

TBC-APS565 Series Closed Loop Mode Hall Effect Current Sensor





TBC-APS565 Series current sensor is a Closed loop device based on the measuring principle of the hall effect, with a galvanic isolation between primary and secondary circuit, It uses for precision measurement of DC, AC and pulse current.

Electrical data (Ta=25°C±5°C,RL=10KΩ,CL=4700PF)

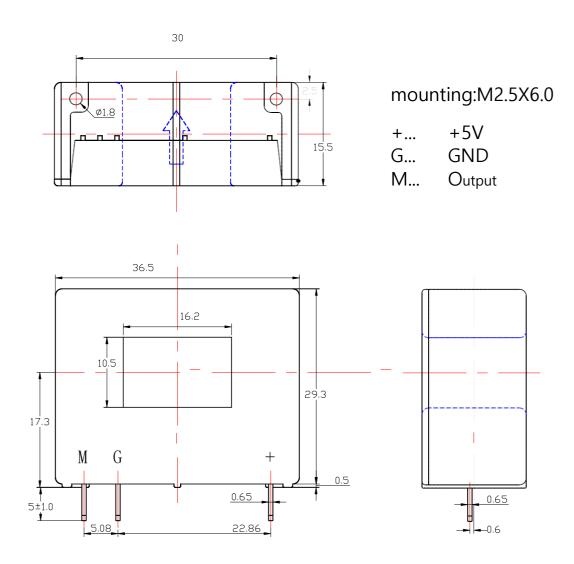
Type Parameter	TBC- 50APS565	TBC- 75APS565	TBC- 100APS565	TBC- 150APS565	Unit
Rated input (Ipn)	±50	±75	±100	±150	А
Measure range(lp)	±150	±225	±300	±300	А
Turns ratio(Np/Ns))	1:1200	1:1200	1:1200	1:1800	Т
Internal resister	3.75±0.1%	2.5±0.1%	1.875±0.1%	1.875±0.1%	Ω
Rated output	@lp=±lpn ±0.625±0.5%				٧
Supply voltage	+5.0 ±2%				
Power consumption	≤20+IpX(Np/Ns)				
Zero voltage	@lp=0 +2.5±0.4%				
Zero voltage	≤±5				
Magnetic Offset voltage	≤±3.0				
Offset drift	≤±0.05				
output drift	≤±0.05				
Linearity	@Ip=0-±Ipn ≤0.1				%FS
Response time	@50A/μS,10%-90% ≤0.5				μs
Bandwidth	@-3dB DC-200				
Galvanic isolation	@ 50Hz, AC,1min 2.5				KV



Applications

- Variable speed drives
- Welding machine
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Electrochemical

Mechanical dimension (for reference only)



Remarks:

- 1. All dimensions are in mm.
- 2. General tolerance ±1mm



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Directions for use

- 1. When the current will be measured goes through a sensor, the voltage will be measured at the output end. (Note: The false wiring may result in the damage of the sensor)
- 2. Customs can adjust Output amplitude of the sensor by needs.
- 3. Custom design in the different rated input current and the output voltage are available.

Standards

UL94-V0.

EN60947-1:2004

IEC60950-1:2001

EN50178:1998

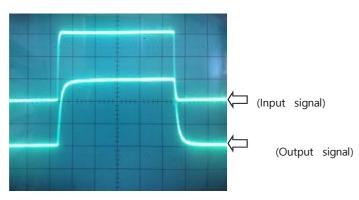
SJ 20790-2000

General data

	Value	Unit	Symbol
Operating temperature	-40 to +85	°C	TA
Storage temperature	-40 to +125	°C	TS
Mass(approx)	18	g	М

Characteristics chart

Pulse current signal response characteristic



Effects of impulse noise

