

# MMA AC Current Digital Meter

**KUSAM-MECO**®

An ISO 9001:2008 Company



## ■ FEATURES

- Programmable CT ratio
  - Output: 0-20mA/4-20mA or 0-5V/1-5V/0-10V
  - RS 485 MODBUS RTU and 4 Alarm Setting Function
  - Small size (Depth< 90mm)
  - Selectable Sampling Speed: (High/Medium/Low)
- \*Sampling speed is determined by the buffer size.  
Buffer size=The number of measurements for RMS.

**MMA** Code1 - Code2 - Code3 - Code4 - Code5 R.M.S

**MMAR** Code1 - Code2 - Code3 - Code4 - Code5 T.R.M.S

| Code 1 | Input Current | Code 2 | Alarm Setting   | Code 3 | Output 1  | Code 4 | Output 2 | Code 5 | Aux. Power    |
|--------|---------------|--------|-----------------|--------|-----------|--------|----------|--------|---------------|
| 1      | X / 5A        | 2      | 2 Alarm Setting | 1      | DC 0~10mA | 6      | RS 485   | 1      | AC 110/220V   |
| 2      | X / 1A        | 4      | 4 Alarm Setting | 2      | DC 0~20mA | 0      | None     | 2      | AC 220V       |
| 3      | 0 ~ 10A       | 0      | None            | 3      | DC 4~20mA | Y      | Other    | 3      | DC 22~72V     |
| Y      | Other         |        |                 | 4      | DC 0~5V   |        |          | 6      | AC/DC 85~265V |
|        |               |        |                 | 5      | DC 1~5V   |        |          | Y      | Other         |
|        |               |        |                 | 6      | DC 0~10V  |        |          |        |               |
|        |               |        |                 | 0      | None      |        |          |        |               |
|        |               |        |                 | Y      | Other     |        |          |        |               |

## SPECIFICATIONS:

### INPUT:

Input Frequency : 45 ~ 70Hz.  
Input Burden : 0.25VA at 60Hz.  
Input Over : Normal AC 5A, Current Over 20A Continuous

### OUTPUT & DISPLAY:

**DC Current:** 0 – 20 mA DC

**Load resistance drive:** output drive 10 VDC maximum

| Output      | Load Resistance |
|-------------|-----------------|
| 0 – 10 mA : | 1000 Ω          |
| 0 – 20 mA : | 500 Ω           |
| 4 – 20 mA : | 500 Ω           |

**DC Voltage:** 0 – 10 V DC

**Load resistance drive:** output drive 5 mA maximum

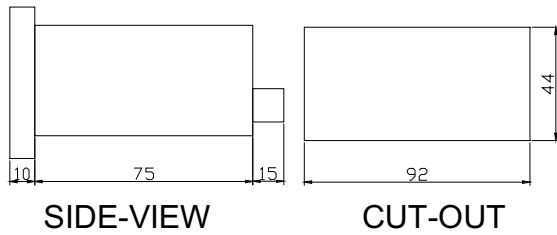
| Output     | Load Resistance |
|------------|-----------------|
| 0 – 5 V :  | 1 KΩ            |
| 1 – 5 V :  | 1 KΩ            |
| 0 – 10 V : | 2 KΩ            |

Output Response Time : ≤1 Sec. ( programmable per 100ms/unit )  
Output Protection : Without Damage for Output Open or Short Circuit.  
Digital Output : RS-485 Output, 1200,2400,4800,9600,19200 Baud Rate, User Selectable.  
Display Range : 0.56" High brightness RED LED , 5 Digits, -19999 ~ 99999Counts..

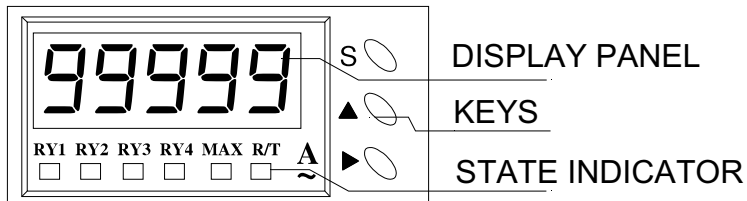
### INSTALLATION & PERFORMANCE:

Accuracy : 0.15%FS+1 Counts. Avg. Typically at 23°C±3°C. 0.25%FS+1 Counts. TRMS Typically at 23°C±3°C.  
Setting Function : 4 Alarm Setting, Setting Function(Hi or Lo) User Selectable.  
Setting Range : -19999 ~ 99999 Counts User Selectable.  
Dead Band : 0 ~ 9999 Counts User Selectable.  
Time Delay : 0 ~ 999 Sec. User Selectable.  
SPDT Capacity : AC 120V 3A,, DC 30V 3A.  
Dielectric Strength : 2KV AC / Min Between Input / Power / Case.  
Impulse : 5 KV 1.2x50 uS, ANSI C37.90a / 1983.DIN IEC 255 — 4.  
Stability : ≤0.2%/Year.  
Temperature Coefficient : ≤60ppm / °C From 0 ~ 60°C ; ≤50ppm/25°C ±5°C  
Operating Condition : -10°C ~ +55°C 20 ~ 95% RH Non-Condensed.  
Storage Condition : -40°C ~ +75°C 20 ~ 95% RH Non-Condensed.  
Consumed Power : ≤3VA, PF = 1  
Power Supply : AC or DC ±20%, 50 / 60Hz.  
Outline Dimension : 1/8 DIN 96W X 48H X 100D mm.  
Mounting : Panel Flush Mounting.

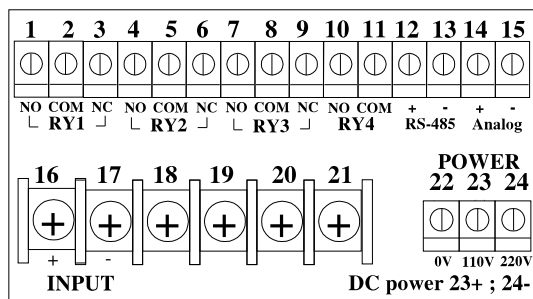
## ■ Dimension (mm)



## ■ Panel Keys



## ■ Connection Diagram



All Specifications are subject to change without prior notice.

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