

# SPLIT-CORE CURRENT TRANSFORMER

## JM21N-XXX-1A series

UL US E344623 CE RoHS2 COMPLIANT



JM21N series of split-core current transformer offers 1A at secondary from sensed primary current. Without using secondary CT inside of meter, users directly connect JM21N series to a meter for high accuracy metering application. It enables one meter to be adopted for various current rating by only changing primary CT so it makes compact design meter and reduces developing cost. Also, over-voltage protection circuit is included to offer safe, fast and cost effective installation.

### APPLICATIONS

- Power meter
- Switchgear
- Distributed measurement systems
- General Sets
- Control panels

### BENEFITS

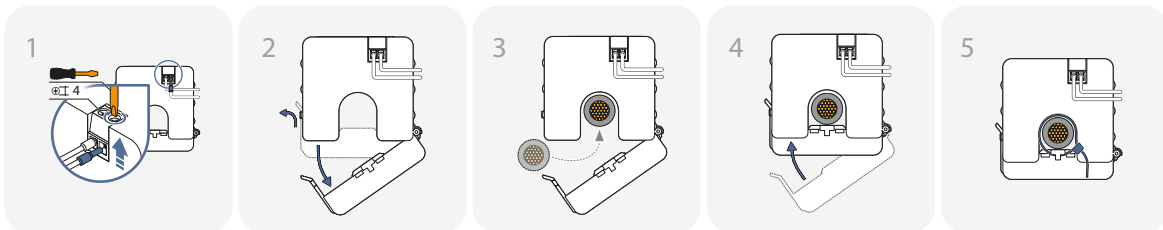
- Small-size, light-weight
- Simple Installation
- Over-Voltage protection circuit is installed.

### FEATURES

- Steel spring plate, output-terminal, secure locking hinge, one-touch structure easily to install to existing equipment such as a power distribution board
- Isolated plastic case recognized according to UL94-V0
- UL / EN 61010 - 1 certified



### HOW TO USE



※ Please refer to "Split-core Current Transformer Installation Guide" for further details.

## ⚠ CAUTION: DANGER ⚠

### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- In order to guarantee safe operation of the transformer, please read and understand the instructions thoroughly. For your reference, see NFPA 70E in the USA, or applicable local codes.
- Before servicing the CTs, turn off all sources of power and use a properly rated voltage sensing device to check if the power is off.
- Current transformer secondary must be shorted or connected to a burden all times.
- The transformer (split core type) must not be operated when it is not fully closed or the installation is not completed.
- Rearrange all covers and protective devices before powering the equipment.
- A qualified person is the one who is skilled and has knowledge about the construction and operation of this electrical equipment, and has received safety training to recognize and avoid the hazards involved. (NEC2011 Article 100)

## 🔔 NOTICE

- Core contact surface is waterproofed, however if it gets rusty, you could reuse after removing rusts with spraying WD-40 or CRC5-56 on the rusted side.
- Do not use any other chemicals except WD-40 or CRC5-56 on housing or any other parts.
- Customizing output lead wire
- This product is not intentionally made for safety applications.
- Make sure not to install this transformer in hazardous or classified areas.
- The installer is responsible for conformance to all applicable codes.
- Ignoring the warnings can lead to serious injury and/or cause damages.
- If this product is used in a way not specified by the manufacturer, the protection offered by the product may be impaired. No responsibility is taken by J&D Electronics for any consequences arising by not following this material properly.

## SPECIFICATION

|                             |   |
|-----------------------------|---|
| Accuracy                    | IEC Class 0.5S / ANSI Class 0.6                           |
| Output Terminals            | Terminal Block(2P) - PART NUMBER : LM5.08/02/90 SW(black) |
| System Voltage              | 720V(0.72kV)  |
| Overload withstand          | 1.2 times rated current continuously                      |
| Compliant with              | IEC/EN61869-2, IEEE/ANSI C57.13 & IEC61010-1              |
| Operating Temperature Range | -20°C to 55°C   |
| Relative Humidity           | 0-85% non-condensing                                      |
| Latch/Unlatch               | about 100 times   |
| Test Voltage                | 3kV for 1minute   |
| Frequency Range             | 50/60Hz   |
| Protection Level            | Bipolar 6.5Vp   |
| Insulation Category         | CAT II or CAT III 600VAC                                  |

## CURRENT TRANSFORMER RATIOS

### How to Order / Model Reference

eg **JM21N-000/0A**

Model **J M 2 1 N**

Primary Current

Select code from ratio table

Secondary Current

1A

1A

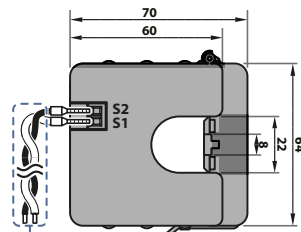
### Current Transformer Ratios

| Primary Current (A) | Metering Burden(VA) |       |       |  | Code |
|---------------------|---------------------|-------|-------|--|------|
|                     | cl. 0.5S            | cl. 1 | cl. 3 |  |      |
| 100                 |                     | 0.2   |       |  | 100  |
| 125                 |                     | 0.2   |       |  | 125  |
| 150                 |                     | 0.2   |       |  | 150  |
| 200                 | 0.2                 |       |       |  | 200  |
| 250                 | 0.2                 |       |       |  | 250  |

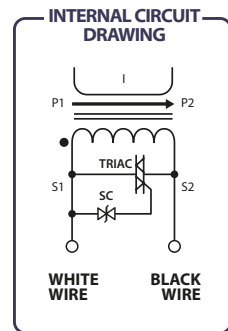
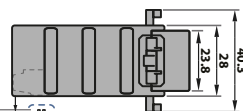
**1A Secondary**

Accuracy conforms to IEC61869-2 & IEEE/ANSI C57.13  
meets the measuring range from 1 to 120% of In

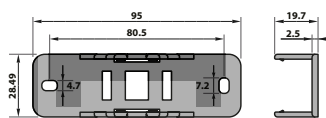
## DIMENSIONS



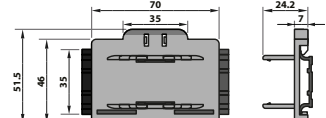
Optional lead wires  
Black & White or  
Brown & Yellow colors of UL1015#18



### • PANEL MOUNT

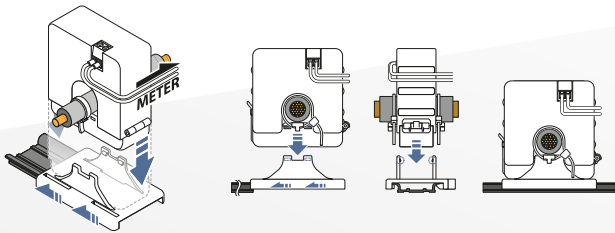


### • DIN RAIL MOUNT



### DIN RAIL MOUNTING

Mount the bracket on the rail and install current transformer



### PANEL MOUNTING

Tighten screws on the hole to mount bracket and install current transformer

