

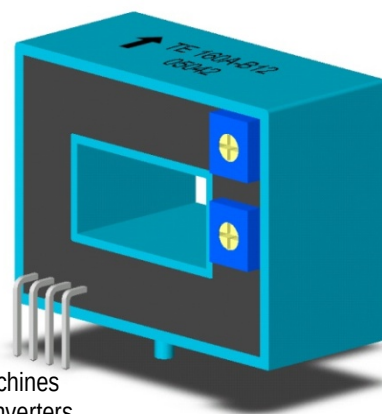
TE 100A~600A-B12

Features

- ◆ Highly reliable Hall Effect device
- ◆ Compact and light weight
- ◆ Fast response time
- ◆ Excellent linearity of the output voltage over a wide input range
- ◆ Excellent frequency response (> 50 kHz)
- ◆ Low power consumption (12 mA nominal)
- ◆ Capable of measuring both DC and AC, both pulsed and mixed
- ◆ High isolation voltage between the measuring circuit and the current-carrying conductor (AC2.5KV)
- ◆ Extended operating temperature range
- ◆ Flame-Retardant plastic case and silicone encapsulate, using UL classified materials, ensures protection against environmental contaminants and vibration over a wide temperature and humidity range

Applications

- ◆ UPS systems
- ◆ Industrial robots
- ◆ NC tooling machines
- ◆ Elevator controllers
- ◆ Process control devices
- ◆ AC and DC servo systems
- ◆ Motor speed controller
- ◆ Electrical vehicle controllers
- ◆ Inverter-controlled welding machines
- ◆ General and special purpose inverters
- ◆ Power supply for laser processing machines
- ◆ Controller for traction equipment e.g. electric trains
- ◆ Other automatic control systems



Specifications

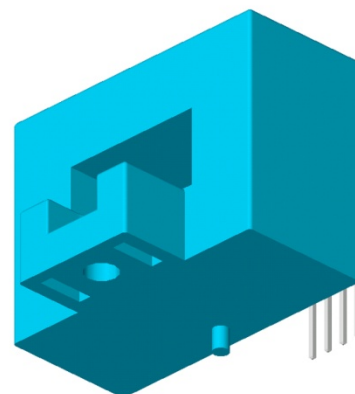
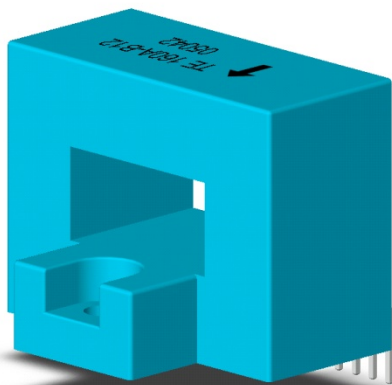
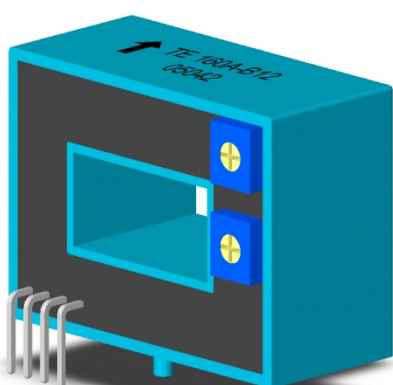
Parameter	Symbol	Unit	TE 100A -B12	TE 150A -B12	TE 160A -B12	TE 200A -B12	TE 220A -B12	TE 250A -B12	TE 300A -B12	TE 400A -B12	TE 500A -B12	TE 600A -B12
Nominal Input Current	I_{fn}	Arms	100	150	160	200	220	250	300	400	500	600
Linear Range	I_{fs}	Arms	105	157	168	210	231	262	315	420	525	630
Nominal Output Voltage	V_{hn}	V	7.07 Vrms(10Vdc peak) $\pm 1\%$ at $I_f = I_{fn}$ ($R_L = 10k\Omega$)									
Offset Voltage	V_{os}	mV	Within ± 35 mV @ $I_f = 0$, $T_a = 25^\circ C$									
Output Resistance	R_{OUT}	Ω	$< 100\Omega$									
Hysteresis Error	V_{oh}	mV	Within ± 15 mV @ $I_f = I_{fn} \rightarrow 0$									
Supply Voltage	V_{CC}/V_{EE}	V	$\pm 12V \pm 5\%$									
Linearity	ρ	%	Within $\pm 1\%$ of I_{fn}									
Consumption Current	I_{CC}	mA	± 12 mA nominal, ± 15 mA max									
di/dt accurately followed	di_f/dt	A/ μ sec	> 50 A/ μ sec									
Response Time (90% V_{hn})	T_r	μ sec	5 μ sec max. @ $di_f/dt = I_{fn}/\mu$ sec									
Frequency bandwidth (-3dB)	f_{BW}	Hz	DC to 50kHz									
Thermal Drift of Output	-	%/ $^\circ C$	Within ± 0.05 %/ $^\circ C$ @ I_{fn}									
Thermal Drift of Zero Current Offset	-	mV/ $^\circ C$	Within ± 1.0 mV/ $^\circ C$ @ I_{fn}									
Dielectric Strength	-	V	AC2.5KV X 60 sec									
Isolation Resistance @ 1000 VDC	R_{IS}	M Ω	> 1000 M Ω									
Operating Temperature	T_a	$^\circ C$	$-15^\circ C$ to $80^\circ C$									
Storage Temperature	T_s	$^\circ C$	$-20^\circ C$ to $85^\circ C$									
Mass	W	g	50g									



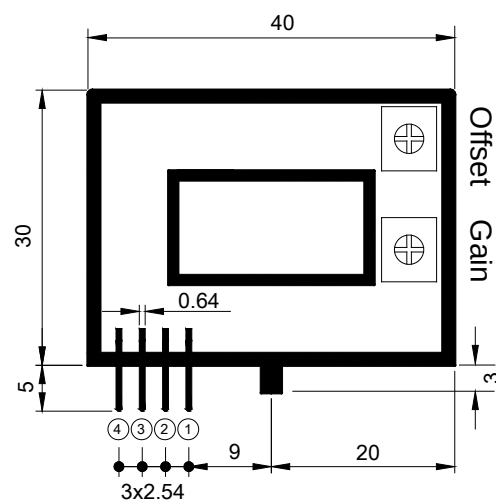
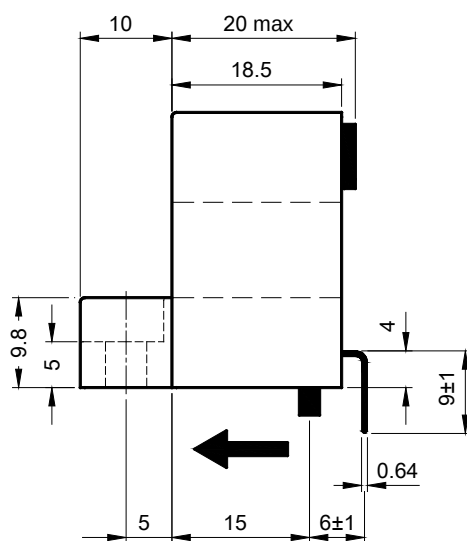
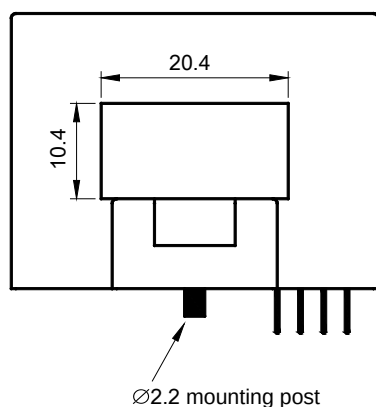
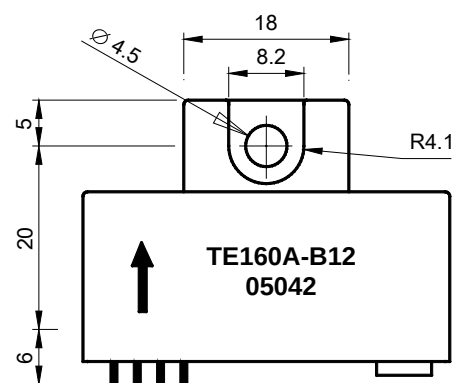
Topstek Current Transducers TE100A .. TE600A-B12

Appearance, dimensions and pin identification

All dimensions in mm ± 0.5 , holes -0 , $+0.2$ except otherwise noted.



Pin Assignment	
①	+12V
②	-12V
③	Vout
④	0V



← Positive current flow direction