

KEOR HP

THREE-PHASE
UPS
from 100 to 800 kVA



GLOBAL SPECIALIST IN ELECTRICAL AND DIGITAL
BUILDING INFRASTRUCTURES



Legrand UPS

SUPERIOR PERFORMANCE
SERVICE CONTINUITY
AND **ENERGY EFFICIENCY**

Legrand, world leader in the manufacture of electrical equipment, offers an extensive range of solutions to meet all the needs of service sector installations, from structured cabling systems for data networks through to control and management of the installation, including trunking and distribution systems.

Incorporating an environmentally-friendly approach to technological development and to address a constantly changing market, Legrand is now offering its new range of UPS and additional functions to ensure maximum continuity of service for all installations.



KEOR HP

THE **UPS** WITH POWER
UP TO **800kVA**



KEOR HP

POWER UPS

The Three-Phase UPS range is available in three types of cabinet with total power rating up to 4.8 MVA



KEOR HP
100-125-160

Compact size with the best balance between footprint and power.

Integrated transformer for the galvanic separation between AC/DC side

EASY installation and maintenance

High efficiency up to 95%

Parallelable up to 4,8MVA

Output power factor 0,9



**KEOR HP
200-250-300**

**KEOR HP
400-500-600-800**

KEOR HP

FLEXIBLE SOLUTIONS

EASY INSTALLATION AND MAINTENANCE

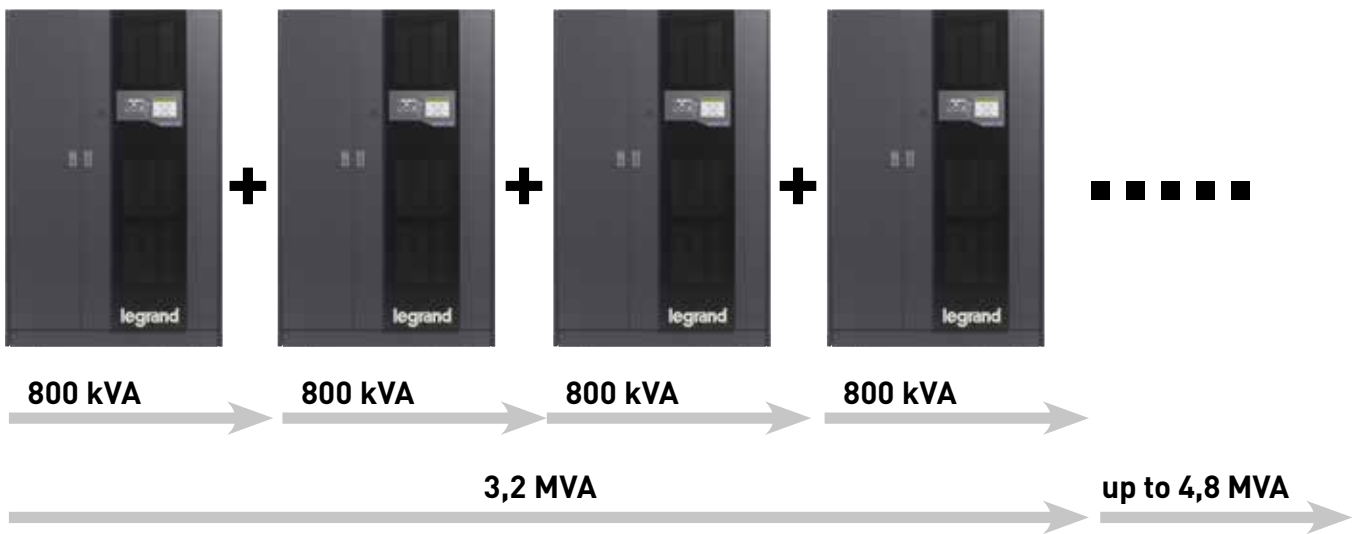
The optimised cooling system enables to position the UPS against the wall and side by side with other equipment without affecting performance. Full front access permits easy installation and fast maintenance operation.



PARALLELEABLE UP 6 UNITS

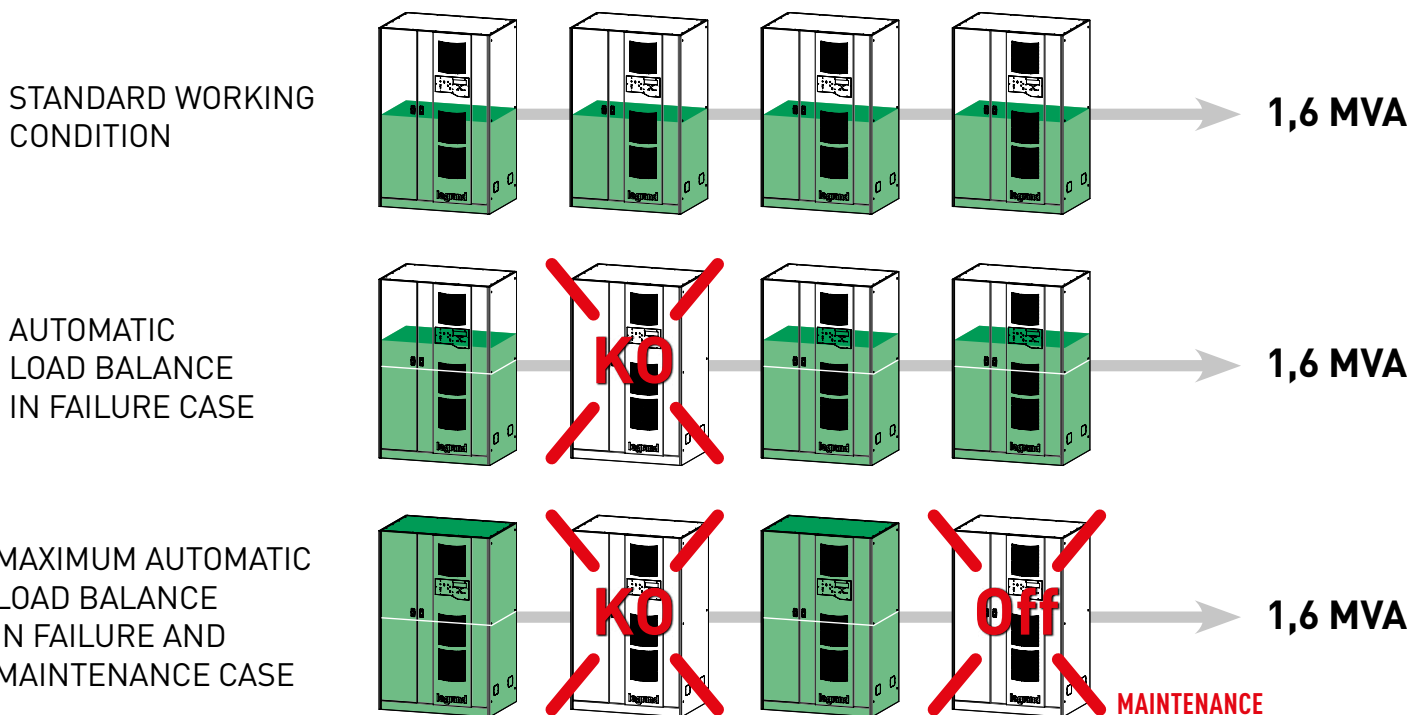
TO INCREASE THE POWER

Depending on the power demand, it is possible to connect in parallel operation up to 6 units of the same power rating. This allows delivery of total power up to 4.8 MVA.



TO INCREASE THE SERVICE CONTINUITY

The parallel connections between the UPS enables to realize different levels of redundancy and obtain the maximum continuity of service.



KEOR HP

WHEN POWER

TAKES CARE OF **THE**

ENVIRONMENT





HIGH EFFICIENCY UP TO 95%

Replacing an existing UPS with the KEOR HP allows immediate power savings for the same operational load.



HIGH TECHNOLOGY (IGBT RECTIFIER)

Thanks to the input circuit with integrated PFC (IGBT rectifier technology), the harmonic distortion on the input line is significantly reduced (THDi<3%). The input power factor is almost unity (> 0.99).

These features make it highly compatible with the system upstream of the UPS without requiring additional filtering or over sizing.



LOW ENVIRONMENTAL IMPACT 30% less CO² emission

The innovative technology of KEOR HP allows:

- high performances
- reduction in power and cooling consumption
- minimum footprint
- minimum cost of infrastructure and management.

KEOR HP 100-125-160-200-250-300

Conventional UPS - Three-phase On-line double conversion VFI



KEOR HP 100



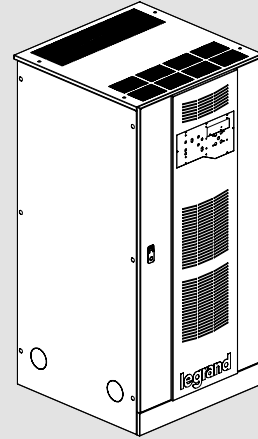
KEOR HP 200

Pack	Model	UPS (without batteries)			
		Nominal power kVA	Active power kW	Dimensions H x W x D (mm)	Net weight (kg)
1	KEOR HP 100	100	90	1670 x 815 x 825	625
1	KEOR HP 125	125	112,5	1670 x 815 x 825	660
1	KEOR HP 160	160	144	1670 x 815 x 825	715

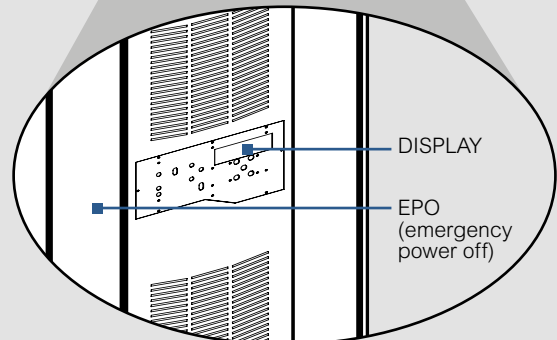
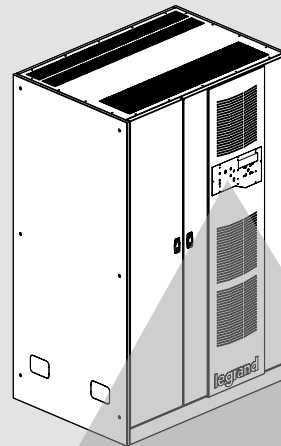
		UPS (without batteries)			
		Nominal power kVA	Active power kW	Dimensions H x W x D (mm)	Net weight (kg)
1	KEOR HP 200	200	180	1905 x 1220 x 870	970
1	KEOR HP 250	250	225	1905 x 1220 x 870	1090
1	KEOR HP 300	300	270	1905 x 1220 x 870	1170

	Options	
	Description	
1	Empty battery cabinet with cables and protection	
1	Batteries 5 years / 10 years life time in cabinets or racks	
1	Battery switch box with protection: fuses	
1	Battery monitoring system	
1	BY PASS insulation transformer	
1	External maintenance by-pass	
1	Top entry cable cabinet	
1	Remote control panel	

Keor HP 100-125-160



Keor HP 200-250-300



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

KEOR HP 100-125-160-200-250-300

Conventional UPS - Three-phase On-line double conversion VFI

Characteristics

General characteristics	100	125	160	200	250	300
Nominal power (kVA)	100	125	160	200	250	300
Active power (kW)	90	112,5	144	180	225	270
Technology	On-line double conversion VFI-SS-111					
Waveform	Sinusoidal					
Architecture	Conventional UPS, parallelable up to 6 unit					
Input characteristics						
Input voltage	380-415 V 3Ph+N					
Input frequency	50-60 Hz \pm 10% autosensing					
Input voltage range	400 V -20% / + 15%					
THD of input current	< 3%					
Compatibility with diesel generators	Configurable for synchronism between the input and output frequencies, even for the highest frequency variations					
Input power factor	> 0,99					
Output characteristics						
Output voltage	380, 400, 415 V 3Ph+N selected					
Efficiency	up to 95%					
Output frequency (nominal)	50 /60 Hz selected \pm 0,001%					
Crest factor	3:1					
THD of output voltage	<5% (with non-linear load)					
Output voltage tolerance	\pm 1% (with balance load)					
Overload capacity	10 minutes at 125%, 60 seconds at 150%, 10 seconds at 200%					
Efficiency in Eco mode	98%					
Bypass	Built-in Automatic and Maintenance By-pass					
Batteries						
Backup time extension	Scalable with additional battery cabinets					
Battery type	VRLA - AGM Maintenance-free Lead Acid Batteries					
Battery test	Automatic or manual					
Battery Recharge Profile	IU (DIN41773)					
Communication and management						
LCD Display	Four LED's to show status at a glance. Four menu-driven interface buttons. Four status at a glance LEDs					
Communication Ports	RS232 and USB serial ports (Optional RS485)					
Audible Alarm	Acoustic alarms and warnings, configurable delays					
Configuration Setting	Auto configuration by firmware, or manual by service engineer					
Net Interface Slot	Built-in dry contact PCB, optional SNMP card					
Emergency Power Off (EPO)	Yes					
Remote Management	Available					
Battery temperature probe	Yes					
Physical characteristics						
Dimensions H x W x D (mm)	1670 x 815 x 825			1905 x 1220 x 870		
Net Weight (kg)	625	660	715	970	1090	1170
Dimensions battery cabinet H x W x D (mm)	1900 x 1400 x 830 (50 batteries) 1900 x 2800 x 830 (100 batteries)			1900 x 1400 x 860 (50 batteries) 1900 x 2800 x 860 (100 batteries)		
Ambient conditions						
Operating temperature ($^{\circ}$ C)	0÷40			0÷40		
Relative humidity (%)	< 95% not condensing			< 95% not condensing		
Protection index	IP20			IP20		
Noise at 1 m (dBA)	< 60			< 62		
Certifications						
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3					

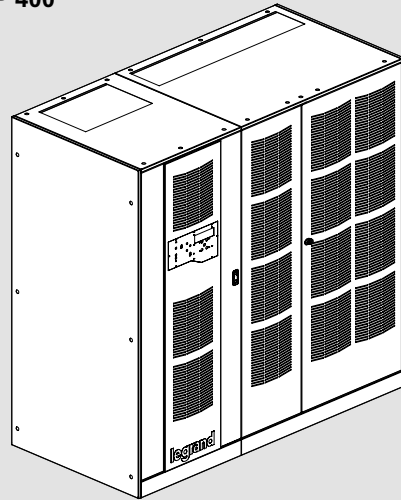
KEOR HP 400-500-600-800

Conventional UPS - Three-phase On-line double conversion VFI



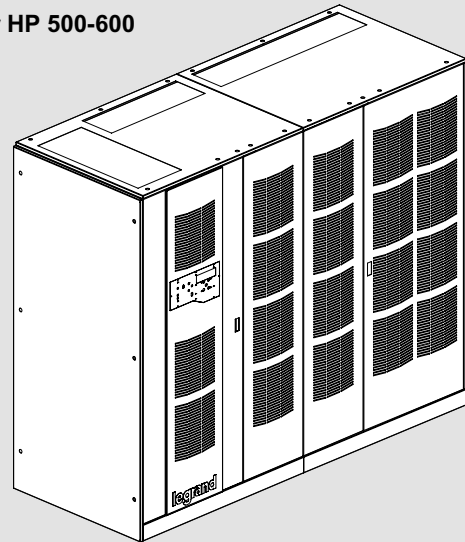
KEOR HP 400

Keor HP 400



Pack	Model	UPS (without batteries)			
		Nominal power kVA	Active power kW	Dimensions A X L X P (mm)	Net weight (kg)
1	KEOR HP 400	400	360	1920 x 1990 x 965	1820
1	KEOR HP 500	500	450	2020 x 2440 x 950	2220
1	KEOR HP 600	600	540	2020 x 2440 x 950	2400
1	KEOR HP 800	800	720	1920 x 3640 x 950	3600

Keor HP 500-600

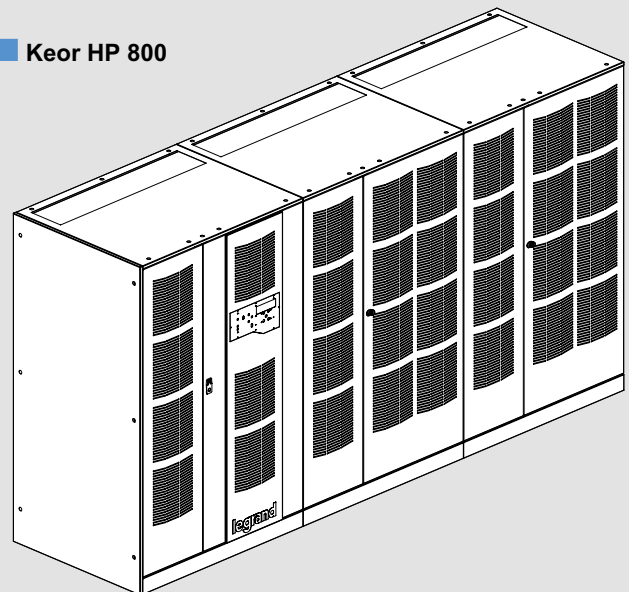


Options

Description

- Empty battery cabinet with cables and protection
- Batteries 5 years / 10 years life time in cabinets or racks
- Battery switch box with protection : fuses
- Battery monitoring system
- BY PASS insulation transformer
- External maintenance by-pass
- Top entry cable cabinet
- Remote control panel

Keor HP 800



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

KEOR HP 400-500-600-800

Conventional UPS - Three-phase On-line double conversion VFI

Caratteristiche

General characteristics	400	500	600	800
Nominal power (kVA)	400	500	600	800
Active power (kW)	360	450	540	720
Technology	On-line double conversion VFI-SS-111			
Waveform	Sinusoidal			
Architecture	Conventional UPS, parallelable up to 6 unit			
Input characteristics				
Input voltage	380-415 V 3Ph+N			
Input frequency	50-60 Hz \pm 10% autosensing			
Input voltage range	400 V -20% / + 15%			
THD of input current	<3%			
Compatibility with diesel generators	Configurable for synchronism between the input and output frequencies, even for the highest frequency variations			
Input power factor	>0,99			
Output characteristics				
Output voltage	380, 400, 415 V 3Ph+N selected			
Efficiency	up to 95%			
Output frequency (nominal)	50 /60 Hz selected \pm 0,001%			
Crest factor	3:1			
THD of output voltage	<5% (with non-linear load)			
Output voltage tolerance	\pm 1% (with balance load)			
Overload capacity	10 minutes at 125%, 60 seconds at 150%, 10 seconds at 200%			
Efficiency in Eco mode	>98%			
Bypass	Built-in Automatic (optional Maintenance Bypass)			
Batteries				
Backup time extension	Scalable with additional battery cabinets			
Battery type	VRLA - AGM Maintenance-free Lead Acid Batteries			
Battery test	Automatic or manual			
Battery Recharge Profile	IU (DIN41773)			
Communication and management				
LCD Display	Four LED's to show status at a glance. Four menu-driven interface buttons. Four status at a glance LEDs			
Communication Ports	RS232 and USB serial ports (Optional RS485)			
Audible Alarm	Acoustic alarms and warnings, configurable delays			
Configuration Setting	Auto configuration by firmware, or manual by service engineer			
Net Interface Slot	Built-in dry contact PCB, optional SNMP card			
Emergency Power Off (EPO)	Yes			
Remote Management	Available			
Battery temperature probe	Yes			
Physical characteristics				
Dimensions H x W x D (mm)	1920 x 1990 x 965	2020 x 2440 x 950	2020 x 2440 x 950	1920 x 3640 x 950
Net Weight (kg)	1820	2220	2400	3600
Dimensions battery cabinet H x W x D (mm)	1900 x 2800 x 860 (100 batteries)			-
Ambient conditions				
Operating temperature (°C)	0÷40			
Relative humidity (%)	<95% not condensing			
Protection index	IP20			
Noise at 1 m (dBA)	<62			
Certifications				
Reference product standards	EN 62040-1, EN 62040-2, EN 62040-3			



Customer services

Reliable

Directly present in more than 70 countries and servicing its products in more than 150 countries worldwide, a team of qualified engineers is available 24/7/365 to support your UPS system to ensure power quality and availability to the most critical loads.

Excellent

Legrand's competitive edge lies in its ability to provide high value-added UPS systems and services for both end users and business partners. For Legrand, creating value means coming up with solutions for lower energy consumption, but also integrating product design into the overall development process. With around 200 000 catalogue items, the Group also provides all products required for electrical and digital building installations, particularly as integrated systems, finding solutions to fit everyone's needs.

Tailor-made

Legrand offers a complete range of specific solutions and services to meet customer requirements:

- Technical pre-sales support at the project design stage
- Factory acceptance test
- Supervision of installation, testing and commissioning, site acceptance test
- Operator training
- Site audit
- Warranty extension
- Annual maintenance contract
- Fast intervention on emergency call

SERVICES

Support

SITE INSPECTION, INSTALLATION SUPERVISION.

We perform a comprehensive check of the UPS environment to ensure safety and fault-free operation. Our technical experts give manufacturer's recommendations to the site engineer or electrical contractors, and supervise the UPS installation before load power-up.



SITE TEST, COMMISSIONING.

Our Service Engineers conduct rigorous site tests and full setting-up of the UPS system before going live. They also perform site acceptance tests according to your requirements. Commissioning operations for KEOR HP are carried out by qualified engineers to guarantee seamless start-up. After the final handing over of the UPS system, a Test and Commissioning report is delivered to you.

Training

TRAINING

We offer on-site training to ensure your equipment's safe and efficient operation. Troubleshooting courses are also available in our plants for intensive hands-on practice on UPS training equipment.



Maintenance

PREVENTIVE MAINTENANCE

Electronic equipment and power systems, such as UPS, contain life-limited components and parts that must be replaced according to the manufacturer's specifications. To ensure optimal performance and to protect your critical application from potential downtime, it is crucial to perform preventive maintenance operations on a regular basis and replace parts when needed. Our Service Contracts include cleaning, IR thermography, measurements, functional tests, event log and power quality analysis, battery health check, hardware and software upgrades, and technical reports. A Preventive Maintenance Plan is one of the most cost-effective actions that can preserve your initial investment and ensure your business continuity.



CORRECTIVE MAINTENANCE, EMERGENCY CALL

In the event of an Emergency Call, our worldwide service network, with engineers and spare-parts stocks strategically located as close as possible to your site, guarantees a fast intervention time with 24/7/365 assistance.

After connecting his laptop to your KEOR HP, very powerful diagnostic software helps our engineer to identify the fault, thus ensuring short MTR (Mean Time To Repair).

Corrective actions are performed such as part replacement, adjustments and upgrades to return the UPS system back to normal operation.



**World Headquarters and
International Department**
87045 Limoges Cedex - France
☎ : + 33 (0) 5 55 06 87 87
Fax : + 33 (0) 5 55 06 74 55

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