

$I_{PN} = 100...300A$

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

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

Industrial 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)	
SICF3S100V2	100	0~±150	0~187	with±15V@±100Amax
			0~112	with±15V@±150Amax
SICF3S200V2	200	0~±300	0~80	with±15V@±200Amax
			0~42	with±15V@±300Amax
SICF3S300V2	300	0~±500	0~40	with±15V@±300Amax
			0~13	with±15V@±500Amax

General 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)

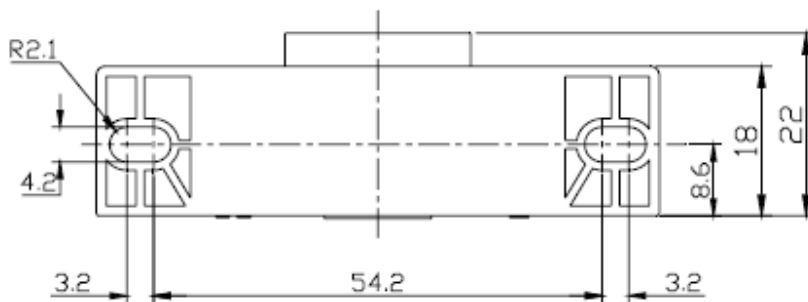
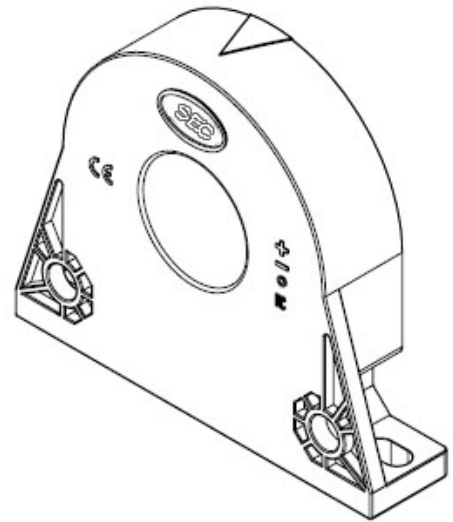
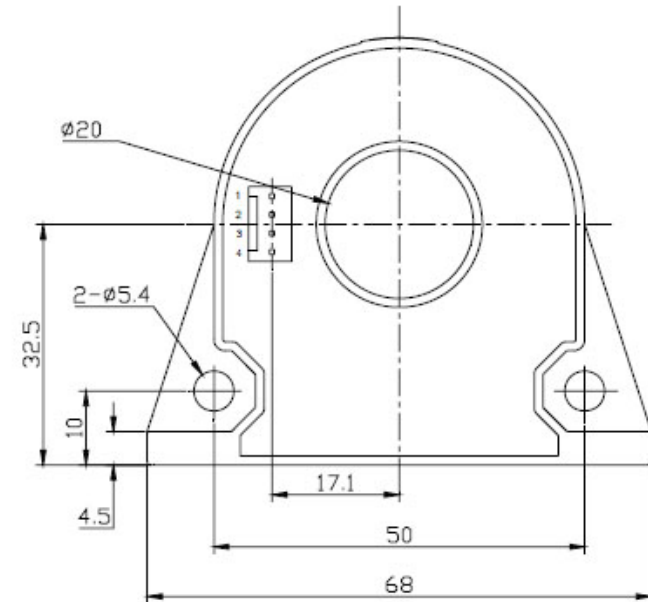
Parameters Table

PARAMETERS	SYMBOL	UNIT	VALUE	CONDITIONS
Electrical data				
Supply voltage(±5%)	V _C	V	±15	
Current consumption	I _C	mA	22+I _s	
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°C
Offset current	I _O	mA	<±0.2	@ I _P = 0, T _A = 25°C
Thermal drift of I _o	I _{OT}	mA	±0.6	@ I _P = 0, -10~+70°C
Response time	t _r	μS	<1	@ 90% of I _{PN} step
di/dt accurately followed	d _i /dt	A/μS	>100	
Frequency bandwidth (1)	BW	kHz	DC~100	@-3dB
General data				
Ambient operating temperature	T _A	°C	-40 ~ +85	
Ambient storage temperature	T _S	°C	-40 ~ +105	
Secondary coil resistance	R _s	Ω	28	@ T _A = 70°C

Notes:

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

Dimensions SICF3SV2 (in mm. 1 mm = 0.0394 inch)



Pins Arrangement

- 1: +15V
- 2: -15V
- 3: 0
- 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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