

AC Current Sensor CYCS11-LT

This current sensor series is based on electromagnetic induction principle and has good stability for measuring 10A ~ 100A AC current and high isolation between primary current and secondary output signal. This sensor can be used for measurement of different AC currents.

Product Characteristics

- Excellent accuracy
- Very good linearity
- Less power consumption
- Window structure
- Electrically isolating the output of the transducer from the current carrying conductor
- No insertion loss
- Current overload capability

Applications

- Various power supply
- Communication systems
- Leakage current measurement
- Numerical controlled machine tools
- Current difference measurement
- Electric circuits measurement
- Microcomputer monitoring
- Electric power network monitoring

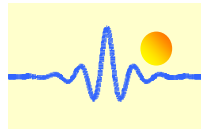
Electrical Data

Primary Nominal Current I_P AC (A)	Measuring Range AC (A)	Output Current DC (mA)	Aperture Diameter (mm)	Part number
10	12	4-20mA DC $\pm 0.8\%$	$\varnothing 20.0$	CYCS11-LT10A
20	24			CYCS11-LT20A
30	36			CYCS11-LT30A
50	60			CYCS11-LT50A
100	10			CYCS11-LT100A

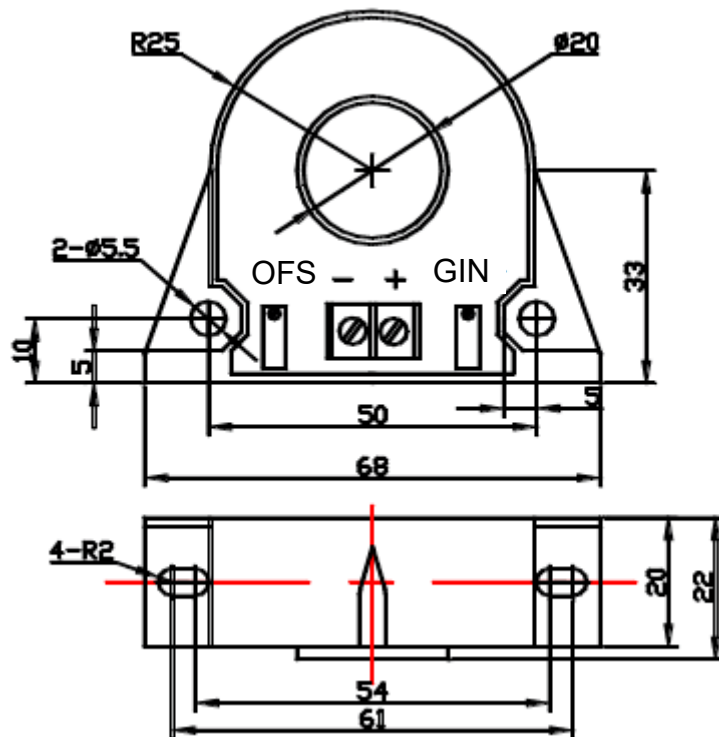
Supply Voltage
Current Consumption
Galvanic Isolation, 50/60Hz, 1min:
Isolation resistance @ 500 VDC
Accuracy at I_r , $T_A=25^\circ\text{C}$ (without offset),
Linearity from 0 to I_r , $T_A=25^\circ\text{C}$,
Electric Offset Current, $T_A=25^\circ\text{C}$,
Thermal Drift of Offset Current $T_a=-25^\circ\text{C} \sim 70^\circ\text{C}$,
Response Time at 90% of I_P ($f=1\text{kHz}$)
Frequency range:
Load (measuring) resistance R_L :

$V_{cc}=+12\text{V} \sim 32\text{VDC}$
 $I_c < 20\text{mA} + I_P / N_s$
3.0kV
> 500 M Ω
 $X < \pm 0.8\% \text{FS}$
 $E_L < \pm 0.2\% \text{FS}$
 $V_{oe} = +4\text{mA} \pm 0.1\text{mA}$
 $V_{ot} < \pm 0.005\text{mA}/^\circ\text{C}$
 $t_r \leq 300\text{ms}$
20~400Hz
 $V_C=17\text{V}$, $R_L=0-250\Omega$;
 $V_C=22\text{V}$, $R_L=0-500\Omega$;
 $V_C=27\text{V}$, $R_L=0-750\Omega$;
 $V_C=32\text{V}$, $R_L=0-1000\Omega$;
 $T_A = -25^\circ\text{C} \sim +70^\circ\text{C}$
 $T_S = -25^\circ\text{C} \sim +85^\circ\text{C}$
92g
Q/320115QHKJ01-2010

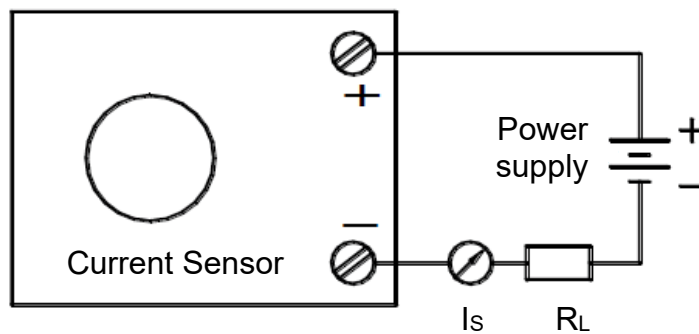
Ambient Operating Temperature:
Ambient Storage Temperature:
Unit Weight:
Standard



PIN-Definition and Dimensions



+: Vc Power supply
-: GND ground
OFS: Offset adjustment
GIN: Gain adjustment



Notes:

1. Connect the terminals of power source, outputs respectively and correctly, never make wrong connection.
2. Two potentiometers can be adjusted, only, if necessary, by turning slowly to the required accuracy with a small screwdriver.
3. The best accuracy can be achieved when the window is fully filled with primary cable (current carrying conductor).