

#### Models Available

- FCT29** Ring Type Current Transformer
- FCT39** Ring Type Current Transformer
- FCT61** Ring Type Current Transformer
- FCT85** Ring Type Current Transformer
- FCT105** Ring Type Current Transformer

#### Product Features

- Circular aperture ideal for cables
- Moulded ABS plastic housing
- 1 Amp or 5 Amp secondary
- Accuracy class 1
- Mounting feet
- Screw type terminals
- Optional terminal cover available
- Optional busbar clamp kit available

## FCT Series Current Transformers

FCT series current transformers are available for primary currents between 5 Amps and 2500 Amps, offering reliability and class 1 accuracy, making them suitable for a large range of industrial applications.

The FCT series current transformers are available in five different physical sizes all with a circular aperture, ideally suited for circular cables. They are enclosed in a protective ABS housing ensuring excellent mechanical strength and electrical insulation.

The FCT series current transformers have fixing feet as standard and can be used with the optional busbar mount clamp kit if required. An optional terminal cover is also available.

## For transforming high AC current to a proportional 1 Amp or 5 Amp output

#### Specification

##### Reference Standard:

- BS7626-1993, BS3938

##### Accuracy:

- Class 1 ( $\pm 1\%$  max. error)

##### Primary Input Current:

- 0-5A to 0-2500A (see range data table)

##### Secondary Current:

- 0-1A or 0-5A

##### Overload:

- To BS3938 - IEC 185

##### Operating Voltage:

- 600Vac maximum

##### Test Voltage:

- 2kV rms 50Hz for 1 minute

##### Frequency:

- 50/60/400Hz

##### Burden:

- See range data table

##### Enclosure:

- Flame retardant ABS
- Surface mounting or busbar mounting
- M4 screw terminals
- IP40 enclosure code
- Insulation class E

##### Operating Temperature:

- $-20^{\circ}\text{C}$  to  $70^{\circ}\text{C}$

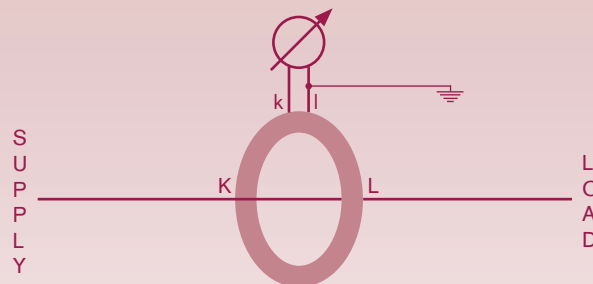
##### Weight:

- See range data table

##### Markings:

- CE marked

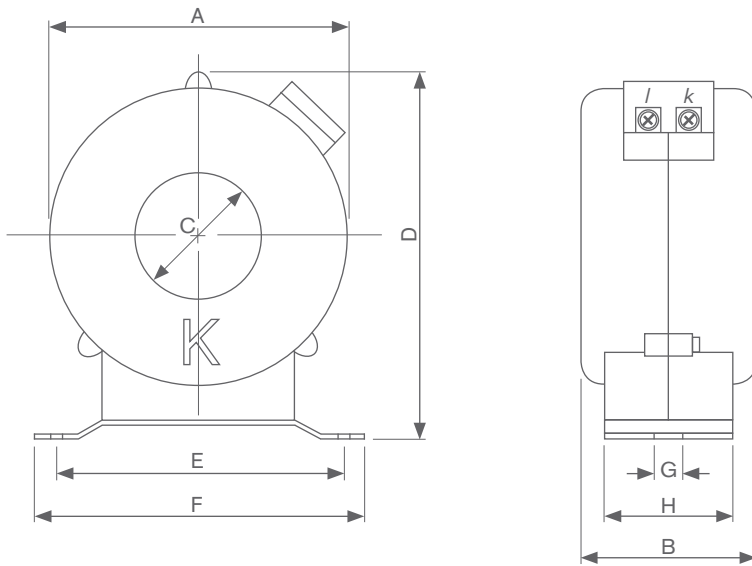
#### Connections



#### Ordering information

Code	Model & Size	Ratio
FCT29	Ring Type CT - 29mm Hole	5/1, 10/1, 15/1, 20/1, 25/1, 30/1, 40/1, 50/1, 60/1, 80/1, 100/1, 150/1
FCT61	Ring Type CT - 61mm Hole	200/1, 250/1, 300/1, 400/1
FCT29	Ring Type CT - 29mm Hole	5/5, 10/5, 15/5, 20/5, 25/5, 30/5, 40/5, 50/5, 60/5, 75/5, 80/5, 100/5, 120/5, 150/5, 200/5, 250/5, 300/5
FCT39	Ring Type CT - 39mm Hole	400/5, 500/5
FCT61	Ring Type CT - 61mm Hole	600/5, 800/5
FCT85	Ring Type CT - 85mm Hole	1000/5
FCT105	Ring Type CT - 105mm Hole	1200/5, 1500/5, 2000/5, 2500/5
<b>Example</b>	<b>FCT29</b>	<b>100/5</b>

**Dimensions**



	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
<b>FCT29</b>	74	55	29	93	84	98	6	42
<b>FCT39</b>	81	55	39	105	84	98	6	42
<b>FCT61</b>	103	55	61	129	105	120	6	42
<b>FCT85</b>	122	55	85	144	125	141	6	42
<b>FCT105</b>	141	55	105	160	133	156	10	50

**Options**

A busbar mount clip (Order Code: **BBCK**) is available which enables the standard ring type FCT current transformers to be safely clamped to a busbar.

Also available for the FCT series of current transformers is a terminal cover (Order Code: **FCTC**) to insulate the secondary terminals.

**Range Data**

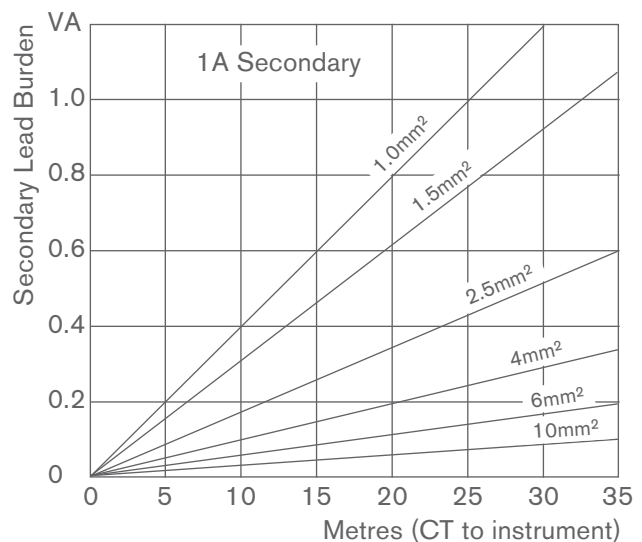
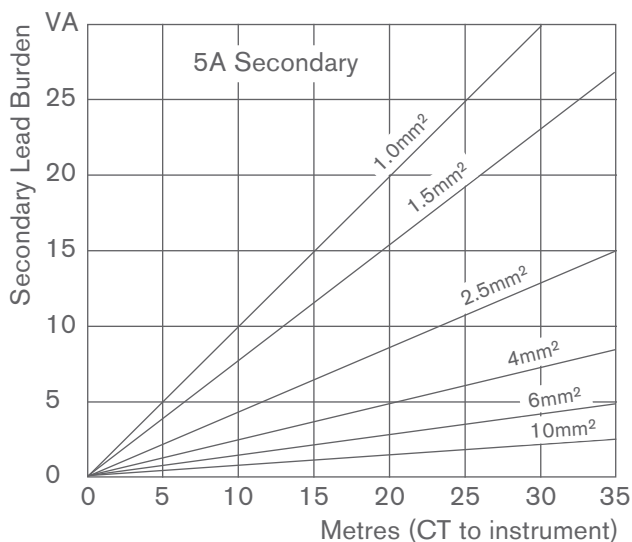
Model	Primary Current (Amps)	Secondary Current (Amps)	Burden (VA)	Through Turns	Hole Diameter (mm)	Weight (grams)
<b>FCT29-5/1</b>	5	1	3	10	29	600
<b>FCT29-10/1</b>	10	1	3	5	29	600
<b>FCT29-15/1</b>	15	1	3	4	29	600
<b>FCT29-20/1</b>	20	1	3	5	29	600
<b>FCT29-25/1</b>	25	1	3	2	29	600
<b>FCT29-30/1</b>	30	1	3	2	29	600
<b>FCT29-40/1</b>	40	1	3	2	29	600
<b>FCT29-50/1</b>	50	1	3	1	29	600
<b>FCT29-60/1</b>	60	1	3	1	29	600
<b>FCT29-80/1</b>	80	1	3	1	29	600
<b>FCT29-100/1</b>	100	1	3	1	29	600
<b>FCT29-150/1</b>	150	1	3	1	29	600
<b>FCT61-200/1</b>	200	1	5	1	61	600
<b>FCT61-250/1</b>	250	1	5	1	61	600
<b>FCT61-300/1</b>	300	1	5	1	61	600
<b>FCT61-400/1</b>	400	1	5	1	61	600

<b>FCT29-5/5</b>	5	5	3	10	29	600
<b>FCT29-10/5</b>	10	5	3	10	29	600
<b>FCT29-15/5</b>	15	5	3	4	29	600
<b>FCT29-20/5</b>	20	5	3	5	29	600
<b>FCT29-25/5</b>	25	5	3	2	29	600
<b>FCT29-30/5</b>	30	5	3	2	29	600
<b>FCT29-40/5</b>	40	5	3	2	29	600
<b>FCT29-50/5</b>	50	5	3	1	29	600
<b>FCT29-60/5</b>	60	5	3	1	29	600
<b>FCT29-75/5</b>	75	5	3	1	29	600
<b>FCT29-80/5</b>	80	5	3	1	29	600
<b>FCT29-100/5</b>	100	5	3	1	29	600
<b>FCT29-120/5</b>	120	5	3	1	29	600
<b>FCT29-150/5</b>	150	5	3	1	29	600
<b>FCT29-200/5</b>	200	5	3	1	29	600
<b>FCT29-250/5</b>	250	5	3	1	29	600
<b>FCT29-300/5</b>	300	5	3	1	29	600
<b>FCT39-400/5</b>	400	5	5	1	39	600
<b>FCT39-500/5</b>	500	5	5	1	39	600
<b>FCT61-600/5</b>	600	5	10	1	61	600
<b>FCT61-800/5</b>	800	5	10	1	61	600
<b>FCT85-1000/5</b>	1000	5	10	1	85	750
<b>FCT105-1200/5</b>	1200	5	10	1	105	1000
<b>FCT105-1500/5</b>	1500	5	10	1	105	1000
<b>FCT105-2000/5</b>	2000	5	10	1	105	1000
<b>FCT105-2500/5</b>	2500	5	10	1	105	1000

## Current Transformer General Specification

### Secondary Lead Burdens

When selecting a current transformer, it is important to consider the power absorbed by the cables connecting the CT secondary terminals and the measuring instrument. The overall burden of the cable and measuring equipment should not exceed the available VA of the CT. Where the current transformer is to be mounted remotely a 1A secondary is recommended. Where there is a very large distance between the instrument and current transformer the use of a current transducer to convert the AC current into a DC signal is recommended.



### Installation & Application Notes

1. It is essential with certain instrumentation that the CT is physically orientated correctly on the conductor. K or P1 must face the supply and L or P2 must face the load. It is also important to ensure that the secondary connections are made in accordance with the instrument connection diagram.
2. The secondary terminals of the CT must NOT make open circuit on load as dangerously high voltages may occur under these conditions. During installation the secondary terminals must be shorted and during operation it is recommended that one side of the secondary winding is earthed.
3. On all current transformers it is possible to reduce the CT ratio by passing multiple turns of the primary conductor cable through the aperture. The resultant CT ratio will be CT primary rating divided by the number of through turns e.g. a 100/5A CT with the primary conductor passed through the aperture twice will produce a CT with a ratio of 50/5A.

Specification subject to change without notice.