

**CSNE151-006**



DRAWING NUMBER

ISSUE 1 2

RELEASE No

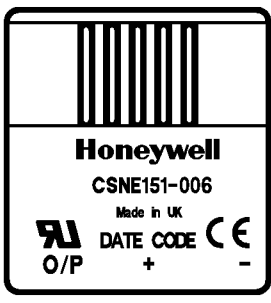
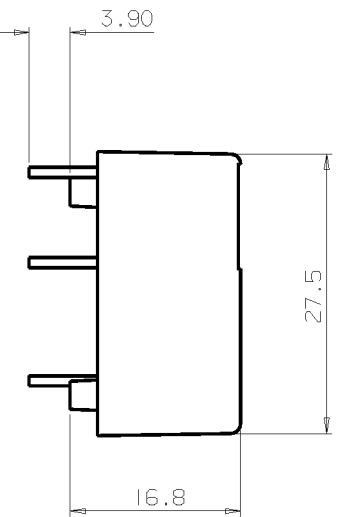
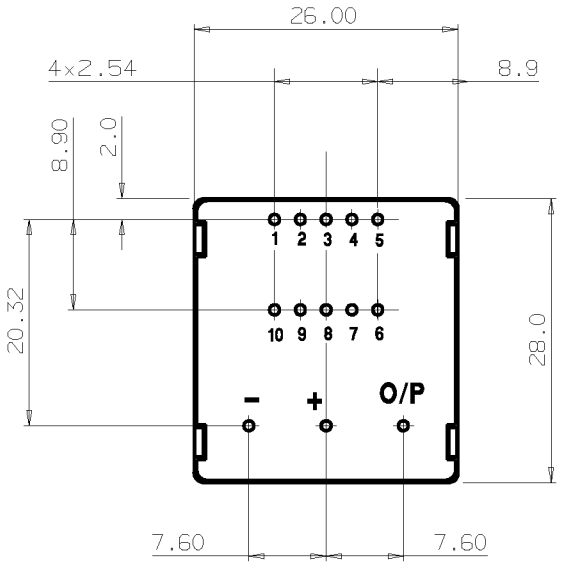
DO NOT SCALE PRINT

REPLACES A302-03

**Honeywell**

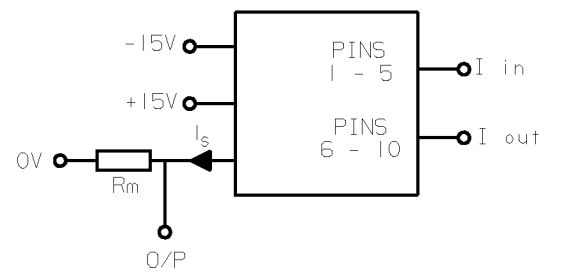
**5A TO 25A  
MULTI - RANGE  
CURRENT SENSOR**

CATALOGUE LISTING  
**CSNE151-006**



RECOMMENDED P.C.B. HOLE :- Ø1.2

ELECTRICAL SCHEMATIC



DESCRIPTION

ELECTRICAL DATA

REVISIONS  
2 WJ 2/98  
  
10/96  
  
DRAWN W. JOHNSTON  
CHECK  
DESIGN  
AUTHOR N

CSNE151-006 IS A MULTI-RANGE CURRENT SENSOR MODULE BASED ON THE 'NULL BALANCE' HALL EFFECT PRINCIPLE. 5, 6, 8, 12 OR 25A CAN BE MEASURED BY SELECTING THE APPROPRIATE 1 TO 5 PRIMARY TURNS. THIS IS A POTTED VERSION WITHOUT A COVER.

NOMINAL PRIMARY CURRENT  $I_{pn}$ :- 25A rms  
MEASURING RANGE  $I_p$ :- 0 TO  $\pm 36A$   
LOAD RESISTANCE:-  $R_m \min$   $R_m \max$   
 $\pm 25A.t \max$  100 $\Omega$  320 $\Omega$   
 $\pm 36A.t \max$  100 $\Omega$  190 $\Omega$

SUPPLY VOLTAGE:-  $\pm 15V$  ( $\pm 5\%$ )  
DIELECTRIC STRENGTH:- 5.0kVrms/50Hz/1min.  
CURRENT CONSUMPTION:- 10 +  $I_s$  mA  
PRIMARY INTERNAL RESISTANCE:- <1.25m $\Omega$ /TURN  
SECONDARY INTERNAL RESISTANCE:- 110 $\Omega$  MAX AT +70°C.

ACCURACY DATA

OFFSET :-  $\pm 0.05$  mA TYP.  
 $\pm 0.15$  mA MAX.  
OFFSET DRIFT WITH TEMP.:-  $\pm 0.17$ mA TYP.  
 $\pm 0.6$ mA MAX.  
LINEARITY:-  $\pm 0.2\%$   $I_{pn}$   
RESPONSE TIME :- <1 $\mu$ S  
FREQUENCY:- DC TO 150KHz

ENVIRONMENTAL DATA

OPERATING TEMP.:- 0 TO +70°C  
STORAGE TEMP.:- -40 TO +90°C

PRIMARY TURNS	PRIMARY CURRENT		NOM. OUTPUT CURRENT (mA) $I_s$	PRIMARY RESISTANCE (m $\Omega$ )	PRIMARY INSERTION INDUCTANCE ( $\mu$ H)	PIN CONNECTIONS
	NOM. $I_{pn}$ (A)	MAX. $I_p$ (A)				
1	25	36	25	0.3	0.023	
2	12	18	24	1.1	0.09	
3	8	12	24	2.5	0.21	
4	6	9	24	4.4	0.37	
5	5	7	25	6.3	0.58	

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THIRD ANGLE PROJECTION

MODIFY ON CAD3D SYSTEM ONLY

SCALE :- 2:1

DIMENSIONS ARE IN MILLIMETRES