

# RING TYPE CURRENT TRANSFORMERS

**HOBUT**

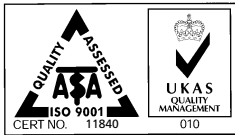
## DESCRIPTION

A range of ring type current transformers suitable for primary currents from 1A - 5000A with 1A or 5A secondaries. This standard range of measuring & protective CTs is available as resin coated or tape wrapped.

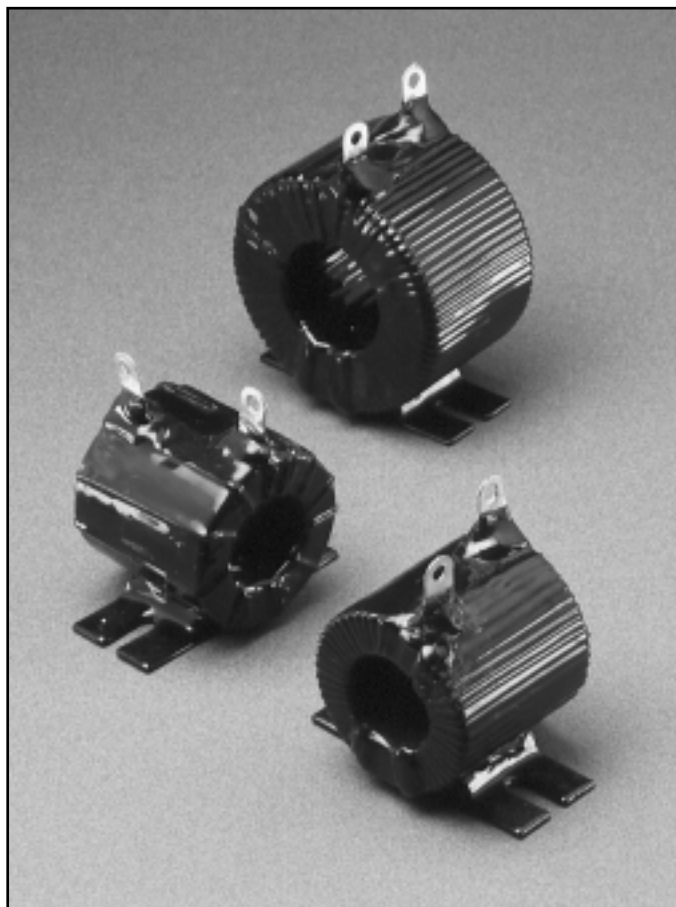
## APPLICATION

Suitable for measuring or protective applications with accuracies of class 0.2, 0.5, 1, 3, 5P10, 10P10 etc.

Designs to customers specification are available.



**CE**



## FEATURES

- Primary currents from 1A - 5000A
- Measuring or Protective types.
- Base or busbar mounting
- Choice of sizes to customers specification

## TECHNICAL SPECIFICATION

- Conforms to IEC44-1, IEC 185 and BS7626.
- Rated system voltage 0.72/3kV.
- Ambient temperature range -30°C to 85°C.
- Frequency range 50-60Hz.
- Insulation level, 3kV (50Hz) for 1 minute.
- Continuous current, 1.2 x rated current.
- Short-term thermal current (I<sub>th</sub>), 60 x rated current.
- Dynamic current (I<sub>dyn</sub>), 2.5 x I<sub>th</sub>.

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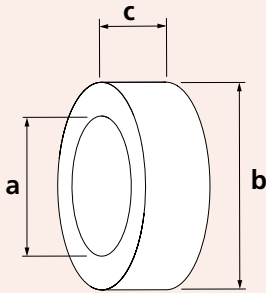
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## RESIN COATED MEASURING CTs - STANDARD RANGE

The Hobut range of measuring CTs converts an alternating current into a proportional current of lower value, which is measured by standard instruments. The CTs are for indoor, low voltage use.

### Dimensions (mm)

Please refer to the table opposite for standard CT dimensions. Alternatively our engineers will design CTs to customers specific dimensions.



**a** = internal diameter  
**b** = outside diameter  
**c** = depth

### Measuring CTs 1A or 5A Secondary

Dimensions mm		CLASS 3			CLASS 1			CLASS 0.5			
Rating A	VA	a	b	c	a	b	c	a	b	c	
40	2.5	32	70	40	-	-	-	-	-	-	
	5	32	70	73	-	-	-	-	-	-	
50	2.5	32	70	40	32	70	73	-	-	-	
	5	32	70	70	-	-	-	-	-	-	
60	2.5	32	70	40	32	70	40	-	-	-	
	5	32	70	73	32	70	73	-	-	-	
80	2.5	32	70	40	32	70	40	-	-	-	
	5	32	70	40	32	70	73	-	-	-	
	10	32	70	73	-	-	-	-	-	-	
100	2.5	32	70	22	32	70	40	35	112	30	
	5	32	70	40	32	70	40	35	112	50	
	10	32	70	40	32	70	73	35	112	70	
	15	32	70	73	32	70	73	35	112	90	
150	2.5	34	67	18	32	70	32	35	112	30	
	5	32	70	22	32	70	40	35	112	30	
	10	32	70	40	32	70	73	35	112	50	
	15	32	70	40	32	70	73	35	112	70	
200	2.5	34	67	18	32	70	20	56	112	30	
	5	34	67	18	32	70	30	56	112	30	
	10 or 15	32	70	40	32	70	40	35	112	50	
300	2.5	34	67	18	32	70	20	56	112	30	
	5	34	67	18	32	70	22	56	112	30	
	10 or 15	34	67	18	32	70	40	35	112	70	
400	up to 15	45	80	20	45	80	20	56	112	30	
	500	up to 15	66	100	20	66	100	20	56	112	30
	600	up to 10	45	80	20	45	80	28	56	112	30
up to 10		66	100	20	66	100	20	56	112	30	
up to 15		45	80	20	45	80	20	56	112	30	
up to 15		66	100	20	66	100	20	56	112	30	
800	up to 15	66	100	20	66	100	20	90	140	33	
1000	up to 15	78	123	20	78	123	20	90	140	33	
1200 to 1600	up to 15	90	140	20	90	140	20	90	140	33	
2000	up to 15	120	160	25	120	160	25	110	170	35	
3000	up to 15	133	192	28	133	192	28	133	192	28	
4500 to 5000	up to 15	154	224	28	158	224	28	154	224	28	

### Order example

When ordering a resin coated measuring CT from our standard range, please specify:

- Primary current
- Secondary current
- VA
- Accuracy
- Dimensions

e.g. 200/5, 5VA, class 3  
ID 34mm, OD 67mm, Depth 18mm

### MULTIPLE PRIMARY TURNS

The ratio of a current transformer can be reduced by passing more than one conductor turn through the centre of the CT. The ratio will therefore be the CT primary divided by the number of turns.

For example, a 400/5A CT with 2 primary turns passed through the centre, will provide an actual ratio of 200/5A.

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## RESIN COATED PROTECTION CTs - STANDARD RANGE

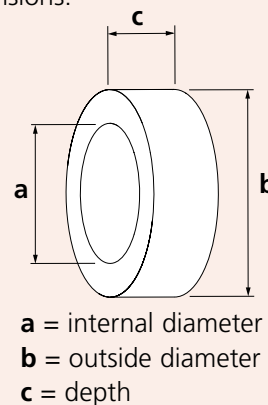
The Hobut range of protection CTs measures current in a system and produces a proportional isolated signal which is used as an input to protection relays, protecting part of the system in the event of a fault.

Protection CTs 5A Secondary

Dimensions mm		CLASS 5P10 & 10P10		
Rating A	VA	a	b	c
100	5	35	110	70
120	5	35	110	70
150	5	35	110	50
	10	35	110	50
200	5	35	110	50
	10	35	110	70
	15	35	110	90
300	5	56	110	50
	10	36	110	90
	15	36	110	70
400	5	56	110	50
	10	56	110	70
	15 or 20	56	110	90
500	5 or 10	56	110	50
	15	56	110	70
	20	56	110	90
600	5	56	110	30
	10	56	110	50
	15	56	110	70
	20	56	110	90
800	5	56	110	30
	10	56	110	50
	15 or 20	56	110	70
1000	5	58	110	31
	10 or 15	58	110	50
	20	58	110	70
1200	5 or 10	90	137	50
	15 or 20	90	137	70
1600	5	85	137	35
	10 or 15	85	137	50
	20	85	137	75
2000 to 2500	5 or 10 15 or 20	110 110	170 170	35 55
3000	5, 10 or 15	150	210	35
	20	150	210	55
4000 to 5000	5, 10, 15 or 20	150	210	35

## Dimensions (mm)

Please refer to the table opposite for standard CT dimensions. Alternatively our engineers will design CTs to customers specific dimensions.



## Order example

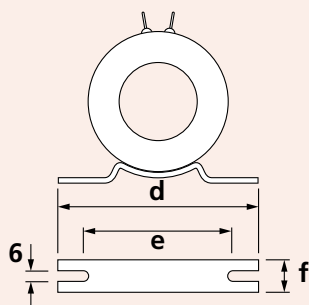
When ordering a protection CT from our standard range please specify:

- Primary current
- Secondary current
- VA
- Accuracy
- Dimensions

e.g. 200/5, 5VA, class 5P10  
ID 35mm, OD 111mm,  
Depth 50mm

## FIXING METHODS FOR PROTECTION & MEASURING CTs

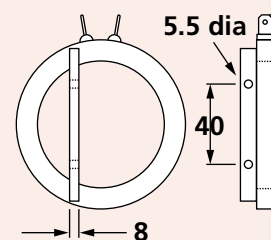
### Base mounting



#### Dimensions mm

	Base 7902	Base 7904	Base 7905
d	99	120	120
e	60	83	83
f	20	20	40

### Busbar mounting

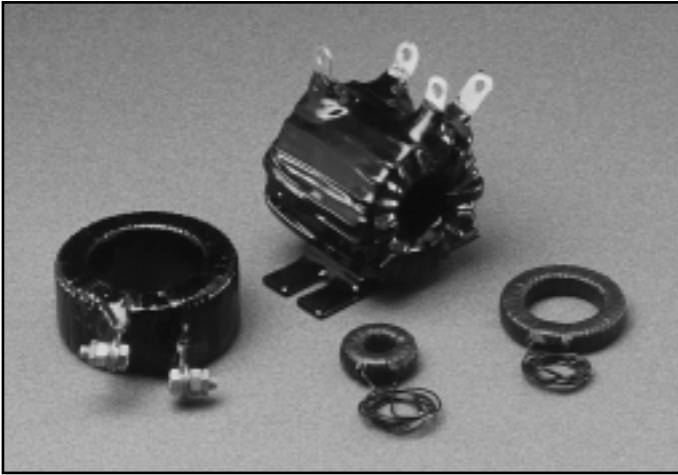


Current transformers are normally supplied without base or busbar mounting. Please specify on your order if a fixing method is required.

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## ELECTRICAL UTILITIES & SPECIAL CTs



Much of our production is devoted to special applications and our engineers design many CTs for individual customers and electrical supply utilities:

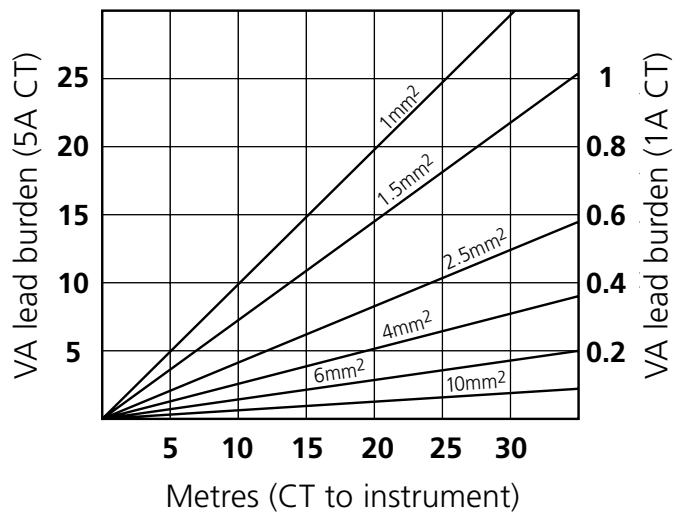
- Double wound CTs
- Class X CTs
- Tape Wrapped CTs
- Summation CTs
- Wedding ring CTs

## BURDEN

When choosing the VA of a CT, the burden of the instrument should be taken into consideration. For example, Moving iron panel meters require a VA of less than 2.5

Where the instrument is remote from the CT, the VA imposed by the length of connection wires should be taken into consideration.

The graph opposite outlines the effect of connection wire length on VA.



## TEST CERTIFICATES

Our production facilities allow automated printing of test certificates for individual Current Transformers, if requested.

## TERMINAL COVERS

Ring type Current Transformers can be supplied with sealable terminal covers. Please specify on your order if required.

Our policy is one of continuous development and therefore specifications may change without notice.

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