

Speciality Magnetic Components QUALIFIED to ISO 9001:2008

# PCB Mounting Hall Effect Current Transformers Detector Coil Assembly Type HES25VT, HES50VT, HES100VT, HES25HR, HES50HR and HES100HR



The HES series of Hall Element and coil assemblies enable the implementation of a full Hall Effect Current Transformer by the addition of the requisite electronic circuitry, suitable for measuring currents up to 100A. They are supplied as a free-standing component, enabling the user to configure a closed-loop Hall Effect current transformer to their own specification.

## Features

- High Accuracy
- Fast Response
- All Contacts via PCB
- Designed in Quality

## **Benefits**

- Galvanic Isolation
- Ease of Assembly
- Non Invasive
- High Reliability
- Wide Dynamic Range

## **Applications**

- Variable Speed Drives
- UPS Systems
- D.C. Power Supplies
- Low Frequency Current Measurement
- Overcurrent Protection
- Robotics
- Frequency Inverters
- Power Factor Monitoring

TECHNICAL DATA	HES25 VT/HR	HES50	/T/HR	HES100 VT/HR	
Nominal Primary Current	25A	50/	4	100A	
Turns Ratio	1000:1				
Nominal Power Supply	±15V ±5%				
Minimum Load Resistance	75 Ω	75 Ω		45 Ω	
Operating Temperature Range	0 to +70°C				
Storage Temperature Range	-25°C to +85°C				
SPECIFICATION	HES25 VT/HR	HES50 VT/HR		HES100 VT/HR	
Linearity	0.1% of nominal primary current				
Limit of linearity	$\pm$ 55A peak	$\pm$ 80A peak		$\pm$ 140A peak	
Overall Accuracy	0.5% of nominal primary				
Zero Offset/Temperature	<5µA/°C				
Zero Offset/Supply Variation	<5µA/V				
Coil Resistance	80 Ω	52 Ω		32 Ω	
Bandwidth (-1dB)	Dc to 100kHz				
Di/dt following	>100A/µs				
Delay time	1µs				
dV/dt Immunity	10kV/µs				
GENERAL DATA	HES25/50/100 VT		HE	HES25/50/100 HR	
Weight	15g nominal				
Housing	Modified Polyphenylene Oxide				
Mounting	Direct mounting to PCB by 6 pins		Direct mo	Direct mounting to PCB by 8 pins	
Conductor Temperature	The temperature of the primary conductor should not exceed 100°C				
Conductor Position	Optimum dynamic performance is achieved with a single conductor filling the bore				
Signal Sense	Positive output for direction of arrow			Positive output for primary down through board	

### DIMENSIONS



**HES HR** 

Pin designation as viewed from below

