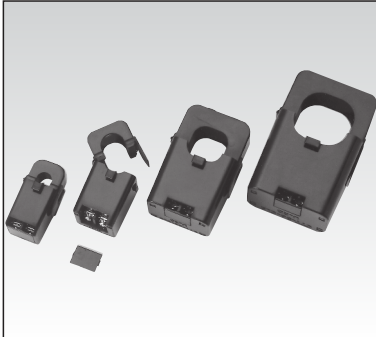


# Average rectifier type current converter

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

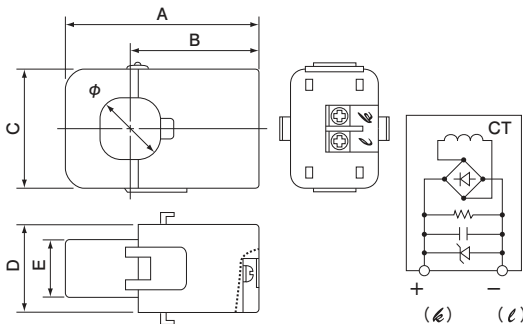


Model CTT-CLS-CV series

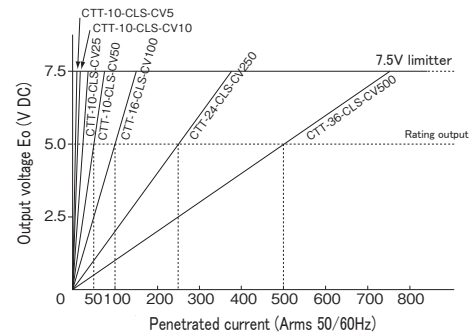
### [Feature]

- Only for 50/60Hz of commercial power supply, average rectifier type current converter of AC current detection and DC voltage output
- Without power supply, output 0-5VDC measure signal directly from sensor
- Extremely simple to mount with integrated mode of clamp type sensor and converter
- Possible to measure with isolation
- Corresponding to wide range of current from 0 ~ 5A to 0 ~ 500A

[Outline drawing · Connection]



[Output voltage characteristic]



### [Specification] Ta=25°C

| Model                 | CTT-10-CLS-CV5  | CTT-10-CLS-CV10     | CTT-10-CLS-CV25     | CTT-10-CLS-CV50     | CTT-16-CLS-CV100    | CTT-24-CLS-CV250    | CTT-36-CLS-CV500    |
|-----------------------|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Rating current        | 5Arms (50/60Hz)   | 10Arms (50/60Hz)    | 25Arms (50/60Hz)    | 50Arms (50/60Hz)    | 100Arms (50/60Hz)   | 250Arms (50/60Hz)   | 500Arms (50/60Hz)   |
| Output voltage        | 0 ~ 5VDC / 0 ~ rating current, build in 7.5VDC limiter (Recommended load resistor $\geq 10M\Omega$ )                              |                     |                     |                     |                     |                     |                     |
| Maximum current       | 100%(continuous)、150%(1min)   |                     |                     |                     |                     |                     |                     |
| Linearity             | $\pm 2\%$ FS dynamic range 1:100 (50/60Hz sine wave)  |                     |                     |                     |                     |                     |                     |
| Output impedance      | 7k $\Omega$ (typ)   | 8.5k $\Omega$ (typ) | 6.8k $\Omega$ (typ) | 6.2k $\Omega$ (typ) | 5.8k $\Omega$ (typ) | 5.8k $\Omega$ (typ) | 5.8k $\Omega$ (typ) |
| Response time         | 300ms (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 | $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$ , $\leq 80\%$ RH, No condensation, for indoor assembly, free direction for setting |                     |                     |                     |                     |                     |                     |
| Storage temperature   | $-30^{\circ}\text{C} \sim +90^{\circ}\text{C}$ , $\leq 85\%$ RH, No condensation  |                     |                     |                     |                     |                     |                     |
| Fitting repeatability | $\approx 100$ times   |                     |                     |                     |                     |                     |                     |
| Output terminal       | 2XM3 screw terminal with terminal cover   |                     |                     |                     |                     |                     |                     |
| Screw torque          | 0.3N · m  |                     |                     |                     |                     |                     |                     |
| Mass                  | approximately 45g   |                     |                     |                     | approximately 75g   | approximately 200g  | approximately 290g  |
| Dimension             | A   | 50                  |                     |                     | 55                  | 74.5                | 91                  |
|                       | B   | 37                  |                     |                     | 40.5                | 49.5                | 61                  |
|                       | C   | 23                  |                     |                     | 29.5                | 45                  | 57                  |
|                       | D   | 26                  |                     |                     | 31                  | 34                  | 40.5                |
|                       | E   | 14.5                |                     |                     | 19                  | 22                  | 22                  |
|                       | $\phi$  | 10                  |                     |                     | 16                  | 24                  | 36                  |

### [Remark]

- (1) There is breakage of ferrite core inside with shocking force to the contact face(10, 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
- (4) Corresponding to small current for rating current below 10A, current sensitivity to be N times with N turns of penetrated wire into sensor body
- (5) Specification is expressed the characterization based on 50/60Hz sine wave current. Corresponding to different waveform and frequency is necessary to be checked beforehand.
- (6) Because of relatively high output impedance, output interface is limited as high impedance specification