

AC Current Sensor CYCS11A-xnWS9

The **CYCS11A-xnWS9** AC current Sensor/Transducer works according to electro-magnetic induction and is designed for applications to the measurement and monitoring of single-phase AC current. The output current of this transducer is proportional to the rectified value (absolute average value) of input AC current or reflects the input current wave. They are suitable for general applications such as fixed frequency voltage supplies etc.

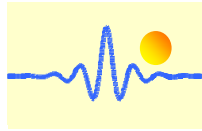
Specifications

Rated input current AC	5A, 10A, 15A, 20A, 25A, 30A, 35A, 40A, 45A, 50A AC
Linear measuring range	0 - 1.2 times of rated input current
Overload capacity	20 times of rated input current, 5s
Input frequency	25Hz ~ 5kHz
Output signals	0-20mADC, 4-20mADC
Measuring accuracy	0.5%
Load capacity	6V
Response time	350ms
Thermal drift	350ppm/°C
Power supply	+12VDC, +24VDC, 85V~265VAC, 90V~360VDC
Static current	13mA
Isolation	3 Isolations between input, output and power supply
Isolation voltage	Input-Output : 2.5 kV DC, 1min, Supply-Input : 2.5 kV DC, 1min Output-Supply : 1.5kV, 1 min
Operating temperature	-10°C ~ +60°C
Storage temperature	-25°C ~ + 70°C
Relative humidity	10% ~ 90%
Protection of Case	IP20
Material of Case	ABS (According to UL94V-0)
Mounting	DIN Rail
Case Style	WS9 with aperture Φ9mm
MTBF	50000h
Unit weight	90g

Definition of Part number:

CYCS11A	-	x	n	WS9	-	0.5	-	m
(1)		(2)	(3)	(4)		(5)		(6)

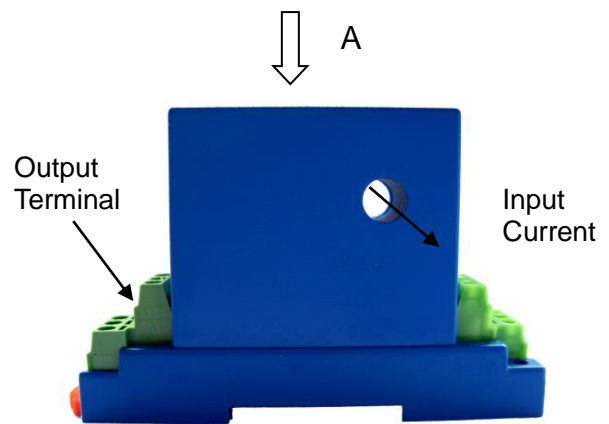
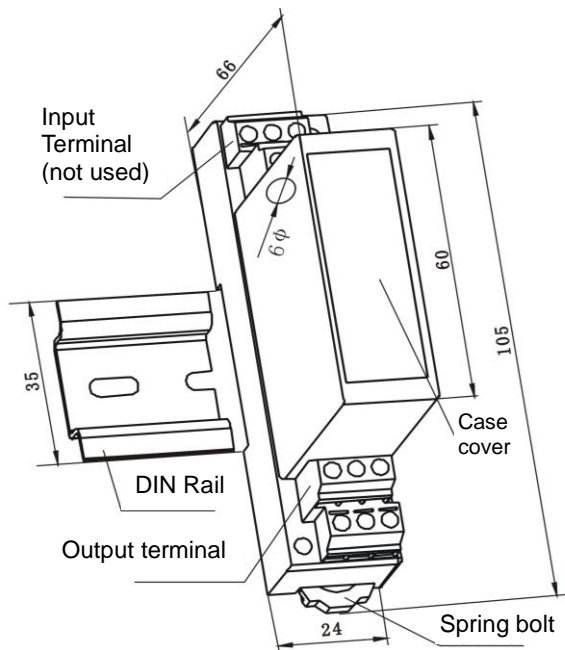
(1)	(2)	(3)	(4)	(5)	(6)
Series name	Output signal	Power supply	Case style	Accuracy class	Input current range (m)
CYCS11A	x=4: 0-20mA DC x=5: 4-20mA DC	n=2: +12V DC n=4: +24V DC n=8: 85~265V AC n=9: 90~360V DC	WS9	0.5%	5A, 10A, 15A, 20A, 25A, 30A, 35A, 40A, 45A, 50A AC



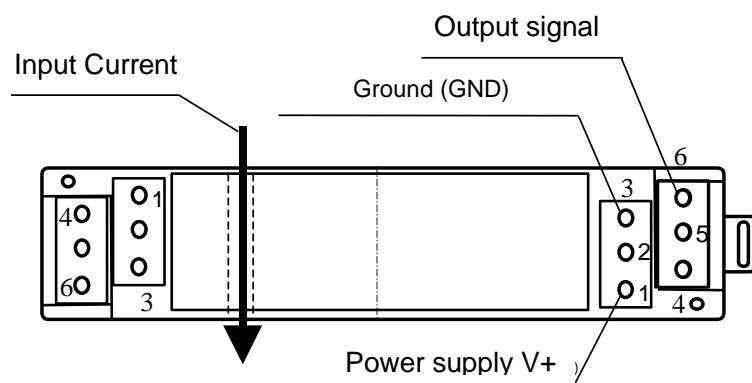
Example 1: CYCS11A-54WS9-0.5-10A, AC Current sensor with
Output signal: 4-20mA DC
Power supply: +24V DC
Rated input current: 0 -10A AC

Example 2: CYCS11A-48WS9-0.5-10A, AC Current sensor with
Output current: 0-20mA DC
Power supply: 85~265V AC
Rated input current: 0 -10A AC

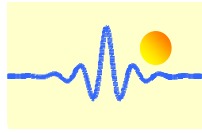
DIMENSIONS (mm)



Dimensions: 105mm x 24mm x 66mm

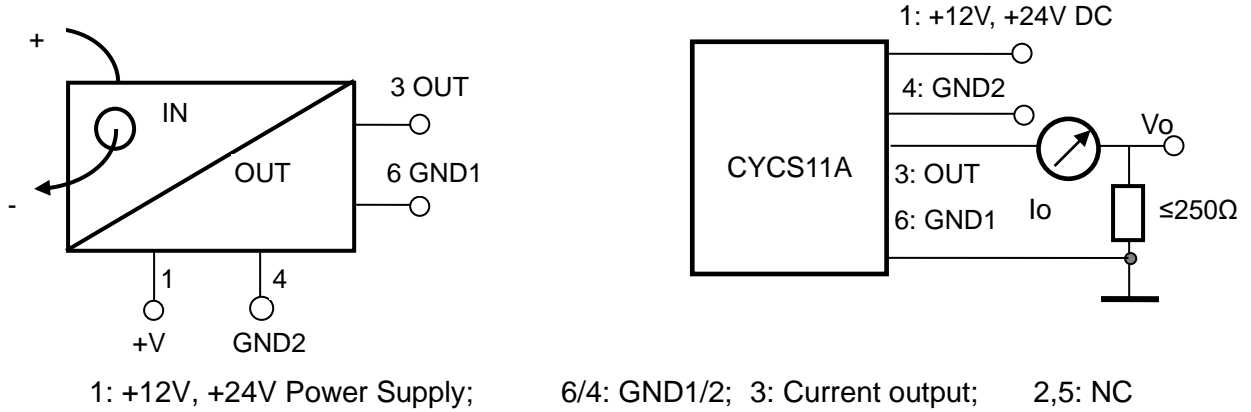


View of A Direction



CONNECTIONS

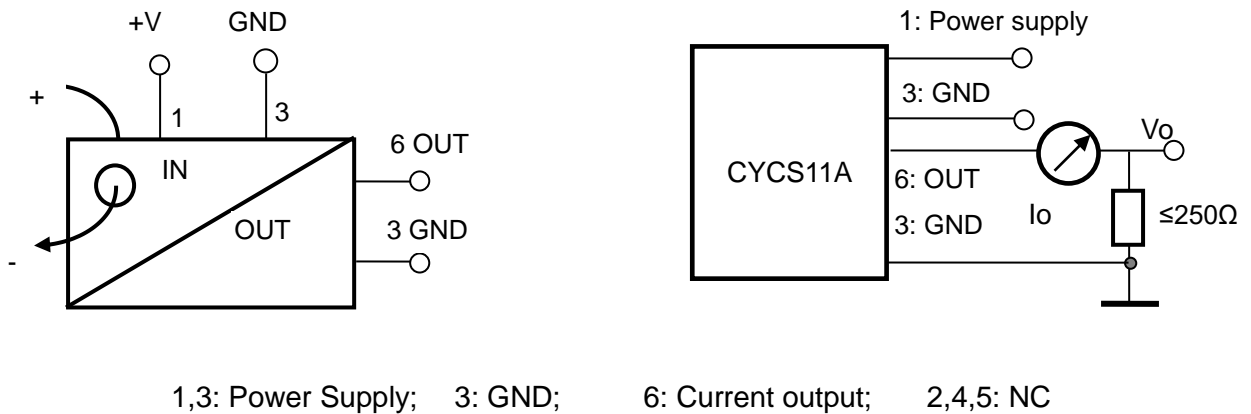
Wiring of Terminals with Power Supply +12V and +24V:



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

Sensor CYCS11A-54WS9-0.5-10A		
Input current (A)	Output current I_o (mA)	Output voltage V_o (V)
0	4	1
2.5	8	2
5	12	3
7.5	16	4
10	20	5

Wiring of Terminals with Power Supply 85~265VAC and 90~360VDC:



Relation between Input and Output:

Sensor CYCS11A-48WS9-0.5-10A		
Input current (A)	Output current I_o (mA)	Output voltage V_o (V)
0	0	0
2.5	5	1.25
5	10	2.5
7.5	15	3.75
10	20	5