



## Split Core AC Current Sensor CYCS11-xnS4

The **CYCS11-xnS4** split core AC current Sensor/Transducer works according Electro-magnetic induction and is designed for applications to measurement and monitoring of single phase AC current. The output signals (DC voltage and current) of these transducers are proportional to the average effective value (RMS) of input AC current. They are suitable for general applications such as fixed frequency voltage supplies etc.

### Specifications

Rated input current range	5A,10A,15A,25A,30A,50A,75A,100A,120A,150A,200A,250A,300A
Frequency of Input current	Typ. 50-60Hz, max. 5kHz
Output signal	0-5V, 0-10V, 0-20mA, 4-20mA etc.
Power supply	+12V DC, +15V DC, +24V DC
Measuring accuracy	1.0%
Isolation	between input, output and power supply
Load resistance	≥2kΩ for voltage output, ≤250Ω for current output
Isolation withstanding voltage	2.5 kV DC, 1min, leakage current 1mA
Operating temperature	-10°C ~ +60°C
Storage temperature	-25°C ~ + 70°C
Relative humidity	10% ~ 90%
Response time	≤250ms
Overload capacity	20 times
Quiescent power consumption	360mW ~ 450mW
Mounting	Din rail
Case style and Window size	S4 with aperture Ø31mm

### Definition of Part number:

CYCS11	-	x	n	S4	-	1.0	-	m
(1)		(2)	(3)	(4)		(5)		(6)

(1)	(2)	(3)	(4)	(5)	(6)
Series name	Output signal	Power supply	Case style	Accuracy class	Input current range (m)
CYCS11	<b>x=3:</b> 0-5V DC <b>x=4:</b> 0-20mA DC <b>x=5:</b> 4-20mA DC <b>x=8:</b> 0-10V DC	<b>n=2:</b> +12V DC <b>n=3:</b> +15V DC <b>n=4:</b> +24V DC	S4	1.0%	5A,10A,15A,25A,30A,50A,75A,100A,120A,150A,200A,250A,300A

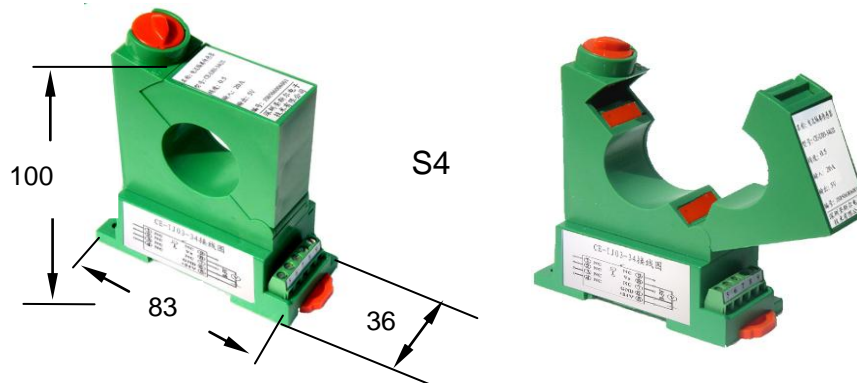
**Example 1:**                    CYCS11-34S4-1.0-100A Split core Single Phase AC Current sensor with  
 Output signal: 0-5V DC  
 Power supply: +24V DC



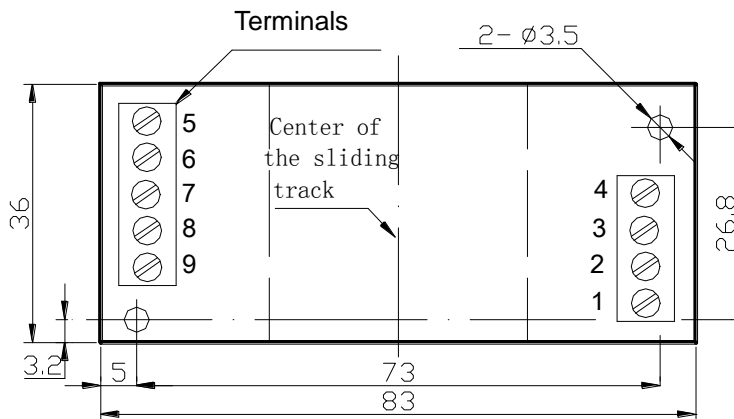
Rated input current: 100A AC/RMS

**Example 2:** CYCS11-54S4-1.0-100A, Single Phase AC Current sensor with  
Output signal: 4-20mA DC  
Power supply: +24V DC  
Rated input current: 100A AC/RMS

### DIMENSIONS (mm)



Dimensions: 100mm x 83mm x 36mm  
Aperture: Ø31 mm



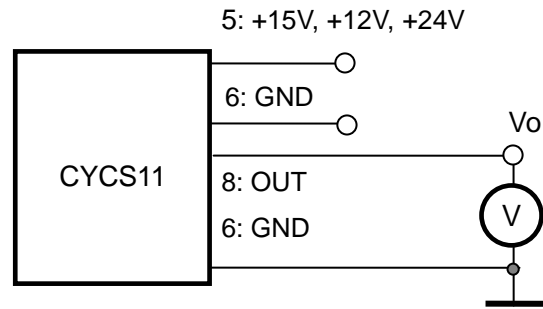
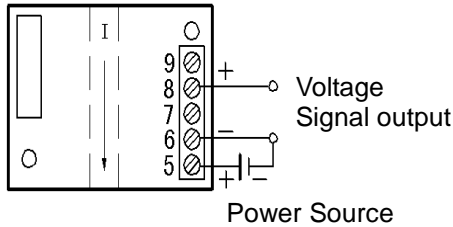
Mounting Dimensions

### CONNECTION

The current carrying cable must pass through the window. The phase of output is the same as that of the current passing the window in the direction of the arrow indicated on the case.



**Wiring of Terminals for voltage output:**

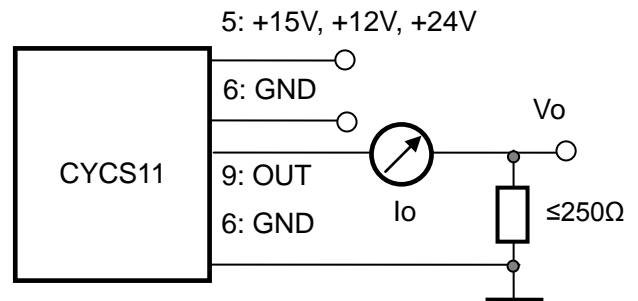
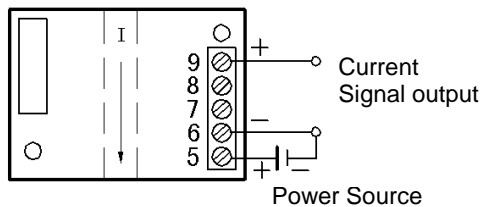


5: +15V, +12V, +24V Power Supply      6: GND      8: Voltage output

**Relation between Input and Output:**

Sensor CYCS11-34S4-1.0-100A	
Input current (A)	Output voltage (V)
0	0
25	1.25
50	2.5
75	3.75
100	5

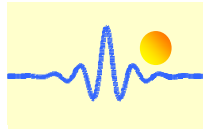
**Wiring of Terminals for Current Output:**



5: +15V, +12V, +24V Power Supply      6: GND      9: Current output

**Relation between Input and Output (for  $R_m=250 \Omega$ ):**

Sensor CYCS11-54S4-1.0-100A		
Input current (A)	Output current $I_o$ (mA)	Output voltage $V_o$ (V)
0	4	1
25	8	2
50	12	3
75	16	4
100	20	5



**Application:**

1. Directly connect to PLC
2. Sense motor stalls and short circuits
3. Industrial instrumentation
4. Process control loops

**Notice:**

1. If you want to open/ close the split core, press and move the orange bolt to the open/close direction
2. The conductor carrying the input current should pass through the center of the aperture as perpendicularly as possible. And then lock the bolt.
3. Make sure that the polarities are in right connection. The output and the power supply must be common grounded at terminal 6.
4. If a meter is used to calibrate the output of the transducer, please make sure that the accuracy of the meter is higher than the transducer.