

**PN : HCS151-100/100B**

**IPN = 25A - 50A**

**Features**

- Closed loop
- High accuracy
- Supply voltage :  $\pm 15V$  DC
- Current output
- Small PCB mounting
- Can be customized

Very good linearity  
 Low power consumption  
 Good over-current capability



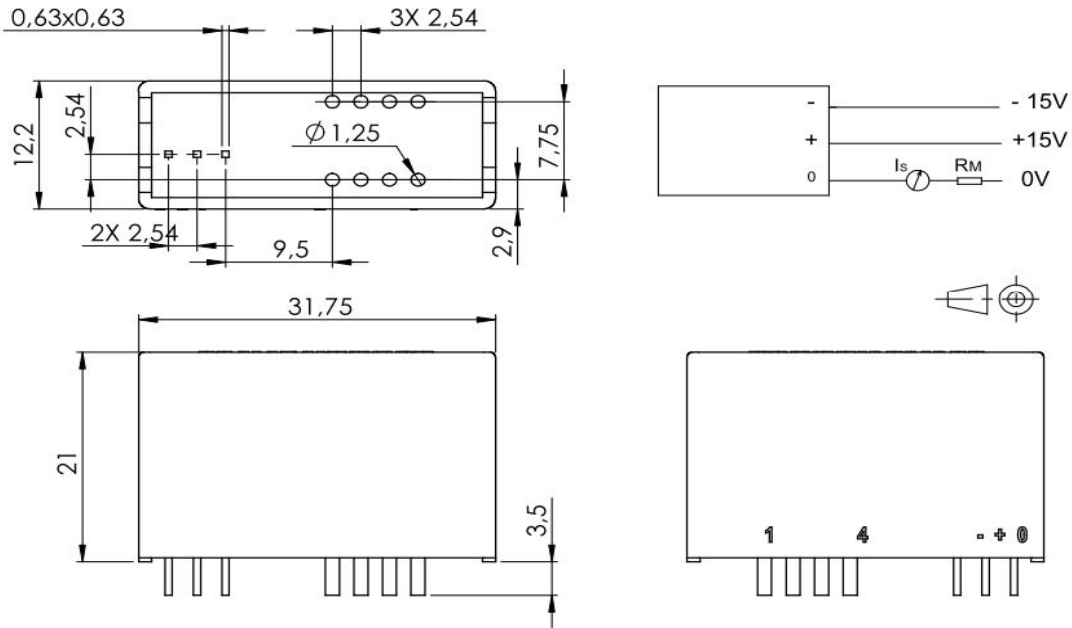
**Applications**

- Frequency drive control home appliances
- Solar power management system
- Inverter applications
- Uninterruptible power supplies (UPS)
- Current monitoring

ELECTRICAL DATA		
HCS-151-...	100	100B
Nominal rms current $I_{PN}$ (A)	25	50
Sensed current range $I_{PM}$ (A)	$\pm 55$	$\pm 100$
Measuring resistance $R_M$ ( $\Omega$ ) with $V_C = \pm 15 V$	54 to 360	68 to 180
Coil turns ratio K ( $P^y:S^y$ )	1 - 2 - 3 - 4 : 1000	1 - 2 - 3 - 4 : 1000
Secondary coil resistance ( $\Omega$ )	30	
Nominal analog output current $I_{SN}$ (mA)	25	50
Static current consumption $I_{CO}$ (mA)	$\leq 15$	
Supply voltage $V_C$ (Vdc)	$\pm 15^{\pm 5\%}$	

ACCURACY DYNAMIC PERFORMANCE			GENERAL & ISOLATION CHARACTERISTICS		
Accuracy $X_G$ @ $I_{PN}$ , $T=25^\circ C$	$\pm 0,5\%$	%	Operating temperature	-40 to +85	$^\circ C$
Zero offset Current $I_O$ @ $I_P=0$ , $T=25^\circ C$	$\leq \pm 0,2$	mA	Storage temperature	-40 to +125	$^\circ C$
Zero current drift @ - 40 $^\circ C$ to 85 $^\circ C$	$\leq \pm 0,5$	mA	Weight	15	g
Linearity error $\epsilon_L$	$\leq 0,1$	% FS	Insulation voltage (50Hz, 1mn)	5	KV
di/dt accurately followed	> 50	A/ $\mu s$			
Response time $t_r$	$\leq 1$	$\mu s$			
Bandwidth (- 3db)	DC to 200	kHz			

## DIMENSIONS



## WIRING DIAGRAM

Number of Primary turns	Primary current $I_{PN}$ (A)		Peak Current $I_{PM}$ (A)		Output Current $I_{SN}$ (mA)		Primary pin
	100	100B	100	100B	100	100B	
							<b>HCS-151-100 &amp; 100B</b>
1	25	50	55	100	25	50	<div style="display: flex; justify-content: space-between; align-items: center;"> <span>8</span> <span>5 Out</span> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <span>In 1</span> <span>4</span> </div>
2	12	25	27	50	24	50	<div style="display: flex; justify-content: space-between; align-items: center;"> <span>8</span> <span>5 Out</span> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <span>In 1</span> <span>4</span> </div>
3	8	16	18	33	24	48	<div style="display: flex; justify-content: space-between; align-items: center;"> <span>8</span> <span>5 Out</span> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <span>In 1</span> <span>4</span> </div>
4	6	12	13	25	24	48	<div style="display: flex; justify-content: space-between; align-items: center;"> <span>8</span> <span>5 Out</span> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <span>In 1</span> <span>4</span> </div>

## MECHANICAL CHARACTERISTICS

General tolerance	$\pm 0,2$ mm
Primary pins	8 x $\varnothing 1,25$ mm
Terminal connection	3 x 0,635*0,635

### Cautions :

Do respect the wiring diagram in accordance with the current value and its flow direction.

**WARNING : Incorrect wiring may cause damage to the sensor.**