

AC Voltage Sensor CYVS11A-xnH2

The **CYVS11A-xnH2** AC voltage sensor/transducer works according to Electromagnetic Induction and is designed for applications to measurement and monitoring of AC voltage. The output signal (DC voltage or current) of this transducer is proportional to the input AC voltage. They are suitable for measurements and long time monitoring of AC voltages and can be applied to power supply management, AC motor drivers, battery chargers and systems etc.

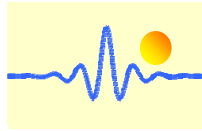
Specifications

Rated input voltage (U _x)	10V-1000V AC		
Linear measuring range	0 - 1.2 times of rated input voltage		
Overload capacity	2 times of rated input voltage		
Frequency of input voltage	25Hz..~ 5kHz		
Input resistance	$R_i = U_x \times 1k\Omega/V$, U_x : input voltage, $U_x \geq 10V$		
Output signals DC	0-5V, 0-10V, 0-20mA, 4-20mA DC		
Measuring accuracy	0.2% for voltage output, 0.5% for current output		
Load capacity	voltage output: 6mA; current output: 6V (300Ω)		
Response time	≤200ms		
Thermal drift	350ppm/°C		
Static current	Voltage output: 20mA; Current output: 23-27mA		
Power supply	85-265VAC, +100-360VDC		
Isolation	Isolation between input and output and power supply		
Isolation withstanding voltage	2.5 kV DC, 1min for Input-Output and power supply – Input 2.5kV DC, 1min for power supply - output		
Operating temperature	-25°C ~ +70°C		
Storage temperature	-25°C ~ + 70°C		
Relative humidity	10% ~ 90%		
Output ripple	10mV (Effective value, when the output load is 250Ω)		
Electromagnetic compatibility:	Surge: 1kV, Electrostatic discharge: 6KV/8KV Electric Fast transient pulse Group: 2kV		
Material of Case	ABS (According to UL94V-0)		
Mounting	DIN Rail	Case Style	H2 without aperture
MTBF	50000h	Safe Standard	IEC61010, 2001
Protection of Case	IP20	Unit weight	150g

Definition of Part number:

CYVS11A	-	x	n	H2	-	0.2	-	m
(1)		(2)	(3)	(4)		(5)		(6)

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Series name	Output signal	Power supply	Case style	Accuracy class	Input Voltage range (m)
CYVS11A	x=3: 0-5V DC x=4: 0-20mA DC x=5: 4-20mA DC x=8: 0-10V DC	n=8: 85V-265VAC n=9: +100-360VDC	H2	0.2% 0.5%	m=10V-1000V AC



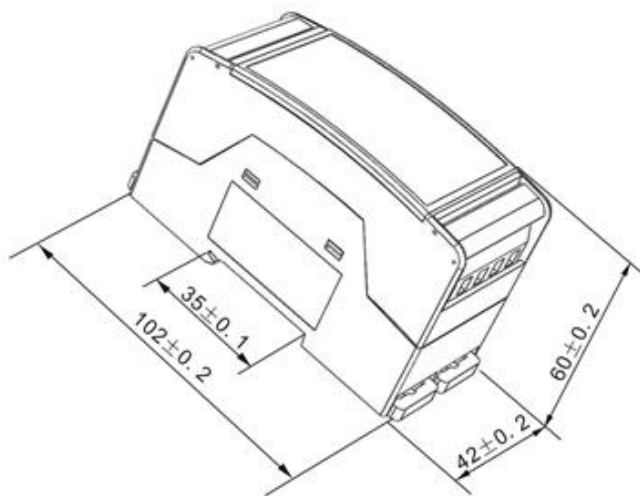
Example 1: CYVS11A-38H2-0.2-100V, AC voltage sensor with
Output signal: 0-5V DC
Power supply: 85-265V AC
Rated input voltage: 0-100V AC

Example 2: CYVS11A-58H2-0.5-100V, AC voltage sensor with
Output signal: 4-20mA DC
Power supply: 85-265V AC
Rated input voltage: 0 -100V AC

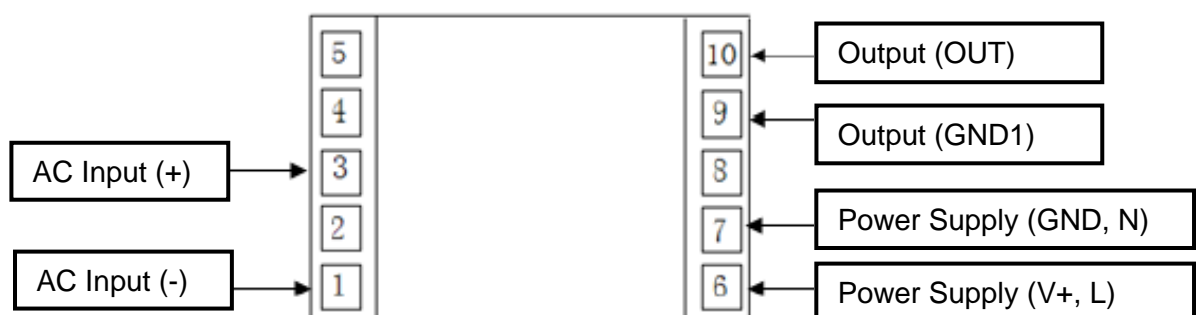
Example 3: CYVS11A-89H2-0.2-100V, AC voltage sensor with
Output signal: 0-10V DC
Power supply: 100-360V DC
Rated input voltage: 0-100V AC

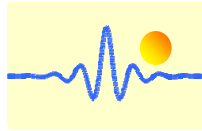
Example 4: CYVS11A-49H2-0.5-100V, AC voltage sensor with
Output signal: 0-20mA DC
Power supply: 100-360V DC
Rated input voltage: 0 -100V AC

DIMENSIONS (mm)



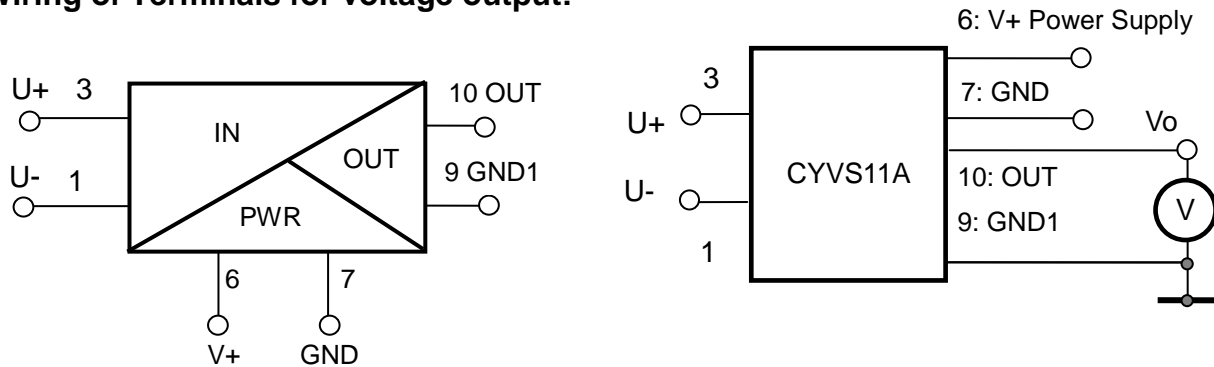
Dimensions: 102mm x 42mm x 60mm





CONNECTIONS

Wiring of Terminals for voltage output:

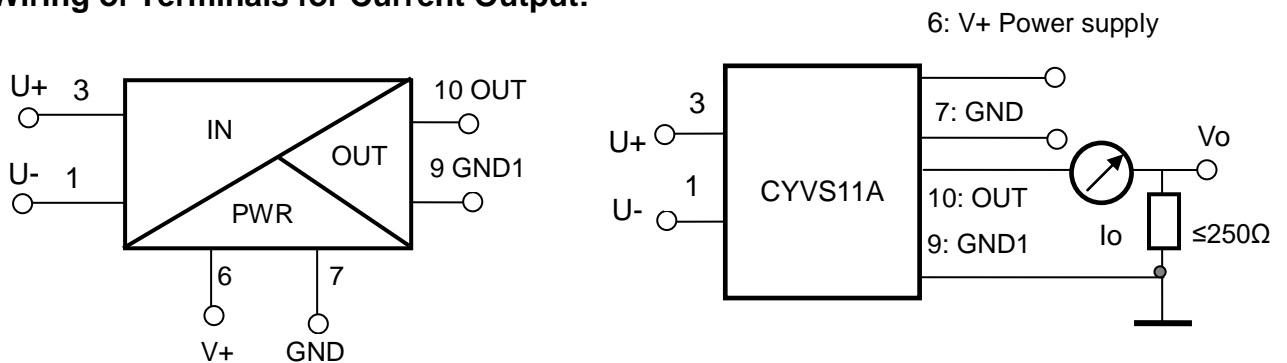


1,3: Input Voltage; 6: Power Supply 7,9: GND 10: Voltage output

Relation between Input and Output:

Sensor CYVS11A-38H2-0.2-100V	
Input Voltage (V)	Output voltage (V)
0	0
25	1.25
50	2.5
75	3.75
100	5

Wiring of Terminals for Current Output:



1,3: Input Voltage; 6, 7: Power Supply 9: GND1 10: current output

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

Sensor CYVS11A-58H2-0.5-100V		
Input Voltage (V)	Output current Io(mA)	Output voltage Vo (V)
0	4	1
25	8	2
50	12	3
75	16	4
100	20	5