87045 LIMOGES Cedex
Telephone: (+33) 05 55 06 87 87 - Fax: (+33) 05 55 06 88 88

Keor LP 1000-2000-3000

3 101 54 - 3 101 55 - 3 101 56 - 3 101 57 - 3 101 58 - 3 101 59



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1. GENERAL FEATURES

The Legrand UPS Keor LP model is a UPS using high frequency PWM technology, On Line Double Conversion type, solid neutral, Rated Power 1000, 2000, 3000 VA, equipped with valve-regulated hermetic-type batteries, contained inside the UPS in a specific compartment or in one or more external cabinets, sized to guarantee a minimum autonomy of 5 minutes at 70% of the load.
Keor LP is available with different types of output sockets:

3 101 54 - 3 IEC sockets 10A
3 101 55 - 3 IEC sockets 10A plus an french standard sockets
3 101 56 - 6 IEC sockets 10A
3 101 57 - 3 IEC sockets 10A plus 2 french standard sockets
3 101 58 - 6 IEC sockets 10A
3 101 59 - 6 IEC sockets 10A plus 2 french standard sockets

The UPS rectifier is comprised of a control and regulation circuit (PFC), which in addition to the functions of a normal rectifier it also:
- automatically correct the power factor of the load bringing it to a value 0.98 with the load already applied in output at 20% of the rated load;
- power the inverter without requiring energy from the batteries even when there is a very low network voltage
- guarantee a total harmonic distortion of the input current $THDI_{in}$ < 10% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:
- Electromechanical switching device
- Command and control logic managed by the microprocessor which:
  - automatically transfers the load directly to the primary network without interrupting the power supply, in conditions of overload, overheating, continuous voltage outside of the tolerances and inverter fault;
  - automatically re-transfer the load from the primary network to the inverter line, without interrupting the power supply, when the normal conditions of the load are restored;
  - if the primary network and inverter are not synchronised, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if installed accordingly on a PC connected to the UPS, allows you to access all of the operating data, regulate and set special functions and control the shut down of Windows and Linux operating systems.

An optional software (UPS Management software) provides hierarchical multiserver shutdown and remote UPS management for any operating system in a heterogeneous network (Windows, Novell, Mac, Linux and the most common Unix).

Keor LP is managed by a microprocessor and is capable of displaying alarms and operating modes on a LED control panel, as described below:

- normal operation
- battery operation
- bypass operation
- overload
- generic fault
- end of back-up time

The Static Keor LP UPS has the CE marking, pursuant to Directives 73/23, 93/68, 89/336, 92/31, 93/68 and is designed and built in compliance with the following standards:
- EN 62040-1 “General and safety requirements for UPS used in operator access areas”
- EN 62040-2 “Electromagnetic compatibility (EMC) requirements”

Available accessories:

Additional battery charger for battery cabinet 1000 VA 3109 58
Additional battery charger for battery cabinet 2000 VA 3109 60
Additional battery charger for battery cabinet 3000 VA 3109 61
Bypass 3109 53

2. TECHNICAL FEATURES

General Features	
Type of operation	On line double conversion
Neutral Connectivity	Solid neutral
Wave shape in networked operation	Sinusoidal
Wave shape in battery operation	Sinusoidal
Switching time	None

General Features	
Rated input voltage	230 V
Input voltage interval	210÷240V at 100% load 185÷260V at 80% load 160÷300V at 70% load
Input frequency	45 - 65Hz ± 2% Autosensing
Power factor	> 0.98

2. TECHNICAL FEATURES (continued)

Output features (network operation)	
Rated output voltage	230 V ± 1%
Rated/active output power	1.000 VA / 900 W 2.000 VA / 1800 W 3.000 VA / 2700 W
Total harmonic distortion of the output voltage on linear rated load	< 1 %
Total harmonic distortion of the output voltage on non-linear rated load, P.F.=0.7	< 4 %
Rated output frequency	50 Hz or 60 Hz +/- 0,1%
Tolerance on the output frequency	Synchronized to the input frequency; ± 1% when not synchronized
Crest factor on the output current	3:1
Overload capacity: • ONLINE mode • for at least 10 second • for at least 30 seconds • instant transfer to bypass	 <105% 121÷150% 106÷120% >151%

Battery features	
Type of battery	Lead-acid, sealed, maintenance-free
Unitary capacity	7 Ah (12V)
Battery module voltage	1000 - 24Vdc 2000 - 48 Vdc 3000 - 72 Vdc
Dimensions of battery cabinet (H x W x D) (mm)	322x151x444 mm
Battery cabinet Net weight (kg)	31

Environmental Specifications	
Noise level measured at 1 meter	<50 dBA
Range of operating temperature	From 0°C to +40°C
Range of operating relative humidity	20-80% non-condensing
Degree of protection	IP21

Manufacturing Specifications	
Maximum weight [1]	1000 - 10 Kg 2000 - 17 Kg 3000 - 23 Kg
Maximum dimensions (W×L×H)	1000 - 236x144x367 mm 2000 - 322x151x444 mm 3000 - 322x151x444 mm
Type of switching	High frequency PWM
Rectifier/booster/inverter technology	MOSFET
Interfaces	1 RS232 serial port, 1 slot for network interface connection (ex. CS121)

Backup time	(min)		
Keor LP	50%	70%	80%
1000	6	5	3
2000	7	5	3
3000	7	5	3
1000 + 1 battery cabinet	99	68	60
2000 + 1 battery cabinet	54	32	28
3000 + 1 battery cabinet	41	24	16
1000 + 2 battery cabinet	184	134	118
2000 + 2 battery cabinet	100	69	61
3000 + 2 battery cabinet	69	50	43

NOTE: The stated back-up times in minutes are estimated and may vary according to the load characteristics, operating conditions and environment.

[1] Maximum weight referring to a configuration with a back-up time of 10 minutes at 80% of the rated load.

3. REAR PANEL DRAWING

