

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
ES2	100-1000A	1A/5A	1.0 0.5
ES4	500-2500A	1A/5A	
ES7	500-3000A	1A/5A	
ES10	800-4000A	1A/5A	
ES13	1000-5000A	1A/5A	
ES16	2000-6000A	1A/5A	

- 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

Character

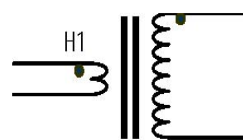
Electrical Parameter

Frequency	50-60Hz
Rated Input	100A-6000A
Over Load	200%In
Rated Output	5A, 1A, 10Vac
Phase angle	$\leq \pm 10\text{min}$
Dielectric strength	4.0KV

Mechanical Parameter

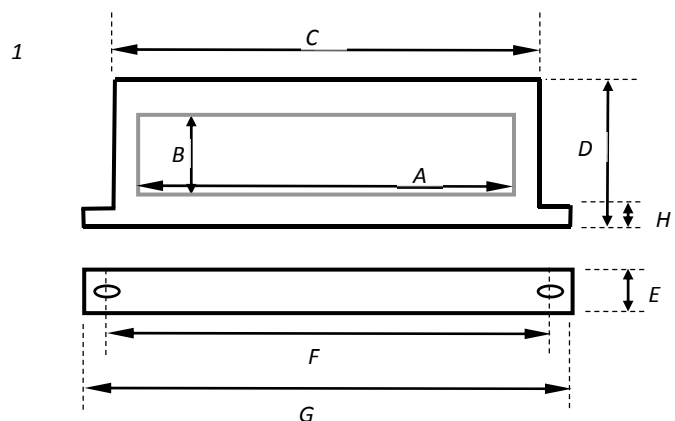
Case	PC /UL94-V0
Core	Silicon steel
Internal structure	Epoxy Resin
Operating Temp	$-10^{\circ}\text{C} \sim +70^{\circ}\text{C}$
Operating Humidity	$\leq 95\%$

Polarity

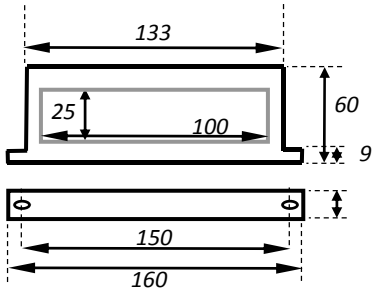
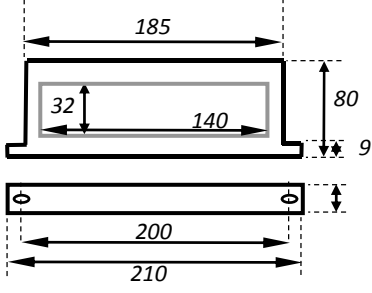
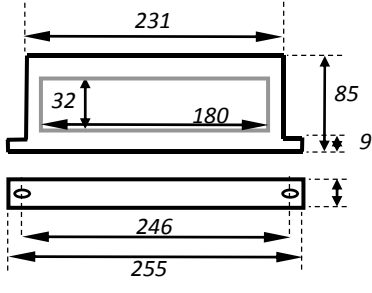
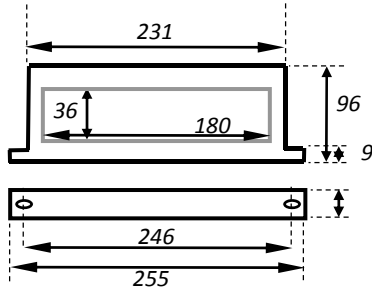
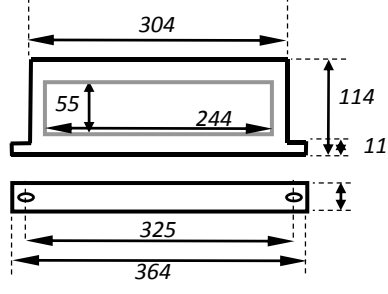
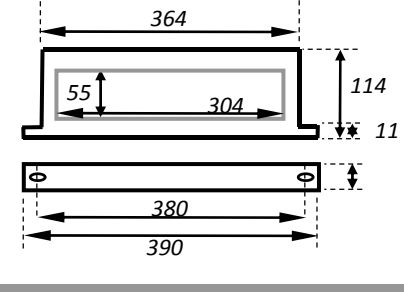


Current transformer polarity can be defined by Permanent markings (typically H 1 - X 1)

Dimensions



Type	A	B	C	D	E	F	G	H
ES2	100	25	133	60	24	150	160	9
ES4	140	32	185	79	28	200	210	9
ES7	180	32	231	84	28	246	255	9
ES10	180	36	231	96	30	246	255	9
ES13	244	55	304	114	30	325	364	11
ES16	304	55	364	114	30	380	390	11

Type	Ratio	Class1.0	Class0.5	Weight	Dimensions (mm.)	Busbar (mm.)
ES2	100/5	1.5	x	0.40		100X25
	150/5	1.5	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		
	500/5	2.5	2	0.40		
	600/5	5	3	0.40		
	800/5	5	3	0.55		
ES4	1000/5	5	3	0.60		140X32
	500/5	5	3	0.40		
	600/5	5	3	0.40		
	750/5	5	3	0.40		
	800/5	5	3	0.55		
	1000/5	5	3	0.60		
	1200/5	10	5	0.65		
	1500/5	10	7.5	0.70		
	1600/5	10	7.5	0.80		
ES7	2000/5	10	7.5	0.95		180X32
	2500/5	15	7.5	1.00		
	3000/5	15	10	1.20		
	500/5	5	2.5	0.40		
	600/5	5	2.5	0.40		
	750/5	5	2.5	0.40		
	800/5	5	2.5	0.55		
	1000/5	5	2.5	0.60		
	1200/5	10	5	0.65		
ES10	1250/5	10	7.5	0.70		180X36
	1500/5	10	7.5	0.80		
	1600/5	10	7.5	0.80		
	2000/5	10	7.5	1.20		
	2500/5	15	10	1.40		
	3000/5	15	10	1.60		
	4000/5	20	15	1.70		
	800/5	10	7.5	0.55		
	1000/5	10	7.5	0.60		
ES13	1200/5	10	7.5	0.65		244X55
	1250/5	10	7.5	0.70		
	1500/5	10	7.5	0.80		
	1600/5	10	7.5	1.20		
	2000/5	10	7.5	1.40		
	2500/5	15	10	1.60		
	3000/5	15	10	1.70		
	4000/5	20	15	1.80		
	5000/5	20	15	1.90		
ES16	2000/5	15	10	1.40		304X55
	2500/5	15	10	1.60		
	3000/5	15	10	1.70		
	4000/5	20	15	1.80		
	5000/5	25	20	1.90		
	6000/5	25	20	2.10		