

# HCSP-3BS

## Three-phase Open Loop Current Sensor - Busbar Mounting



### KEY FEATURES

- ▶ Open loop current transducer based on Hall effect
- ▶ Measured current values up to  $\pm 1.200$  A
- ▶ 3-phase busbar mounting
- ▶ 3 simple analog ratiometric outputs
- ▶ Non-intrusive technology
- ▶ Galvanic separation between power and control
- ▶ Full compatibility with Infineon HybridPack
- ▶ Press fit contacts to eliminate soldering
- ▶ Operating temperature from  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

### DESCRIPTION

Piher Sensing Systems' HCSP3BS is a three-phase open loop current sensor that generates a ratiometric analog output voltage signal proportional to the current flowing through the conductor. Based on Hall effect technology the sensor has been designed for accurate measurement of AC and DC currents in automotive battery management and motor control applications.

### APPLICATIONS

- ▶ Motor control
- ▶ EV motor inverters
- ▶ DC/DC converters

### SPECIFICATIONS

Parameter	Unit	Min.	Typ.	Max.
Supply voltage	V	4,5	5	5,5
Supply current	mA	33	42	48
Output voltage	V	0,5		4,5
Offset voltage	V		2,5	
Frequency bandwidth	kHz	70		250
Operating temperature	$^{\circ}\text{C}$	-40		+125
Typical error (at $25^{\circ}\text{C}$ ; $V_{cc} = 5\text{V}$ )	%	0,65		2,5
Max. error (at $-40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ ; $V_{cc} = 5\text{V}$ )	%	1		3,5

Other specification on request

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ORDER CODE					
HCSP-3BS-_____	0800	0900	1000	1100	1200
Current measuring range	±800 A	±900 A	±1000 A	±1100 A	±1200 A
Sensitivity*	2,5 mV/A	2,22 mV/A	2 mV/A	1,81 mV/A	1,67 mV/A
Sensitivity error*	± 0,6 %				
Electrical offset voltage*	± 3 mV				

\*at 25°C / Vcc = 5V; Other specification on request



Please always use the latest updated datasheets and 3D models published on our website.

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