



- Parallel operation expands the load capacity
Up to 5 units can be operated in parallel
Max. 5 kW, 50 Arms
- Supports single-phase 3-wire method, 3-phase 3-wire method
Equipped with tracking operation function

For load test for various inverters such as inverter for Fuel Cell power generation, UPS inverter, inverter for photovoltaic generation, and transformer



AC ELECTRONIC LOAD PCZ1000A

- Maximum input load power: 1000 W
- Input voltage range: 14 V to 280 V(rms)
- Input current range: 0 to 10 A(rms)
- Input frequency range: 45 Hz to 65 Hz

Constant Current/Constant Resistance/Constant Power mode provided.
Useful Crest Factor function is equipped.

PCZ1000A is an AC electronic load that enables you to perform load simulation for various inverters and transformers.

In addition to the resistive loads generally used in tests, it is capable of simulating capacitor-input rectifier loads.

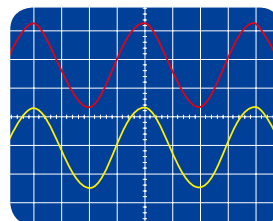
The instrument supports input up to 1000 W and is equipped with 3 operation modes - Constant Current, Constant Resistance, and Constant Power.

Current waveform resemble to sine wave can be output constantly without effect by voltage waveform at each mode. Moreover, the instrument is equipped with Crest Factor function that is suitable for simulating current load test for switching power supply.

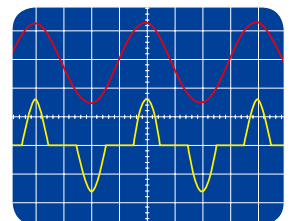
This instrument provides improved operability through CPU control and enables external control and read-back via RS232C.

Crest Factor Function [1.4 to 4.0]

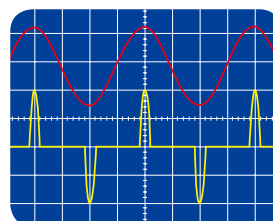
Facilitating load tests for peak or harmonic currents helps reduce design and labor time and cost as well as improve the quality of the unit under test [- Voltage waveform - Current waveform]



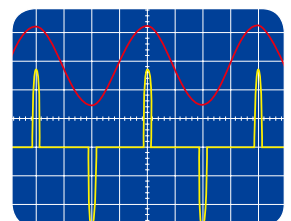
▲C.F setting value1.4



▲C.F setting value2.0



▲C.F setting value3.0



▲C.F setting value4.0

Specifications

Input rating (AC)	Operation voltage *1		14 Vrms to 280 Vrms 20 Vpeak to 400 Vpeak
	Maximum current *2		10 Arms 40 Apeak
	Maximum power *3		1000 W
	Frequency		45 Hz to 65 Hz
	Minimum operation start voltage *4		3 Vpeak
Constant-current (CC) mode *5	Setting range		0 Arms to 10 Arms
	Setting accuracy *6		Within ± (1 % of set + 0.1 A)
	Setting resolution		10 mA Arms
	Stability	Line variations *7	Within 10 mA Arms
		Input-voltage variations *8	Within 100 mA Arms
Temperature coefficient (at the rated current)		200 ppm/°C (typical)	
Constant-resistance (CR) mode *9	Setting range	H range (Full current at 10 V)	1 Ω to 1 kΩ 1 S to 1 mS *10
		L range (Full current at 100 V)	10 Ω to 10 kΩ 0.1 S to 0.1 mS *10
		Setting resolution	H range (Full current at 10 V) L range (Full current at 100 V)
	Setting accuracy	(in current terms) *6, *11	Within ± (2 % of set + 0.2 A)
	Stability	Input-voltage variations *12	Within ± 10 %
	Constant-power (CP) mode *13	Setting range	
Setting accuracy *6, *14		Within ± 5 % of set	
Setting resolution		1 W	
Input-voltage variations *15		Within ± 5 %	
Crest-factor (C.F) function *16	Setting range		1.4 to 4.0
	Resolution		0.1
Master-slave parallel operation		Up to 5 units including master unit	
Tracking function		Same current as master unit passes to slave unit	
Ammeter (RMS display mode)	Number of display digits (full scale)		10.00 Arms
	Accuracy *6		Within ± 1 % of FS
Ammeter (peak display mode)	Number of display digits (full scale)		40.0 Apeak
	Accuracy *6		Within ± 2 % of FS
Voltmeter	Number of display digits (full scale)		300.0 Vrms
	Accuracy *6		Within ± 1 % of FS
Protection function *17	Peak overcurrent protection (POCP) *18		Approx. 48 Apeak
	Overcurrent protection (OCP) *19		Approx. 11.5 Arms
	Overvoltage protection (OVP) *18		Approx. 470 Vpeak
	Overpower protection (OPP)		Approx. 1150 W
	Overheat protection (OHP) *20		-
Internal circuit protection (FUSE BRK)		Internal fuse blown	
Input power (AC)	Voltage range (nominal value) *21	1	90 Vrms to 110 (100) Vrms
		2	108 Vrms to 132 (120) Vrms
		3	180 Vrms to 220 (200) Vrms
		4	216 Vrms to 250 (240) Vrms
	Frequency		50 Hz/60 Hz
Power consumption (apparent power)		MAX 220 VA	
Withstand voltage	Primary side to case		1500 Vac for 1 minute
	Primary side to load input terminals		1500 Vac for 1 minute
	Load input terminals to case		500 Vac for 1 minute
Insulation resistance	Primary side to case		1000 Vdc at 20 MΩ or more
	Primary side to load input terminals		1000 Vdc at 20 MΩ or more
	Load input terminals to case		1000 Vdc at 20 MΩ or more
Temperature and humidity ranges	Operating temperature range		0 °C to 40 °C (32 °F to 104 °F)
	Operating humidity range		20 %rh to 85 %rh (no condensation)
	Storage temperature range		-25 °C to 70 °C (-13 °F to 158 °F)
	Storage humidity range		90 %rh and below (no condensation)
Dimensions (case)		430W×400D×128Hmm	
Weight		Approx. 22 kg (48.5 lb)	

- *1 Input-voltage range in which the rated input current can flow.
 *2 For an input voltage of 100 Vrms or greater, the maximum current is derated to the rated input power (1000 W.)
 *3 For an input voltage of 100 Vrms or less, the maximum power is limited by the rated input current (10 Arms).
 *4 Minimum input voltage at which the input current starts to flow.
 *5 The input-current waveform does not change with changes in the input-voltage waveform. The RMS value of the input current is kept constant (response rate: approximately 1 s). (Response rate: Time required to reach ±10% of the steady value (value reached 5 seconds or more after state change))
 *6 At temperature(23 ± 5 °C)
 *7 Changes in the input current when variations in the rated-voltage range are given at an input voltage of 100 Vrms and an input current of 10 Arms, based on the nominal value of the input line voltage.
 *8 Changes in the input current when the input voltage is changed from 10 Vrms to 280 Vrms at an input current of 3.57 Arms (rating at an input voltage of 280 Vrms).
 *9 The input-current waveform does not change with changes in the input-voltage waveform. This mode results in an input current (RMS value) that is proportional to the RMS value of the input voltage (response rate: approximately 1 s).
 *10 S represents the unit of conductance (siemens).
 Conductance [S] = 1/resistance value [Ω]
 Conductance [S] × input voltage [V] = load current [A]
 *11 At an input voltage of 100 Vrms.
 *12 Changes in the resistance value when the input voltage is varied from 10 Vrms to 100 Vrms at an input current of 0.5 A or more.
 *13 The input-current waveform does not change with changes in the input-voltage waveform. This mode results in an input current (RMS value) that is inversely proportional to the RMS value of the input voltage (response rate: approximately 1 s).
 *14 At an input voltage of 100 Vrms
 *15 Changes in the power value when the input voltage is varied from 10 Vrms to 100 Vrms.
 *16 Varies the angular width of the current at the approximate input-voltage peak, based on a sinusoidal current waveform.
 *17 Turns off the LOAD key when the protection function is activated.
 *18 Turns off the LOAD key within 20 ms.
 *19 Turns off the LOAD key within 3 ms.
 *20 Detects the internal-heat-sink surface temperature to turn off the LOAD key.
 *21 Selectable by Switch position.

Options

- Rack mount bracket
 - KRB3 (Inch size, EIA standard compatible rack)
 - KRB150 (Metric size, JIS standard compatible rack)
- Parallel operation cable
 - PC01-PCZ1000A



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