Output single-phase, single-phase 3-wire,* Convenient multiple output supports a wide AC power supply offering superior space factor

High-performance AC Power Supplies
PCR-LE2 SERIES

NEW

The PCR-LE2 Series are designed based on the PCR-LE Series that supports single-phase output, single-phase 3-wire output, and three-phase output within the rated capacity by selecting the switch from the front panel operation. The PCR-LE2 series offer the same basic performance, using the common power unit of the PCR-LE Series, with providing easier installation and saving the space more efficiently compare to the individual allocation of the system for a single-phase, single-phase 3-wire, and three-phase systems. The lineup of PCR-LE2 Series are available in 3 models: 6 kVA, 9 kVA, and 27 kVA model.


Single-phase output display screen


Single-phase 3-wire output display screen


Three phase output display screen


PCR6000LE2 PCR9000LE2

PCR27000LE2

and three-phase power with a single unit.
range of industrial devices.
and cost performance.

*: The Output power with single-phase 3-wire limits 2/3 of the rated output.

● Lineup

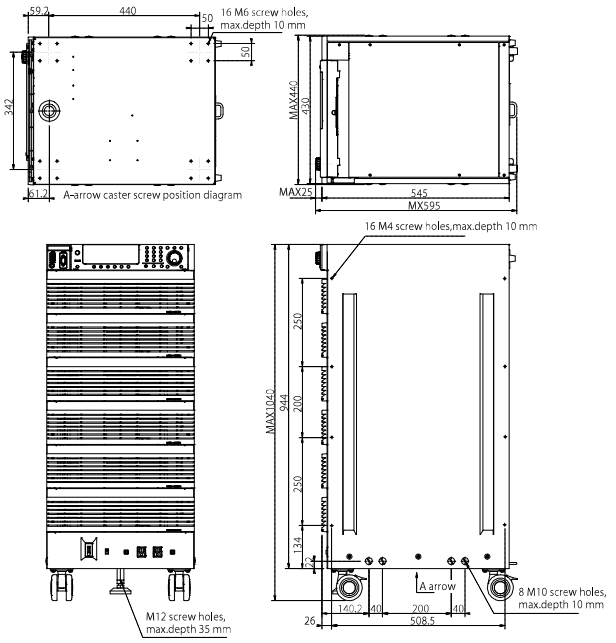
Model		PCR6000LE2	PCR9000LE2	PCR27000LE2
Output capacity	Single-phase	6 kVA	9 kVA	27 kVA
	Single phase 3-wire	4 kVA	6 kVA	18 kVA
	three phase	6 kVA	9 kVA	27 kVA
Maximum output current	Single-phase	60 A / 30 A	90 A / 45 A	270 A / 135 A
	Single phase 3-wire· three phase	20 A / 10 A	30 A / 15 A	90 A / 45 A
ACmode (L/H range)		1 V to 150 V / 2 V to 300 V		
	Single-phase	60 A / 30 A	90 A / 45 A	270 A / 135 A
	Single phase 3-wire· three phase	20 A / 10A	30 A / 15 A	90 A / 45 A
DC mode (L/H range)		1.4 V to 212 V / 2.8 V to 424 V		
	Single-phase	42 A / 21 A	63 A / 31.5 A	189 A / 94.5 A
	Single phase 3-wire· three phase	14 A / 7A	21 A / 10.5 A	63 A / 31.5 A
Dimensions (mm(inches)) (Maximum dimensions)		430(440) W	430(440) W	1490(1580) W *
		944(1040) H	1325(1420) H	1425 H *
		550(595) D	550(595) D	835 D *
Weight		Approx. 140 kg (308.64 lbs)	Approx. 190 kg (418.88 lbs)	Approx. 700 kg (1543.24 lbs)

*OP03-KRC included.

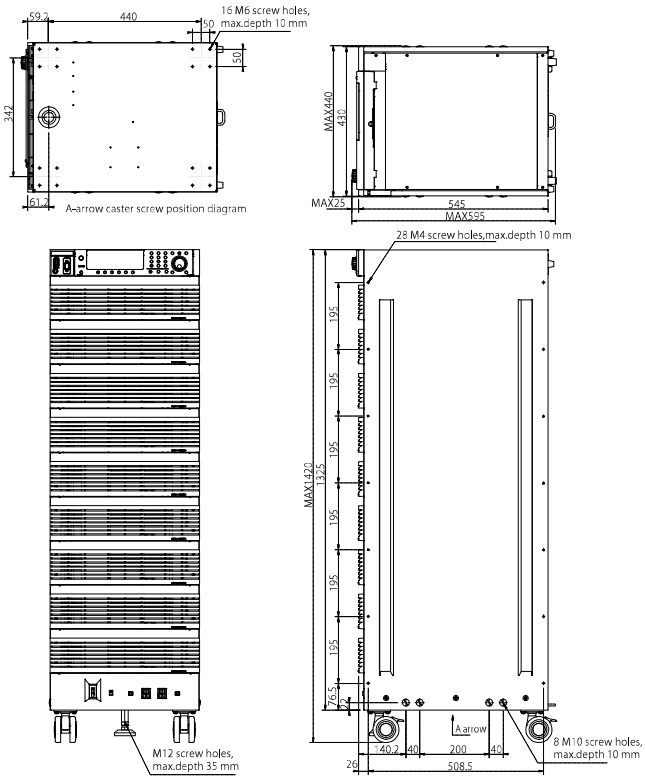
● Rearpanel

PCR6000LE2 PCR9000LE2 PCR27000LE2

dimensions



PCR6000LE2



PCR9000LE2

PCR27000LE2

● Concerning installation of the PCR27000LE2

The PCR27000LE2 requires for the installation work. Please consult with your local Kikusui distributor.

● Concerning relocation of the PCR27000LE2

The PCR27000LE2 cannot be relocated after it is installed. If relocation becomes necessary, please consult with your local Kikusui distributor.

specifications

Item/Model		PCR6000LE2		PCR9000LE2		PCR27000LE2
Input ratings (AC rms)			3P3W 200V	3P3W 200V	3P4W 400V	3P3W 200V
Voltage		Line voltage 170 V to 250 V			Phase voltage 187 V to 254 V (Line voltage 324 V to 440 V)	Line voltage 170 V to 250 V
Phases		Single phase	Three phase 3-wire	Three phase 3-wire	Three phase 4-wire	Three phase 3-wire
Frequency		47 Hz to 63 Hz				
Apparent power		Approx. 10.6 kVA	Approx. 10.6 kVA	Approx. 15.7 kVA	Approx. 15.7 kVA	Approx. 48 kVA
Power factor *1		0.97 (TYP)				
Max. current		64 A or less	38 A or less	55 A or less	30 A or less	165 A or less
AC mode output ratings (AC rms)						
Voltage (output L range, output H range)*2		1 V to 150 V, 2 V to 300 V				
Voltage setting accuracy (output L range, output H range)*3		±(0.3 % of set + 0.6 V)				
Max. current*4	Single phase, poly phase, L range, H range	60 A, 30 A · 20 A, 10 A	60 A, 30 A · 20 A, 10 A	90 A, 45 A · 30 A, 15 A	90 A, 45 A · 30 A, 15 A	270 A, 135 A · 90 A, 45 A
Phase*5		Single phase · Single phase3-wire · Three phase 4-wire				
Power capacity	Single phase, Three-phase 4-wire, Single phase 3-wire	6 kVA · 4 kVA	6 kVA · 4 kVA	9 kVA · 6 kVA	9 kVA · 6 kVA	27 kVA · 18 kVA
Maximum peak current*6		Max. current (rms) × 4 (TYP)				
Max. reverse current*7		30 % of the max. current (rms)				
Load power factor*4		0 to 1 (leading or lagging)				
Frequency*4 *8		1 Hz to 999.9 Hz ★				
DC mode output ratings (for Single-phase and Single-phase Three-wire output only)						
Voltage (output L range, output H range)*2		1.4 V to 212 V / 2.8 V to 424 V				
Voltage setting accuracy (output L range, output H range) *9		± (0.05 % of set + 0.05 V / 0.1 V)				
Max. current*4	Single phase, poly phase, L range, H range	42 A, 21 A · 14 A, 7 A	42 A, 21 A · 14 A, 7 A	63 A, 31.5 A · 21 A, 10.5 A	63 A, 31.5 A · 21 A, 10.5 A	189 A, 94.5 A · 63 A, 31.5 A
Max. instantaneous current*10		Max. current (rms) × 3.6				
Power capacity	Single phase, Single phase 3-wire	4.2 kW · 2.8 kW	4.2 kW · 2.8 kW	6.3 kW · 4.2 kW	6.3 kW · 4.2 kW	18.9 kW · 12.6 kW
Output voltage stability						
Line regulation(With respect to changes in the rated range)		Within ±0.1 %				
Line regulation(With respect to 0 % to 100 % changes in the rating)*11		±0.3 V				±0.5 V
Output frequency variation in AC mode(Between 40 Hz and 999.9 Hz)*12		Within ±0.5 %				Within ±1 %
Ripple noise in DC mode(5 Hz to 1 MHz components)		0.25 Vrms or less				0.5 Vrms or less
Ambient temperature variation(With respect to changes in the rated range)*13		100 ppm/ ℃ (TYP)				
Output frequency stability, output voltage waveform distortion ratio, output voltage response speed, efficiency						
Output frequency stability(With respect to changes in all rated ranges)		Within $\pm 5\times10^{-5}$, Setting accuracy : Within $\pm 1\times10^{-4}$				
Output voltage waveform distortion ratio*14		0.3 % or less				0.5 % or less
Output voltage response speed*15		30 μs (TYP)				50 μs (TYP)
Efficiency*1		58 % or more				
Phase difference of the output phase voltage*16	Single phase 3-wire	Within 180° · 120°± (0.4° + 5 μs) *17				
	Three-phase 4-wire	Within 180° · 120°± (0.4° + f0×1.8×10^{-30})				
Meters (fluorescent display)						
Voltmeter *18 *19	Resolution / RMS,AVE Display mode	0.1 V				
	Accuracy / RMS,AVE Display mode	Within ± (1 % of rdng + 2 digits) (10 V to 848 V and at room temperature)				
Ammeter *18 *19	Resolution / RMS,AVE Display mode Single phase · Poly phase	0.1A · 0.01 A	0.1 A · 0.01 A	0.1 A	0.1 A	0.1 A / 1 A · 0.1 A
	Accuracy / RMS Display mode	Within ± (1% of reading + 2digits) (5 % of the max. rated current to max. rated current and at room temperature)				
Wattmeter*19	Resolution / Single phase · Poly phase	1 W · 0.1 W / 1 W	1 W · 0.1 W / 1 W	1 W	1 W	1 W / 10 W
	Accuracy	Within ± (1 % of reading + 3digits) (10 % of the rated power capacity to the rated power capacity, when the load power factor is 1, and at room temperature.)				
Frequency meter*20	Resolution	0.01 Hz / 0.1 Hz				
General						
Insulation resistance	Between input and chassis, output and chassis, and input and output	500 V, 10 MΩ or more				
Withstand voltage		1.5 kVAC for 1 minute				
Circuit method		Linear amplifier system				
Environmental conditions	Operating temperature range / Storage temperature range	0 ℃ to +50 ℃ / -10 ℃ to +60 ℃				
	Operating humidity range / Storage humidity range	20 % rh to 80 % rh (no condensation) / 90 % rh or less (no condensation)				
Weight		Approx.140 kg(308.64 lbs)	Approx.140 kg(308.64 lbs)	Approx.190 kg(418.88 lbs)	Approx.190 kg(418.88 lbs)	Approx.700 kg(1543.24 lbs)
Input terminal	Input terminal board [3 φ]	M8	M5	M5	M5	M8
Output terminal	Output terminal board Single phase · Single phase 3-wire, Three-phase 4-wire	M8 · M5				M8 · M8
Input power cord [Sold separately option]	Shape	single-core cable			—	
	The number	3 pc	4 pc	4 pc	5 pc	—
	Conductor cross section/Length	14 mm^2 / 3 m	14 mm^2 / 3 m	14 mm^2 / 3 m	14 mm^2 / 3 m	—
Accessories	Setup guide	1 copy				
	CD-ROM(User's manual)	1 disc				
	Quick Reference	1 each for English and Japanese				
	Safety information	1 copy				
Other	Electromagnetic compatibility (EMC)	EMC Directive 2004/108/EC、EN61326-1、EN61000-3-2、3-3 The maximum length of all cables and wires connected to the PCR-LE Series must be less than 3 m.				
	Safety	Low Voltage Directive 2006/95/EC、EN61010-1Class Ⅰ Pollution Degree2				
	Output voltage ratio versus rated output current characteristics	PCR-LE series just like.(See P. 23.)				

*1 When the output phase voltage is 100 V or 200 V, the output current is the rated value, the load power factor is 1, and the output frequency is between 40 Hz and 999.9 Hz.
*2 L/H range can be changed by means of a switch on the front panel. Resolution: 0.1V
*3 When the output frequency is between 45 Hz and 65 Hz, with no load, and at room temperature.
*4 When the maximum voltage is between 1 V and 100 V (L range) or 2 V and 200 V (H range) and the load power factor is between 0.8 and 1.When the output phase voltage is between 100 V and 150 V or 200 V and 300 V (AC mode) or 100 V and 212 V or 200 V and 424 V (DC mode), the output current is reduced by the output phase voltage.
When the load power factor is between 0 and 0.8, the output current is reduced by the load power factor. (AC mode)
When the output frequency is between 1 Hz and 40 Hz, the output current is reduced by the output frequency. (AC mode)
*5 The output phase mode can be changed by means of a key on the operation panel. "Poly" in the table indicates single-phase three-wire mode and three-phase four-wire mode.
*6 When the output phase voltage is in the vicinity of the peak (±15 deg) (However, this is limited by the rated output current's rms value).
*7 When the output phase voltage is 100 V or 200 V and the output frequency is between 40 Hz and 999.9 Hz (reverse current is −180 deg out of phase with the output voltage).
*8 Resolution：0.01Hz (1.00Hz～100.0Hz)、0.1Hz (100.0Hz～999.9Hz)
*9 With no load at room temperature
*10 Limited by the rated output current's rms value
*11 When the output phase voltage is between 80 V and 150 V (L range) or 160 V and 300 V (H range) and the load power factor is 1. At the output terminal block. When the response mode is set to MEDIUM.(There is no F mode)
*12 When the output phase voltage is between 80 V and 150 V (L range) or 160 V and 300 V (H range) and the load power factor is 1. This is the output line regulation with 200 Hz as the reference. When the response mode is set to MEDIUM.(There is no F mode)
*13 When the output phase voltage is 100 V or 200 V and the output current is 0 A.
*14 When the output phase voltage is between 80 V and 150 V (L range) or 160 V and 300 V (H range) and the load power factor is 1. When the response mode is set to MEDIUM.(There is no F mode)
*15 When the output phase voltage is 100 V or 200 V, the load power factor is 1, and the output current changes from 0 A to the rated value and from the rated value to 0 A.
*16 Phase difference between output voltages (phase voltages) when each phase is considered along with the neutral point.
*17 The following show the angles obtained by calculating the expression with the specified frequency.
Within ±0.5° (when generating 60 Hz output)
Within ±1.2° (when generating 400 Hz output)
*18 With the true rms display, a waveform with a crest factor of 3 or less.
*19 When the output frequency is between 45 Hz and 65 Hz.
*20 Displays the output frequency setting (frequency of the internal reference voltage)

★ **PCR-LE2 Series 500Hz Limit Model**
The PCR-LE Series offers the type on each model that limits the maximum output frequency up to 500 Hz.

ordering information

Part		Model	Remarks
High-performance AC Power Supplies（Single phase）		PCR500LE	Single phase 500VA
		PCR1000LE	Single phase 1kVA
		PCR2000LE	Single phase 2kVA
		PCR3000LE	Single phase 3kVA
		PCR4000LE	Single phase 4kVA
		PCR6000LE	Single phase 6kVA
		PCR9000LE	Single phase 9kVA
High-performance AC Power Supplies (Single phase/Single phase three wire/Three-phase change types)		PCR6000LE2	Single phase / Three-phase 6kVA, Single phase three wire 4kVA
		PCR9000LE2	Single phase / Three-phase 9kVA, Single phase three wire 6kVA
		PCR27000LE2	Single phase / Three-phase 27kVA, Single phase three wire 18kVA
GPIB interface		IB05-PCR-LE	
USB interface		US05-PCR-LE	
LAN interface		LN05-PCR-LE	
Analog interface		EX05-PCR-LE	An amplifier type
		EX06-PCR-LE	Amplitude control type
Input power cable	For PCR1000LE	AC5.5-3P3M-M4C	3-core cabtire cables 5.5 mm^2/3 m M4
	For PCR2000LE	AC8-1P3M-M5C-3S	3 single-core cables 8 mm^2/3 m M5
	For PCR3000/6000LE/6000LE2	AC14-1P3M-M8C-3S	3 single-core cables 14 mm^2/3 m M8
	For PCR4000LE	AC22-1P3M-M8C-3S	3 single-core cables 22 mm^2/3 m M8
	For PCR6000LE,LE2 (Three-phase 200V input) /PCR9000LE,LE2	AC14-1P3M-M5C-4S	4 single-core cables 14 mm^2/3 m M5
	For PCR9000LE (400V input)	AC5.5-1P3M-M5C-5S	5 single-core cables 5.5 mm^2/3 m M5
Extension cable for control panel		EC05-PCR	2m
Parallel operation driver (Master)		PD05M-PCR-LE	Cannot be used with PCR500LE or PCR1000LE.
Parallel operation driver (Slave)		PD05S-PCR-LE	Cannot be used with PCR500LE or PCR1000LE.
Single-phase three-wire output driver		2P05-PCR-LE	
Three-phase output driver		3P05-PCR-LE	
		3P05-PCR-LE（500Hz LMT）	Overseas export
Extension cable		CC01-PCR-LE	For 2P05・3P05 1.5 m
		CC02-PCR-LE	For 2P05・3P05 2.8 m
Extension connection cable (For parallel operation)		PC01-PCR-LE	1.3 m
Extension power signal cable (For parallel operation)		CC11-PCR-LE	1 m
Power-sync cable		LC01-PCR-LE	1 m
Rack mount Brakets	For PCR500LE	KRB4	For EIA inch size
		KRB200	For JIS metric size
	For PCR1000LE	KRB6	For EIA inch size
		KRB300	For JIS metric size
	For PCR2000LE	KRB9	For EIA inch size
		KRB400-PCR-LE	For JIS metric size
Base holding angle		OP03-KRC	For fixing PCR3000LE/4000LE/6000LE/9000LE/6000LE2/9000LE2 and fixing to the floor Standard accessories for the PCR27000LE2
Dip simulator		DSI Series	
Line impedance network		LIN Series	
Quick Immunity Sequencer 2		SD009-PCR-LE	
Software for creating sequences		SD011-PCR-LE（Wavy for PCR-LE）	

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For our local sales distributors and representatives, please refer to "sales network" of our website.

●Distributor/Representative

Issue:Mar.2014 2014030.5KPRIEC31