

## Three Phase AC Voltage Transducer (delta)

The **CYVJ31/41 Series** (Average RMS) and **CYVJ31A/41A Series** (True RMS), Voltage AC Sensors/Transducers are targeted for Measurements of three phase AC voltages. The relation between the output (DC voltage or current) and the input voltage (RMS) is linear. **CYVJ31/41 Series** can measure the average RMS of AC voltages and applied to long time monitoring of harmonic voltages.

The **CYVJ31A/41A Series** (True RMS) are especially for applications to monitoring of three phase AC voltages, the waveform of which is not ideal sinusoid. These transducers are accurate and ideal for measurements and monitoring of chopped waveform drivers and quickly varying motor loads etc.

The **CYVJ31/CYVJ31A** are used for 3-phase 3-wire AC networks/systems, while the **CYVJ41/CYVJ41A** are for 3-phase 4-wire systems.

### Specifications

Series	Operating Principle	Isolation Voltage	Response Time Range 0 to 90% FS	Overload Capacity	Quiescent Power Consumption (mW)		Mounting
					Vz, Vd, Vg, Iz Output	Iy Output	
CYVJ31 CYVJ31A	Electro-magnetic Induction	≤2500 V DC	≤400mS	2 Times 10/sec	350	400	Surface or Din rail
CYVJ41 CYVJ41A					350	400	

### Part Numbers

Series	Output	Power Source	Window Opening (mm)	Case Style	Accuracy	Rated Input (RMS)
CYVJ31 CYVJ41	<b>1:</b> 0~5V RMS(Vg)* <b>3:</b> 0~5V DC (Vz) <b>4:</b> 0~20mA (Iz)	<b>2:</b> 12V <b>3:</b> 15V <b>4:</b> 24V	<b>M:</b> None	S3	0.2% 0.5%	50V, 75V, 100V, 200V, 250V, 300V, 380V, 400V, 500V
CYVJ31A CYVJ41A	<b>5:</b> 4~20mA (Iy)** <b>8:</b> 0~10V DC (Vd)				0.5%	

\* Tracking output (Vg) type not available in series CYVJ31A, CYVJ41A and the accuracy of Vg is only 0.5.

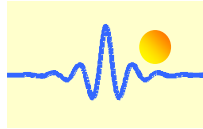
\*\* Loop resistance from 0 to 250Ω. Contact factory for loop resistance above 250 Ω

### Part Number Example: **CYVJ41-32MS3-0.5/0~250V**

Description: 3-phase 4-line AC Voltage Transducer, Input: 0-250V, Output: 0-5V, Power Source: +12V, no Aperture, Accuracy: 0.5, Case Style S3

### Application:

- Harmonic voltages
- Chopped waveform drivers
- Quickly varying voltage supplies
- Phase fired controlled devices

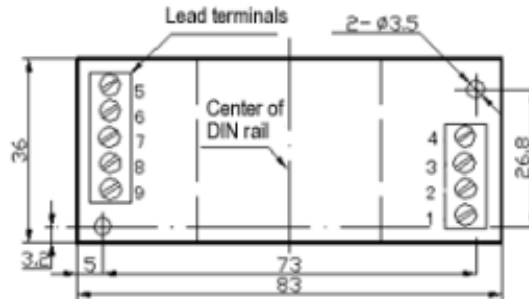


## Case Style

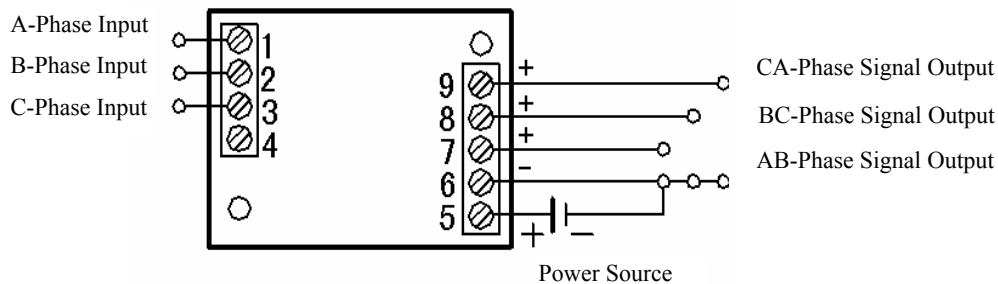
Case Style S3 without Aperture



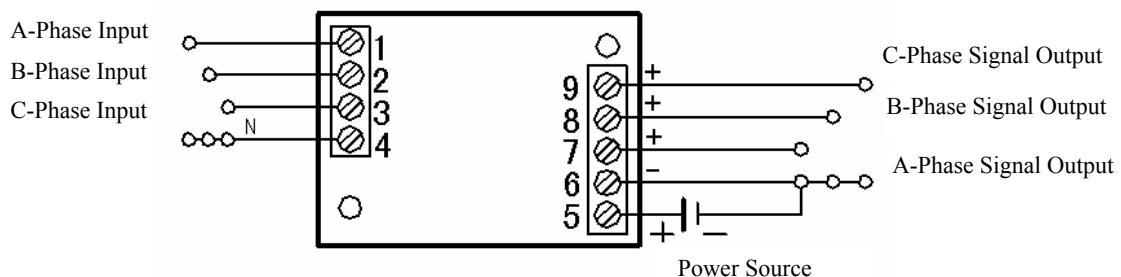
Installation



## Connection Diagram



**Fig.1** CYVJ31, CYVJ31A Case S



**Fig. 2** CYVJ41, CYVJ41A Case S

### Notice:

1. In case the input is 3-phase 3-line system, the first output corresponds to the line voltage between VAB, the second output corresponds to line voltage between VBC, and the third output corresponds to line voltage between VCA. In case the input is 3-phase 4-line, three outputs correspond respectively to phase voltage of ABC phases.
2. The output signal and the power source must be earthed in common. Please keep right connection, don't in error set.