

PLZ-152WA/W2 series

ELECTRONIC LOAD (CC·CR)



PLZ152WA



PLZ72W

PLZ152W

General-Purpose Series That Can Set Two Loads

Outline

The PLZ-W2 Series are high reliability electronic loads that feature an automatic reset overload protector, as well as constant current mode operation, constant resistance mode operation, and switching operation.

Features

- **Small size, high reliability**
Two loads can be set with a 10-turn helical potentiometer. Load current switching is also easily performed with a built-in oscillator.
- **Digital display**
An autoranging 3-1/2 digits digital voltammeter is provided.
- **Perfect safety device**
The automatic reset type protector automatically prevents overpower, overvoltage, and overcurrent input. Overpower and overvoltage protector operations cause an indicator lamp to light.
- **Computer control**
An automated measurement system can be built by using the Kikusui DPO2212A (Digital Programming Option) or PIA4800 series (Power Supply Controller).
- **Built-in switching oscillator**
The built-in switching oscillator allows switching between set loads at a period of 1ms to 100ms in the constant current and constant resistance modes.
- **Accommodated to zero volts input**
The PLZ152WA can operate down to zero volts. It renders perfect shorting with the current controlled, which have hardly been attainable with traditional load devices.

Applications

■ As a resistor (resistance mode)

The PLZ-W2 Series can be used as a power sliding resistor up to 70W, 150W and 0.13Ω to 100Ω (PLZ152W) resistance range is provided.

The load switch can be easily turned on and off.

■ As a constant current load (constant current mode)

This is suitable for charging test of primary (synch operation) and secondary batteries, capacitors, and other devices that draw a current (within the rated voltage range) regardless of the voltage.

Remote control using an external resistance or voltage is also possible.

■ As a dynamic load

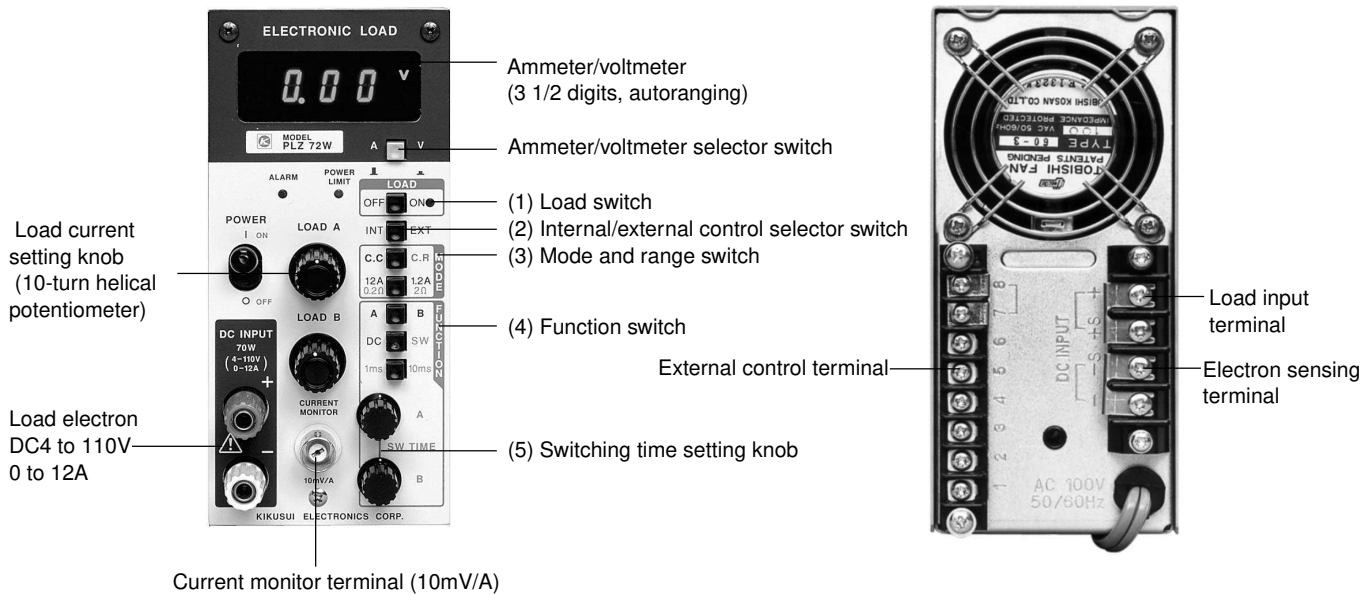
Dynamic testing using the built-in switching oscillator to switch the load current set at LOAD A and LOAD B is possible.

This test is generally called the “transient response characteristic” and checks the characteristics of the control system of regulated power supplies. It can be performed in the constant current mode or constant resistance mode.

PLZ-152WA/W2 series

ELECTRONIC LOAD (CC-CR)

Front and Rear Panels (PLZ72W)



(1) LOAD

Switch that opens and closes the input (load). When the protection circuit operates, this switch automatically trips. When the cause of the trouble is removed, this switch automatically resets.

(2) INT.EXT

Load manual operation (INT) or current control using an external control voltage (EXT) can be selected. (Constant current mode only)

(3) MODE

Selects C.C (Constant Current) or C.R (Constant Resistance) operation. A switch that switches the current and resistance range is also provided.

(4) FUNCTION

Two loads, A and B, can be selected.

Load A-B switching using a built-in oscillator is possible.

A switching frequency range switch is provided.

(5) SW TIME

This knob varies the switching time (1ms to 100ms). The switching time can be individually set for load current LOAD A and LOAD B.

Specifications

Specification	Input range			Constant current mode			Constant resistance mode	Power consumption	Weight
	Max. power dissipation	Voltage	Current	Range	Ripple & noise	Rise/fall times	Range	Approx.	Approx.
Model NO.	W	V	A	A			Ω	VA	kg
PLZ72W	70	4 to 110	0 to 12	1.2/12	2mArms	12A/100 μ s	0.2/2	20	3
PLZ152W	150		0 to 30	3/30	5mArms	30A/150 μ s	0.1/1	30	5
PLZ152WA	150	0 to 110 ^{*1}	0 to 30	3/30	7mArms	30A/200 μ s	0.1/1	230	10.5

■ Operation modes

- 1) Constant current: 2 ranges continuously variable
- 2) Constant resistance: 2 ranges continuously variable
- 3) Built-in switching (constant current mode)
Switching by oscillator (10Hz to 1kHz) and manual switching are possible.

■ Remote control

- 1) Constant current control
External resistance: 0 to 5k Ω
External voltage: 0 to 10V
- 2) Constant resistance control
External resistance: 0 to 5k Ω

■ Parallel operation

Capacity can be increased by using one-control parallel operation.

■ Protection circuit

Automatic reset type

■ Input terminals

Front and rear panels

■ Indicator

Max. 1999

Ammeter/voltmeter switching^{*2}

Accuracy (23°C $\pm$ 5°C)

Ammeter: $\pm$ (0.5% rdg + 0.1% f.s. + 1 digit)

Voltmeter: $\pm$ (0.1% rdg + 0.1% f.s. + 1 digit)

■ Oscillator

Period: 1ms to 10ms/10ms to 100ms

2 ranges

■ Input voltage

100VAC $\pm$ 10%, 50/60Hz

■ Ambient temperature & humidity

0 to 40°C, 10 to 90% RH

*1 0.5 to 110V in CR mode

*2 Ammeter and voltmeter (PLZ152WA)

*3 Available for PLZ72W and PLZ152W