



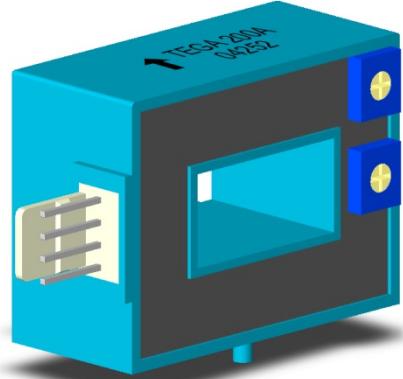
## TEGA 40A~600A

## 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

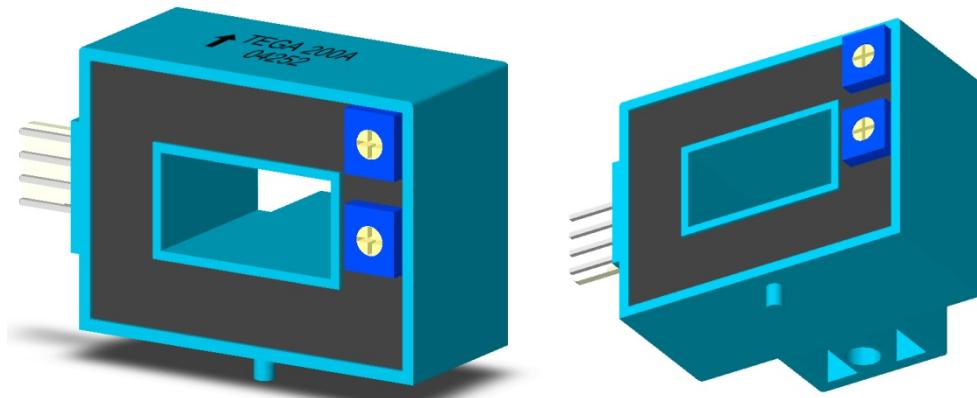
Parameter	Symbol	Unit	TEGA 40A	TEGA 60A	TEGA 90A	TEGA 100A	TEGA 110A	TEGA 130A	TEGA 200A	TEGA 250A	TEGA 400A	TEGA 470A	TEGA 600A									
Nominal Input Current	$I_{fn}$	A DC	40	60	90	100	110	130	200	250	400	470	600									
Linear Range	$I_{fs}$	A DC	$\pm 120$	$\pm 180$	$\pm 270$	$\pm 300$	$\pm 330$	$\pm 390$	$\pm 600$	$\pm 750$	$\pm 1000$	$\pm 1000$	$\pm 1000$									
Nominal Output Voltage	$V_{hn}$	V	4 V $\pm 1\%$ at $I_f = I_{fn}$ ( $R_L = 10k\Omega$ )																			
Offset Voltage	$V_{os}$	mV	Within $\pm 35$ mV @ $I_f = 0$ , $T_a = 25^\circ C$																			
Output Resistance	$R_{OUT}$	$\Omega$	<100 $\Omega$																			
Hysteresis Error	$V_{oh}$	mV	Within $\pm 20$ mV @ $I_f = I_{fn} \rightarrow 0$																			
Supply Voltage	$V_{CC}/V_{EE}$	V	$\pm 15V \pm 5\%$																			
Linearity (0 -- $\pm I_{fn}$ )	$\rho$	%	Within $\pm 1\%$ of $I_{fn}$																			
Consumption Current	$I_{CC}$	mA	$\pm 12$ mA nominal, $\pm 15$ mA max																			
di/dt accurately followed	$dI_f/dt$	A/ $\mu$ sec	>50 A/ $\mu$ sec																			
Response Time (90% $V_{hn}$ )	$T_r$	$\mu$ sec	5 $\mu$ sec max. @ $dI_f/dt = I_{fn}/\mu$ sec																			
Frequency bandwidth (-3dB)	$f_{BW}$	Hz	DC to 50kHz																			
Thermal Drift of Output	-	$^\circ C$ /°C	Within $\pm 0.1$ %/ $^\circ C$ @ $I_{fn}$																			
Thermal Drift of Zero Current Offset	-	$mV/^\circ C$	$< \pm 1.5$ mV/ $^\circ C$	$< \pm 1.2$ mV/ $^\circ C$	$< \pm 1.0$ mV/ $^\circ C$																	
Dielectric Strength	-	V	AC2.5KV X 60 sec																			
Isolation Resistance @ 1000 VDC	$R_{IS}$	M $\Omega$	>1000 M $\Omega$																			
Operating Temperature	$T_a$	$^\circ C$	-15 $^\circ C$ to 85 $^\circ C$																			
Storage Temperature	$T_s$	$^\circ C$	-20 $^\circ C$ to 85 $^\circ C$																			
Mass	W	g	66g																			



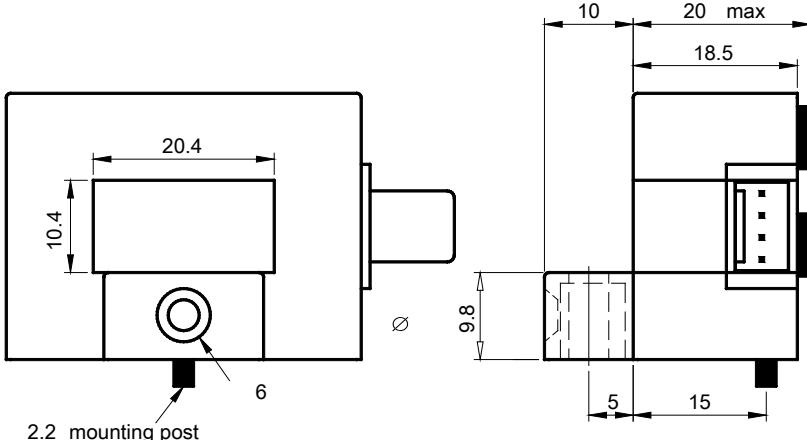
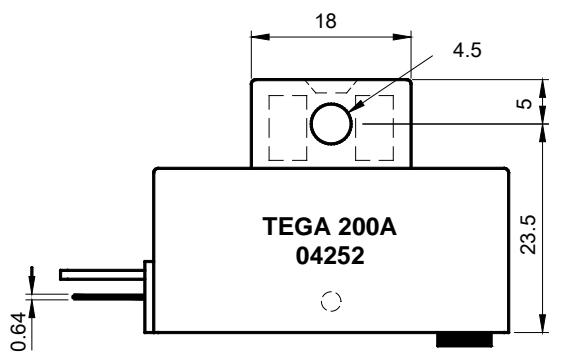
# Topstek Current Transducers TEGA40A .. TEGA600A

## Appearance, dimensions and pin identification

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



Pin Assignment	
(1)	+15V
(2)	-15V
(3)	Vout
(4)	0V



Positive current flow direction

