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 ± 10% 50/60 Hz single phase
Power consumption: Approx. 65 VA (at 120 V AC)

Input.

Loading voltage: 4 - 60 V DC
Loading current: 0 - 140 A
Maximum loading power: 700 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: ±250 V DC

Modes.

Constant current mode: 0 - 140 A (1st range)
0 - 14 A (2nd range)

Constant resistance mode: 10 - 100 mΩ (1st range) (minimum 0.025 Ω)
0.1 - 1 Ω (2nd range)
1 - 10 Ω (3rd range)
10 - 100 Ω (4th range)

Constant voltage mode: 5 - 60 V DC

Constant Current Characteristics.

Stability: 0.1% + 10 mA for loading voltage variation from 4 to 60 V
0.1% + 10 mA for line voltage variation by ±10%

Ripple and noise: 15 mA RMS

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

Rise/fall time: 200 µsec or less (when an internally installed oscillator is used).

Constant Resistance Characteristics.

Stability: ±10% loading voltage variation:

(Stability)	(Input Voltage Variation)	(Setting resistance)
	4 - 10 V	1 Ω
	4 - 40 V	10 Ω

Stability ±10% variation of line voltage: 0.1% + 10 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. 145 A DC

Overpower protection: Approx. 730 W

Wrong polarity input protection: By use of a diode

Overheating protection: 100°C ±5°C at cooling package

Line input fuse rating: 1 A

Meters.

Maximum significant number for display: 1999

Ammeter accuracy: ±(0.5% of reading + 0.1% of F.S + 1 digit) at 20°C ±10°C

Voltmeter accuracy: ±(0.1% of reading + 0.1% of F.S + 1 digit) at 20°C ±10°C

Power meter accuracy: ±(3% of F.S + 1 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)

Insulation resistances

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

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

Dimensions: 448W × 178H × 464D (mm) (largest parts)

Weight: Approx. 17 kg

Accessories (in carton)

Instruction manual	1
Terminal Cover	1
Nuts M8N × 1.25	2
Screws M3 × 0.5 × 5 (polycarbonate)	2