

NA25B-P Current Transducer

Applications:

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

Main technical data:

1. Normal current I_{PN} : 25A rms

2. Measuring range I_p : 0~±55A

3. Measuring resistance @+85°C:		$R_{M \min}$	$R_{M \max}$
with ±12V	@ ±DC25A:	0 Ω	252 Ω
	@ ±AC25A:	0 Ω	150 Ω
with ±15V	@ ±DC25A:	70 Ω	366 Ω
	@ ±AC25A:	70 Ω	231 Ω



4. Secondary normal current: 25mA rms

5. Conversion ratio: 1-2-3:1000

6. Supply voltage(+/-5%): +/-12V~ +/-15V

7. Current consumption: 16mA+ Secondary output current

8. Isolation: Between primary and secondary + test winding + screen: 5kV rms/50Hz/1min

Accuracy – Dynamic performance

1. Accuracy @ I_{PN} , $T_A=+25^\circ\text{C}$: +/-0.8%

2. Non-linearity (0~± I_{PN}): +/-0.2%

3. Offset current I_o @ $T_A=+25^\circ\text{C}$: +/-0.15mA

4. Residual current @ $I_p=0$, after an overload of $3 \times I_{PN}$: less than +/-0.25mA

5. Thermal drift of I_o @ $0^\circ\text{C} \sim +70^\circ\text{C}$: +/-0.6mA

@ $-25^\circ\text{C} \sim +85^\circ\text{C}$: +/-0.7mA

6. Response time @90% of I_p max: ≤500ns

7. di/dt accurately followed: > 200A/us

8. Frequency bandwidth (-1dB): DC 0~200kHz

General data:

1. Operating temperature: $-25^\circ\text{C} \sim +85^\circ\text{C}$

2. Storage temperature: $-40^\circ\text{C} \sim +90^\circ\text{C}$

3. Secondary coil resistance: ≤76 Ω

4. Weight: 22g

5. Standards: EN 50178

Features:

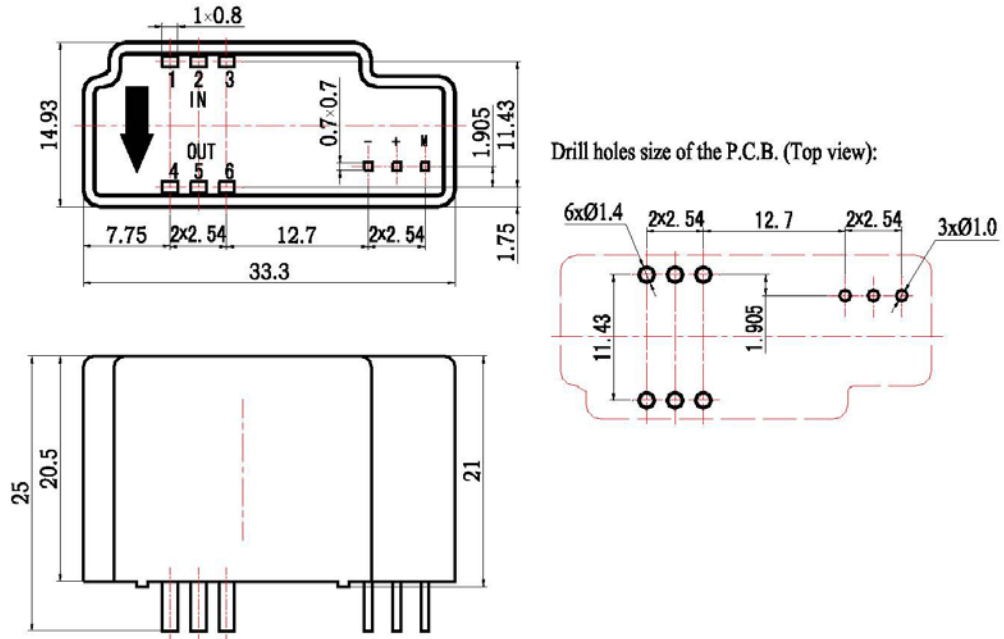
1. Hall effect measuring principle

2. Galvanic isolation between primary and secondary circuit

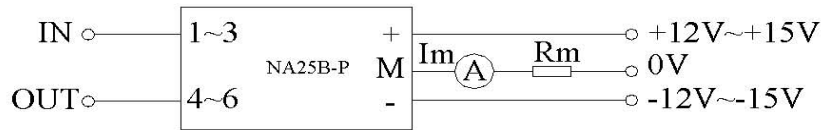
3. Insulated plastic case made of white PPO recognized according to UL 94-V0

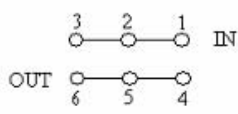
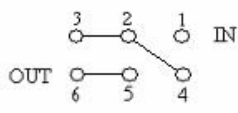
4. The whole current transducer comply with RoHS Directive completely

Dimension:



Connection:



Number of primary turns	Primary current		Nominal output current I_{SN} [mA]	Turns ratio K_N	Primary resistance R_p [mΩ]	Primary insertion inductance L_p [μH]	Recommended connections
	nominal I_{PN} [A]	maximum I_p [A]					
1	25	55	25	1:1000	0.18	0.013	
2	12	27	24	2:1000	0.81	0.05	
3	8	18	24	3:1000	1.62	0.12	