

HNV025A Series Hall Current Sensor

Introduction

HNV025A Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.

△ Electrical Parameters (Ta=25°C)

Type		HNV025A	
Parameters	Symbols		
Nominal measuring current	I_{PN}	$\pm 10\text{mA}$	
Linear range	I_P	$0\sim\pm 14\text{mA}$	
Turns ratio	K_N	2500:1000	
Primary coil resistance	R_c	$190\ \Omega$	
Secondary coil resistance	R_i	$40\ \Omega$	
Nominal output current	I_{SN}	$\pm 25\ \text{mA} \pm 0.25\ \text{mA}$	
Zero offset current	I_o	$\pm 0.05\ \text{mA}$ Type $\pm 0.25\ \text{mA}$ Max	
Linear error	ξ_L	$\pm 0.2\%$	
Supply voltage	V_c	$\pm 15\text{V} \pm 5\%$	
Response time	T_r	$\leq 40\ \mu\text{S}$	
Temperature drift of bridge offset	I_{OT}	$-10^\circ\text{C}\sim+70^\circ\text{C}$	$\pm 0.2\text{mA}$ Type $\pm 0.3\text{mA}$ Max
		$-40^\circ\text{C}\sim+85^\circ\text{C}$	$\pm 0.3\text{mA}$ Type $\pm 0.6\text{mA}$ Max
Recommended load resistance	R_M	$100\ \Omega\sim 300\ \Omega$	
Power dissipation current	I_C	$(10+ I_S)\ \text{mA}$	
Isolation voltage	V_d	$2.5\text{KV}/50$ or $60\text{Hz}/1\text{min}$	
Operating temperature	T_a	$-25^\circ\text{C}\sim+85^\circ\text{C}$	
Storage temperature	T_s	$-40^\circ\text{C}\sim+90^\circ\text{C}$	



Features:

- ◆ Adopt UL94V-0-recognized insulated casing
- ◆ High insulation between primary side and secondary side
- ◆ High over-load capacity
- ◆ Small size and space saving
- ◆ Full-sealed
- ◆ High reliability

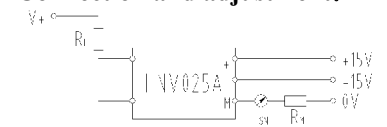
Applications:

- ◆ Control feedback system
- ◆ Variable-frequency speed control system
- ◆ Power source
- ◆ Robot
- ◆ Over-current protection

Instructions for Use:

- ◆ Connect the wire of transducer in correct way as required.
- ◆ Inputting measured voltage from input end of transducer, the in-phase current signal can be obtained from output end by sampling.

Connection and adjustment:



- ◆+: +Vc (+15V)
- ◆-: -Vc (-15V)
- ◆M: Output

△Dimensions: (mm)

