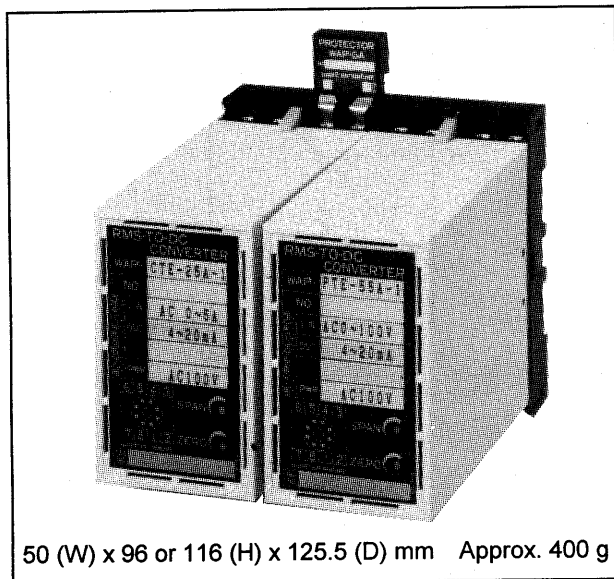


# CT CONVERTER AND PT CONVERTER (AC SIGNAL AND RMS-TO-DC CONVERTER) WVP-CTA/CTE/PTA/PTE



These plug-in signal converters convert the secondary outputs of CTs or PTs in power-receiving facilities, etc., into instrumentation signals that are convenient for transmissions. The types CTE and PTE provide particularly high reliability against distorted waves, since they adopt a true r.m.s. value measurement method.

## Features

- Input, output and power supply terminals are isolated from each other, with a dielectric strength of 2,000 VAC
- Deliver signals with low ripple and excellent linearity.
- Constant-voltage or constant current output, with no need to specify a load resistance
- Suitable for monitoring power or lighting circuits (Types CTE and PTE)
- Plug-in design reduces system installation and maintenance time

## Major Applications

- Output of CT and PT signals to computers
- Monitoring of induction motor and pump operations
- Current or voltage measurement on circuits using thyristors and inverters

Model WVP -  -   -

CTA	CT converter	Rectifying type (mean value)
CTE	(isolated)	True r.m.s. value type
PTA	PT converter	Rectifying type (mean value)
PTE	(isolated)	True r.m.s. value type

Power Supply	
1	AC 100 V $\pm$ 10%, 50·60Hz
2	AC 200 V $\pm$ 10%, 50·60Hz
3	DC 24 V $\pm$ 10%
4	AC 110 V $\pm$ 10%, 50·60Hz
5	AC 220 V $\pm$ 10%, 50·60Hz

Input Signal		
24	AC 0-1 A	Ranges for CT converter
25	AC 0-5 A	
55	AC 0-100 V	Ranges for PT converter
56	AC 0-110 V	
57	AC 0-150 V	
58	AC 0-200 V	
59	AC 0-250 V	
99	Other than the above (Please consult with us.)	

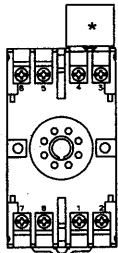
Output Signal		
		Allowable Load Resistance
A	DC 4-20 mA	less than 750 $\Omega$
B	DC 1-5 mA	less than 3 K $\Omega$
C	DC 2-10 mA	less than 1.5 K $\Omega$
D	DC 0-1 mA	less than 15 K $\Omega$
E	DC 0-10 mA	less than 1.5 K $\Omega$
F	DC 0-16 mA	less than 937 $\Omega$
G	DC 0-20 mA	less than 750 $\Omega$
H	DC 1-5 V	more than 2.5 K $\Omega$
J	DC 0-10 mV	more than 10 K $\Omega$
K	DC 0-100 mV	more than 100 K $\Omega$
L	DC 0-1 V	more than 500 $\Omega$
N	DC 0-5 V	more than 2.5 K $\Omega$
P	DC 0-10 V	more than 5 K $\Omega$
R	DC $\pm$ 10 V	more than 5 K $\Omega$
S	Other than the above (Please consult with us.): Voltage output 10 V or less Current output 20 mA or less	

## Specification

Input signal:	AC current (CT), AC voltage (PT)
Output signal:	DC voltage, DC current
Accuracy:	$\pm 0.2\% \cdot fs$ (at 23°C, with sine square)
Allowable excessive input:	1,000% of rated input for 5 seconds (CT) 200% of rated input for 5 seconds (PT)
Allowable load resistance:	For voltage output, use the converter with a load current of 2 mA or less (1 $\mu A$ or less for an output below 1 V $\cdot fs$ ). For current output, use the converter with a voltage drop of 15 V or less between output terminals.
Response time:	0.5 sec (time to reach 90% of the final value)
Output ripple:	0.25%(p-p) $\cdot fs$ or less
Rated frequency:	45 to 65 Hz
Operating temperature and humidity:	-5 to +55°C, 90% RH or less (without condensation)
Influence of ambient temperature:	$\pm 0.2\% \cdot fs/10^\circ C$
Insulation resistance:	100 M $\Omega$ or more with a 500 VDC megger between the input/output terminal and power supply terminal, and between the input and output terminals
Dielectric strength:	2,000 VAC for 1 minute between the input and output terminals, and between the input/output terminal and power supply terminal
Power consumption:	Approx. 4 VA (AC), Approx. 120 mA (DC)
Input loss:	Voltage: Approx. 1 mA or less Current: Approx. 0.45 VA or less
Zero & span adjustment:	$\pm 20\% \cdot fs$ each (multi-turn trimmer)

## Explanation of Terminals

Protector



(\* Standard accessory to CT Converter)

No.	Symbol	Description
1	OUTPUT	+
2		-
3	INPUT	
4		
5		N.C.
6		N.C.
7	POWER	U (+)
8		V (-)