 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 mm<sup>2</sup> 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  $\Omega$

**Insulation resistance:**  $\geq 100\text{ M}\Omega$  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	$\pm 1\%/In, \pm 2\%/0.2 In$	$\pm 1.5 \pm 1^\circ$
CLSE-05	50 A	20 mA	$\pm 1\%/In, \pm 2\%/0.2 In$	$\pm 1 \pm 1^\circ$
CLSE-10	100 A	20 mA	$\pm 1\%/In, \pm 2\%/0.2 In$	$\pm 0.5 \pm 1^\circ$
CLSE-20	200 A	20 mA	$\pm 1\%/In, \pm 2\%/0.2 In$	$\pm 1^\circ$
CLSE-40	400 A	20 mA	$\pm 1\%/In, \pm 2\%/0.2 In$	$\pm 1^\circ$
CLSE-60	600 A	20 mA	$\pm 1\%/In, \pm 2\%/0.2 In$	$\pm 1^\circ$

### STANDARDS & APPROVALS

**EU conformity:**

EMC Directive

EN 61326-1

Low Voltage Directive

EN 61010-1

EN 61010-2-032

Measurement Category III (input)

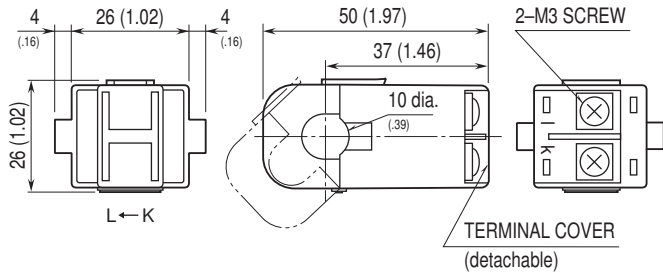
Pollution Degree 2

RoHS Directive

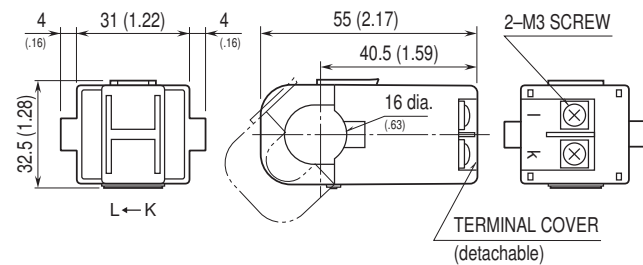
EN 50581

## EXTERNAL DIMENSIONS unit: mm (inch)

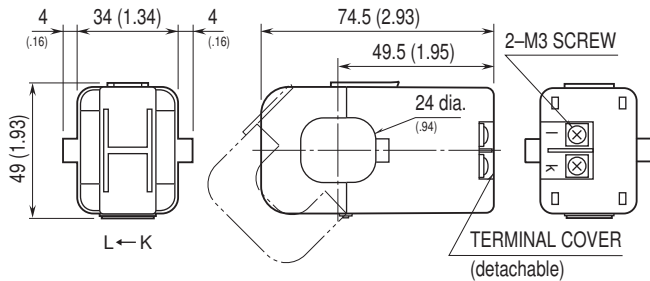
### ■ Sensor model No.: CLSE-R5, CLSE-05



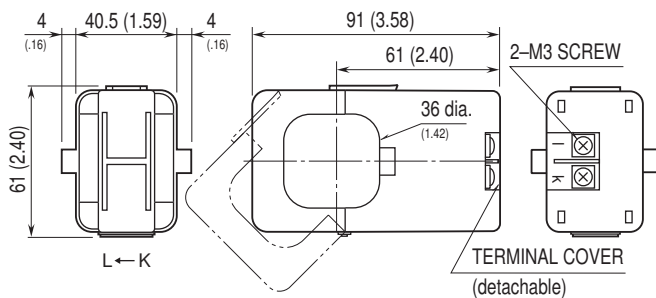
### ■ Sensor model No.: CLSE-10



### ■ Sensor model No.: CLSE-20



### ■ Sensor model No.: CLSE-40, CLSE-60



Specifications are subject to change without notice.