

Topstek Current Transducer TMBH100A..TMBH1200A

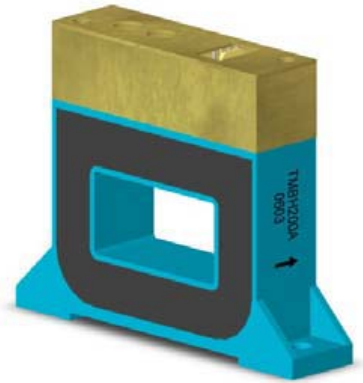
TMBH 100A~1200A

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



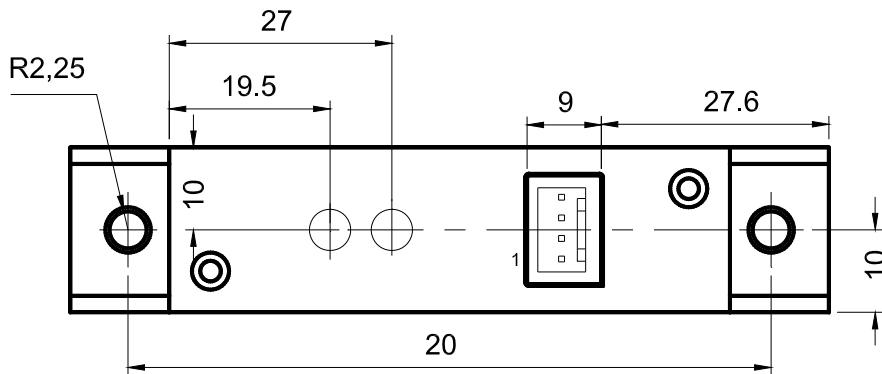
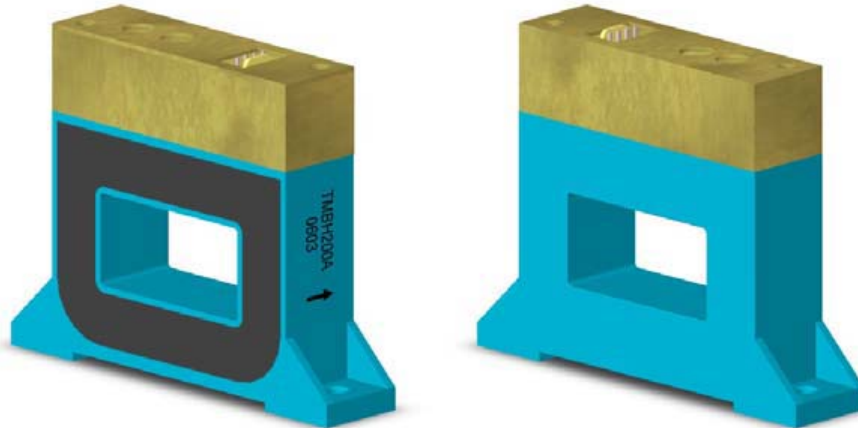
Specifications

Parameter	Symbol	Unit	TMBH 100A	TMBH 200A	TMBH 300A	TMBH 400A	TMBH 600A	TMBH 800A	TMBH 1000A	TMBH 1200A
Nominal Input Current	I _{fn}	A DC	±100	±200	±300	±400	±600	±800	±1000	±1200
Linear Range	I _{fs}	A DC	±300	±600	±900	±1200	±1800	±2400	±2700	±2700
Nominal Output Voltage	V _{hn}	V	4.0 V±1% at If=I _{fn} (R _L =10kΩ)							
Offset Voltage	V _{os}	mV	Within ±40 mV @ I _f =0, T _a =25°C							
Output Resistance	R _{OUT}	Ω	<100Ω							
Hysteresis Error	V _{oh}	mV	Within ±25 mV @ I _f =I _{fn} →0							
Supply Voltage	V _{CC} /V _{EE}	V	±15V ±5%							
Linearity	ρ	%	Within ±1% of I _{fn}							
Consumption Current	I _{CC}	mA	±15 mA max							
Response Time (90%V _{hn})	T _r	μsec	10 μsec @ d I _f / dt = I _{fn} / μsec							
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	< ±3.0 mV/°C	< ±2.0 mV/°C		< ±1.5 mV/°C				
Dielectric Strength	-	V	AC2.5KV X 60 sec							
Isolation Resistance @ 1000 VDC	R _{IS}	MΩ	>1000 MΩ							
Operating Temperature	T _a	°C	-15°C to 80°C							
Storage Temperature	T _s	°C	-20°C to 85°C							
Mass	W	g	300 g							

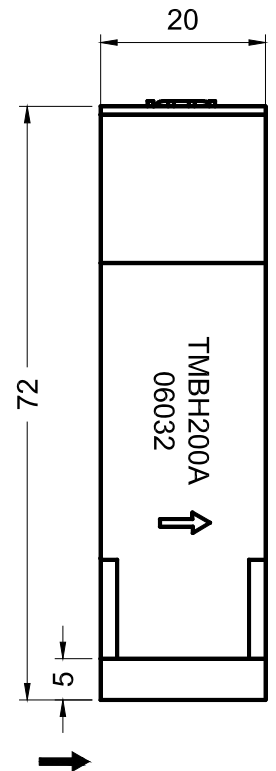
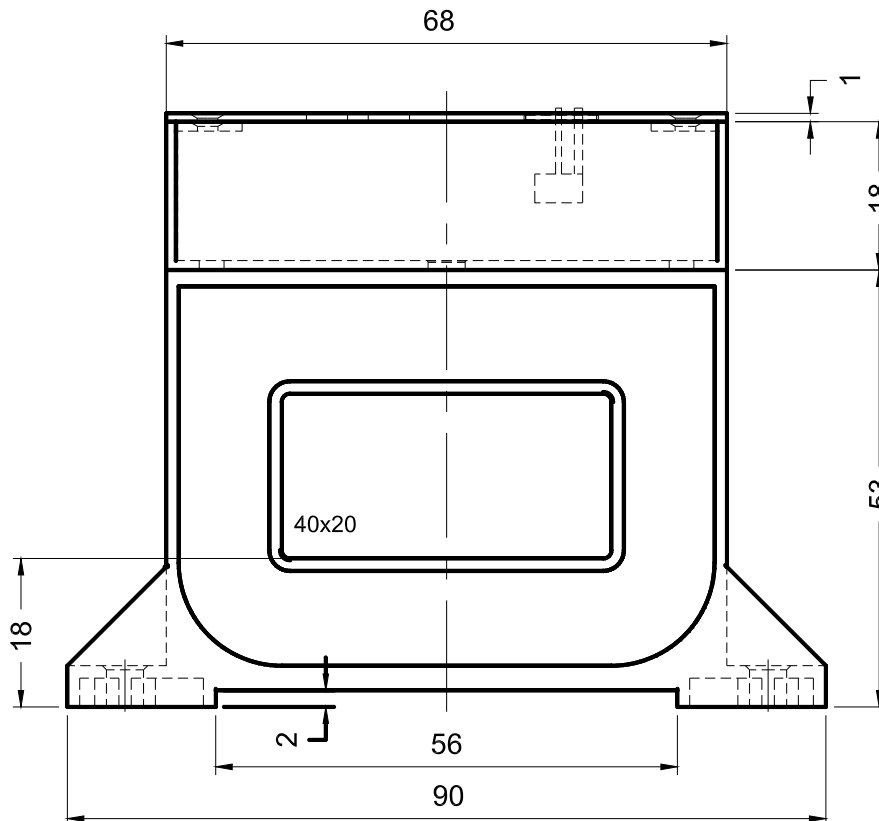
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Appearance, dimensions and pin identification

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



Pin Assignment	
1	+15V
2	-15V
3	V _{out}
4	0V



Positive current flow direction