

# RMS rectifier type current converter

## Current converter integrated clamp type sensor and RMS converter 5A ~ 500A

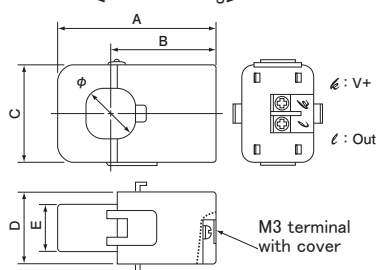


Model CTT-CLS-RMS series

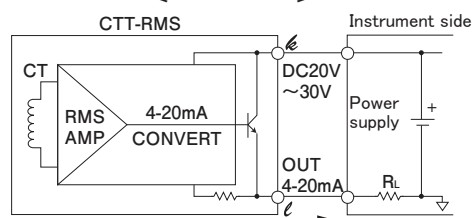
### [Features]

- Detection 50/60Hz distorted wave of commercial power supply as RMS value
- Output 4~20mADC instrumentation signal directly
- Extremely simple to mount with integrated mode of clamp type sensor and converter
- Corresponding to wide range of current from 0 ~ 5A to 0 ~ 500A
- 2 wires transmission system in common use of power supply (20V ~ 30V) of data logger and PCL

### [Outline drawing]



### [Connection]



2 wires transmission method in common of (+) power supply of instrument

### [Specification] Ta=25°C

| Model                 | CTT-16-CLS-RMS5  | CTT-16-CLS-RMS10 | CTT-16-CLS-RMS25 | CTT-16-CLS-RMS50 | CTT-16-CLS-RMS100 | CTT-24-CLS-RMS250 | CTT-36-CLS-RMS500 |      |
|-----------------------|--|------------------|------------------|------------------|-------------------|-------------------|-------------------|------|
| Power supply          | DC20 ~ 30V (25mA typ)  |                  |                  |                  |                   |                   |                   |      |
| Rating current        | 5 (Arms)   | 10 (Arms)        | 25 (Arms)        | 50 (Arms)        | 100 (Arms)        | 250 (Arms)        | 500 (Arms)        |      |
| Output current        | 4 ~ 20mADC/0 ~ rating current (Recommended load resistor $\leq 600\Omega$ / at power supply 24V) |                  |                  |                  |                   |                   |                   |      |
| Maximum current       | 120%(continuous), 150%(1min)   |                  |                  |                  |                   |                   |                   |      |
| Linearity             | $\pm 2\%$ FS (50/60Hz sine wave)   |                  |                  |                  |                   |                   |                   |      |
| Response time         | 100ms (typ)  |                  |                  |                  |                   |                   |                   |      |
| Output ripple         | Within 5% of output  |                  |                  |                  |                   |                   |                   |      |
| Withstand voltage     | AC2000V(50/60Hz), 1min (Core-output terminal in a lump)  |                  |                  |                  |                   |                   |                   |      |
| Insulation resistance | DC500V, $\geq 100M\Omega$ (Core-output terminal in a lump)                                       |                  |                  |                  |                   |                   |                   |      |
| Operating temperature | -20°C ~ +50°C, $\leq 80\%$ RH, no condensation, for indoor assembly, free direction for setting  |                  |                  |                  |                   |                   |                   |      |
| Storage temperature   | -30°C ~ +90°C, $\leq 85\%$ RH, no condensation   |                  |                  |                  |                   |                   |                   |      |
| Fitting repeatability | $\approx 100$ times  |                  |                  |                  |                   |                   |                   |      |
| Output terminal       | 2XM3 screw terminal with terminal cover  |                  |                  |                  |                   |                   |                   |      |
| Screw torque          | 0.3N · m   |                  |                  |                  |                   |                   |                   |      |
| Mass                  | approximately 75g  |                  |                  |                  |                   | 約200g             | 約290g             |      |
| Dimension             | A  |                  |                  | 55               |                   |                   | 74.5              | 91   |
|                       | B  |                  |                  | 40.5             |                   |                   | 49.5              | 61   |
|                       | C  |                  |                  | 29.5             |                   |                   | 45                | 57   |
|                       | D  |                  |                  | 31               |                   |                   | 34                | 40.5 |
|                       | E  |                  |                  | 19               |                   |                   | 22                | 22   |
|                       | φ  |                  |                  | 16               |                   |                   | 24                | 36   |

### [Remark]

- (1) There is breakage of ferrite core inside with shocking force to the contact face(16 type)
- (2) Although core joint surface is protected from rust, in the case of rusting, possible to be recovered by removal of rust with CRC-556 (goods on the market) and paint it again. (24, 36 type)
- (3) Please use dedicated ones for the screws mounted on the output terminal