

HM-A



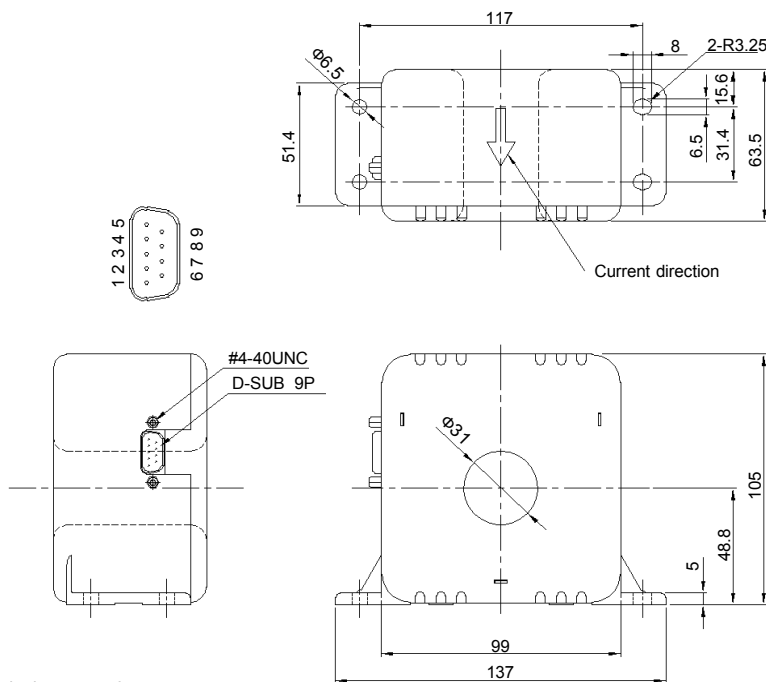
- Rated current 300A ~ 600A
- High accuracy current sensor using fluxgate technology
- Very low output noise
- ±12 Volt version also available

Applications

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

Dimensions

(mm)



- Terminal No.
- 1 - N.C.
  - 2 - N.C.
  - 3 - Status output -
  - 4 - GND
  - 5 - -15 supply voltage
  - 6 - Current output
  - 7 - N.C.
  - 8 - Status output +
  - 9 - +15 supply voltage

Weight : 1000g

General tolerance: ±0.5

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 ]	Within ±10μA	
Output linearity	Within ±10ppm	
Second coil resistance	Approx. 16Ω	
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(Photocupuler output) (Note5)	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 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.

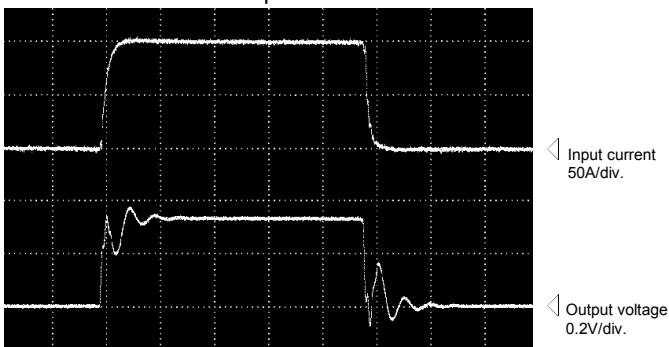
Note5) It is a signal that indicates the inside circuit operation; it indicates Lo level under normal operation, and Hi level when the inner circuit is shut down because of an over current.

Characteristics chart

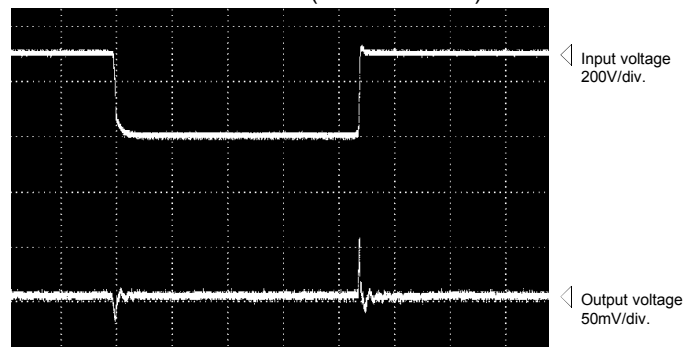
HM-A600A04B15B (RL=5Ω)

Time base: 5μs/div.

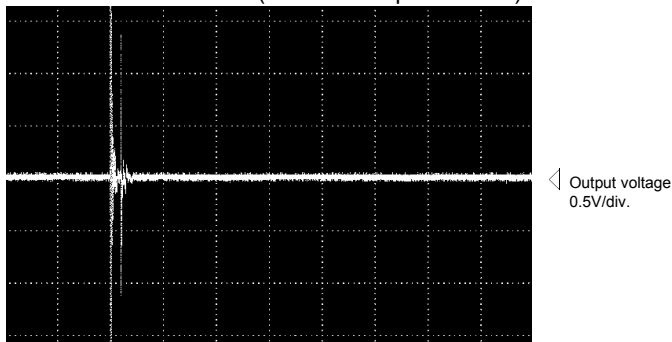
Pulse current response characteristic



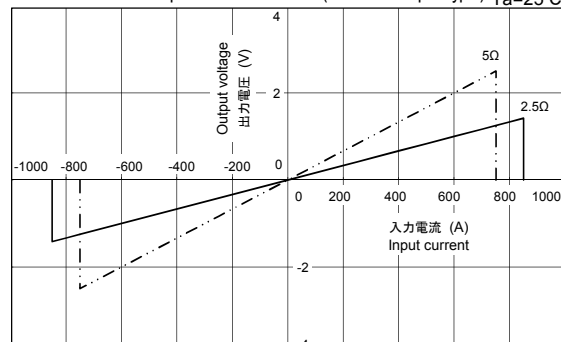
Noise characteristics (Effects of dv/dt)



Noise characteristics (Effects of impulse noise)



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



Note: The marks "◁" means 0V or 0A.