ChenYang
Technologies GmbH & Co. KG

AC Current Sensor CYCS11A-xnWS4

The **CYCS11A-xnWS4** 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 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	0.5A, 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A 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	WS4 with aperture Φ4mm
MTBF	50000h
Unit weight	90g

Definition of Part number:

CYCS11A	-	x	n	WS4	-	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	WS4	0.5%	0.5A, 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A

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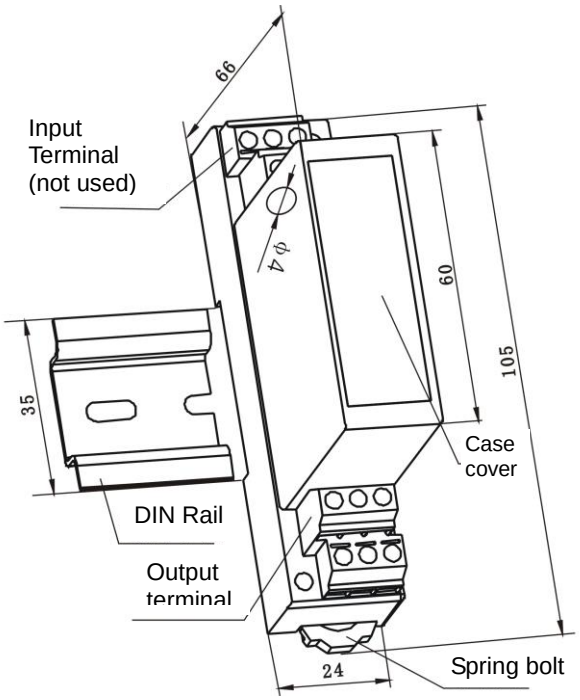
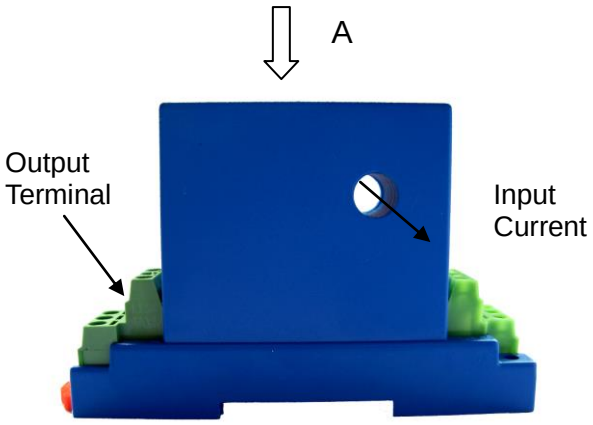
Example 1: CYCS11A-54WS4-0.5-1A, AC Current sensor with
Output signal: 4-20mA DC
Power supply: +24V DC
Rated input current: 0 -1A AC

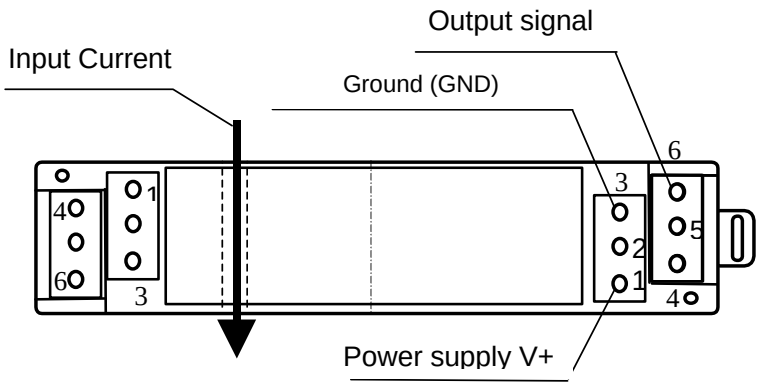
Example 2: CYCS11A-48WS4-0.5-1A, AC Current sensor with
Output current: 0-20mA DC
Power supply: 85~265V AC
Rated input current: 0 -1A AC

DIMENSIONS (mm)





Dimensions: 105mm x 24mm x 66mm



View of A Direction

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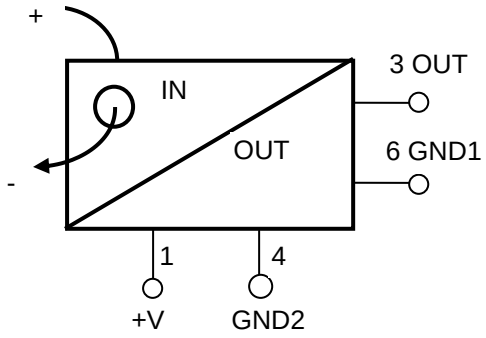
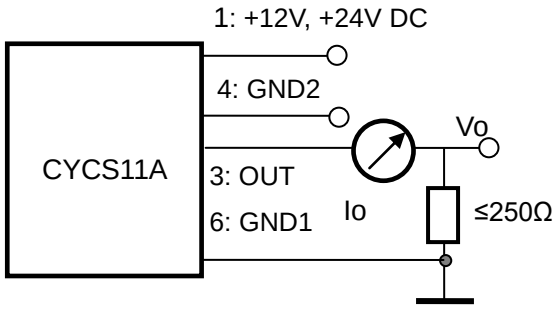
CONEECTIONS

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



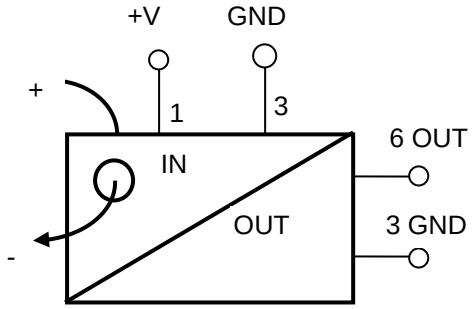


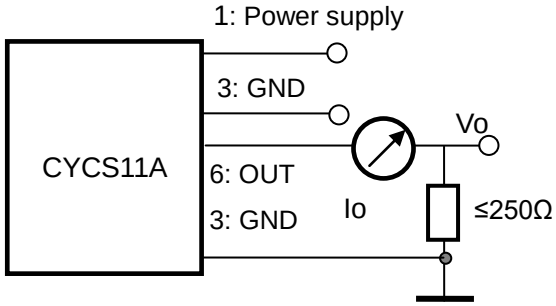
1: +12V, +24V Power Supply; 6/4: GND1/2; 3: Current output; 2,5: NC

Relation between Input and Output (for R_m=250 Ω):

Sensor CYCS11A-54WS4-0.5-1A		
Input current (A)	Output current Io(mA)	Output voltage Vo (V)
0	4	1
0.25	8	2
0.5	12	3
0.75	16	4
1	20	5

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





1,3: Power Supply; 3: GND; 6: Current output; 2,4,5: NC

Relation between Input and Output:

Sensor CYCS11A-48WS4-0.5-1A		
Input current (A)	Output current Io(mA)	Output voltage Vo (V)
0	0	0
0.25	5	1.25
0.5	10	2.5
0.75	15	3.75
1	20	5

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