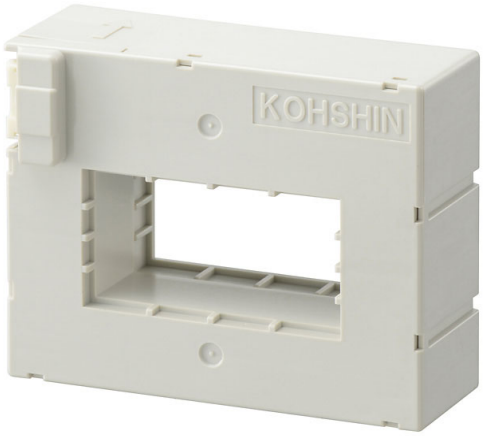
KOHSHIN

HC-MA series

Large current range
Bolt on type

HC-MA



- Rated current 300A ~ 1500A
- High precision realized with adoption of dedicated ASIC
- Superior noise-resistance
- Small temperature drift as a result of built-in temperature correction circuit
- 5V single power supply
- Bus bar mounting type

Applications

Inverters, Servo drivers, Power supply equipment, Uninterruptible power supply (UPS), Welders, Photovoltaic generation

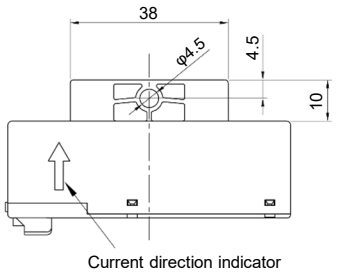
Dimensions

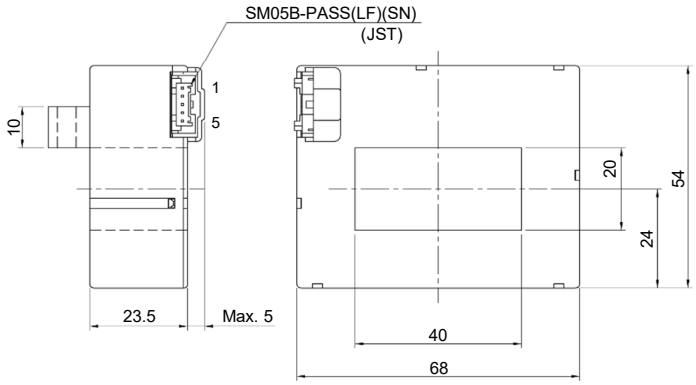
(mm)

Terminal No.

1 ··· NC
2 ··· Vcc
3 ··· Output
4 ··· Reference Voltage Output
5 ··· GND

Weight : 175g





General tolerance: ±0.5

Specification

Ta=25℃

Type	HC-MA300V08PP5B	HC-MA600V08PP5B	HC-MA800V08PP5BH	HC-MAE10V08PP5BH	HC-MAE15V08PP5BH
Rated current [If]	±300A	±600A	±800A	±1000A	±1500A
Saturation current [Is]	±800A	±1200A	±2200A	±2400A	±2400A
Linearity limits	0～±750A	0～±1000A	0～±2100A	0～±2100A	0～±2100A
Reference voltage output [Vref] (I=0)	+2.5V±15mV				
Rated output RL=10kΩ [Vh] (I=If, Output-Vref)	V0±0.8V±1.5%				
Residual output [V0] (I=0, Output-Vref)	Within ±22mV				
Output linearity	Within ±0.5%				
Response time	Within 5μs (di/dt=100A/μs)				
Response performance	Within 15%				
Hysteresis voltage range	Within 10mV				
Output Temp. Coef.	Within ±0.04%/℃				
Residual output Temp. Coef.	Within ±0.2mV/℃		Within ±0.3mV/℃		
Reference voltage output Temp. Coef.	Within ±0.03%/℃				
Control power supply [Vcc]	+5V±5%				
Consumption current	Within 15mA				
Operating Temp.	-40℃~+105℃				
Storage Temp.	-40℃~+105℃				
Dielectric withstand voltage	4000V AC 50/60Hz 1minute				
Insulation resistance	Not less than 500MΩ 500V DC				

Note1) The indicated residual output is the one after the core hysteresis is removed.

Note2) Output (Vout) specifications include 100Ω output resistance and 2mA maximum output current.
Reference voltage output (Vref) specifications include 1kΩ output resistance and 2mA maximum output current.

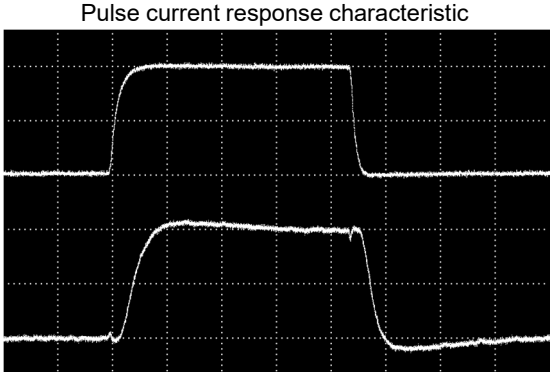
Note3) In this specification, accuracy was determined with reference to the reference voltage (Vref).
Please note that reference voltage error and reference voltage temperature characteristics are added when the reference voltage is not used.

Characteristics chart

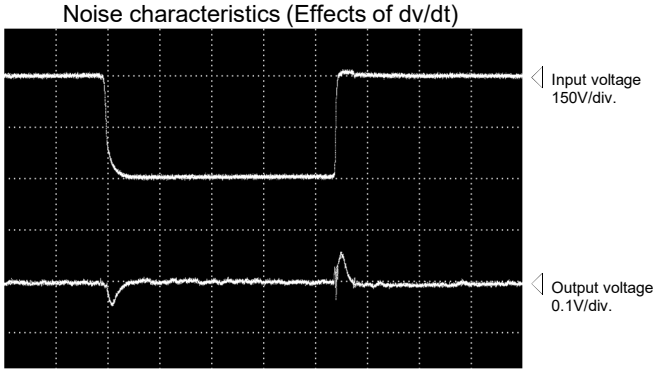
HC-MA300V08PP5B

Time base: 5μs/div.

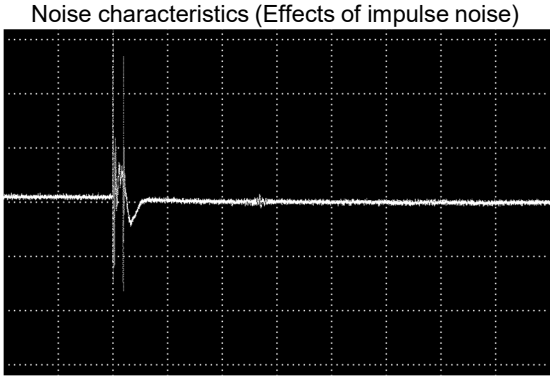
Pulse current response characteristic



Noise characteristics (Effects of dv/dt)

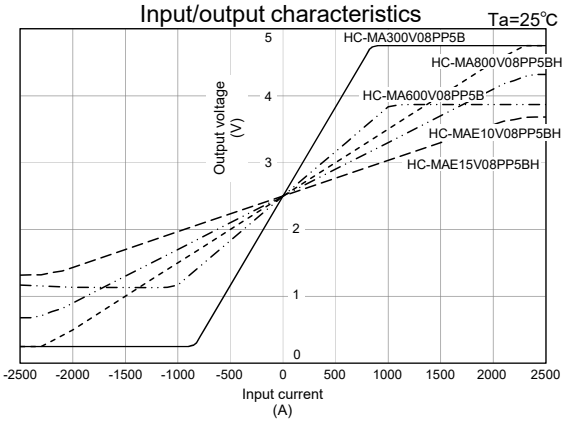


Noise characteristics (Effects of impulse noise)



Input/output characteristics

Ta=25℃



Note: The marks " ◁ " means 0V or 0A.