ChenYang
Technologies GmbH & Co. KG

AC Current Sensor CYCS11A-xnN9

The current sensor **CYCS11A-xnN9** adopts special isolation module to measure the AC current in the grid and circuit in real time and convert it into DC output signals. It has the characteristics of high precision, high isolation, wide frequency response, low drift, low power consumption, wide temperature range, strong anti-interference ability and wide working power supply range. This product adopts snap-in structure, terminal wiring, easy installation, input, output and power triple isolations, suitable for power supply equipment, power network monitoring automation system, industrial control monitoring system, railroad signal system, etc.

Specifications

Rated input current AC	0.5A, 1A, 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	0-5VDC, 0-10VDC, 0-20mADC, 4-20mADC		
Measuring accuracy	0.2%		
Load capacity	voltage output: 5mA; current output: 6V (300Ω)		
.Response time	300ms		
Thermal drift	Voltage output: 150ppm/°C; current output: 250ppm/°C		
Power supply	+9V~36VDC		
Static power consumption	0.6W	full power consumption	0.9W
Isolation	Isolation between input, output and power supply		
Isolation voltage	Input-Output : 2.5 kV DC, 1min, Supply-Input : 2.5 kV DC, 1min Output-Supply : 2.5kV, 1 min		
Operating temperature	-25°C ~ +70°C		
Storage temperature	-40°C ~ + 85°C		
Relative humidity	10% ~ 90%		
Output ripple	10mV (Effective value, when the output load is 250Ω)		
Electromagnetic compatibility:	Surge: 2kV 1.2/50μs, Electrostatic discharge: 6KV/8KV Electric Fast transient pulse Group: ±2kV		
Material of Case	ABS (According to UL94V-0)		
Mounting	DIN Rail	Case Style	N9 with aperture Φ9mm
MTBF	50000h	Safe Standard	IEC61010, 2001
Protection of Case	IP20	Unit weight	100g

Definition of Part number:

CYCS11A	-	x	n	N9	-	0.2	-	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=3:** 0-5V DC **x=4:** 0-20mA DC **x=5:** 4-20mA DC **x=8:** 0-10V DC	n**=7:** +9V~+36VDC	N9	0.2%	0.5A, 1A, 5A, 10A, 15A, 20A, 25A, 30A, 35A, 40A, 45A, 50A AC

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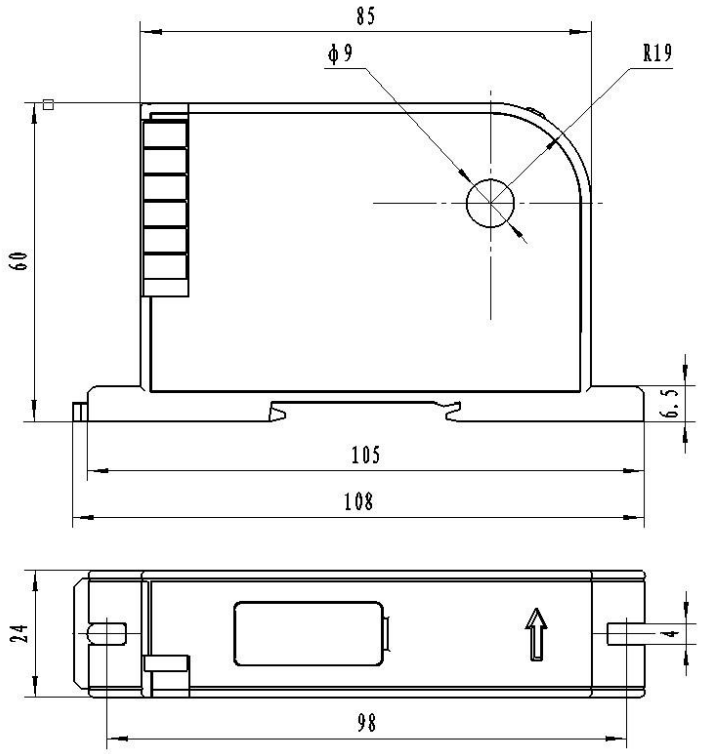
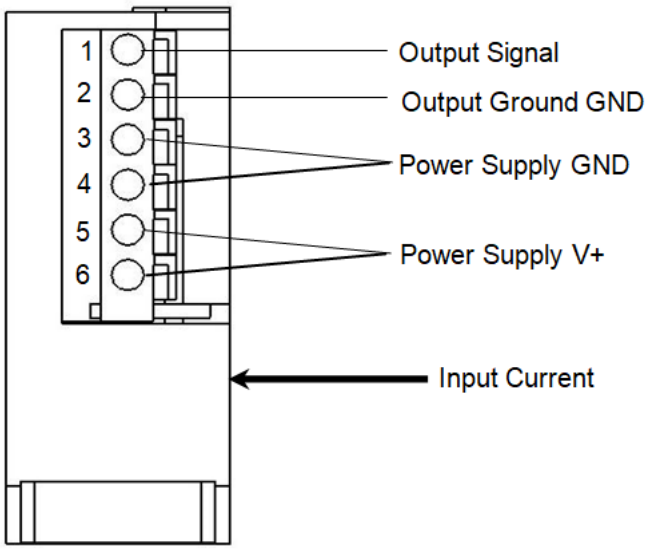
Example 1: CYCS11A-37N9-02-10A, AC Current sensor with
Output signal: 0-5V DC
Power supply: +9V ~ +36VDC
Rated input current: 0 -10A AC

Example 2: CYCS11A-57N9-0.2-10A, AC Current sensor with
Output current: 4-20mA DC
Power supply: +9V~+36V AC
Rated input current: 0 -10A AC

DIMENSIONS (mm)



Dimensions: 108mm x 24mm x 66mm



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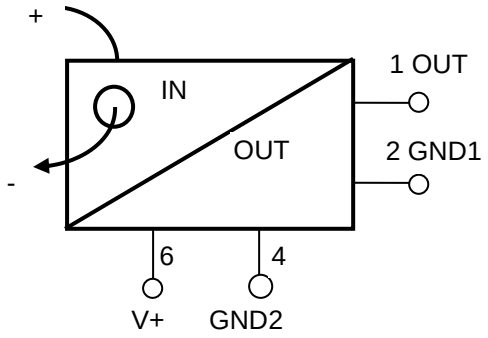
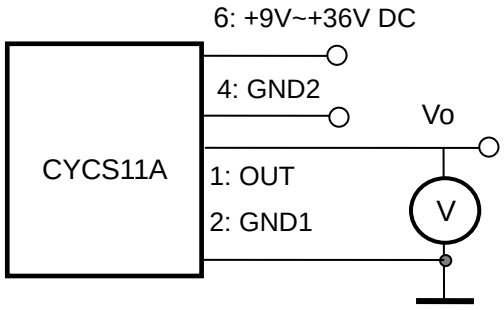
CONNECTIONS

Wiring of Terminals for voltage output:



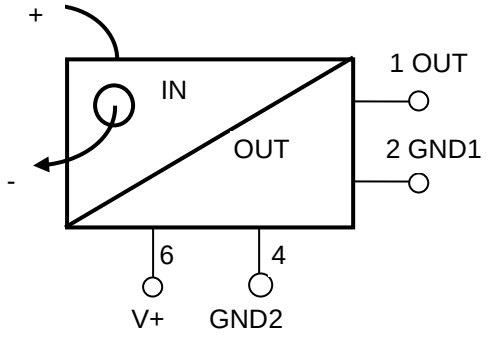


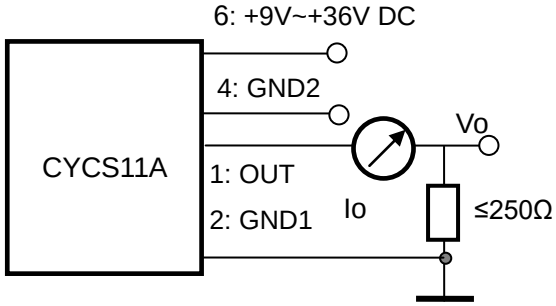
6: Power Supply; 2, 4: GND1, GND2; 1: Voltage Output

Relation between Input and Output

Sensor CYCS11A-37N9-0.5-10A	
Input current (A)	Output voltage Vo (V)
0	0
2.5	1.25
5	2,5
7.5	3,75
10	5

Wiring of Terminals for Current Output:





6: Power Supply; 2, 4: GND1, GND2; 1: Current Output

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

Sensor CYCS11A-57N9-0.2-10A		
Input current (A)	Output current Io(mA)	Output voltage Vo (V)
0	4	1
2.5	8	2
5	12	3
7.5	16	4
10	20	5

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