

HS-PHB series

Very small-sized, low-capacity type
PCB-mounting type

HS-PHB



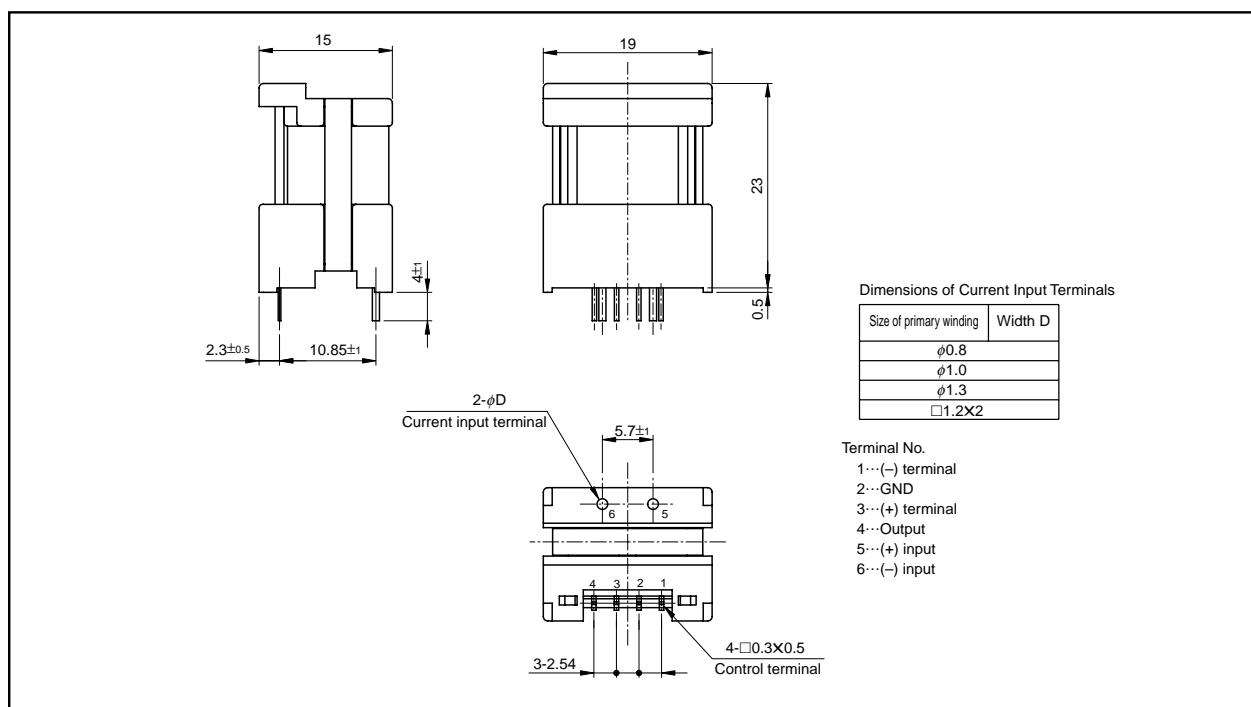
- Rated current 35A ~ 50A
- Realized high precision and compact size
- Superior in response, linearity and temperature characteristics

Applications

Inverters, servo drivers, power supply equipment, NC machine tools

Dimensions

(mm)



Specification

Ta=25°C

| Type | Voltage output type | | |
|---------------------------------|-------------------------------|---------------|---------------|
| | HS-PHB35V4B15 | HS-PHB40V4B15 | HS-PHB50V4B15 |
| Rated current [If] | ±35A | ±40A | ±50A |
| Continuously flowing DC current | ±25.2A | ±28.8A | ±36A |
| Saturation current [Is] | ±87.5A | ±100A | ±125A |
| Linearity limits | 0~±70A | 0~±80A | 0~±100A |
| Size of primary winding | φ1.3 | □1.2X2 | □1.2X2 |
| Turns | 1 | 1 | 1 |
| Rated output | ±4V±1.5% (RL=10kΩ) | | |
| Residual output | Within ±30mV | | |
| Output linearity | Within ±0.5% | | |
| Response time | Within 3μs (at di/dt=If/μs) | | |
| Response performance | Within 10% | | |
| Hysteresis voltage range | Within 50mV | | |
| Output Temp. Coef. | Within ±0.04%/°C | | |
| Residual output Temp. Coef. | Within ±1mV/°C | | |
| Control power supply | ±15V±5% | | |
| Consumption current | 20mA+(Input current × N)/1270 | | |
| Operating Temp. | -10°C~+80°C | | |
| Storage Temp. | -15°C~+85°C | | |
| 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.

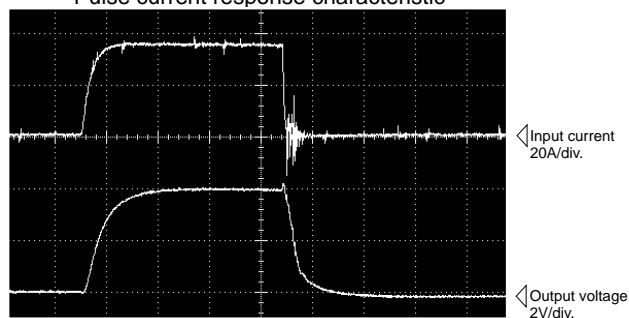
Note2) For continuously flowing DC currents, see the principal characteristics marked by an asterisk (※) on page 1-5.

Characteristics chart

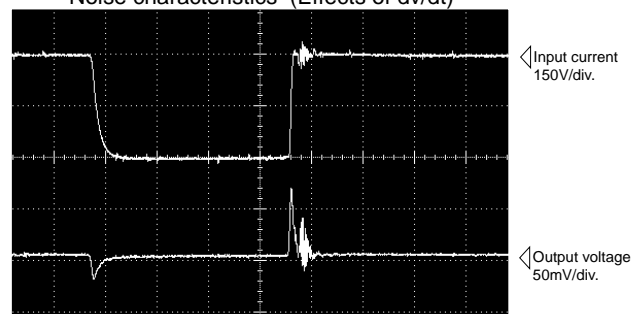
HS-PHB35V4B15 (RL=10KΩ)

Time base : 5μs/div.

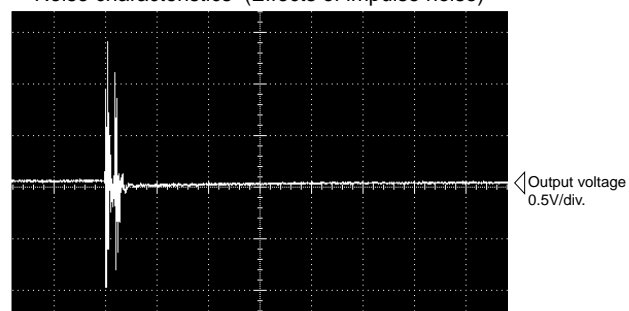
Pulse current response characteristic



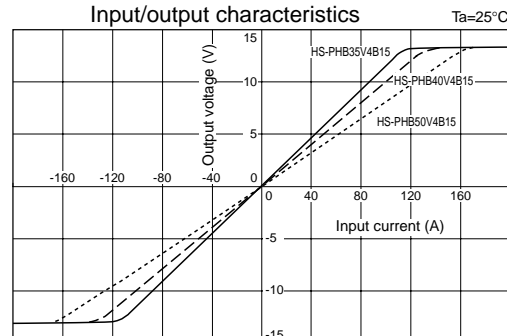
Noise characteristics (Effects of dv/dt)



Noise characteristics (Effects of impulse noise)



Input/output characteristics



Note : The mark "◁" means 0V or 0A.