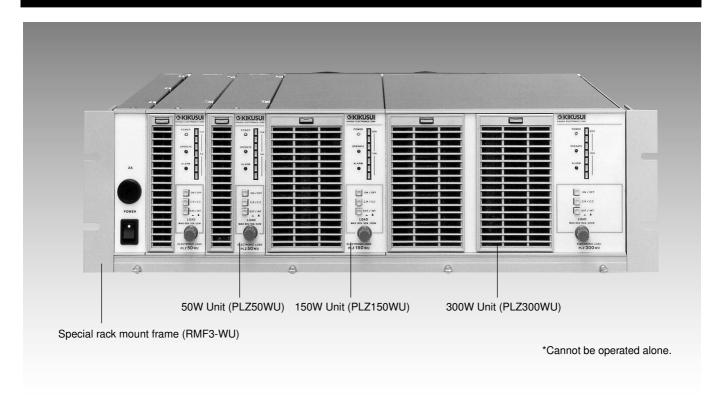
# **PLZ-WU series**

## **ELECTRONIC LOAD (CC·CR·CV)**



Multichannel System Rack Mount Integrated Type (Mount System PAT. Pending) Adaptable to 2.2V to 60V DC

DISCON: PLZ50WU/PLZ300WU

#### **Outline**

Currently, switching power supplies and other built-in power supplies for electronic circuit drive and primary and secondary batteries are used in industrial equipment, electric home appliances, and transportation equipment have become indispensable in the electronics field.

The PLZ-WU Series are compact electronic loads with a wide range of applications. They can be used as the characteristics testing, life testing, and aging load of these DC voltage sources and also as the dynamic testing and constant current load impossible with ordinary sliding resistor and other solid loads.

#### **Features**

■ Multiple channels

Since eight 50W type, four 150W type, and two 300W type PLZ-WU can be mounted in one frame, mounting density is high and they are perfect for rack mounting for systemization as a low capacity to medium capacity switching power supply, and for various characteristics testing and aging of batteries.

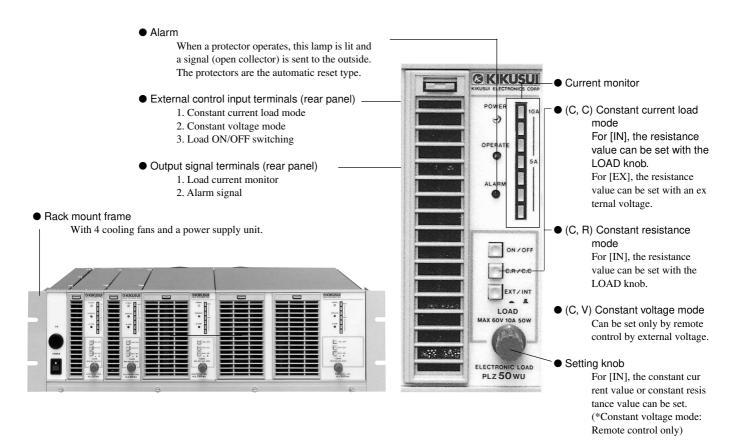
- Can even be used with 2.2V or less input voltage Current capacity allows use even with input voltages of 2.2V (PLZ50WU: 2V) or less. Therefore, the PLZ-WU Series can be used with low voltage sources and batteries and in a range up to 60V. (See page 7-12 for the operation range.)
- Integrated rack mount frame type

  New mounting system makes mounting simple. A unit cooling fan and power supply unit are provided at the frame section. The rack can be adapted to EIA standard inch size or JIS standard millimeter size by using accessory parts.
- Various remote control functions (GPIB expansion possible)

Constant current load mode and constant voltage mode operation can be remotely controlled with an analog signal. GPIB control is also possible using the digital programming option (DPO2212A) or the power supply controller (PIA4800 series).

# **ELECTRONIC LOAD (CC-CR-CV)**

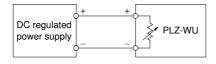
## **Panel**



## **Applications**

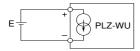
### ■ As a constant resistance load (C.R mode)

The PLZ-WU can be used as a power sliding resistor up to the allowable power. A 0.05 to  $2\Omega$  (PLZ300WU) resistance range is provided.



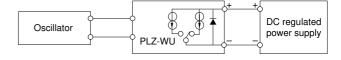
#### ■ As a constant current load (C.C mode)

Since the set current is drawn (SINK operation) within the rated voltage range, the PLZ-WU is perfect for primary and secondary battery discharge test and DC power supply adjustment and testing. The PLZ-WU can also be controlled with an external voltage(0 to 10V). A typical application is as a pulse power supply controlled by an external voltage. Plating, electrolysis, and other advanced control is also possible.



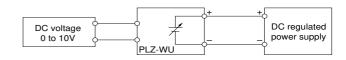
#### ■ As a dynamic load

Since dynamic testing (transient response characteristic test), which switches the load current at a period of 1ms to 100ms, is possible by using an external oscillator, the characteristics of DC power supply control systems can be checked.



#### ■ As a constant voltage power supply (C.V mode)

The PLZ-WU can be used as a parallel control type voltage power supply. The load side voltage can be made constant by controlling the voltage drop generated by the load current by connecting an impedance in series with the PLZ-WU Series. Typical applications include various current limiting characteristic tests and battery overcurrent protection and prevention.



# **PLZ-WU series**

# **ELECTRONIC LOAD (CC·CR·CV)**

## **Specifications**

## <u>Unit</u>

Specification	Input range			Constant current mode		Constant resistance mode	Constant voltage mode	Power consumption	Weight
Model No.	Max. power dissipation	Voltage	Current	Ripple	Rise/fall	Variation range	Variation range	Approx.	Approx.
Model No.	W	V	A	& noise	times	Ω	V	VA	kg
PLZ50WU	50	2.0 to 60	0 to 10	2mArms	10A/100ms	0.2 to 10	DC2.0 to 60	12	1.1
PLZ150WU	150	2.2 to 60	0 to 30	5mArms	30A/150ms	0.1 to 5	DC2.2 to 60	12	2.2
PLZ300WU	300	2.2 to 60	0 to 60	10mArms	60A/200ms	0.05 to 2	DC2.2 to 60	12	4

#### **Rack Mount Frame**

Model No.	Standard	Maximum dimensions	Remarks
DME2 WILL	EIA (inch size)	482W × 132.5H × 352Dmm	Power supply control unit, cooling fan
RMF3-WU	JIS (millimeter size)	480W × 149H × 352Dmm	• Adaptable to AC input by switching to 90Vto250V.

■ Operation modes (1) Constant current mode

(2) Constant resistance mode

(3) Constant voltage mode (remote control only)

■ Remote control (1) Constant current mode

External voltage: 0 to 10V (2) Constant voltage mode

External voltage: 0 to 10V (3) Load on/off switching

External voltage: Switched with contact signal

■ Signal output

Load current monitor Full scale 1V ±2%

Alarm output Isolation open collector by photocoupler Remote control with external voltage 0 to 10V ■ Parallel operation

■ Protection circuits If a protection function operates, an alarm lamp

lights and the circuit trips

90 to 250VAC no switching, 50/60Hz ■ Input voltage

■ Ambient temperature range 0 to 40°C, 10 to 80% RH

■ Dedicated rack mount RMF3-WU

(EIA Standard) 482W × 132.5H × 352Dmm

 $\blacksquare$  Maximum number of mountable units (JIS Standard)  $480W \times 149H \times 352Dmm$ 

PLZ50WU unit: 8 PLZ150WU unit: 4 PLZ300WU unit: 2

## **Operating Characteristics**

