

Three Phase AC Current Transducer (delta)

Sensors/Transducers of the **CYIJ31 Series** (average RMS) and **CYIJ31A Series** (true RMS) output linear DC voltages or currents, which are proportional to the effective value (RMS) of three phase input AC currents. The **CYIJ31 Series** is suitable for measuring the average RMS of input currents and can be applied to the long time monitoring of sinusoid currents.

The **CYIJ31A Series** is designed for true RMS measurement of any periodic currents with applications to the monitoring of three phase AC currents, the waveform of which is not ideal sinusoid. These transducers are accurate and ideal for the monitoring of chopped waveform drivers and quickly varying motor loads etc.

Specifications:

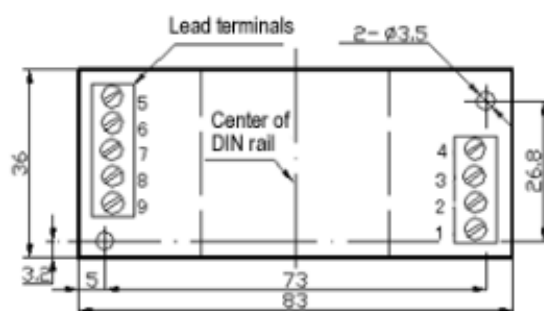
Series	Operating Principle	Isolation Voltage	Response Time Range 0 to 90% FS	Overload Capacity	Quiescent Power Consumption (mW)		Mounting
					Vz, Vd, Vg, Iz Output	Iy Output	
CYIJ31 CYIJ31A	Electro-Magnetic Induction	≤2500VDC	≤400mS	200 times or <5/sec at 100A	300 (class 0.2%) 100 (class 0.5%)	480 (class 0.2%) 450 (class 0.5%)	Din Rail

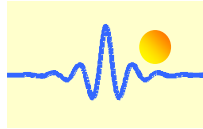
Case Style

Case Style S3 with three Aperture



Installation





Part Numbers

Series	Output	Power Source	Window Opening (mm)	Case Style	Accuracy	Rated Input (RMS)
CYIJ31 CYIJ31A	1: 0~5V RMS (Vg)* 3: 0~5V DC (Vz) 4: 0~20 mA (Iz) 5: 4~20 mA (Iy)** 8: 0~10V DC (Vd)	2: 12V 3: 15V 4: 24V	A: Ø4 B: Ø6.5	S3	0.2% 0.5%	1A, 2A, 5A, 10A, 15A, 25A

* Tracking output (Vg) type not available in series CYIJ31A and now the accuracy only 0.5.

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

Part Number Example: CYIJ31-32BS3-0.5/0~5A

Description: Three Phase AC Current Transducer, average responding, Input: 0-5Aac, Output: 0-5Vdc, Power Source: +12V DC, Window Opening: Ø6.5mm, Case Style: S3 Accuracy: 0.5 %

Connection Diagram (see document of case styles and mounting diagrams)

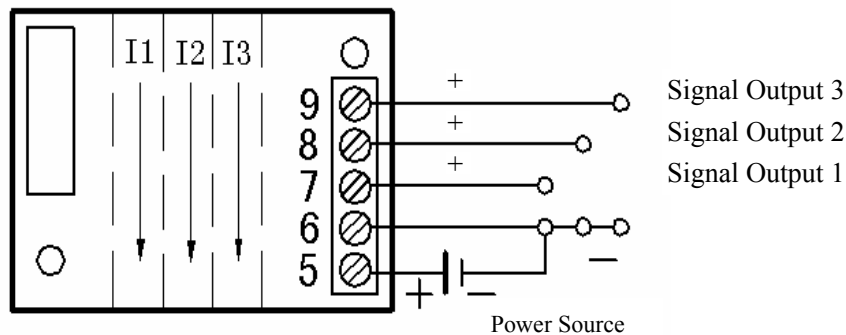


Fig. 1 CYIJ31, CYIJ31A, Output Signal, Case S3

Application:

- Phase fired controlled heaters
- Quickly varying motor loads
- Chopped wave form drivers
- Harmonic currents

Notice:

1. There is no polarity requirement for the input signal connection.
2. For application above 25 Amp use an external current. Connect the secondary leads of the current transformer to the input of the transducers.
3. The output signal and the power source are common at pin 6.