

# High-precision Power Converter

Penetration-type  
chassis-attached  
( $\pm 20A \sim \pm 100A$ )

Uses

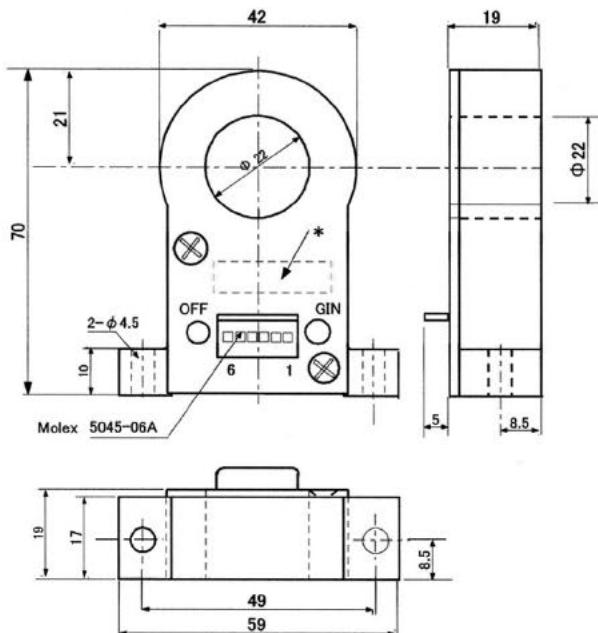
Power controllers

## Main Electrical Characteristics Main Specifications

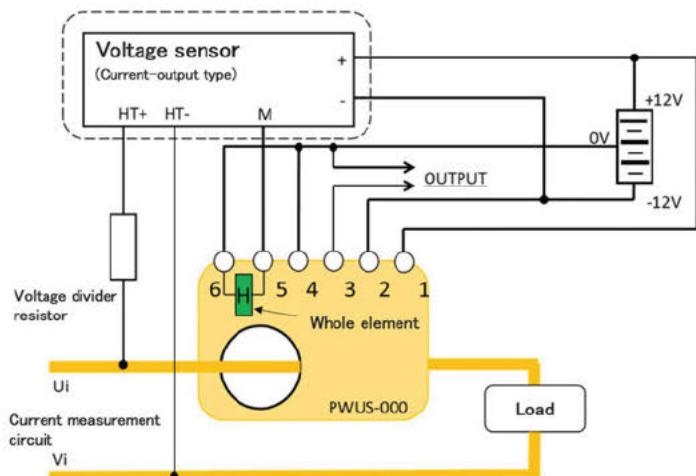
Ta=25°C

Parameter	Symbol	Unit	Model		
			PWUS-1022S	PWUS-1052S	PWUS-11002S
Primary nominal current	If (n)	A	$\pm 20A$	$\pm 50A$	$\pm 100A$
Measurable range	Ip	A DC	$\pm 2 \sim \pm 90$	$\pm 5 \sim \pm 200$	$\pm 10 \sim \pm 500$
		Ap-p	1.5~70	3.5~140	7~360
Rated output voltage	Vout	V	$2V \pm 1\%$ at If=If(n), Ic=3.5mA DC		
Linearity limits	εL	%	$\leq \pm 1\%$ of If(n)		
Supply voltage	Vcc	V	$\pm 12V \pm 5\%$		
Current consumption	Ic	mA	$\leq \pm 15mA$		
Ambient operating temp.	Ta	°C	$-10°C \sim +60°C$		
Ambient storage temp.	Ts	°C	$-15°C \sim +80°C$		

## PWUS-000 Outline Drawing (Unit: mm)



System diagram for connection as electrical sensor



### Terminal connection numbers

- 1:+12V
- 2:-12V
- 3:OUT PUT
- 4:0V
- 5:Ic+

High-precision power measurements can be conducted through attaching a separate voltage sensor (power output type).

Power conversion system:

Input current:  $I_p = \sqrt{2} I_p \sin(\omega t - \varphi)$  Input voltage:  $V = \sqrt{2} I_c \sin \omega t$   
Output voltage:  $V_{out} = [I_c \times I_p \cos \varphi - I_c \times I_p (2\omega t - \varphi)]$