

# Average rectifier type current converter

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

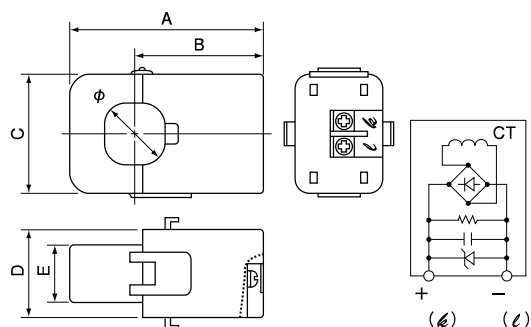


Model CTT-CLS-CV series

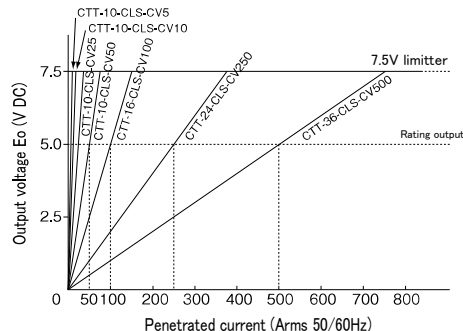
### [Feature]

- 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°C ~ +50°C, $\leq 85\%RH$ , 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 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
	φ	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