Telephone: +44 (0) 1245 428500 Email: sales@rayleigh.com

## **RI-CT090 Series**



# Single Phase Moulded Case Current Transformers

- From 400A to 1600A Primary currents
- 5A or 1A Secondary output
- 85mm width
- 60 x 15mm, 50 x 30mm or Ø45mm cable aperture
- Sealable terminal cover
- Supplied with Busbar fixings and mounting feet
- Compact design
- Indication of primary current flow (arrows on case body)



60 x 15mm

50 x 30mm

#### **Product Description**

The RI-CT090 Series forms part of a large family of solid core single phase moulded case current transformers from Rayleigh Instruments.

These transformers are suitable for monitoring current flow in commercial, industrial or utility applications. They are designed to connect any standard metering or relay product requiring a 5A or 1A output and are available with Primary current input ranges from 400A to 1600A

The RI-CT090 Series have been designed for ease of installation and are supplied with Busbar fixings and mounting feet. They also have clear markings moulded into the case to indicate the correct direction of primary current flow to minimise installation errors.

#### **Parameters**

|                    | Burden          |               |               |               |
|--------------------|-----------------|---------------|---------------|---------------|
| Primary<br>Current | Class 0.5<br>VA | Class 1<br>VA | Class 3<br>VA | Order<br>Code |
| 400                | 5               | 7.5           | 10            | 0400          |
| 500                | 5               | 10            | 15            | 0500          |
| 600                | 6               | 10            | 15            | 0600          |
| 750                | 8               | 10            | 15            | 0750          |
| 800                | 10              | 12.5          | 15            | 0800          |
| 1000               | 10              | 15            | 20            | 1000          |
| 1200               | 10              | 15            | 20            | 1200          |
| 1250               | 10              | 15            | 20            | 1250          |
| 1500               | 15              | 20            | 25            | 1500          |
| 1600               | 15              | 20            | 25            | 1600          |

Available with 5A or 1A Secondary



#### **Rated Standard**

| Rated Primary Current (I <sub>pr</sub> )          | 4001600A                            |
|---|-------------------------------------|
| Frequency Range (f <sub>R</sub> )                 | 4763Hz                              |
| Rated continuous over current (I <sub>cth</sub> ) | 1.2 x rated current                 |
| Rated short time thermal current $(I_{th})$       | <60 I <sub>n</sub>                  |
| Rated dynamic current (I <sub>dyn</sub> )         | 2.5lth                              |
| Instrument security factor (FS)                   | ≤5                                  |
| Rated Secondary output (I <sub>sr</sub> )         | 5A or 1A                            |
| Accuracy class                                    | Class 0.5, 1 and 3 to IEC/EN61869-2 |

Telephone: +44 (0) 1245 428500

 ${\bf Email: sales@rayleigh.com}$ 

#### Insulation

| Insulation type        | Dry transformer, air insulation; Class B |
|------------------------|--|
| Highest voltage (Um)   | 0.72kV r.m.s.                            |
| Rated insulation level | 3kV r.m.s. 50Hz/1 min                    |

#### **Environmental Conditions**

| Reference temperature               | 23°C ±1°C           |
|-------------------------------------|---------------------|
| Nominal temperature range           | -25°C50°C           |
| Daily mean temperature              | ≤30°C               |
| Limit temperature range for storage | -40°C85°C           |
| Relative humidity                   | ≤85% non condensing |

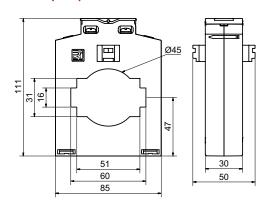
#### **Housing**

| Housing material                | Self extinguishing polycarbonate |
|---------------------------------|----------------------------------|
| Protection degree (IEC/EN60529) | IP40 housing, Terminals IP20     |
| Mounting                        | Foot mounting or busbar mounting |
| Weight                          | ≤300g                            |

#### **Connections**

| Primary winding   | Passing cable                      |
|-------------------|------------------------------------|
| Secondary winding | Screw clamp connection - 6mm² Max. |

### **Dimensions (mm)**



#### **Accessories**

The RI-CT090 series of current transformers come supplied with fixing feet and busbar clamping screws.

#### **Information Required with Order**

| Build your order number - example                         | RI-CT090 | 5A | 1200 |
|---|----------|----|------|
| Model   |          |    |      |
| Secondary Current   |          |    |      |
| Primary Current Range - See Parameters Table 'Order Code' |          |    |      |