



AC/DC Current Sensor CYCS-xnU0

The **CYCS-xnU0** AC/DC current sensor/transducer works according Photoelectrical Induction and is designed for applications to measurement and monitoring of AC/DC current and DC impulse current. The output signal of this transducer is tracing voltage and proportional to the input AC/DC current. They are suitable for measurements and long time monitoring of DC, AC and impulse currents.

Specifications

Rated input current	1mA, 5mA, 10mA, 50mA, 100mA, 500mA, 1A, 2A, 3A, 4A, 5A DC
Linear measuring range	0 - 1.2 times of rated input current
Overload capacity	10 times of rated input current
Input frequency	±DC, 20Hz ~ 10kHz
Input resistance	$R_f=0.05V / I_x$, I_x : Input current
Output signals	Tracing voltage ±5V, 0-5VDC
Measuring accuracy	0.2% for tracing output, 0.5% for DC voltage output
Load capacity	5mA
Response time	≤15μs for tracing voltage output, 100ms for 0-5VDC
Thermal drift	150ppm/°C
Power supply	±12VDC, ±15VDC
Static current	30mA
Isolation	Isolation between input and output, power supply at the output
Isolation withstanding voltage	1.5 kV DC, 1min
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	U0 without aperture
MTBF	50000h
Unit weight	90g

Definition of Part number:

CYCS	-	x	n	U0	-	0.2	-	m
(1)		(2)	(3)	(4)		(5)		(6)

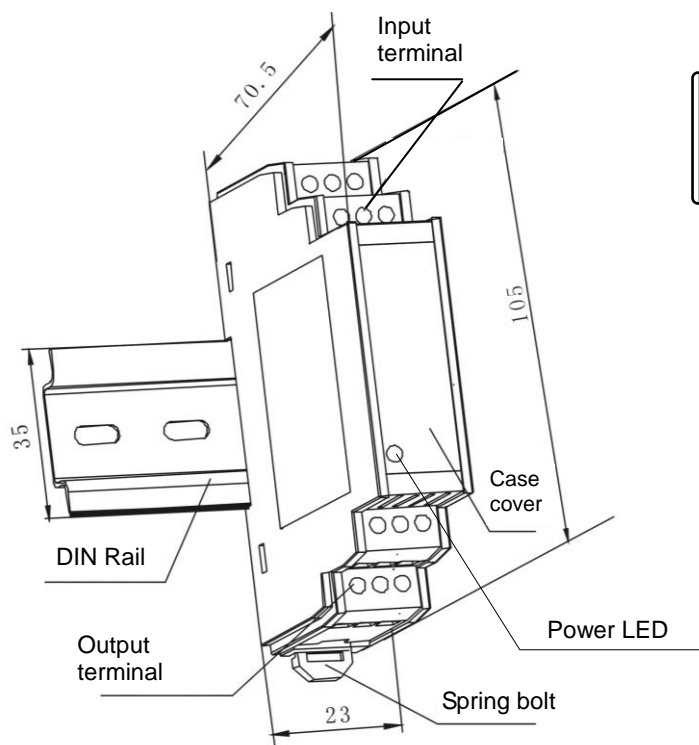
(1)	(2)	(3)	(4)	(5)	(6)
Series name	Output signal	Power supply	Case style	Accuracy class	Input current range (m)
CYCS	x=1: ±5V AC/DC x=3: 0-5V DC	n=5: ±12V DC n=6: ±15V DC	U0	0.2%	1mA, 5mA, 10mA, 50mA, 100mA, 500mA, 1A, 2A, 3A, 4A, 5ADC



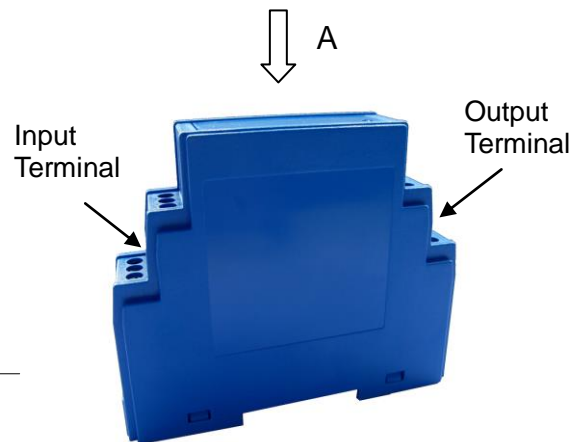
Example 1: CYCS-35U0-0.2-100mA, AC/DC Current sensor with
Output signal: 0-5V DC
Power supply: $\pm 12V$ DC
Rated input current: 100mA AC/DC

Example 2: CYCS-15U0-0.2-100mA, AC/DC Current sensor with
Output signal: $\pm 5V$ AC/DC
Power supply: $\pm 15V$ DC
Rated input current: 100mA AC/DC

DIMENSIONS (mm)



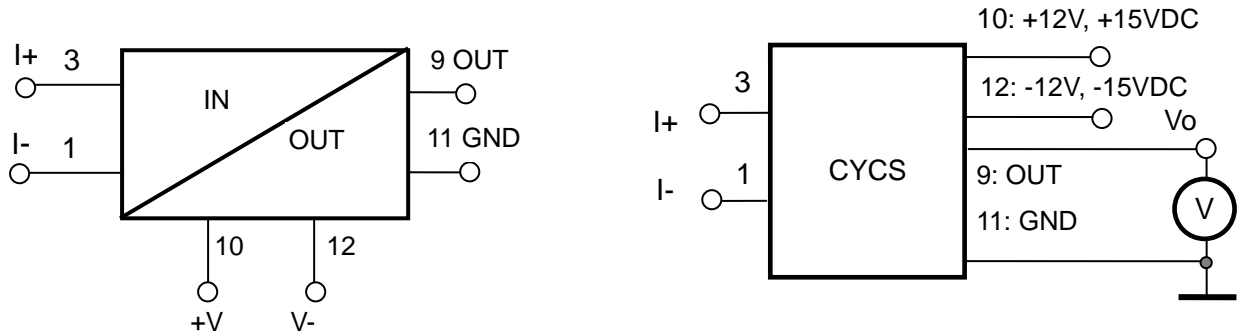
View of A Direction



Dimensions: 105mm x 23mm x 70.5mm



CONNECTION



1, 3: Input Current; 10, 12: Power Supply V+ and V- 11: GND 9: Voltage Output

Relation between Input and Output:

Sensor CYCS-35U0-0.2-100mA	
Input current (mA)	Output voltage (V)
0	0
±25	1.25
±50	2.5
±75	3.75
±100	5

Sensor CYCS-15U0-0.2-100mA	
Input current (mA)	Output voltage (V)
-100	-5
-50	-2.5
0	0
50	2.5
100	5