Honeywell

25A Closed Loop Current Sensor

<u>CSNE151-104</u>

2000 Turn 25Arms Current Sensor

1. DEFINITION.

The CSNE151-104 is a current transducer based on the principle of magnetic compensation. It provides electronic measurement of DC, AC or pulsed currents, and their combinations, with galvanic isolation between the primary (high current) and secondary circuits.

2. ELECTRICAL DATA.

Nominal current (In)		: 25 A.t rms		
Measuring range (DC or AC Peak)		: 0 to \pm 55 A.	t	
Measuring resistance $(at + 70^{\circ}C)$: Rm min	Rm max	
with ±15V	at ± 25 A.t max	: 193 ohm	722 ohm	
	at \pm 55 A.t max	: 193 ohm	223 ohm	
Nominal analogue output current at 25A		: 12.5 mA		
Turns ratio		: 1,2,3 / 2000		
Accuracy at +25°C		: maximum ±	: maximum ±1.0% at In	
Supply voltage		: ±15V dc (±5%)		
Galvanic isolation		: 5 kV rms / 5	: 5 kV rms / 50 Hz / 1 minute	

3. ACCURACY - DYNAMIC PERFORMANCE.

Zero offset current at +25°C	: better than ± 0.3 mA
Thermal drift of offset current 0°C to 70°C	: better than ± 0.6 mA
Linearity	: better than ± 0.3 %
Response time	: better than 1µs
Bandwidth	: DC to 100 kHz
dI/dt	: better than 50A/µs

4. GENERAL DATA.

Operating temperature	: -40° C to $+75^{\circ}$ C
Storage temperature	: -40° C to $+90^{\circ}$ C
Current consumption	: 10 mA plus output current
Secondary internal resistance (at +70°C)	: 190 ohm
Sensor housing	: Insulated plastic case
Connection (Primary)	: 3 x 1.25mm busbars
Connection (Secondary)	: 3 x 1.0mm pcb pins

Notes.

1. All specifications are at $\pm 25^{\circ}$ C and ± 15 V supply unless otherwise stated.

NOTES: I. MOUNTING HOLES - PRIMARY PINS Ø1.45mm (0.057) 2. WOUNTING HOLES - SECONDARY PINS Ø1.00mm (0.039) CONNECTIONS 01 01 01 01 0⁶ 0¹ 0⁴ 0¹¹ 0,0,0 000 8 ę, P.R.I.M.R.Y P.I.NS 6,5,4 1,2,3 . PRIMURY TURNS ~ DC ACCURACY [[152] NUMBER OF TURNS 2000年1 [[.52] 1 + - DIRECTION MAXIMUM COIL RESISTANCE AT 70°C ī π - 12.7 B G061 OUTPUT NOMINAL 12.5mA 1,60 SENSING RANGE NOM. MAX. MAX(IOSECS) - 2,54 [.10] 1.371 W to 55A 1 DIRECTION OF CURRENT Ŧ 50.4 - 31,75 --> 25A ė Ŧ -+-GLASS-FILLED POLYESTER P N L NI HOUSING 9,47 [.37] 20,8 [.82] [...] T, 75 -

SUPPLY RANGE ±15 V

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