

HM-B



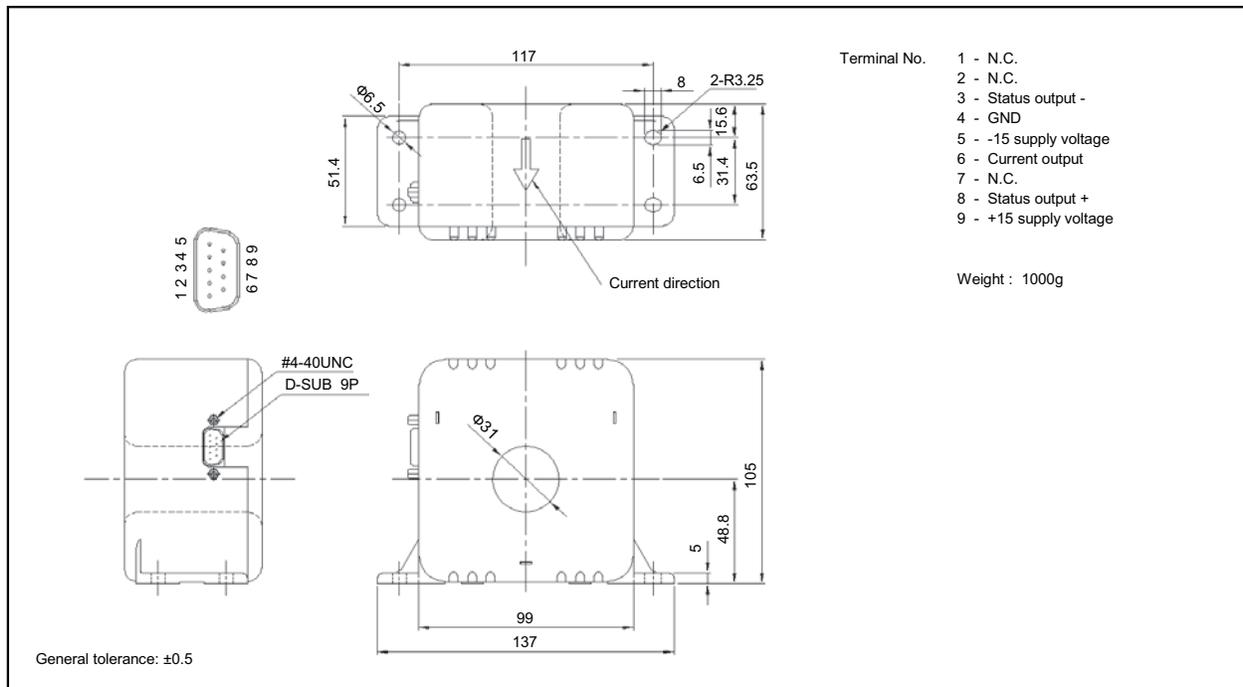
- Rated current 300A ~ 600A
- High accuracy current sensor using flux-gate technology
- Very low output noise

Applications

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

Dimensions

(mm)



Specification

Ta=25°C

Type	Current output type	
	HM-B300A02B15	HM-B600A04B15
Rated current [If]	±300A	±600A
Continuously flowing DC current	±300A	±600A
Min. overload trip current [Is]	$\geq \pm 850A (RL \leq 5\Omega)$ $\geq \pm 950A (RL \leq 2.5\Omega)$ $0 \sim \pm 700A (RL \leq 5\Omega)$ $0 \sim \pm 800A (RL \leq 2.5\Omega)$	
Linearity limits		
Rated output	+If	I0+200mA±300ppm
	-If	I0-200mA±300ppm
Residual output [lo]	Within ±10µA	
Output linearity	Within ±10ppm	
Second coil resistance	Approx. 14Ω	
Response time	Within 1µs (at di/dt=100A/µs)	
Response performance	Within 35%	
Hysteresis voltage range	Within 15µA	
Output Temp. Coef.	Within ±5ppm/°C	
Residual output Temp. Coef.	Within ±0.2µA/°C	
Control power supply	±15V±5%	
Consumption current	250mA+(Input current/1500)	
Operating Temp.	+10°C~+50°C	
Storage Temp.	0°C~+60°C	
Operation status(Photocoupler output)	Open collector (Imax=6mA Vmax=+15V), Active low (Normal operation)	
Dielectric withstand voltage	2500V AC 50/60Hz 1minute	
Insulation resistance	Not less than 500MΩ 500V DC	

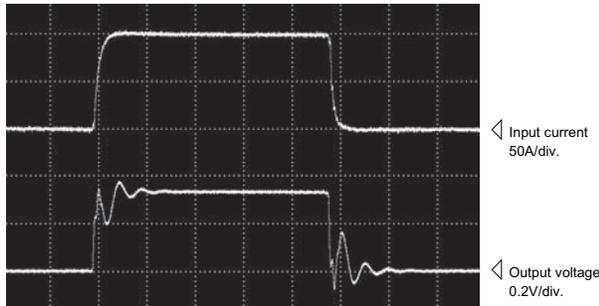
- Note1) The indicated residual voltage is the one after the core hysteresis is removed.
- Note2) Energization time of continuous live DC current x110% shall be within 1 minute.
- Note3) If the current is higher than this, the inside circuit will shut down and the output will be almost zero.
- Note4) 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

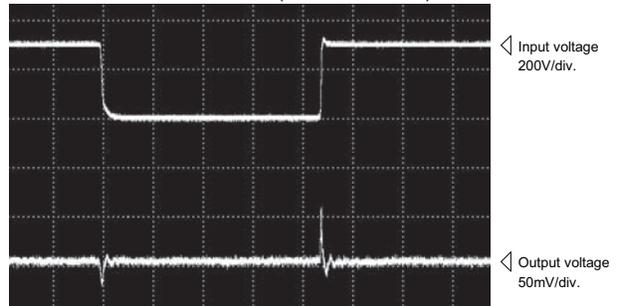
HM-B600A04B15 (RL=5Ω)

5µs/div. Time base

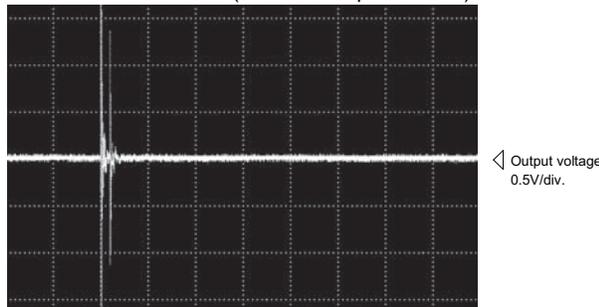
Pulse current response characteristic



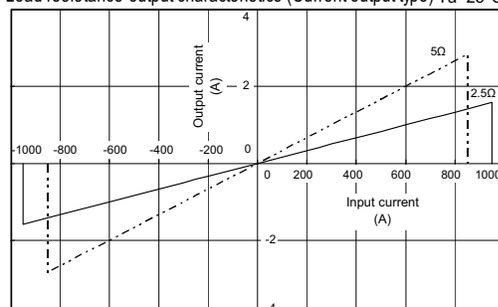
Noise characteristics (Effects of dv/dt)



Noise characteristics (Effects of impulse noise)



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



Note: The marks "◁" means 0V or 0A.