

RI-CTS024-EW Series



easywire® Single Phase Mini Split-Core Current Transformers

- Patented technology
- From 100A to 300A Primary currents
- RJ45 connector output
- 330mV **easywire®** Secondary output
- 24mm cable aperture and 50mm width
- Integral 1 metre cable
- Snap together housing
- Compact design
- Indication of primary current flow (arrow on case body)

Ø 24mm

Product Description

The RI-CTS024-EW Series is part of the **easywire®** family of current transformers and forms part of a large family of split-core single-phase moulded case current transformers from Rayleigh Instruments.

The **easywire®** system has been designed to save up to 90% installation time compared to a standard current transformer to meter installation.

These transformers are suitable for monitoring current flow in domestic, commercial, industrial or utility applications and are designed to connect to the **easywire®** series of metering products.

RI-CTS024-EW Series current transformers have been designed for ease of installation into existing set-ups where removal of existing cable is impractical. They also have clear markings moulded into the case to indicate the correct direction of primary current flow to minimise installation errors.

Built-in limiting circuitry ensures the secondary of the current transformer is always under load and clamped to a safe level. This means that the output connection may be safely disconnected while under load.

Parameters

| Primary Current A | Burden | | | Order Code |
|-------------------|--------------|------------|------------|------------|
| | Class 0.5 VA | Class 1 VA | Class 3 VA | |
| 100 | - | 1.5 | - | 0100 |
| 160 | - | 1.5 | - | 0160 |
| 200 | - | 1.5 | - | 0200 |
| 250 | - | 1.5 | - | 0250 |
| 300 | - | 1.5 | - | 0300 |

Available with 330mV Secondary output

Accessories

A splitter box is available to enable these current transformers to be used in three-phase applications



Rated Standard

| | |
|---|---|
| Rated Primary Current (I_{pr}) | 100...300A |
| Frequency Range (f_R) | 47...63Hz |
| Rated continuous over current (I_{cth}) | 1.2 x rated current |
| Rated short time thermal current (I_{th}) | $\leq 60 \times I_{pr}$ |
| Rated dynamic current (I_{dyn}) | 2.5 I_{th} |
| Instrument security factor (FS) | ≤ 5 |
| Rated Secondary output | easywire ® 330mV |
| Accuracy class | Class 1 to IEC/EN61869-2, IEC/EN60044-8 |

Insulation

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

Environmental Conditions

| | |
|-------------------------------------|----------------------------|
| Reference temperature | 23°C $\pm 1^\circ\text{C}$ |
| Nominal temperature range | -5°C...40°C |
| Limit temperature range for storage | -40°C...85°C |
| Relative humidity | $\leq 85\%$ non condensing |
| Altitude | ≤ 1000 meters |

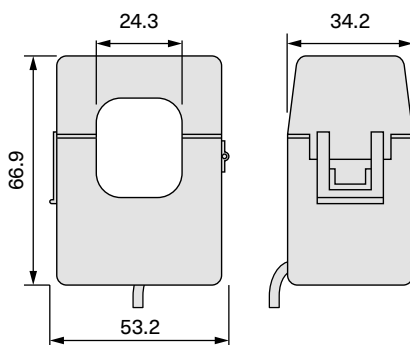
Housing

| | |
|---------------------------------|------------------------------|
| Housing material | Fire resistant UL94-V0 |
| Protection degree (IEC/EN60529) | IP40 housing, Terminals IP20 |
| Mounting | Snap together housing |
| Weight | $\geq 300\text{g}$ |

Connections

| | |
|-----------------------|---|
| Primary winding | Passing cable |
| Secondary winding | Integral 1 metre cable (other cable lengths available on request - see table below) |
| Secondary Connections | RJ45 plug for connection to easywire ® meters |

Dimensions (mm)



Information Required with Order

| | |
|--|------------------------------|
| Build your order number - example | RI-CTS024-EW /330 /0300 G 01 |
| Model | |
| Secondary Current - 330mV | |
| Primary Current Range - See Parameters Table 'Order Code' | |
| Housing Colour : G = Grey | |
| Cable Length : 01 = 1 meter (standard). 03 = 3, 07 = 7 and 10 = 10 meter (to order only). | |