

HM-A



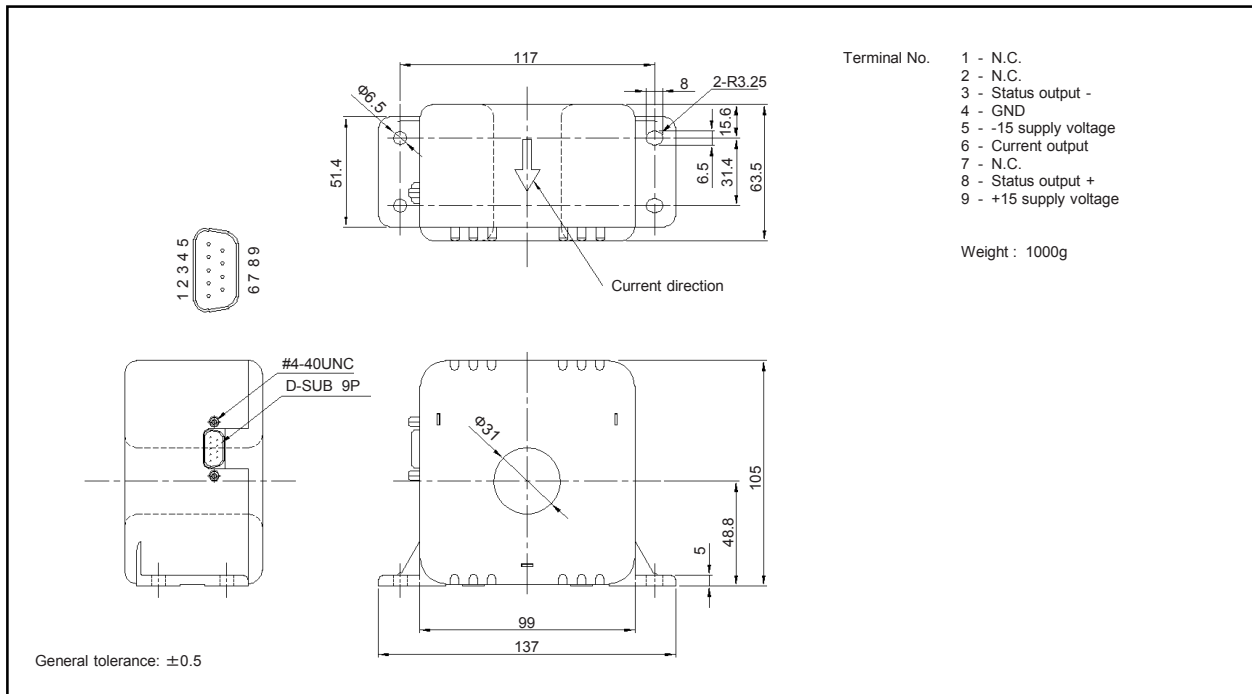
- Rated current 300A ~ 600A
- High accuracy current sensor using fluxgate technology
- Very low output noise

Applications

High precision power supply, Medical equipment, High precision inverter, Test equipment

Dimensions

(mm)



Specification

Ta=25°C

Type	Current output type	
	HM-A300A02B15B	HM-A600A04B15B
Rated current [If]	±300A	±600A
Continuously flowing DC current	±600A	±600A
Min.overload trip current [Is] (Note3)	$\geq \pm 750A (RL \leq 5\Omega)$ $\geq \pm 850A (RL \leq 2.5\Omega)$	
Linearity limits (Note4)	$0 \sim \pm 650A (RL \leq 5\Omega)$ $0 \sim \pm 750A (RL \leq 2.5\Omega)$	
Rated output [Ih]	+If	I0+200mA±300ppm
	-If	I0-200mA±300ppm
Residual output [I0]	I0+400mA±300ppm	
Output linearity	I0-400mA±300ppm	
Second coil resistance	Within ±10μA	
Response time	Within ±10ppm	
Response performance	Approx. 16Ω	
Hysteresis voltage range	Within 1μs (at di/dt=100A/μs)	
Output Temp. Coef.	Within 35%	
Residual output Temp. Coef.	Within 15μA	
Control power supply	Within ±5ppm/°C	
Consumption current	Within ±0.2μA/°C	
Operating Temp.	±15V±5%	
Storage Temp.	250mA+(Input current/1500)	
Operation status(Photocoupler output) (Note5)	+10°C~+50°C	
Dielectric withstand voltage	0°C~+60°C	
Insulation resistance	Open collector (Imax=6mA Vmax=+15V), Active low (Normal operation)	
	2500V AC 50/60Hz 1minute	
	Not less than 500MΩ 500V DC	

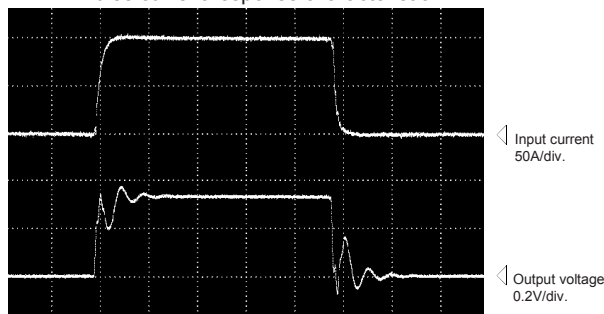
- Note1) The indicated residual output is the one after the core hysteresis is removed.
- Note2) Energization time of continuous live DC current x110% shall be within 1 minute.
- Note3) If the current is higher than this, the inside circuit will shut down and the output will be almost zero.
- Note4) Denotes the range of the input current value for which the output is within 0.1% of the estimate output voltage.
- Note5) It is a signal that indicates the inside circuit operation; it indicates Lo level under normal operation, and Hi level when the inner circuit is shut down because of an over current.

Characteristics chart

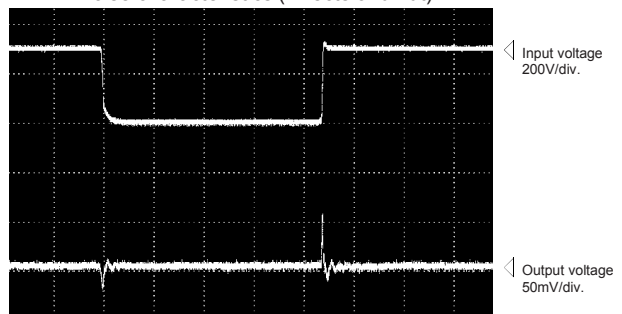
HM-A600A04B15B (RL=5Ω)

Time base: 5μs/div.

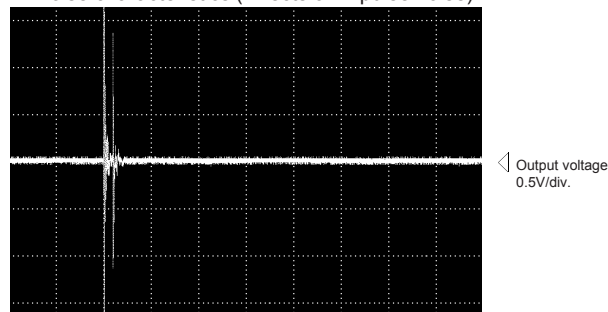
Pulse current response characteristic



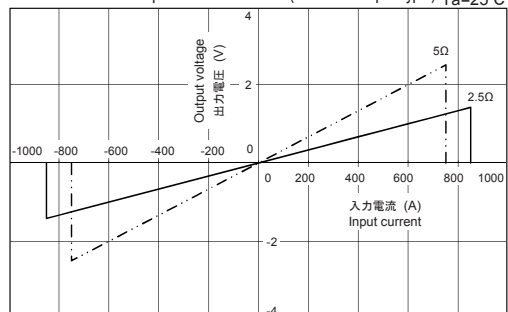
Noise characteristics (Effects of dv/dt)



Noise characteristics (Effects of impulse noise)



Load resistance-output characteristics (Current output type) Ta=25°C



Note: The marks "◁" means 0V or 0A.