

Voltage and Current Sensor Specifications

Description	Specifications_BHEL	Vendor specifications
Hall Effect Voltage Sensor		
No's Required	7	
Primary Nominal Voltage	750 V (r.m.s)	
Measuring Range	0 to ± 1000 V	
Rated Nominal possible Output Voltage with burden resistors	≥ 5 V	
Supply Voltage	± 15 V ($\pm 5\%$)	
Isolation Voltage (RMS)	> 3 kV/50Hz/1min	
Offset current	$\leq \pm 100$ μ A	
Overall Accuracy at +25 °C	$< \pm 1\%$ of nominal voltage	
Linearity error	$< \pm 0.5\%$	
Sensitivity	> 50 μ A/V	
Response time	≤ 100 μ s	
Ambient operating temperature	0°C to 70°C	
Frequency Bandwidth	14 kHz @ -3db	
Mounting	Panel	
Hall Effect Current Sensor	Closed loop	
No's Required	2	
Nominal Current	200 Amp (r.m.s)	
Measuring Range	± 300 A	
Rated Nominal possible Output Voltage with burden resistors	≥ 5 V	
Supply Voltage	± 15 V ($\pm 5\%$)	
Isolation	50Hz, 1min, minimum 2.5 kV RMS	
Overall Accuracy	$\leq \pm 0.5$ @ ± 15 V	
Linearity error	$< 0.15\%$	
Offset current	$\leq \pm 0.2$ mA, $T_a = 25^\circ\text{C}$	
Response time	< 1 μ s	
Frequency bandwidth	DC-100 kHz	
Ambient operating temperature	0°C to 70°C	
Mounting	PCB	

Hall Effect Current Sensor	Closed loop	
No's Required	4	
Nominal Current	100 Amp (r.m.s)	
Measuring Range	±150 A	
Rated Nominal possible Output Voltage with burden resistors	≥ 5 V	
Supply Voltage	±15V (±5%)	
Isolation	50Hz,1min,minimum 2.5 kV RMS	
Overall Accuracy	<± 0.5 @ ±15V	
Linearity error	<0.15 %	
Offset current	≤ ±0.2mA, Ta=25°C	
Response time	<1 μs	
Frequency bandwidth	DC-150 kHz	
Ambient operating temperature	0°C to 70°C	
Mounting	PCB	

Hall Effect Current Sensor	Closed loop	
No's Required	4	
Nominal Current	50 Amp (r.m.s)	
Measuring Range	± 70 A	
Rated Nominal possible Output Voltage with burden resistors	≥ 5 V	
Supply Voltage	±15V (±5%)	
Isolation	50Hz,1min,minimum 2.5 kV RMS	
Overall Accuracy	<± 0.7 @ ±15V	
Linearity error	<0.15 %	
Offset current	≤ ±0.2mA, Ta=25°C	
Response time	<1 μs	
Frequency bandwidth	DC-150 kHz	
Ambient operating temperature	0°C to 70°C	
Mounting	PCB	