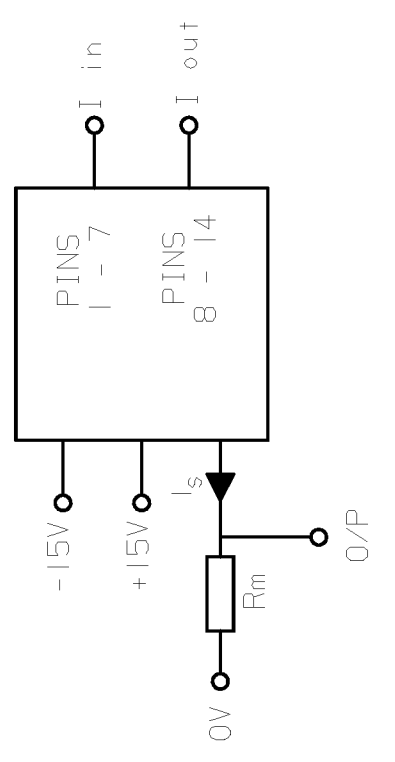


ELECTRICAL SCHEMATIC



DESCRIPTION

CSNE151-001 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 7 PRIMARY TURNS. THIS IS A POTTED VERSION WITHOUT A COVER.

ELECTRICAL DATA

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 Ω 320 Ω
 $\pm 36A.t$ max 160 Ω 190 Ω
NOTE: - MAX RANGE OF $\pm 43A$ UP TO 70°C FOR R_L 100 Ω MIN/140 Ω MAX
SUPPLY VOLTAGE: - $\pm 15V$ ($\pm 5\%$)
DIELECTRIC STRENGTH: - 5.0KVrms/50Hz/1min.
CURRENT CONSUMPTION: - $I_0 + I_s$ mA
PRIMARY INTERNAL RESISTANCE: - $< 1.25m\Omega$ /TURN
SECONDARY INTERNAL RESISTANCE: - 110 Ω MAX AT +70°C.

PRIMARY TURNS	PRIMARY CURRENT		NOM. OUTPUT CURRENT I_s	PRIMARY RESISTANCE (m Ω)	PRIMARY INSERTION INDUCTANCE (μ H)	PIN CONNECTIONS
	NOM. I_{pn} (A)	MAX. I_p (A)				
1	25	36	25	0.2	0.017	7 6 5 4 3 2 1 IN 8 9 10 11 12 13 14 OUT
2	12	18	25	0.8	0.07	7 6 5 4 3 2 1 IN 8 9 10 11 12 13 14 OUT
3	8	12	25	1.7	0.16	7 6 5 4 3 2 1 IN 8 9 10 11 12 13 14 OUT
4	6	9	25	3.2	0.29	7 6 5 4 3 2 1 IN 8 9 10 11 12 13 14 OUT
5	5	7	25	5.1	0.47	7 6 5 4 3 2 1 IN 8 9 10 11 12 13 14 OUT
6	4	6	25	7.0	0.64	7 6 5 4 3 2 1 IN 8 9 10 11 12 13 14 OUT
7	3.5	5	25	8.9	0.82	7 6 5 4 3 2 1 IN 8 9 10 11 12 13 14 OUT

ACCURACY DATA

OFFSET : - ± 0.05 mA TYP.
 ± 0.15 mA MAX.
OFFSET DRIFT WITH TEMP. : - ± 0.2 mA TYP.
 ± 0.7 mA MAX.
LINEARITY : - $\pm 0.2\%$ I_{pn}
RESPONSE TIME : - $< 1\mu$ S
FREQUENCY : - DC TO 150KHz

ENVIRONMENTAL DATA

OPERATING TEMP. : - -40 TO +85°C
STORAGE TEMP. : - -40 TO +90°C