

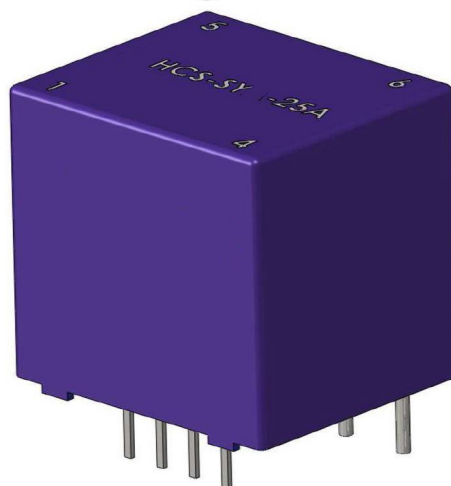
PN : HCS-SY

IPN = 3A - 5A - 10A - 15A - 20A - 25A - 30A - 50A

Features

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

Very good linearity
 Low power consumption
 Good over-current capability



Applications

- AC/DC variable speed motor driver
- Battery applications
- Uninterruptible power supplies (UPS)
- Switching power supplies (SMPS)

ELECTRICAL DATA

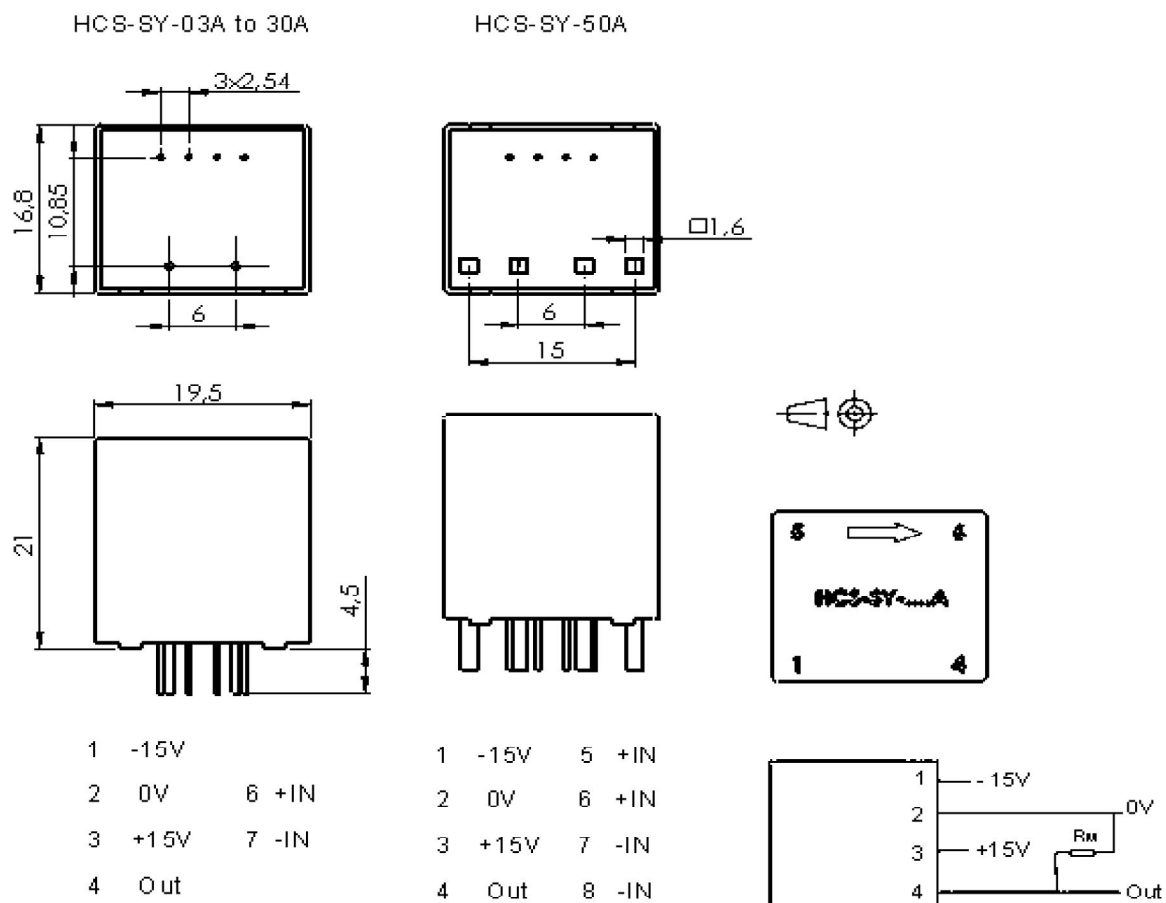
HCS-SY-...	03A	05A	10A	15A	20A	25A	30A	50A
Nominal rms current I_{PN} (A)	3	5	10	15	20	25	30	50
Sensed current range I_{PM} (A)	± 9	± 15	± 30	± 45	± 60	± 75	± 90	± 150
Coil turns ratio K ($P^{IV} : S^{IV}$)	6:1800	4:2000	3:3000	2:3000	1:2000	1:2500	1:3000	1:3125
Sampling resistor R_M (Ω)	400	400	400	400	400	400	400	250
Rated output voltage V_O (V)	± 4							
Static current consumption I_C (mA)	<15							
Supply voltage V_C (Vdc)	$\pm 15 \pm 0,5\%$							

ACCURACY DYNAMIC PERFORMANCE

GENERAL CHARACTERISTICS

Accuracy X_G @ I_{PN} , T=25°C	$\pm 0,5\%$	%	Operating temperature	-40 to +85	°C
Zero offset voltage V_{OE} @ $I_P=0$, T=25°C	± 20	mV	Storage temperature	-40 to +125	°C
Offset voltage drift V_{OE} @ -40°C to +85°C	$\leq \pm 0,5$	mV/°C	Insulation voltage (50Hz, 1mm)	5	KV
Linearity error ϵ_L	$\leq 0,1$	% FS	Weight	12	g
di/dt accuracy followed	> 50	A/ μ s			
Response time tr	≤ 1	μ s			
Bandwidth (-3db)	DC to 200	Khz			

DIMENSIONS



MECHANICAL CHARACTERISTICS

HCS-SY-...	03A	05A	10A	15A	20A	25A	30A	50A
Input pins (mm)	\varnothing 0,6	\varnothing 0,8	\varnothing 0,8	\varnothing 1,0	\varnothing 1,4	\varnothing 1,4	\varnothing 1,4	$2 \times \varnothing$ 1,6x1,5
Terminal connection	4 pins, size 0,25 x 0,5 mm							
General tolerance	\pm 0,2 mm							

WARNING : Incorrect wiring may cause damage to the sensor.