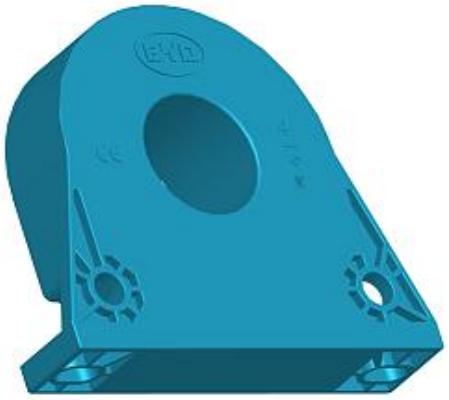
BSF3-ICV2H

Current Sensors

Description

For the electronic measurement of currents: DC, AC, pulsed, mixed, with a galvanic isolation between the primary circuit (high power) and the secondary circuit (electronic circuit).



Features

- Hall effect measuring principle
- Galvanic isolation between primary and secondary circuit
- Low power consumption
- Extended measuring range
- Insulated plastic case recognized according to UL 94-V0

I_{PN} = 100...300A

Advantages

- Very good linearity
- Excellent accuracy
- Low temperature drift
- Wide frequency bandwidth
- Optimized response time
- No insertion losses
- High immunity against external Interference
- Excellent performance and price

Applications

- AC variable speed drives
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Power supplies for welding applications
- Static converters for DC motor drives
- Switched-Mode Power Supplies (SMPS)

TYPES OF PRODUCTS				
Type	**Primary nominal current r. m. s I_{PN} (A)**	**Primary current measuring range I_P (A)**	**Measuring resistance R_M (Ω)**	
BSF3-100ICV2H	100	0~±150	0～187	with ±15V@±100Amax
			0～112	with ±15V@±150Amax
BSF3-200ICV2H	200	0~±300	0～80	with ±15V@±200Amax
			0～42	with ±15V@±300Amax
BSF3-300ICV2H	300	0~±500	0～40	with ±15V@±300Amax
			0～13	with ±15V@±500Amax

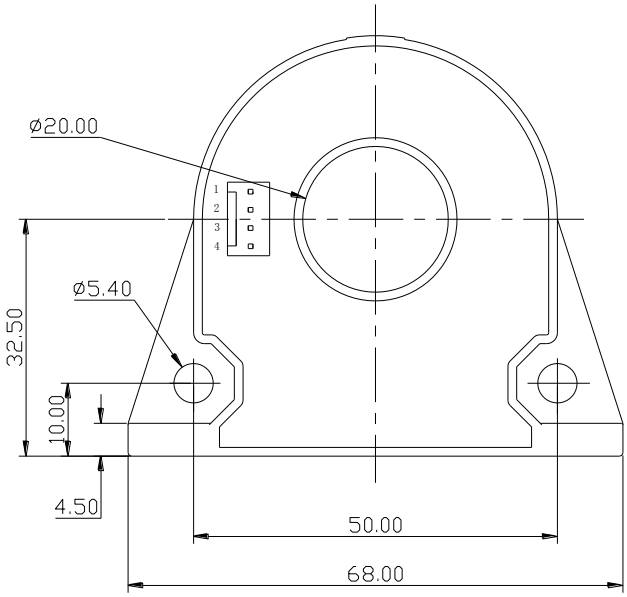
Parameters Table

PARAMETERS	SYMBOL	UNIT	VALUE	CONDITIONS
Electrical data				
Supply voltage(±5%)	V_C	V	±15	
Current consumption	I_C	mA	22+Is	
Secondary nominal r.m.s. current	I_{SN}	mA	50	I_{PN} = 100A
			100	I_{PN} = 200A
			150	I_{PN} = 300A
Conversion ratio	K_N		1:2000	
R. m. s voltage for AC isolation test	V_d	KV	6	@50Hz, 1 min
Accuracy - Dynamic performance data				
Linearity	ε_L	%	<±0.1	
Accuracy	X_G	%	<±0.5	@ I_{PN}, T_A = 25 ℃
Offset current	I_O	mA	<±0.15	@ I_P = 0,T_A = 25 ℃
Thermal drift of Io	I_{OT}	mA	<±0.6	@ I_P = 0,－10 ℃～+70 ℃
Response time	t_r	μS	<1	@ 90% of I_{PN} step
d_i/d_t accurately followed	d_i/d_t	A/μS	>100	
Frequency bandwidth (1)	f	kHz	DC~100	@-3dB
General data				
Ambient operating temperature	T_A	℃	-40 ~ +105	
Ambient storage temperature	T_S	℃	-40 ~ +105	
Secondary coil resistance	Rs	Ω	28	@ T_A = 70 ℃

Notes:

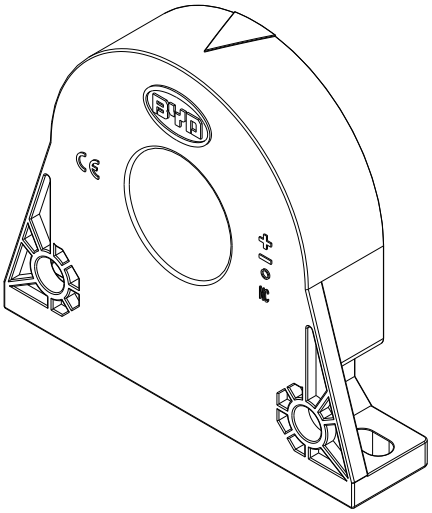
(1) Please refer to derating curves in the technical file to avoid excessive core heating at high frequency.

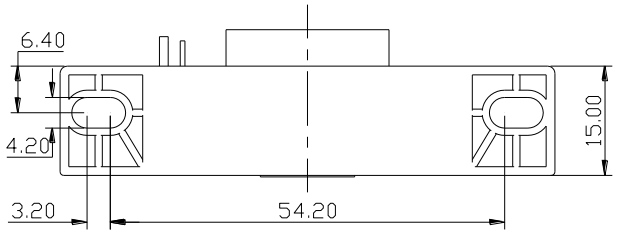
Dimensions BSF3-ICV2H (in mm. 1 mm = 0.0394 inch)



副边端子:

1:+15V
2:-15V
3:O
4:NC





◆Instructions of use

1. When the test current passes through the sensor, you can get the size of the output current. (Warning: wrong connection may lead to sensors damage)
2. According to user needs, different rated input currents and output currents of the sensors can be customized.

RESTRICTIONS ON PRODUCT USE

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