

7. One-controlled Parallel Operation.

It is possible to increase current capabilities by operating a number of units connected in parallel simultaneously under the control of a master unit.

8. Protection Circuits Include:

Overvoltage, overcurrent, overpower, overheating, and input terminal connection in reverse polarity.

The PLZ series is offered as a portable desk-top unit and may be integrated into a 19 inch or 500 mm Kikusui standard rack, with the use of the option brackets.

1-2. Specifications

Power Requirements.

Line voltage: 120 V AC \pm 10% 50/60 Hz single phase

Power consumption: Approx. 35 VA (at 120 V AC)

Input.

Loading voltage: 4 - 60 V DC

Loading current: 0 - 30 A

Maximum loading power: 150 W

Operating ambient temperature range: 0 - 40°C (32 - 104°F)

Operating ambient humidity range: 10% - 90% RH

Cooling method: Forced air cooling by means of fan

Isolation from ground: \pm 250 V DC

Modes.

Constant current mode: 0 - 30 A (1st range)

0 - 3 A (2nd range)

Constant resistance mode: 10 - 100 m Ω (1st range) (minimum 0.12 Ω)

0.1 - 1 Ω (2nd range)

1 - 10 Ω (3rd range)

10 - 100 Ω (4th range, the range can be switched to 100 - 1000 Ω , refer page 14.)

Constant voltage mode: 5 - 60 V DC

Constant Current Characteristics.

Stability: 0.1% + 3 mA for loading voltage variation from 4 to 60 V

0.1% + 3 mA for line voltage variation by $\pm 10\%$

Ripple and noise: 4 mA RMS

Temperature coefficient: 0.02%/°C (standard value)

Rise/fall time: 100 μ sec or less (when an internally installed oscillator is used).

Constant Resistance Characteristics.

Stability: $\pm 10\%$ loading voltage variation:

(Stability)	(Input Voltage Variation)	(Setting resistance)
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4 - 10 V	1 Ω
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4 - 30 V	10 Ω
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Stability $\pm 10\%$ variation of line voltage: 0.1% + 6 mA

Temperature coefficient: 0.03%/°C standard value (at the minimum resistance value of a range).

Remote Control.

Constant current: External resistance 0 - 1000 Ω

External voltage 0 - 10 V DC

Constant resistance: External resistance 0 - 1000 Ω

Constant voltage: External voltage 0 - 10 V DC

Protecting Functions.

Overvoltage protection: Approx. 65 V DC

Overcurrent protection: Approx. 33 A DC

Overpower protection: Approx. 170 W

Wrong polarity input protection: By use of a diode

Overheating protection: 100°C $\pm 5^\circ$ C at cooling package

Line input fuse rating: 1 A

Meters.

Maximum significant number for display: 1999

Ammeter accuracy: $\pm(0.5\% \text{ of reading} + 0.1\% \text{ of F.S} + 1 \text{ digit})$
at $20^{\circ}\text{C} \pm 10^{\circ}\text{C}$

Voltmeter accuracy: $\pm(0.1\% \text{ of reading} + 0.1\% \text{ of F.S} + 1 \text{ digit})$
at $20^{\circ}\text{C} \pm 10^{\circ}\text{C}$

Power meter accuracy: $\pm(3\% \text{ of F.S} + 1 \text{ digit})$ at 5 V or more and
5 A or more

Constant voltage mode display: Yellow LED

Parallel operation: Control by one unit (master unit) is
possible

Oscillator.

Frequency: 10 - 100 Hz (1st range)
0.1 - 1 kHz (2nd range)

Duty ratio: 20 - 80% or more (continuously variable)

Operating ambient temperature range: 0 to 40°C

Operating ambient humidity range: 10 to 90% RH

Insulation resistances

Between chassis and line: 500 V DC, min. 30 M Ω

Between chassis and input terminals: 500 V DC, min. 20 M Ω

Dimensions: 220W \times 165H \times 415D (mm) (largest parts)

Weight: Approx. 8 kg

Instruction manual: One copy (in carton)