

# Daker DK Plus 1000

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### 1. GENERAL FEATURES

The Legrand UPS model Daker DK Plus 1000 is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 1,000 VA – 900 W, equipped with valve-regulated, hermetically-sealed accumulator batteries, contained in a specific compartment inside the UPS or in one or more external cabinets, sized to guarantee a minimum uptime of 10 minutes at 80% of the load. The electronics and batteries are contained in just two rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets. The rectifier for the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>in</sub> < 3% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;
  - automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
  - if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, allows you to access all of the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown. An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 1000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 1000 Static Uninterruptible Power Supply bears the CE marking, pursuant to Directives 2014/35, 2104/30, and is designed and built in compliance with the following standards:

- EN 62040-1 "General and safety requirements for UPSs used in areas that are accessible to the operator"
- EN 62040-2 "Electromagnetic Compatibility requirements (EMC)"
- EN 62040-3 "Performance and test method requirements".

### 2. TECHNICAL FEATURES

General Features	
Nominal power (VA)	1000
Active power (W)	900
Technology	On-Line Double Conversion VFI-SS-111
Waveform	Sinusoidal
UPS architecture	convertible tower and rack 19
Surge Rating	1145
ECO Mode efficiency	%97

Input	
Input voltage	230 V
Input frequency	50-60 Hz ±5% Autosensing
Input Voltage Range	180-300 on full load 150-300 on 80%load 110-300 on 60% load
THD Input current	< 3%
Input power factor	> 0.99
Input Plug	3 101 70: Multi Standard 3 100 49: British Standard

Output	
Output voltage	230V ± 1%
Output frequency (nominal)	50/60 Hz (can be set from the LCD panel) +/- 0.1%
Crest Factor	1:3
THD Output voltage	Linear load 2% Nonlinear load 5%
Output Voltage Tolerance	±1%
Bypass	Internal automatic Bypass (included) External maintenance Bypass (OPTIONAL)

## 2. TECHNICAL FEATURES *(continued)*

Batteries	
Uptime Expansion	yes
Number of batteries	3
Battery series Type/Voltage	12V 7.2Ah
Uptime with 80% load (min)	10
Recharge time (to 100%)	4 hours
Battery disconnecter for safe transportation	yes

Communication and management	
Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

Mechanical features	
Measurements H x L x D (mm)	440x88 (2U) x405
Battery Cabinet Measurements H x L x D (mm)	440x88 (2U) x425
Net Weight (kg)	16

Environmental conditions	
Operating temperature (°C)	0 ÷ 40 °C
Degree of protection	IP20
Relative humidity (%)	0-95% non-condensing
Noise level at 1 m (dBA)	On-Line Mode < 50 Eco Mode < 40
Heat Loss (BTU/h)	490

Certifications	
Standards	EN 62040-1, EN 62040-2, EN 62040-3

# Daker DK Plus 2000

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### 1. GENERAL FEATURES

The Legrand UPS model Daker DK Plus 2000 is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 2,000 VA – 1800 W, equipped with valve-regulated, hermetically-sealed accumulator batteries, contained in a specific compartment inside the UPS or in one or more external cabinets, sized to guarantee a minimum uptime of 10 minutes at 80% of the load. The electronics and batteries are contained in just two rack units (2U).

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets. The rectifier of the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>in</sub> < 3% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;
  - automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
  - if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, which allows you to access all of the operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown. An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 2000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 2000 Static Uninterruptible Power Supply bears the CE marking, pursuant to Directives 2014/35, 2104/30, and is designed and built in compliance with the following standards:

- EN 62040-1 “General and safety requirements for UPSs used in areas that are accessible to the operator”
- EN 62040-2 “Electromagnetic Compatibility requirements (EMC)”
- EN 62040-3 “Performance and test method requirements”.

### 2. TECHNICAL FEATURES

General Features	
Nominal power (VA)	2000
Active power (W)	1800
Technology	On-Line Double Conversion VFI-SS-111
Waveform	Sinusoidal
UPS architecture	convertible tower and rack 19
Surge Rating	1530
ECO Mode efficiency	%97,75

Input	
Input voltage	230 V
Input frequency	50-60 Hz ±5% Autosensing
Input Voltage Range	180-300 on full load 150-300 on 80%load 110-300 on 60% load
THD Input current	< 3%
Input power factor	> 0.99
Input Plug	3 101 71: Multi Standard 3 100 55: British Standard

Output	
Output voltage	230V ± 1%
Output frequency (nominal)	50/60 Hz (can be set from the LCD panel) +/- 0.1%
Crest Factor	1:3
THD Output voltage	Linear load 2% Nonlinear load 5%
Output Voltage Tolerance	±1%
Bypass	Internal automatic Bypass (included) External maintenance Bypass (OPTIONAL)

## 2. TECHNICAL FEATURES *(continued)*

Batteries	
Uptime Expansion	yes
Number of batteries	6
Battery series Type/Voltage	12V 7.2Ah
Uptime with 80% load (min)	10
Recharge time (to 100%)	4 hours
Battery disconnecter for safe transportation	yes

Communication and management	
Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

Mechanical features	
Measurements H x L x D (mm)	440x88 (2U) x600
Battery Cabinet Measurements H x L x D (mm)	440x88 (2U) x600
Net Weight (kg)	29.5

Environmental conditions	
Operating temperature (°C)	0 ÷ 40 °C
Degree of protection	IP20
Relative humidity (%)	0-95% non-condensing
Noise level at 1 m (dBA)	On-Line Mode < 50 Eco Mode < 40
Heat Loss (BTU/h)	654

Certifications	
Standards	EN 62040-1, EN 62040-2, EN 62040-3

# Daker DK Plus 3000

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### 1. GENERAL FEATURES

The Legrand UPS model Daker DK Plus 3000 is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 3,000 VA – 2700 W, equipped with valve-regulated, hermetically-sealed accumulator batteries, contained in a specific compartment inside the UPS or in one or more external cabinets, sized to guarantee a minimum uptime of 8 minutes at 80% of the load. The electronics and batteries are contained in just two rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets.

The rectifier of the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of > 0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>in</sub> < 3% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;
  - automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
  - if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, which allows you to access all of the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.

An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 3000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 3000 Static Uninterruptible Power Supply bears the CE marking pursuant to Directives 2014/35, 2104/30, and is designed and built in compliance with the following standards:

- EN 62040-1 "General and safety requirements for UPSs used in areas that are accessible to the operator"
- EN 62040-2 "Electromagnetic Compatibility requirements (EMC)"
- EN 62040-3 "Performance and test method requirements".

### 2. TECHNICAL FEATURES

General Features	
Nominal power (VA)	3000
Active power (W)	2700
Technology	On-Line Double Conversion VFI-SS-111
Waveform	Sinusoidal
UPS architecture	convertible tower and rack 19
Surge Rating	1530
ECO Mode efficiency	%98

Input	
Input voltage	230 V
Input frequency	50-60 Hz ±5% Autosensing
Input Voltage Range	180-300 on full load 150-300 on 80%load 110-300 on 60% load
THD Input current	< 3%
Input power factor	> 0.99
Input Plug	3 101 72: Multi Standard 3 100 75: British Standard

Output	
Output voltage	230V ± 1%
Output frequency (nominal)	50/60 Hz (can be set from the LCD panel) +/- 0.1%
Crest Factor	1:3
THD Output voltage	Linear load 2% Nonlinear load 5%
Output Voltage Tolerance	±1%
Bypass	Internal automatic Bypass (included) External maintenance Bypass (OPTIONAL)

## 2. TECHNICAL FEATURES *(continued)*

Batteries	
Uptime Expansion	yes
Number of batteries	6
Battery series Type/Voltage	12V 9Ah
Uptime with 80% load (min)	8
Recharge time (to 100%)	4 hours
Battery disconnecter for safe transportation	yes

Communication and management	
Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

Mechanical features	
Measurements H x L x D (mm)	440x88 (2U) x600
Battery Cabinet Measurements H x L x D (mm)	440x88 (2U) x600
Net Weight (kg)	30

Environmental conditions	
Operating temperature (°C)	0 ÷ 40 °C
Degree of protection	IP20
Relative humidity (%)	0-95% non-condensing
Noise level at 1 m (dBA)	On-Line Mode < 50 Eco Mode < 40
Heat Loss (BTU/h)	818

Certifications	
Standards	EN 62040-1, EN 62040-2, EN 62040-3

# Daker DK Plus 5000

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### 1. GENERAL FEATURES

The Legrand UPS model Daker DK Plus 5000 is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 5000 VA – 5000 W, equipped with valve-regulated, hermetically-sealed accumulator batteries, contained in a specific compartment inside the UPS or in one or more external cabinets, sized to guarantee a minimum uptime of 4 minutes at 80% of the load.  
The electronics and batteries are contained in just four rack units.

The rectifier of the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>in</sub> < 3% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;
  - automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
  - if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, which allows you to access all of the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.  
An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 5000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 5000 Static Uninterruptible Power Supply bears the CE marking, pursuant to Directives 2014/35, 2104/30, and is designed and built in compliance with the following standards:

- EN 62040-1 "General and safety requirements for UPSs used in areas that are accessible to the operator"
- EN 62040-2 "Electromagnetic Compatibility requirements (EMC)"
- EN 62040-3 "Performance and test method requirements".

### 2. TECHNICAL FEATURES

General Features	
Nominal power (VA)	5000
Active power (W)	5000
Technology	On-Line Double Conversion VFI-SS-111
Waveform	Sinusoidal
UPS architecture	convertible tower and rack 19
Surge Rating	1900
ECO Mode efficiency	%98

Input	
Input voltage	230 V
Input frequency	50-60 Hz ±5% Autosensing
Input Voltage Range	170V - 288V on full load
THD Input current	< 3%
Input power factor	> 0.99

Output	
Output voltage	230V ± 1%
Output frequency (nominal)	50/60 Hz (can be set from the LCD panel) +/- 0.1%
Crest Factor	1:3
THD Output voltage	Linear load 2% Nonlinear load 5%
Output Voltage Tolerance	±1%

## 2. TECHNICAL FEATURES *(continued)*

Batteries	
Uptime Expansion	No
Number of batteries	20
Battery series Type/Voltage	12V 5Ah
Uptime with 80% load (min)	4

Communication and management	
Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

Mechanical features	
Measurements H x L x D (mm)	440x176 (4U) x680
Battery Cabinet Measurements H x L x D (mm)	440x132 (3U) x680
Net Weight (kg)	60

Environmental conditions	
Operating temperature (°C)	0 ÷ 40 °C
Degree of protection	IP20
Relative humidity (%)	0-95% non-condensing
Noise level at 1 m (dBA)	< 50
Heat Loss (BTU/h)	982

Certifications	
Standards	EN 62040-1, EN 62040-2, EN 62040-3



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### 1. GENERAL FEATURES

The Legrand UPS Daker DK Plus 5000 model is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 5000 VA – 5000 W. It does not contain internal batteries but can be connected to one or more external cabinets containing valve-regulated, hermetically sealed accumulator batteries.

The fact that it does not contain internal batteries reduces the dimensions of this UPS to just two rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets.

The rectifier of the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>in</sub> < 3% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;
  - automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
  - if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, which allows you to access all of the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.

An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 5000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 5000 Static Uninterruptible Power Supply bears the CE marking, pursuant to Directives 2014/35, 2014/30, and is designed and built in compliance with the following standards:

- EN 62040-1 "General and safety requirements for UPSs used in areas that are accessible to the operator"
- EN 62040-2 "Electromagnetic Compatibility requirements (EMC)"
- EN 62040-3 "Performance and test method requirements".

### 2. TECHNICAL FEATURES

General Features	
Nominal power (VA)	5000
Active power (W)	5000
Technology	On-Line Double Conversion VFI-SS-111
Waveform	Sinusoidal
UPS architecture	convertible tower and rack 19
Surge Rating	1900
ECO Mode efficiency	%98

Input	
Input voltage	230 V
Input frequency	50-60 Hz ±5% Autosensing
Input Voltage Range	170V - 288V on full load
THD Input current	< 3%
Input power factor	> 0.99

Output	
Output voltage	230V ± 1%
Output frequency (nominal)	50/60 Hz (can be set from the LCD panel) +/- 0.1%
Crest Factor	3:1
THD Output voltage	Linear load 2% Nonlinear load 5%
Output Voltage Tolerance	±1%

## 2. TECHNICAL FEATURES *(continued)*

Batteries	
Uptime Expansion	yes
Number of batteries	-
Battery series Type/Voltage	-
Uptime with 80% load (min)	-

Communication and management	
Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

Mechanical features	
Measurements H x L x D (mm)	440x88 (2U) x 680
Battery Cabinet Measurements H x L x D (mm)	440x88 (2U) x 680
Net Weight (kg)	25

Environmental conditions	
Operating temperature (°C)	0 ÷ 40 °C
Degree of protection	IP20
Relative humidity (%)	0-95% non-condensing
Noise level at 1 m (dBA)	< 50
Heat Loss (BTU/h)	982

Certifications	
Standards	EN 62040-1, EN 62040-2, EN 62040-3

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### 1. GENERAL FEATURES

The Legrand UPS model Daker DK Plus 6000 is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 6,000 VA – 6000 W, equipped with valve-regulated, hermetically-sealed accumulator batteries, contained in a specific compartment inside the UPS or in one or more external cabinets, sized to guarantee a minimum uptime of 4 minutes at 80% of the load.  
The electronics and batteries are contained in just four rack units.

The rectifier of the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>in</sub> < 3% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;
  - automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
  - if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, which allows you to access all of the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.  
An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 6000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 6000 Static Uninterruptible Power Supply bears the CE marking, pursuant to Directives 2014/35, 2104/30, and is designed and built in compliance with the following standards:

- EN 62040-1 "General and safety requirements for UPSs used in areas that are accessible to the operator"
- EN 62040-2 "Electromagnetic Compatibility requirements (EMC)"
- EN 62040-3 "Performance and test method requirements".

### 2. TECHNICAL FEATURES

General Features	
Nominal power (VA)	6000
Active power (W)	6000
Technology	On-Line Double Conversion VFI-SS-111
Waveform	Sinusoidal
UPS architecture	convertible tower and rack 19
Surge Rating	1900
ECO Mode efficiency	%98

Input	
Input voltage	230 V
Input frequency	50-60 Hz ±5% Autosensing
Input Voltage Range	170V - 288V on full load
THD Input current	< 3%
Input power factor	> 0.99

Output	
Output voltage	230V ± 1%
Output frequency (nominal)	50/60 Hz (can be set from the LCD panel) +/- 0.1%
Crest Factor	1:3
THD Output voltage	Linear load 2% Nonlinear load 5%
Output Voltage Tolerance	±1%

## 2. TECHNICAL FEATURES *(continued)*

Batteries	
Uptime Expansion	No
Number of batteries	20
Battery series Type/Voltage	12V 5Ah
Uptime with 80% load (min)	4

Communication and management	
Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

Mechanical features	
Measurements H x L x D (mm)	440x176 (4U) x680
Battery Cabinet Measurements H x L x D (mm)	440x132 (3U) x680
Net Weight (kg)	60

Environmental conditions	
Operating temperature (°C)	0 ÷ 40 °C
Degree of protection	IP20
Relative humidity (%)	0-95% non-condensing
Noise level at 1 m (dBA)	< 50
Heat Loss (BTU/h)	1300

Certifications	
Standards	EN 62040-1, EN 62040-2, EN 62040-3

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### 1. GENERAL FEATURES

The Legrand UPS Daker DK Plus 6000 model is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 6,000 VA – 6000 W. It does not contain internal batteries but can be connected to one or more external cabinets containing valve-regulated, hermetically sealed accumulator batteries. The fact that it does not contain internal batteries reduces the dimensions of this UPS to just two rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets. The rectifier of the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>in</sub> < 3% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;
  - automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
  - if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, which allows you to access all of the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.

An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 6000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 6000 Static Uninterruptible Power Supply bears the CE marking, pursuant to Directives 2014/35, 2104/30, and is designed and built in compliance with the following standards:

- EN 62040-1 "General and safety requirements for UPSs used in areas that are accessible to the operator"
- EN 62040-2 "Electromagnetic Compatibility requirements (EMC)"
- EN 62040-3 "Performance and test method requirements".

### 2. TECHNICAL FEATURES

General Features	
Nominal power (VA)	6000
Active power (W)	6000
Technology	On-Line Double Conversion VFI-SS-111
Waveform	Sinusoidal
UPS architecture	convertible tower and rack 19
Surge Rating	1900
ECO Mode efficiency	%98

Input	
Input voltage	230 V
Input frequency	50-60 Hz ±5% Autosensing
Input Voltage Range	170V - 288V on full load
THD Input current	< 3%
Input power factor	> 0.99

Output	
Output voltage	230V ± 1%
Output frequency (nominal)	50/60 Hz (can be set from the LCD panel) +/- 0.1%
Crest Factor	3:1
THD Output voltage	Linear load 2% Nonlinear load 5%
Output Voltage Tolerance	±1%

## 2. TECHNICAL FEATURES *(continued)*

Batteries	
Uptime Expansion	yes
Number of batteries	-
Battery series Type/Voltage	-
Uptime with 80% load (min)	-

Communication and management	
Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

Mechanical features	
Measurements H x L x D (mm)	440x88 (2U) x 680
Battery Cabinet Measurements H x L x D (mm)	440x88 (2U) x 680
Net Weight (kg)	25

Environmental conditions	
Operating temperature (°C)	0 ÷ 40 °C
Degree of protection	IP20
Relative humidity (%)	0-95% non-condensing
Noise level at 1 m (dBA)	< 50
Heat Loss (BTU/h)	1300

Certifications	
Standards	EN 62040-1, EN 62040-2, EN 62040-3

# Daker DK Plus10000 – Inverter

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### 1. GENERAL FEATURES

The Legrand UPS Daker DK Plus 10000 model is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 10,000 VA – 10000 W. It does not contain internal batteries but can be connected to one or more external cabinets containing valve-regulated, hermetically sealed accumulator batteries. The fact that it does not contain internal batteries reduces the dimensions of this UPS to just three rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets.

The rectifier of the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>in</sub> < 3% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
- automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;
- automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
- if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, allows you to access all of the operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.

An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 10000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 10000 Static Uninterruptible Power Supply bears the CE marking, pursuant to Directives 2014/35, 2104/30, and is designed and built in compliance with the following standards:

- EN 62040-1 “General and safety requirements for UPSs used in areas that are accessible to the operator”
- EN 62040-2 “Electromagnetic Compatibility requirements (EMC)”
- EN 62040-3 “Performance and test method requirements”

### 2. TECHNICAL FEATURES

General Features	
Nominal power (VA)	10000
Active power (W)	10000
Technology	On-Line Double Conversion VFI-SS-111
Waveform	Sinusoidal
UPS architecture	convertible tower and rack 19
Surge Rating	1900
ECO Mode efficiency	%98,5

Input	
Input voltage	230 V
Input frequency	50-60 Hz ±5% Autosensing
Input Voltage Range	170V - 288V on full load
THD Input current	< 3%
Input power factor	> 0.99

Output	
Output voltage	230V ± 1%
Output frequency (nominal)	50/60 Hz (can be set from the LCD panel) +/- 0.1%
Crest Factor	1:3
THD Output voltage	Linear load 2% Nonlinear load 5%
Output Voltage Tolerance	±1%

## 2. TECHNICAL FEATURES *(continued)*

Batteries	
Uptime Expansion	yes
Number of batteries	-
Battery series Type/Voltage	-
Uptime with 80% load (min)	-

Communication and management	
Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

Mechanical features	
Measurements H x L x D (mm)	440 x132 (3U) x 680
Battery Cabinet Measurements H x L x D (mm)	440 x132 (3U) x 680
Net Weight (kg)	26

Environmental conditions	
Operating temperature (°C)	0 ÷ 40 °C
Degree of protection	IP20
Relative humidity (%)	0-95% non-condensing
Noise level at 1 m (dBA)	< 50
Heat Loss (BTU/h)	1636

Certifications	
Standards	EN 62040-1, EN 62040-2, EN 62040-3



# Daker DK Plus 10000 – Inverter 3-1

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### 1. GENERAL FEATURES

The Legrand UPS Daker DK Plus 10000 model is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 10,000 VA – 9000 W. It does not contain internal batteries but can be connected to one or more external cabinets containing valve-regulated, hermetically sealed accumulator batteries. The fact that it does not contain internal batteries reduces the dimensions of this UPS to just three rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets.

The rectifier of the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>in</sub> < 3% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
- automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;
- automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
- if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, allows you to access all of the operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.

An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK 10000 Plus is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection

The Daker DK Plus 10000 Static Uninterruptible Power Supply bears the CE marking, pursuant to Directives 2014/35, 2104/30, and is designed and built in compliance with the following standards:

- EN 62040-1 “General and safety requirements for UPSs used in areas that are accessible to the operator”
- EN 62040-2 “Electromagnetic Compatibility requirements (EMC)”
- EN 62040-3 “Performance and test method requirements”

### 2. TECHNICAL FEATURES

General Features	
Nominal power (VA)	10000
Active power (W)	9000
Technology	On-Line Double Conversion VFI-SS-111
Waveform	Sinusoidal
UPS architecture	convertible tower and rack 19
Surge Rating	1900
ECO Mode efficiency	%97,5

Input	
Input voltage	380V 3F+N
Input frequency	50/60 Hz ±5% Autosensing
Input Voltage Range	305 V - 485 V at full load
Input power factor	> 0.99

Output	
Output voltage	230V ± 1%
Output frequency (nominal)	50/60 Hz (can be set from the LCD panel) +/- 0.1%
Crest Factor	1:3
THD Output voltage	Linear load 2% Nonlinear load 5%
Output Voltage Tolerance	±1%

## 2. TECHNICAL FEATURES *(continued)*

Batteries	
Uptime Expansion	yes
Number of batteries	-
Battery series Type/Voltage	-
Uptime with 80% load (min)	-

Communication and management	
Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

Mechanical features	
Measurements H x L x D (mm)	440 x132 (3U) x 680
Battery Cabinet Measurements H x L x D (mm)	440 x132 (3U) x 680
Net Weight (kg)	26

Environmental conditions	
Operating temperature (°C)	0 ÷ 40 °C
Degree of protection	IP20
Relative humidity (%)	0-95% non-condensing
Noise level at 1 m (dBA)	< 50
Heat Loss (BTU/h)	1636

Certifications	
Standards	EN 62040-1, EN 62040-2, EN 62040-3

## DAKER DK PLUS 1 kVA (UL)

3 101 40



1. GENERAL SPECIFICATIONS .....	1
2. TECHNICAL SPECIFICATIONS.....	2

### 1. GENERAL SPECIFICATIONS

The Legrand UPS model Daker DK Plus 1000 is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 1000 VA – 900 W, equipped with valve-regulated, hermetically-sealed accumulator batteries, contained in a specific compartment inside the UPS or in one or more external cabinets, sized to guarantee a minimum uptime of 5 minutes at 70% of the load.

The electronics and batteries are contained in just two rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets.

The rectifier for the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>lin</sub> < 7% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;

- automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
- if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, allows you to access all the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.

An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 1000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 1000 Static Uninterruptible Power Supply bears the UL FCC, cTUVus marking, pursuant to UL, and is designed and built in compliance with the following standards:

- Safety: UL1778 V4 (cTUVus)
- EMC: FCC Part 15 Class A

## DAKER DK PLUS 1 kVA (UL)

3 101 40

### 2. TECHNICAL SPECIFICATIONS

#### General specifications

Nominal power (VA)	1000
Active power (W)	900
Technology	On-Line Double Conversion VFI-SS-111
Output waveform	Sinusoidal
UPS architecture	Convertible tower and rack 19

#### Input

Nominal Voltage	120V 1ph+N+PE
Voltage Range	90 – 150V Ph-N full load 55 – 150V Ph-N %60 load"
Frequency	44 - 66Hz
THDin	< 7% at full load
Power Factor	> 0.99

#### Output

Output Voltage	120V 1ph+N+PE
Output Frequency (nominal)	50/60 Hz $\pm 0.2\%$ (can be set from the LCD panel)
Crest Factor	3:1
THD Output voltage	< 3%
Output voltage Tolerance	$\pm 1\%$
Bypass	Internal automatic Bypass (included)

#### Batteries

Type	Lead Acid, sealed, free maintenance VRLA
Uptime Expansion	Yes
Nominal UPS Battery Voltage	$\pm 24$ Vdc
Number of batteries	2
Battery series Type/Voltage	12V 7.2Ah

#### Communication and management

Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

#### Mechanical features

Dimensions (H x W x D)	440 x 88 (2U) x 405
Battery Cabinet	
Measurements H x L x D (mm)	440 x 88 (2U) x 600
Net Weight (kg)	11

#### Environmental specs

Noise level @ 1m	< 50dBA
Operating temperature range	from 0°C to +40°C
Stock temperature range	from -10°C to +50°C
Humidity range	0-95% not condensing
Protection degree	IP20

#### Certifications

Safety	UL1778 V4 (cTUVus )
EMC	FCC Part 15 Class A
Markings	FCC, cTUVus

## DAKER DK PLUS 1.5 kVA (UL)

3 101 41



1. GENERAL SPECIFICATIONS .....	1
2. TECHNICAL SPECIFICATIONS.....	2

### 1. GENERAL SPECIFICATIONS

The Legrand UPS model Daker DK Plus 1500 is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 1500 VA – 1350 W, equipped with valve-regulated, hermetically-sealed accumulator batteries, contained in a specific compartment inside the UPS or in one or more external cabinets, sized to guarantee a minimum uptime of 5 minutes at 70% of the load.

The electronics and batteries are contained in just two rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets.

The rectifier for the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>lin</sub> < 7% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;

- automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
- if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, allows you to access all the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.

An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 1500 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 1500 Static Uninterruptible Power Supply bears the UL FCC, cTUVus marking, pursuant to UL, and is designed and built in compliance with the following standards:

- Safety: UL1778 V4 (cTUVus)
- EMC: FCC Part 15 Class A

## DAKER DK PLUS 1.5 kVA (UL)

3 101 41

### 2. TECHNICAL SPECIFICATIONS

#### General specifications

Nominal power (VA)	1500
Active power (W)	1350
Technology	On-Line Double Conversion VFI-SS-111
Output waveform	Sinusoidal
UPS architecture	Convertible tower and rack 19

#### Input

Nominal Voltage	120V 1ph+N+PE
Voltage Range	90 – 150V Ph-N full load 55 – 150V Ph-N %60 load"
Frequency	44 - 66Hz
THDin	< 7% at full load
Power Factor	> 0.99

#### Output

Output Voltage	120V 1ph+N+PE
Output Frequency (nominal)	50/60 Hz $\pm 0.2\%$ (can be set from the LCD panel)
Crest Factor	3:1
THD Output voltage	< 3%
Output voltage Tolerance	$\pm 1\%$
Bypass	Internal automatic Bypass (included)

#### Batteries

Type	Lead Acid, sealed, free maintenance VRLA
Uptime Expansion	Yes
Nominal UPS Battery Voltage	$\pm 36$ Vdc
Number of batteries	3
Battery series Type/Voltage	12V 7.2Ah

#### Communication and management

Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

#### Mechanical features

Dimensions (H x W x D)	440 x 88 (2U) x 405
Battery Cabinet	
Measurements H x L x D (mm)	440 x 88 (2U) x 600
Net Weight (kg)	14.5

#### Environmental specs

Noise level @ 1m	< 50dBA
Operating temperature range	from 0°C to +40°C
Stock temperature range	from -10°C to +50°C
Humidity range	0-95% not condensing
Protection degree	IP20

#### Certifications

Safety	UL1778 V4 (cTUVus )
EMC	FCC Part 15 Class A
Markings	FCC, cTUVus

## DAKER DK PLUS 2 kVA (UL)

3 101 42



1. GENERAL SPECIFICATIONS .....	1
2. TECHNICAL SPECIFICATIONS.....	2

### 1. GENERAL SPECIFICATIONS

The Legrand UPS model Daker DK Plus 2000 is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 2000 VA – 1800 W, equipped with valve-regulated, hermetically-sealed accumulator batteries, contained in a specific compartment inside the UPS or in one or more external cabinets, sized to guarantee a minimum uptime of 5 minutes at 70% of the load.

The electronics and batteries are contained in just two rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets.

The rectifier for the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>lin</sub> < 7% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;

- automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
- if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, allows you to access all the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.

An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 2000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 2000 Static Uninterruptible Power Supply bears the UL FCC, cTUVus marking, pursuant to UL, and is designed and built in compliance with the following standards:

- Safety: UL1778 V4 (cTUVus)
- EMC: FCC Part 15 Class A

## DAKER DK PLUS 2 kVA (UL)

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### 2. TECHNICAL SPECIFICATIONS

#### General specifications

Nominal power (VA)	2000
Active power (W)	1800
Technology	On-Line Double Conversion VFI-SS-111
Output waveform	Sinusoidal
UPS architecture	Convertible tower and rack 19

#### Input

Nominal Voltage	120V 1ph+N+PE
Voltage Range	90 – 150V Ph-N full load 55 – 150V Ph-N %60 load"
Frequency	44 - 66Hz
THDin	< 7% at full load
Power Factor	> 0.99

#### Output

Output Voltage	120V 1ph+N+PE
Output Frequency (nominal)	50/60 Hz $\pm 0.2\%$ (can be set from the LCD panel)
Crest Factor	3:1
THD Output voltage	< 3%
Output voltage Tolerance	$\pm 1\%$
Bypass	Internal automatic Bypass (included)

#### Batteries

Type	Lead Acid, sealed, free maintenance VRLA
Uptime Expansion	Yes
Nominal UPS Battery Voltage	$\pm 48$ Vdc
Number of batteries	4
Battery series Type/Voltage	12V 7.2Ah

#### Communication and management

Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

#### Mechanical features

Dimensions (H x W x D)	440 x 88 (2U) x 485
Battery Cabinet	
Measurements H x L x D (mm)	440 x 88 (2U) x 600
Net Weight (kg)	20

#### Environmental specs

Noise level @ 1m	< 50dBA
Operating temperature range	from 0°C to +40°C
Stock temperature range	from -10°C to +50°C
Humidity range	0-95% not condensing
Protection degree	IP20

#### Certifications

Safety	UL1778 V4 (cTUVus )
EMC	FCC Part 15 Class A
Markings	FCC, cTUVus



## DAKER DK PLUS 3 kVA (UL)

3 101 43



1. GENERAL SPECIFICATIONS .....	1
2. TECHNICAL SPECIFICATIONS.....	2

### 1. GENERAL SPECIFICATIONS

The Legrand UPS model Daker DK Plus 3000 is an uninterruptible power source with high frequency PWM technology, Double Conversion On-Line, solid neutral, Rated Power 3000 VA – 2700 W, equipped with valve-regulated, hermetically-sealed accumulator batteries, contained in a specific compartment inside the UPS or in one or more external cabinets, sized to guarantee a minimum uptime of 5 minutes at 70% of the load.

The electronics and batteries are contained in just two rack units.

The architecture of this UPS means it can be installed in either a Tower configuration or inside Rack cabinets.

The rectifier for the UPS is comprised of a control and regulating circuit (PFC), which, in addition to normal rectifier functions also:

- automatically corrects the power factor of the load to restore it to a value of >0.99 with a load applied at the output at 20% of the rated load;
- power the inverter without requiring energy from the batteries, even when there is very low voltage from the mains;
- ensures a total harmonic distortion of the input current THD<sub>lin</sub> < 7% without the addition of filters or supplementary parts.

The bypass circuit is designed and built in compliance with the following:

- Electromechanical switch
- Command and control logic managed by a microprocessor that:
  - automatically transfers the load directly onto the primary mains line without interrupting the power supply if any conditions of overload, over temperature, continuous voltage outside of the tolerances and inverter anomaly arise;

- automatically re-transfers the primary mains line load to an inverter line, without interrupting the power supply, once normal conditions of the load have been restored;
- if the primary mains line and the inverter are not synchronized, the bypass must be disabled.

A diagnostic and shutdown software (UPS Communicator), if accordingly installed in a PC connected to the UPS, allows you to access all the DHEA's operational data, make adjustments and settings to the special functions and control Windows and Linux operating system shutdown.

An optional software (UPS management software) offers hierarchic multiserver shutdown and remote management of the UPS for any operating system in a heterogeneous network (Windows, Novell, Linux and the common Unix).

Daker DK Plus 3000 is managed by a microprocessor and is able to display, on a control panel and LCD screen, the alarms and operating modes described below:

- normal operation
- output frequency that is not synchronized with the input
- battery-powered operation
- operation in bypass mode
- faulty power module
- overloaded
- generic anomaly
- incorrect neutral connection
- back-up time
- end of uptime

The Daker DK Plus 3000 Static Uninterruptible Power Supply bears the UL FCC, cTUVus marking, pursuant to UL, and is designed and built in compliance with the following standards:

- Safety: UL1778 V4 (cTUVus)
- EMC: FCC Part 15 Class A

## DAKER DK PLUS 3 kVA (UL)

3 101 43

### 2. TECHNICAL SPECIFICATIONS

#### General specifications

Nominal power (VA)	3000
Active power (W)	2700
Technology	On-Line Double Conversion VFI-SS-111
Output waveform	Sinusoidal
UPS architecture	Convertible tower and rack 19

#### Input

Nominal Voltage	120V 1ph+N+PE
Voltage Range	90 – 150V Ph-N full load 55 – 150V Ph-N %60 load"
Frequency	44 - 66Hz
THDin	< 7% at full load
Power Factor	> 0.99

#### Output

Output Voltage	120V 1ph+N+PE
Output Frequency (nominal)	50/60 Hz $\pm 0.2\%$ (can be set from the LCD panel)
Crest Factor	3:1
THD Output voltage	< 3%
Output voltage Tolerance	$\pm 1\%$
Bypass	Internal automatic Bypass (included)

#### Batteries

Type	Lead Acid, sealed, free maintenance VRLA
Uptime Expansion	Yes
Nominal UPS Battery Voltage	$\pm 72$ Vdc
Number of batteries	6
Battery series Type/Voltage	12V 9Ah

#### Communication and management

Display and Signals	Four buttons and four LEDs to monitor the status of the UPS in real time
Communication Ports	RS232 serial ports, USB
Remote Management	available
Network interface slot	SNMP

#### Mechanical features

Dimensions (H x W x D)	440 x 88 (2U) x 600
Battery Cabinet	
Measurements H x L x D (mm)	440 x 88 (2U) x 600
Net Weight (kg)	27

#### Environmental specs

Noise level @ 1m	< 50dBA
Operating temperature range	from 0°C to +40°C
Stock temperature range	from -10°C to +50°C
Humidity range	0-95% not condensing
Protection degree	IP20

#### Certifications

Safety	UL1778 V4 (cTUVus )
EMC	FCC Part 15 Class A
Markings	FCC, cTUVus