



- Epoxy Resin Current Transformers with Molded Case.
- Tough resilient flame retardant UL-94V0.
- Temperature range -10°C to 70°C
- Metering class 1.0, 0.5
- IEC44-1, IEC185, BS3938, DIN42600
- Tropicalized design with Insulation Class E and thermal 120°C
- Totally enclosed in tough, self-extinguishing moldings.
- Safe, easy to install, portable
- Wide inner window, allowing clamping of big cables or bus-bars
- Wide range of sizes to accommodate all the existing installations

### Application

Arrange of Molded Case Epoxy Resin Current Transformers, with in-built terminal covers. Primary ranges available up to 6000A with 5A secondary as standard as wishes 1A, 10Vac.

Molded Case Epoxy Resin Current Transformers has been designed to meet the growing demand for installation into hi quality and severe tough demanded and or existing networks improving. The Molded Case Epoxy Resin Current Transformer allows installation with cables or bulbar circuits with simple insertion of the CT and fit to more winding and sizing through. The products are ideal for retro-fitting and are therefore popular in the Energy Management and Power Factor Correction industries.

ES series much more advantages from conventional simple current transformer has been specially designed to facilitate their installation in new or already existing networks. They may be installed. An internal precision resistor across the secondary winding of the CT provides a low safe voltage output. It can save time and the installation costs.

### Accuracy

$$I_s N_2 = I_p N_1 - I_m N_1$$

Where:  $I_s N_2$  = the secondary current X the number of turns

$I_p N_1$  = primary current X the number of turns

$I_m N_1$  = ampere-turns required for core loss

The excitation current, ( $I_m$ ), determines the maximum accuracy That can be achieved with a current transformer. This current is defined as that portion of the primary current which satisfies the core losses. While the excitation current can never be eliminated, it can, in some cases, be compensated by adjusting the turn's ratio. If it were not for the core losses, the primary and secondary currents would be exactly inversely proportional to the number of turns in the two windings. The error due to leakage flux is negligible in most current transformers using steroidal cores, and utilizing proper winding methods.

### Type Table

Mfg. P/N	Input (A)	Output (A)	Accuracy
ER1	40-80A	1A/5A	1.0 0.5
ER2	100-150A	1A/5A	
ER3	100-400A	1A/5A	
ER4	150-800A	1A/5A	
ER6	200-1000A	1A/5A	
ER8	400-1500A	1A/5A	
ER10	500-2500A	1A/5A	
ER15	1000-5000A	1A/5A	
ER20	2000-6000A	1A/5A	
ER30	3000-10000A	1A/5A	

### Character

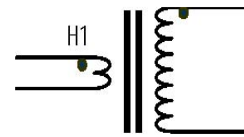
#### Electrical Parameter

Frequency	50-60Hz
Rated Input	100A-10000A
Over Load	200%In
Rated Output	5A, 1A others by request.
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	4.0KV

#### Mechanical Parameter

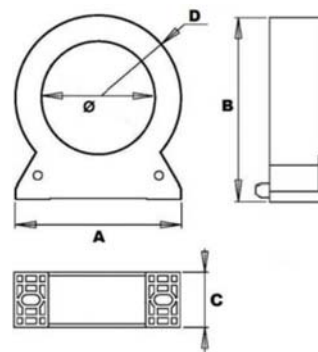
Case	PC /UL94-V0
Core	Silicon steel
Internal structure	Epoxy Resin
Operating Temp	-10°C ~ +70°C
Operating Humidity	$\leq 95\%$

### Polarity



Current transformer polarity can be defined by Permanent markings (typically H 1 - X 1 )

### Dimensions



Type	Ø	A	B	C	D
ER1	11	50	58	38	26
ER2	25	80	70	23	29
ER3	35	100	90	30	37
ER4	45	120	102	34	45
ER6	65	150	126	36	53
ER8	72	175	150	42	67
ER10	100	131	136	48	66
ER15	150	200	209	56	100
ER20	200	253	270	56	125
ER30	300	360	380	58	180

Type	Ratio	Class1.0_VA	Class0.5_VA	Weight	Busbar ( mm.)
ER1	40/5	2.5	X	0.55	Ø 11
	50/5	2.5	X	0.55	
	60/5	2.5	1.5	0.55	
ER2	100/5	2.5	1.5	0.55	Ø 25
	150/5	2.5	1.5	0.55	
ER3	100/5	1.5	x	0.40	Ø 35
	150/5	2.5	x	0.40	
	200/5	2.5	x	0.40	
	250/5	2.5	2	0.40	
	300/5	2.5	2	0.40	
	400/5	2.5	2	0.40	
ER4	150/5	2.5	2	0.40	Ø 45
	200/5	2.5	2	0.40	
	250/5	2.5	2	0.40	
	300/5	2.5	2	0.55	
	400/5	2.5	2	0.60	
	500/5	2.5	2	0.70	
	600/5	5	2.5	0.70	
ER6	800/5	5	2.5	0.75	Ø 55
	300/5	2.5	1.5	0.55	
	400/5	2.5	1.5	0.55	
	500/5	2.5	1.5	0.60	
	600/5	5	2.5	0.65	
	800/5	5	2.5	0.70	
ER8	1000/5	5	2.5	0.80	Ø 72
	500/5	5	2.5	0.60	
	600/5	5	2.5	0.65	
	800/5	5	2.5	0.70	
	1000/5	10	7.5	0.80	
	1200/5	10	7.5	1.20	
ER10	1500/5	10	7.5	1.40	Ø 100
	800/5	5	2.5	0.70	
	1000/5	10	7.5	0.80	
	1200/5	10	7.5	0.90	
	1500/5	10	7.5	1.00	
	1600/5	15	10	1.00	
	2000/5	15	10	1.20	
ER15	2500/5	20	15	1.30	Ø 150
	1000/5	5	2.5	0.80	
	1200/5	5	2.5	0.90	
	1500/5	5	2.5	1.00	
	1600/5	10	7.5	1.20	
	2000/5	10	7.5	1.40	
	2500/5	15	10	1.50	
	3000/5	20	15	1.60	
	4000/5	25	15	1.70	
ER20	5000/5	30	20	1.80	Ø 200
	2000/5	15	10	1.40	
	2500/5	15	10	1.60	
	3000/5	20	15	1.70	
	4000/5	25	15	1.80	
	5000/5	35	20	1.90	
ER30	6000/5	35	20	2.00	Ø 300
	4000/5	25	15	1.80	
	5000/5	35	20	1.90	
	8000/5	35	20	2.20	
	10000/5	35	20	2.30	