



Topstek Current Transducers TEGA40A .. TEGA600A

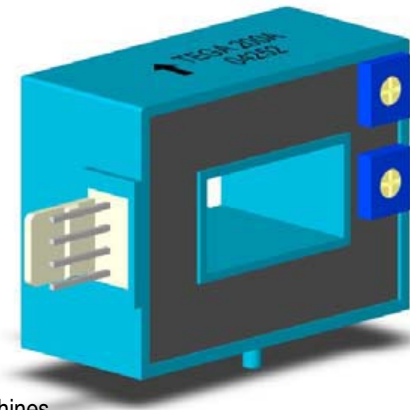
TEGA 40A~600A

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

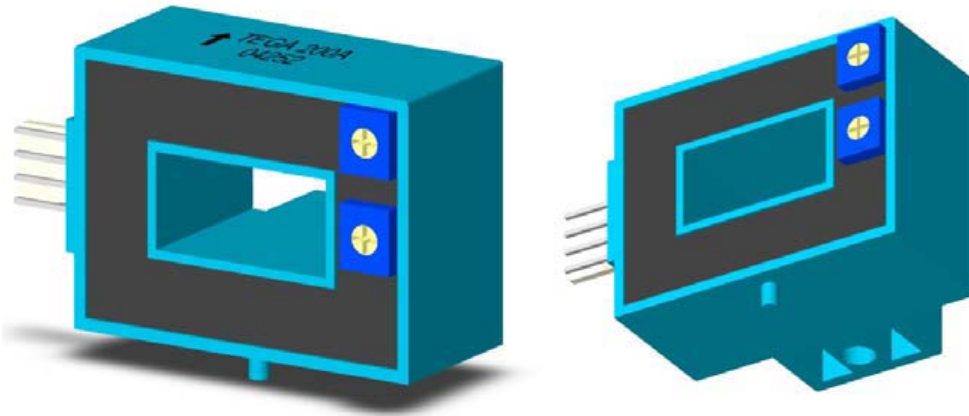
Parameter	Symbol	Unit	TEGA 40A	TEGA 60A	TEGA 90A	TEGA 100A	TEGA 110A	TEGA 130A	TEGA 200A	TEGA 250A	TEGA 400A	TEGA 470A	TEGA 600A
Nominal Input Current	I_{fn}	A DC	40	60	90	100	110	130	200	250	400	470	600
Linear Range	I_{fs}	A DC	±120	±180	±270	±300	±330	±390	±600	±750	±1000	±1000	±1000
Nominal Output Voltage	V_{hn}	V	4 V ±1% at $I_f=I_{fn}$ ($R_L=10k\Omega$)										
Offset Voltage	V_{os}	mV	Within ±35 mV @ $I_f=0$, $T_a=25^\circ\text{C}$										
Output Resistance	R_{OUT}	Ω	<100 Ω										
Hysteresis Error	V_{oh}	mV	Within ±20 mV @ $I_f=I_{fn} \rightarrow 0$										
Supply Voltage	V_{CC}/V_{EE}	V	±15V ±5%										
Linearity (0 -- ± I_{fn})	ρ	%	Within ±1% of I_{fn}										
Consumption Current	I_{CC}	mA	±12 mA nominal, ±15 mA max										
Response Time (90% V_{hn})	T_r	μsec	7 μsec max. @ $d I_f/dt = I_{fn}/\mu\text{sec}$										
Frequency bandwidth (-3dB)	f_{BW}	Hz	DC to 50kHz										
Thermal Drift of Output	-	%/°C	Within ±0.1 %/°C @ I_{fn}										
Thermal Drift of Zero Current Offset	-	mV/°C	< ±1.5 mV/°C	< ±1.2 mV/°C	< ±1.0 mV/°C								
Dielectric Strength	-	V	AC2.5KV X 60 sec										
Isolation Resistance @ 1000 VDC	R_{IS}	M Ω	>1000 M Ω										
Operating Temperature	T_a	°C	-15°C to 85°C										
Storage Temperature	T_s	°C	-20°C to 85°C										
Mass	W	g	66g										



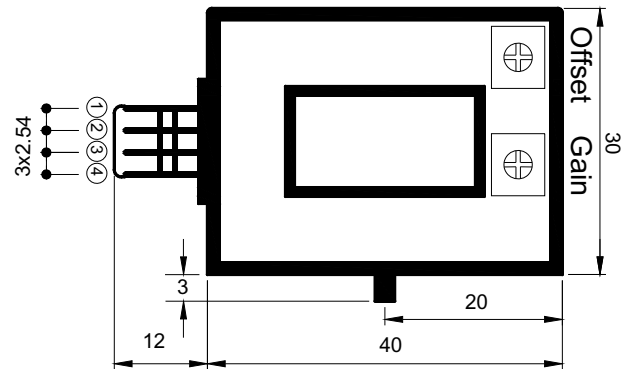
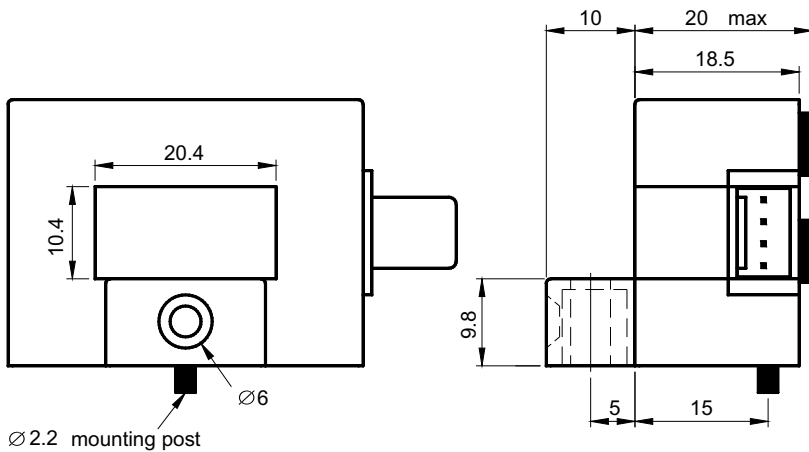
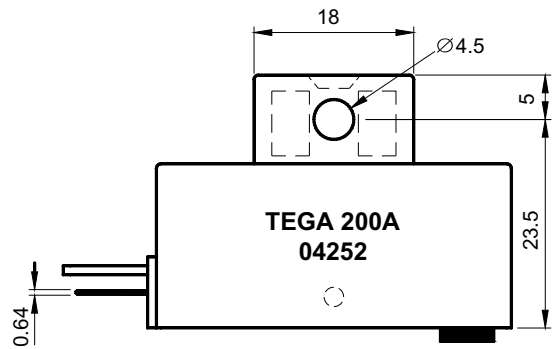
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Appearance, dimensions and pin identification

All dimensions in mm ± 0.1 , holes $-0, +0.2$ except otherwise noted.



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



Positive current flow direction

