

# HNV025T Series Hall Current Sensor

## Introduction

HNV025T Series Hall voltage 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		HNV025T	
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	$I_o$	$\pm 0.1\ \text{mA}$ Type $\pm 0.25\ \text{mA}$ Max	
Linear error	$\xi_L$	$\pm 0.2\%$	
Supply voltage	$V_c$	$\pm 15\text{V} \pm 5\%$	
Response time	$T_r$	$\leq 40\ \mu\text{S}$	
Temperature drift of bridge offset	$I_{OT}$	$0^\circ\text{C}\sim+70^\circ\text{C}$	$\pm 0.2\text{mA}$ Type $\pm 0.4\text{mA}$ 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	$V_d$	2.5KV/50 or 60Hz/1min	
Operating temperature	$T_a$	$-25^\circ\text{C}\sim+85^\circ\text{C}$	
Storage temperature	$T_s$	$-40^\circ\text{C}\sim+90^\circ\text{C}$	



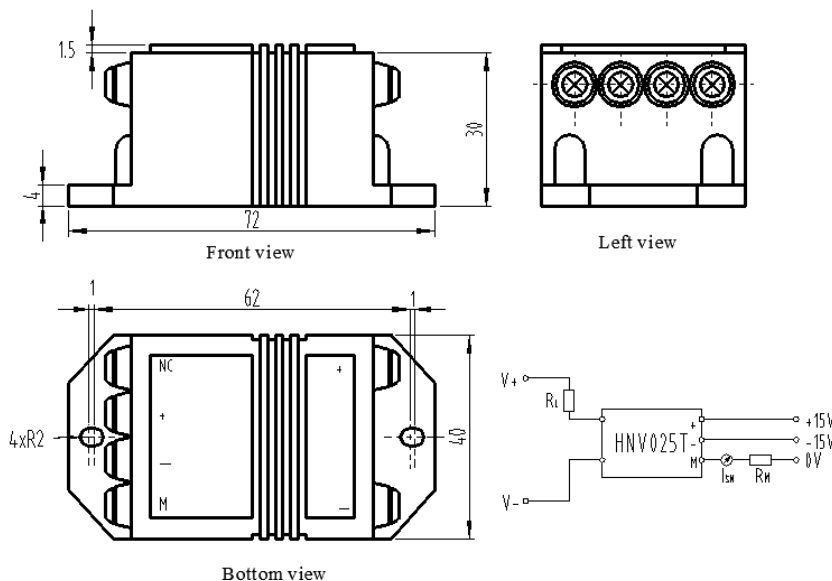
## Features:

- ◆ 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

## △ Dimensions: (mm)



## 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