

# Galaxy 300 and Galaxy 300i

10-40 kVA 380/400/415 V

Operation

07/2016



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# Important Safety Instructions — SAVE THESE INSTRUCTIONS

Read these instructions carefully and look at the equipment to become familiar with it before trying to install, operate, service or maintain it. The following safety messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a “Danger” or “Warning” safety message indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages with this symbol to avoid possible injury or death.

## **DANGER**

**DANGER** indicates a hazardous situation which, if not avoided, **will result in death or serious injury**.

**Failure to follow these instructions will result in death or serious injury.**

## **WARNING**

**WARNING** indicates a hazardous situation which, if not avoided, **could result in death or serious injury**.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

## **CAUTION**

**CAUTION** indicates a hazardous situation which, if not avoided, **could result in minor or moderate injury**.

**Failure to follow these instructions can result in injury or equipment damage.**

## **NOTICE**

**NOTICE** is used to address practices not related to physical injury. The safety alert symbol shall not be used with this type of safety message.

**Failure to follow these instructions can result in equipment damage.**

## Please Note

Electrical equipment should only be installed, operated, serviced, and maintained by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

## Safety Precautions

### **⚠ DANGER**

#### **HAZARD OF ELECTRICAL SHOCK, EXPLOSION OR ARC FLASH**

All safety instructions in this document must be read, understood and followed.

**Failure to follow these instructions will result in death or serious injury.**

### **⚠ DANGER**

#### **HAZARD OF ELECTRICAL SHOCK, EXPLOSION OR ARC FLASH**

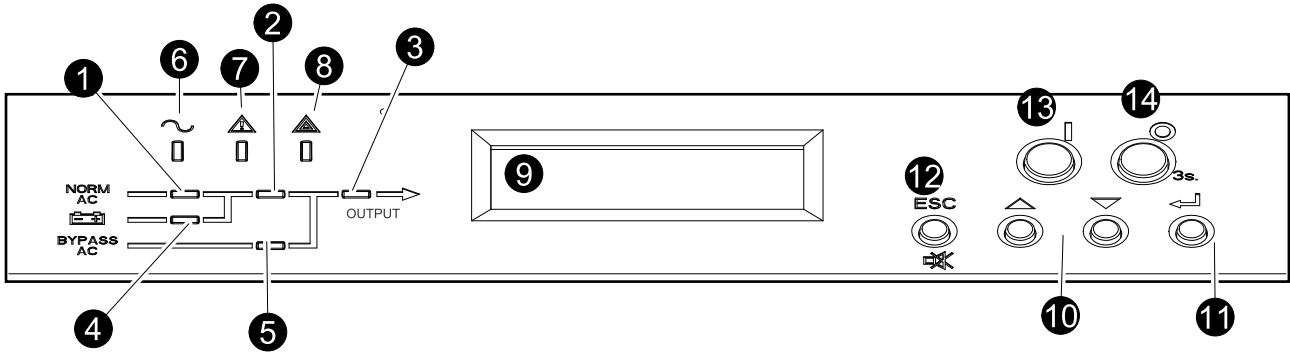
After the UPS system has been electrically wired, do not start up the system. Start-up must only be performed by Schneider Electric.

**Failure to follow these instructions will result in death or serious injury.**

# Overview

## Display Interface

The eight LEDs to the left of the display screen (1-8) indicate the operational status of the UPS. The four navigation keys at the bottom right of the interface (10-12) are used to select and open menu items, access information, and change UPS parameters. The two buttons at the upper right of the interface (13- 14) are used to turn in and out of normal operation.



## LEDs

**NOTE:** The mimic diagram (1-5) shows the electrical power flow and gives the status of main functions. The LEDs are:

- **Green** – when the function is active
- **Red** – when the function is inoperable
- **OFF** – when the function is inactive

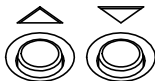




1	PFC	Green: Power Factor Correction (PFC) works on normal AC input. Red: An AC normal alarm, DC BUS alarm, or major PFC alarm is present. OFF: The PFC is not working.
2	INVERTER	Green: The inverter is operating. <sup>1</sup> Red: The inverter or the static switch is inoperable. OFF: The inverter is OFF. <sup>1</sup>
3	LOAD	Green: The inverter supports the load <sup>1</sup> or the load is supported by the AC bypass source. Red: The inverter is not connected to the load <sup>1</sup> and the load is not supported by the AC bypass source or QOP is open. OFF: The maintenance bypass breaker Q3BP is ON (closed).
4	BATTERY	Green: The UPS is in battery operation. Red: The battery or the charger is inoperable, or the battery circuit breaker is OFF. OFF: The batteries are charging or ready to supply the load if the AC power is absent or battery present configuration is absent.
5	BYPASS	Green: The load is supported by the AC bypass source. Red: The bypass is inoperable, QM2 is OFF in normal mode, QM2 is ON in frequency converter mode, or a transfer to bypass is unavailable. OFF: The load is not supported by the AC bypass source.

1. Indicates double-conversion mode.

6	LOAD PROTECTED	Green: The UPS is running in normal operation mode and the load is protected. OFF: The load is not protected by the UPS or an alarm is present.
7	ENVIRONMENT AND MINOR FAULT	Orange: An alarm is present or redundancy is lost in parallel system. OFF: No alarm is present.
8	LOAD UNPROTECTED	Red: The load is unprotected (and may be supplied by the AC bypass source or another parallel UPS). A service call is required. OFF: No alarms are present.

### Display Screen, Navigation Keys, and the ON/OFF Buttons

**NOTE:** Each navigation key corresponds to a function that is presented on the display. The function of each navigation key changes depending on the menu displayed on the screen. The below table describes the most common functions of the display, each navigation key, and the INVERTER ON/OFF buttons.

9	Display screen		Displays alarms, status data, instructional help, and configuration items.
10	Navigation keys		Scroll through and select menu items.
11	Enter key		Opens menu items and confirms changes to UPS parameters. A push on the Enter key is interpreted by the UPS as a YES or a launch of command.
12	ESC key		Returns to the previous screen displayed or is interpreted as a NO.
13	INVERTER ON		Transfers to normal operation.
14	INVERTER OFF		Transfers to bypass operation when pressed for three seconds.

### Default Screen

The Default screen appears after UPS initialization and UPS settings. The Default screen is the main entrance to the user functions of the display interface.



or



the Enter key and the navigation keys take you from the Default screen to the menu and sub menu screens where it is possible to command, configure, and monitor the UPS. See the menu tree under *UPS Breakers*, page 9.

### Screen Saver

When the display has been inactive for 30 minutes, the screen saver turns **ON** and the display flashes every five seconds between the two screens below. The



backlight turns **OFF** three minutes after the last activation of the display by means of the four navigation keys.

MGE Galaxy 300

< 5 seconds >

Press the ESC key to continue.....

## UPS Breakers

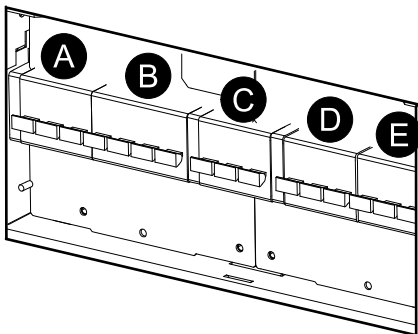
### UPS with Internal Batteries

**NOTE:** The breakers are located behind the front door and accessed by giving the front door a little push on its right side. See the UPS installation manual for further information.

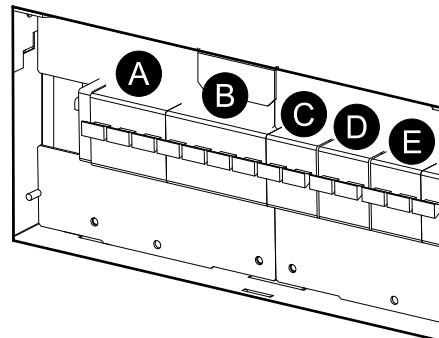
Breakers		
A	QB	UPS battery breaker
B	QM1	Input breaker
C	QM2	Static bypass breaker
D	Q3BP	Maintenance bypass breaker
E	QOP	Output breaker
	QFB	Battery cabinet breaker (not illustrated below)

### UPS with Internal Batteries

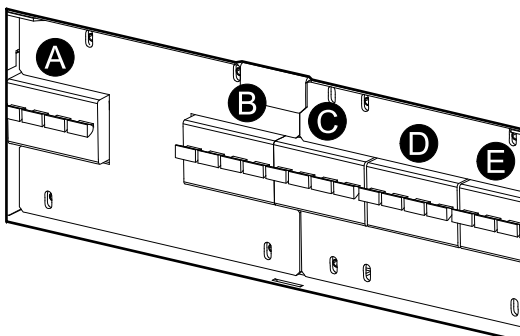
10, 15, and 20 kVA 3:3



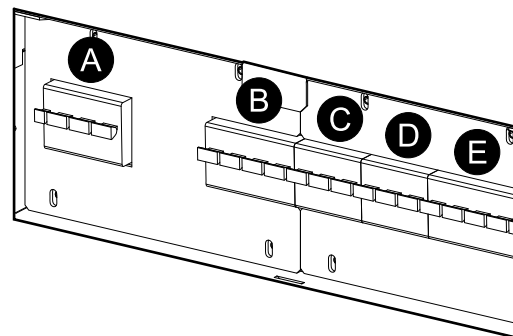
10 and 15 kVA 3:1



30 and 40 kVA 3:3

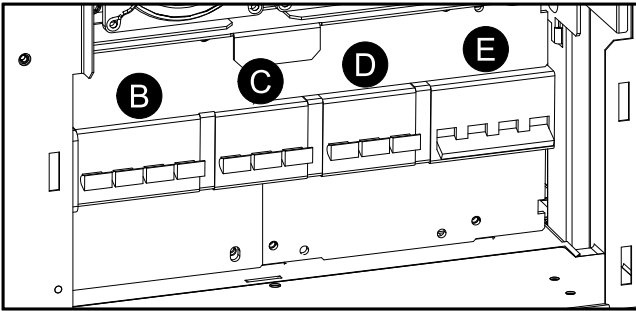


20 and 30 kVA 3:1

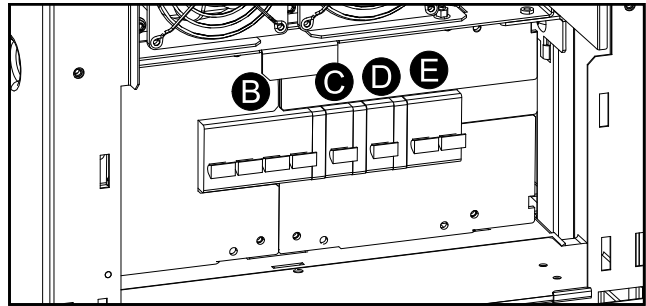


## UPS without Internal Batteries

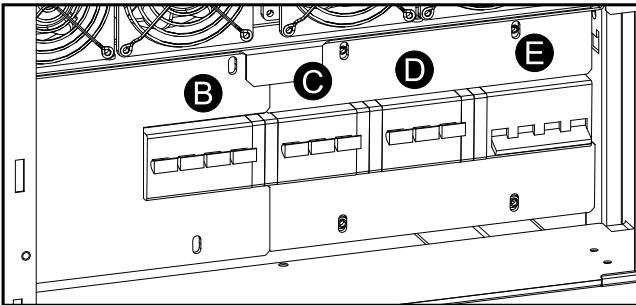
10, 15, and 20 kVA 3:3



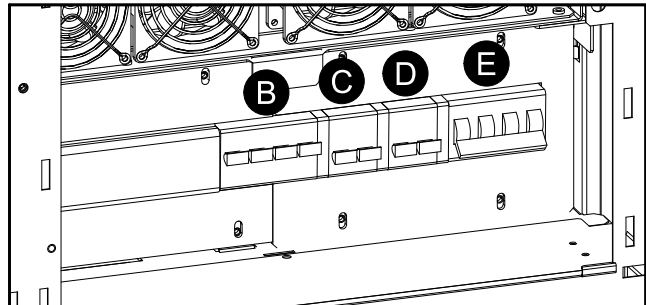
10 and 15 kVA 3:1



30 and 40 kVA 3:3

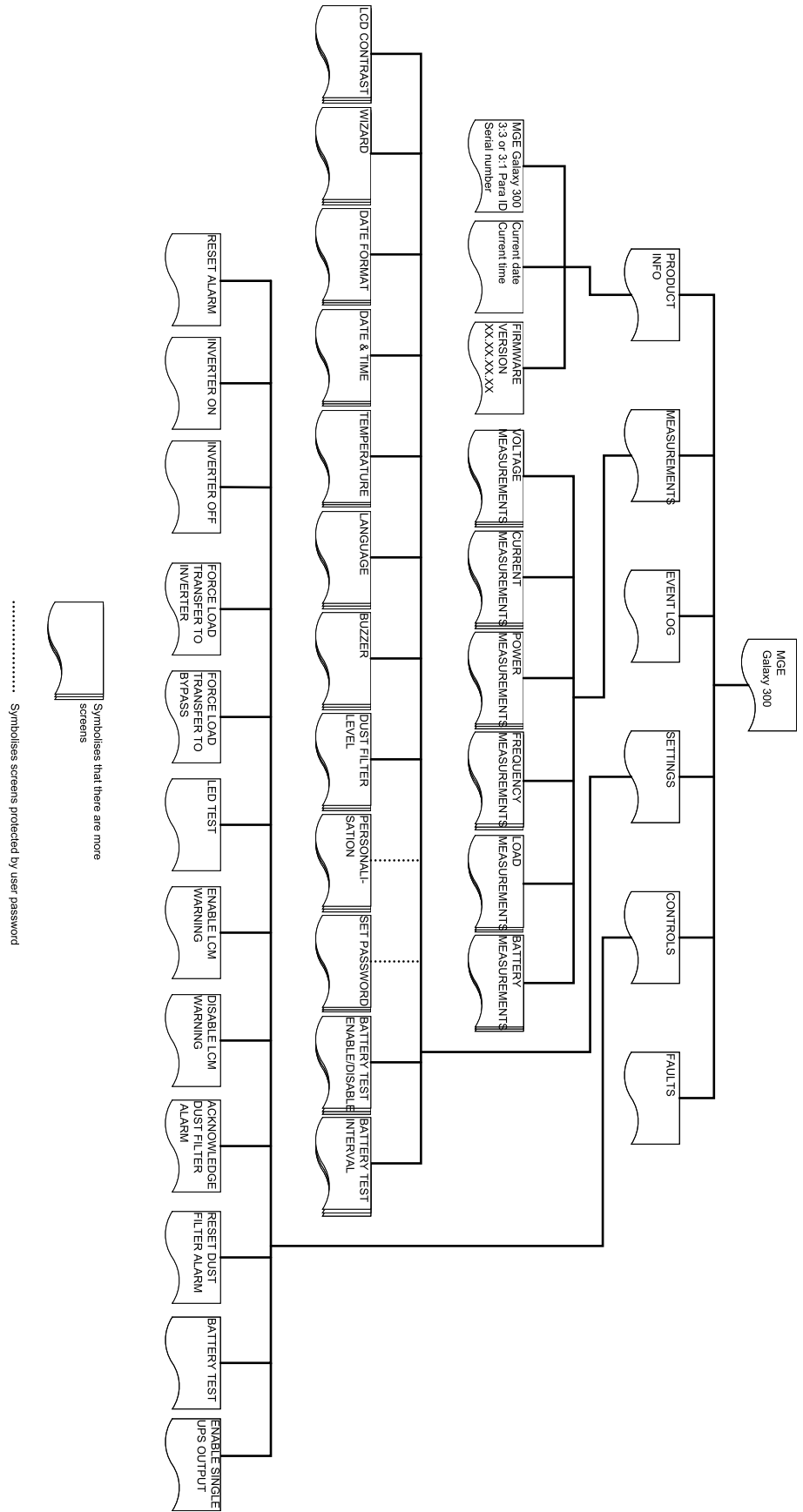


20 and 30 kVA 3:1



## Menu Tree

**NOTE:** The menu tree provides a quick overview of the functions and views you may access. The UPS display screen will only display two lines at a time although three lines occur below.



# Operation

## ⚠ DANGER

### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Before carrying out any operation procedures make sure that the input breaker (QM1) and the static bypass breaker (QM2) are in the ON (closed) position.

**Failure to follow these instructions will result in death or serious injury.**

## ⚠ DANGER

### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Connection of power and control cables must be carried out and checked by qualified personnel before carrying out any operation procedures.

**Failure to follow these instructions will result in death or serious injury.**

## ⚠ WARNING

Only qualified personnel following the required training course must undertake modifications to UPS parameters.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

## Operation Modes

### Normal Operation

The UPS provides power to the connected load from mains power. The UPS converts mains power to conditioned power for the connected load while recharging the batteries.

This mode is accessed via the display.

### Battery Operation

The UPS transfers to battery operation if the supply of mains power fails or is outside the pre-defined limits. The UPS provides power to the connected load from its internal or (if available) additional external batteries for a finite period. In standby mode, the UPS can make a cold start via the INVERTER ON button or via the display.

### Static Bypass Operation

Static bypass operation keeps the load supplied with power from the AC bypass source. If the UPS conditions for normal operation are not met, the load will be transferred from normal operation to the bypass source with no interruption in power to the critical load.

### Maintenance Bypass Operation

Maintenance bypass operation keeps the load supplied with mains power during maintenance, tests, or repair of the UPS power sections. In maintenance bypass operation, mains power is sent directly to the connected load bypassing **all** internal UPS functions and filters. Battery backup is not available in maintenance bypass operation as the UPS configuration is completely isolated.

## Frequency Converter Operation

In frequency converter operation the output frequency will be fixed to 50 Hz or 60 Hz depending on the output voltage setting which is fixed to 220 VAC, 230 VAC, or 240 VAC for 50 Hz and 220 VAC or 230 VAC for 60 Hz. In frequency converter mode, the UPS cannot transfer to bypass operation and maintenance operation. The static bypass breaker (**QM2**) and the maintenance bypass breaker (**Q3BP**) are in the **OFF (opened)** position and should both be locked by a padlock (see the installation manual for more information).

This mode is accessed via the display.

## Parallel Operation

Parallel operation supports redundancy (1+1). The maximum load rate that can be supported by a parallel configuration is the same as for a single configuration. However, if one UPS unit becomes inoperable, the other UPS unit supplies the load without any load drop. This mode must only be configured by Schneider Electric-certified service partners to ensure proper operation of the UPS unit.

**NOTE:** When communication between the two UPS units is lost, the two UPS units will stay in current status and cannot transfer between normal operation and static bypass operation by either manual operation or external conditions such as impacting heavy load. Do not try to turn OFF the inverters, for they cannot be turned ON again for safety reasons. In this case, a Schneider Electric-certified service partner is needed for further operation.

This mode is accessed via the display.

## Single UPS Output Operation

Entering this operation requires that the parallel cable is disconnected or that the other UPS is powered OFF, and the UPS will leave this operation automatically when the parallel cable is connected and the other UPS is powered ON without a parallel init error. This operation is only a temporary method to support the load, and it is not allowed to enable single UPS output operation on two UPS units simultaneously. Contact a Schneider Electric-certified service partner to re-build the parallel system. Only one parallel-configured UPS is connected to the load. It works like a single system except for the fact that several alarms are displayed and the maximum load rate that can be supported is the same as for a single configuration.

## Single System

### Start Up the UPS System with the Wizard Enabled

**NOTE:** The default value of the wizard is **ENABLE** which is a prerequisite for carrying out this procedure. See *Setting the Wizard*, page 34.

**NOTE:** Upon initial start-up, the UPS will automatically guide you via the wizard to select different settings: language, current voltage, current frequency, and mode. If a wizard prompt is ignored the default setting of the prompt will be enabled. You must complete the wizard one time before you can disable it for subsequent start-up sessions of the UPS system.

**NOTE:** You must have your password ready as you will be asked to enter it during this procedure. If you are in doubt about how to enter or set your password, see *Entering the Password*, page 37 and *Setting the Password*, page 36.

**NOTE:** When a settings value has been entered and confirmed by the prompt **Done!**, the wizard automatically moves to the next display prompt after three seconds.

1. Power on the UPS system by turning the input breaker (**QM1**) to the **ON (closed)** position.

**NOTE:** If the prompt **System init error! Error code: 1-x** appears on the display screen, see *Status and Alarm Messages*, page 46.

```
System initialization..
```

2. When the **Change language? (Y=Enter, N=Esc)** prompt appears on the display screen, do **one** of the following:
  - Press the Enter key to view the list of languages, select one of the 18 languages by using the navigation keys and press the Enter key again to confirm. After three seconds the UPS confirms the new setting by the prompt **Done!**
  - Press the **ESC** key to move on to **Change voltage of 2XXV? (Y=Enter, N=Esc)**.

**NOTE:** If the output breaker (**QOP**) is **ON (closed)** at this point, you must **Close QM1 to continue setting!** followed by the Enter key, and **Open QOP to continue setting!** followed by the Enter key.

**NOTE:** If the output breaker (**QOP**) is **ON (closed)** the menu freezes and is unable to continue.

3. When the **Change voltage of 2XXV? (Y=Enter, N=Esc)** prompt appears on the display screen, do **one** of the following:
  - Press the Enter key to view the list of voltages, select 220 V, 230 V, or 240 V by using the navigation keys and press the Enter key again to confirm. After three seconds the UPS confirms the new setting by the prompt **Done!**
  - Press the **ESC** key to move on to **Change freq. of xxHz? (Y=Enter, N=Esc)**.
4. When the **Change freq. of XXHz? (Y=Enter, N=Esc)** prompt appears on the display screen, do **one** of the following:
  - Press the Enter key to view the list of frequencies, select 50 Hz or 60 Hz by using the navigation keys and press the Enter key again to confirm. After three seconds the UPS confirms the new setting by the prompt **Done!**
  - Press the **ESC** key to move on to **Change normal/freq. converter/parallel mode? (Y=Enter, N=Esc)**.

**NOTE:** The UPS system does not support a combination of 240 V and 60 Hz. If such a combination has been chosen, you will be asked to **Change voltage of 2XXV (Y=Enter, N=Esc)** and a new voltage must be entered.

```
240V/60Hz output is
not supported!
```

5. When the **Change xxxx mode? (Y=Enter, N=Esc)** prompt appears on the display screen, do **one** of the following:
  - Press the Enter key to view the list of operation modes, select normal mode, frequency converter mode, or parallel mode by using the navigation keys and press the Enter key again. After three seconds the UPS confirms the new setting by the prompt **Done!**
  - Press the **ESC** key to move on to **Save new settings?**
6. When the **Save new settings?** prompt appears on the display screen, press the Enter key for **Saving Settings.....** Wait for the UPS to confirm the new settings by the prompt **Setting success!**

**NOTE:** If the **Setting failed!** is displayed, the UPS will ask you to **Start with previous setting values?** Press the **ESC** key to select new settings or the Enter key to move to the next step without saving the new settings.

7. When the **Disable wizard? (Y=Enter, N=Esc)** prompt appears on the display screen, do **one** of the following:
  - Press the Enter key to disable the wizard where after the screen will return to the Default screen three seconds after having confirmed with the prompt **Done!**

**NOTE:** Schneider Electric strongly recommends this choice to allow for the use of the automatic start function for subsequent start-ups.
  - Press the **ESC** key and the display screen returns to the Default screen without disabling the wizard.
8. Turn the static bypass breaker (**QM2**) to the **ON (closed)** position.
9. Turn the output breaker (**QOP**) to the **ON (closed)** position.
10. Do **one** of the following depending on your configuration:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **ON (closed)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **ON (closed)** position.
11. The UPS starts up in static bypass operation. Check the LEDs to see if the UPS is in static bypass operation:
  - PFC LED: During DC bus charging the LED flashes where after it stays green
  - LOAD LED: green (if the output breaker (**QOP**) is turned **ON** - otherwise the LED is red)
  - BYPASS LED: green
  - LOAD UNPROTECTED LED: red
  - Other LEDs: **OFF**

## Initial Start-up of the UPS System with the Wizard Disabled

1. Power on the UPS system by turning the input breaker (**QM1**) to the **ON (closed)** position.
2. Turn the static bypass breaker (**QM2**) to the **ON (closed)** position.
3. Turn the output breaker (**QOP**) to the **ON (closed)** position.
4. Do **one** of the following depending on your configuration:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **ON (closed)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **ON (closed)** position.
5. The UPS starts up in static bypass operation. Check the LEDs to see if the UPS is in static bypass operation:
  - PFC LED: during DC bus charging the LED flashes where after it stays green
  - LOAD LED: green (if the output breaker (**QOP**) is turned **ON** - otherwise the LED is red)
  - BYPASS LED: green
  - LOAD UNPROTECTED LED: red
  - Other LEDs: **OFF**

## Turn into Normal Operation from Static Bypass Operation

**NOTE:** Never attempt to switch back the UPS into normal operation until you have verified that there are no internal UPS alarms.

**NOTE:** Check the LEDs to see if the UPS is running in static bypass operation:

- PFC LED: during DC bus charging the LED flashes where after it stays green

- LOAD LED: green (if the output breaker (**QOP**) is turned **ON** - otherwise the LED is red)
- BYPASS LED: green
- LOAD UNPROTECTED LED: red
- Other LEDs: **OFF**

Before turning into normal operation you must make sure that the DC bus charging has been completed; when the DC bus has finished charging, the PFC LED stops flashing and stays green.

**NOTE:** Turning out of bypass can be done either via the INVERTER ON button or via the display.

### Via the Display

1. Do **one** of the following depending on your configuration:
  - a. Configuration with internal batteries : Turn the battery breaker (**QB**) to the **ON (closed)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **ON (closed)** position.
2. Confirm that the input breaker (**QM1**) is at the **ON (closed)** position.
3. Confirm that the output breaker (**QOP**) is at the **ON (closed)** position.
4. Confirm that the maintenance bypass breaker (**Q3BP**) is at the **OFF (opened)** position.
5. From the Default screen, press the Enter key.
6. Go to **CONTROLS** by using the navigation keys and press the Enter key.
7. Do **one** of the following depending on the preferred level of security regarding the present bypass condition:
  - The UPS system will only turn into normal operation if the static bypass condition is ready: Go to **INVERTER ON** by using the navigation keys and press the Enter key.
  - The UPS will be forced into normal operation regardless of the bypass condition: Go to **FORCED LOAD TRANSFER TO INVERTER** by using the navigation keys and press the Enter key.

**NOTE:** If the bypass voltage is within the range of the inverter output voltage the **Processing.....** prompt appears followed by **Command is accepted!**

**NOTE:** If the prompts **Command is not allowed!** or **Command time has run out!** appear on the display screen:

1. Check the breaker status.
  2. Make sure that the DC bus is available (the PFC LED is green when the DC bus is available).
  3. Check for inverter alarms (the INVERTER LED is red if an alarm condition has occurred).
8. Check the LEDs to see if the UPS is in normal operation.
    - PFC LED: green
    - INVERTER LED: green
    - LOAD LED: green
    - LOAD PROTECTED LED: green
    - Other LEDs: **OFF**



## Via the INVERTER ON Button

1. Do **one** of the following depending on your configuration:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **ON (closed)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **ON (closed)** position.
2. Confirm that the input breaker (**QM1**) is at the **ON (closed)** position.
3. Confirm that the output breaker (**QOP**) is at the **ON (closed)** position.
4. Confirm that the maintenance bypass breaker (**Q3BP**) is at the **OFF (opened)** position.
5. Push the INVERTER ON button.

**NOTE:** If the bypass voltage is within the range of the inverter output voltage the **Processing.....** prompt appears followed by **Command is accepted!**

**NOTE:** If the bypass voltage is outside the range of the inverter output voltage, the **Confirm transfer with break?** prompt appears. If you press the Enter key to confirm, a load drop between 20-30 ms will occur. If the load is too sensitive for this occurrence, press the **ESC** key to return to previous screens and wait for the bypass voltage and inverter output voltage to synchronize. Then try again.

**NOTE:** If the prompts **Command is not allowed!** or **Command time has run out!** appear on the display screen:

1. Check the breaker status.
  2. Make sure that the DC bus is available (the PFC LED is green when the DC bus is available).
  3. Check for inverter alarms (the INVERTER LED is red if an alarm condition has occurred).
6. Check the LEDs to see if the UPS is in normal operation.
    - PFC LED: green
    - INVERTER LED: green
    - LOAD LED: green
    - LOAD PROTECTED LED: green
    - Other LEDs: **OFF**

## Turn into Static Bypass Operation from Normal Operation

**NOTE:** Never attempt to switch the UPS into static bypass operation till you have verified that there are no bypass alarms.

**NOTE:** Check the LEDs to see if the UPS is in normal operation.

- PFC LED: green
- INVERTER LED: green
- LOAD LED: green
- LOAD PROTECTED LED: green
- Other LEDs: **OFF**

**NOTE:** In static bypass operation, the load is not protected by the UPS and the output power is not conditioned.

**NOTE:** Turning into static bypass can be done either via the **INVERTER OFF** button or via the display.

## Via the Display

1. From the Default screen, press the Enter key.
2. Go to **CONTROLS** by using the navigation keys and press the Enter key.
3. Do **one** of the following depending on the preferred level of security regarding the present bypass condition:
  - The UPS system will only turn into static bypass operation if the normal operation condition is ready: Go to **INVERTER OFF** by using the navigation keys and press the Enter key.
 

**NOTE:** Schneider Electric strongly recommends this (A) choice to prevent a load drop.
  - The UPS will be forced into static bypass operation regardless of the normal operation condition: Go to **FORCED LOAD TRANSFER TO BYPASS** by using the navigation keys and press the Enter key.
4. When the **Risk of load drop, continue or not?** prompt appears, press the Enter key to continue (or the **ESC** key to return to previous screens). The **Processing.....** prompt appears followed by **Command is accepted!**
5. Check the LEDs to see if the UPS is in static bypass operation:
  - LOAD LED: green (if the output breaker (**QOP**) is turned **ON (closed)** - otherwise the LED is red)
  - BYPASS LED: green
  - LOAD UNPROTECTED: red

## Via the INVERTER OFF Button

1. Push the INVERTER OFF button.

**NOTE:** If the bypass voltage is within range of the inverter output voltage the **Processing.....** prompt appears followed by **Command is accepted!**

**NOTE:** If the bypass voltage is outside the range of the inverter output voltage the **Confirm transfer with break?** prompt appears. If you press the Enter key to confirm, a load drop between 20-30 ms will occur. If the load is too sensitive for this occurrence, press the **ESC** key to return to previous screens and wait for the bypass voltage and inverter output voltage to synchronize. Then try again.

2. Check the LEDs to see if the UPS is in static bypass operation:
  - LOAD LED: green (if the output breaker (**QOP**) is turned **ON (closed)** - otherwise the LED is red)
  - BYPASS LED: green
  - LOAD UNPROTECTED LED: red

## Turn into Frequency Converter Operation from Normal Operation

### **NOTICE**

#### **HAZARD OF EQUIPMENT DAMAGE OR LOAD DROP**

In frequency converter operation the UPS cannot run in static bypass or maintenance bypass operation. Before turning the UPS into this operation mode, you must contact a Schneider Electric-certified service partner to make sure that the static bypass breaker (QM2) and the maintenance bypass breaker (Q3BP) are in the OFF (opened) position (Schneider Electric strongly recommends to lock these with a padlock available from Schneider Electric), and that the cables are disconnected according to the instructions in the installation manual.

**Failure to follow these instructions can result in equipment damage.**

**NOTE:** You must have your password ready as you will be asked to enter it during this procedure. If you are in doubt about how to enter or set your password, see *Entering the Password, page 37* and *Setting the Password, page 36*.

1. Check the LEDs to see if the UPS is in normal operation:
  - PFC LED: green
  - INVERTER LED: green
  - LOAD LED: green
  - LOAD PROTECTED LED: green
  - Other LEDs: **OFF**
2. Turn the static bypass breaker (**QM2**) to the **OFF (opened)** position.
3. Turn the output breaker (**QOP**) to the **OFF (opened)** position.
4. Go to **SETTINGS > PERSONALIZATION > UPS OPERATION MODE > Frequency converter mode** by using the navigation keys and press the Enter key.
5. Press the **ESC** key to return to **UPS OPERATION MODE**.
6. Press the **ESC** key again. The display will show the message **Stop all converters and save new settings?**
7. Press the Enter key to confirm.
8. The UPS is now **Saving settings.....**

**NOTE:** The display will now show **Setting success!** or **Setting failed!**
9. Wait for the converters to restart and the PFC to finish charging.
 

**NOTE:** Make sure that the static bypass breaker (**QM2**) and the maintenance bypass breaker (**Q3BP**) is in the **OFF (opened)** position. Otherwise, the transfer is forbidden.
10. When the PFC LED changes to green, push the INVERTER ON button.
11. Turn the output breaker (**QOP**) to the **ON (closed)** position.
12. Check the LEDs to see if the UPS is in frequency converter mode:
  - PFC LED: green
  - INVERTER LED: green
  - LOAD LED: green
  - BYPASS LED: OFF
  - LOAD PROTECTED LED: green
  - Other LEDs: **OFF**

## Turn into Normal Operation from Frequency Converter Operation

### **NOTICE**

#### **LOAD DROP**

When QOP is opened while the UPS is in frequency converter operation, the load will not be transferred, but will be dropped.

**Failure to follow these instructions can result in equipment damage.**

**NOTE:** You must have your password ready as you will be asked to enter it during this procedure. If you are in doubt about how to enter or change your password, see *Setting the Password, page 36*.

1. Check the LEDs to see if the UPS is in frequency converter mode:
  - PFC LED: green
  - INVERTER LED: green
  - LOAD LED: green
  - BYPASS LED: OFF
  - LOAD PROTECTED LED: green

**NOTE:** Make sure that the static bypass breaker (**QM2**) and the output breaker (**QOP**) is in the **OFF (opened)** position. Otherwise, the transfer will fail. When **QOP** is **OFF (opened)**, the display will show the message **FAULT BREAKER QOP OPEN**. When this message appears, press the **ESC** key twice to return to the default screen.
2. Go to **SETTINGS > PERSONALIZATION > UPS OPERATION MODE > NORMAL MODE** by using the navigation keys and press the Enter key. The Screen will display the message **SELECTED!**.
3. Press the **ESC** key twice. The display will show the message **Stop all converters and save new settings?**
4. Press the Enter key to confirm.
5. The UPS is now **Saving settings.....**

**NOTE:** The display will now show **Setting success!** or **Setting failed!** Press the **ESC** key a few times until you to return to the default screen.
6. Wait for the converters to restart and the PFC to finish charging.
7. Turn the output breaker (**QOP**) to the **ON (closed)** position.
8. Turn the static bypass breaker (**QM2**) to the **ON (closed)** position.
9. Push the INVERTER ON button.
10. Check the LEDs to see if the UPS is in normal operation:
  - PFC LED: green
  - INVERTER LED: green
  - BYPASS LED: OFF
  - LOAD LED: green
  - LOAD PROTECTED LED: green
  - Other LEDs: **Off**

## Turn into Maintenance Bypass Operation from Normal Operation

1. Confirm that the static bypass breaker (**QM2**) is at the **ON (closed)** position.
2. Turn into static bypass operation via the display or the INVERTER OFF button. See *Turn into Static Bypass Operation from Normal Operation, page 17*.
 

**NOTE:** Now, the load is not protected by the UPS.

**NOTE:** Make sure that the load is supplied by AC bypass source.
3. Turn the maintenance bypass breaker (**Q3BP**) to the **ON (closed)** position.
4. Turn the input breaker (**QM1**) to the **OFF (opened)** position and then turn the static bypass breaker (**QM2**) to the **OFF (opened)** position.
5. Turn the output breaker (**QOP**) to the **OFF (opened)** position. Now the load is not supported by the UPS.
6. Do **one** of the following depending on your configuration:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **OFF (opened)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **OFF (opened)** position.

## Turn into Normal Operation from Maintenance Bypass Operation

**NOTE:** Never attempt to turn back the UPS into normal operation till you have verified that there are no internal UPS alarms.

1. Turn the output breaker (**QOP**) and the static bypass breaker (**QM2**) to the **ON (closed)** position. Now the load is supported by the UPS.
2. Check the LEDs to see if the UPS is in bypass operation:
  - BYPASS LED: green
  - LOAD LED: green
3. Turn the maintenance bypass breaker (**Q3BP**) to the **OFF (opened)** position.
4. Turn the input breaker (**QM1**) to the **ON (closed)** position.
5. Do **one** of the following depending on your configuration:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **ON (closed)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **ON (closed)** position.

**NOTE:** Now, the inverter is **OFF** and the DC bus will start charging. Wait for the DC bus to finish charging before you continue. If the **UPS AUTOMATIC START** function has been enabled under **PERSONALIZATION**, the inverter will start up automatically. If not, the inverter is **OFF** and must be turned **ON** via the **INVERTER ON** button or the display. See *Turn into Normal Operation from Static Bypass Operation, page 15*.

6. Make sure that the **INVERTER** is **ON**. Check the LEDs to see if the UPS is in normal operation:
  - PFC LED: green
  - INVERTER LED: green
  - LOAD LED: green
  - LOAD PROTECTED LED: green
  - Other LEDs: **OFF**

**NOTE:** The load is now protected by the UPS.

## Perform a Total Power Off

**NOTE:** To carry out this procedure the load supported by the UPS units must be turned **OFF**.

1. Check that the load which is supported by the UPS units is turned **OFF**.
2. Turn into static bypass operation via the display or via the **INVERTER OFF** button. See *Turn into Static Bypass Operation from Normal Operation, page 17*.
3. Turn the output breaker (**QOP**) and the static bypass breaker (**QM2**) into **OFF (opened)** position on both UPS units.
4. Turn the input breaker (**QM1**) into **OFF (opened)** position.
5. Do **one** of the following depending on your configuration:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **OFF (opened)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **OFF (opened)** position.

## Turn into Normal Operation from Total Power Off

1. Power on the UPS system by turning the input breaker (**QM1**) to the **ON (closed)** position.
2. Turn the static bypass breaker (**QM2**) to the **ON (closed)** position.

3. Turn the output breaker (**QOP**) to the **ON (closed)** position.
4. Do **one** of the following depending on your configuration:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **ON (closed)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **ON (closed)** position.
5. The UPS starts up in static bypass operation. Check the LEDs to see if the UPS is in static bypass operation:
  - PFC LED: during DC bus charging the LED flashes where after it stays green
  - LOAD LED: green (if the output breaker (**QOP**) is turned **ON** - otherwise the LED is red)
  - BYPASS LED: green
  - LOAD UNPROTECTED LED: red
  - Other LEDs: **OFF**
6. Push the INVERTER ON button to turn on the inverter.
7. Check the LEDs to see if the UPS is in normal operation:
  - PFC LED: green
  - INVERTER LED: green
  - BYPASS LED: OFF
  - LOAD LED: green
  - LOAD PROTECTED LED: green
  - Other LEDs: **OFF**

## Parallel System

**NOTE:** To facilitate the parallel operation description, one UPS is named UPS 1 and the other UPS is named UPS 2, but there is no difference between these two units.

### Start Up Parallel System

**NOTE:** Before starting up the parallel system, please ensure that the parallel cable is well connected between two UPS units.

**NOTE:** After system initialization and wizard (if enabled), if the prompt **Parallel UPS lost, enable single UPS output?** appears on the display screen, please check the parallel cable connection. If the prompt does not disappear after that, press the Enter key to confirm, and the message **Success!** or **Failed** will inform you whether single UPS output for temporary power supply is enabled successfully or not, or disable single UPS output by pressing the **ESC** key. Contact a Schneider Electric-certified service partner to re-build the parallel system.

<b>NOTICE</b>
<p>Single UPS output operation is only a temporary method to support your load, and no redundancy is provided in this case.</p> <p><b>Failure to follow these instructions can result in equipment damage.</b></p>

1. Power ON the system by turning the input breaker (QM1) into ON (closed) position on both UPS units.

**NOTE:** If the wizard is enabled, please refer to step 2-7 of *Start Up the UPS System with the Wizard Enabled, page 13* to complete the wizard on both UPS units. It is strongly recommended to disable the wizard.

**NOTE:** If the prompt **System init error! Error code: 1-X** appears on the display screen, see the error codes for UPS system initialization under *Status and Alarm Messages, page 46*.

<b>NOTICE</b>
<p>Do not enable single UPS output on both UPS units simultaneously as this will damage the product.</p> <p><b>Failure to follow these instructions can result in equipment damage.</b></p>

2. Turn the static bypass breaker (QM2) into **ON (closed)** position on both UPS units.
3. Turn the output breaker (QOP) into **ON (closed)** position on both UPS units.
4. Do **one** of the following depending on your configuration on both UPS units:
  - a. Configuration with internal batteries: Turn the battery breaker (QB) to the **ON (closed)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker QFB to the **ON (closed)** position.

5. The two UPS units start up in static bypass operation. Check the LEDs to see if the UPS units are in static bypass operation:
  - PFC LED: during DC bus charging the LED flashes green and then stays green
  - LOAD LED: green (if the output breaker (**QOP**) is turned **ON** - otherwise it is red)
  - BYPASS LED: green
  - LOAD UNPROTECTED LED: red
  - Other LEDs: **OFF**

## Turn into Normal Operation from Static Bypass Operation

**NOTE:** If UPS 1 has been turned into normal operation, but UPS 2 stays in static bypass operation, there will be no output from UPS 2 static bypass, and therefore the bypass LED of UPS 2 will be turned OFF and the load LED of UPS 2 will be red.

**NOTE:** Please refer to *Turn into Normal Operation from Static Bypass Operation, page 15* for details on how to turn one UPS from static bypass operation into normal operation.

1. Turn UPS 1 into normal operation from static bypass operation. Verify that the LEDs of UPS 1 now running in normal operation are:
  - PFC LED: green
  - INVERTER LED: green
  - LOAD LED: green
  - LOAD PROTECTED LED: green
  - Environment and minor fault LED: orange
  - Other LEDs: **OFF**Simultaneously, UPS 2 is locked to load **OFF** from static bypass operation. Verify that the LEDs of UPS 2 are:
  - PFC LED: green
  - LOAD LED: red
  - BYPASS LED: OFF
  - LOAD PROTECTED LED: red
  - Environment and minor fault LED: orange
  - Other LEDs: **OFF**
2. Turn UPS 2 into normal operation from static bypass operation.
3. Check the LEDs to see if the two UPS units are in normal operation, where the LEDs are:
  - PFC LED: green
  - INVERTER LED: green
  - LOAD LED: green
  - LOAD PROTECTED LED: green
  - Other LEDs: **OFF**

## Turn into Static Bypass Operation from Normal Operation

**NOTE:** If one UPS is still in normal operation mode, the other UPS will not be allowed to output in static bypass even if it has been turned into static bypass operation.

**NOTE:** Please refer to *Turn into Static Bypass Operation from Normal Operation, page 17* for details on how to turn one UPS from normal operation into static bypass operation.



1. Turn UPS 1 into static bypass operation from normal operation. UPS 1 is now locked to load **OFF** from normal operation. Verify that the LEDs of UPS 1 are:
  - PFC LED: green
  - LOAD LED: green
  - LOAD PROTECTED LED: red
  - Other LEDs: **OFF**

Simultaneously, UPS 2 is still running in normal operation. Verify that the LEDs of UPS 2 are:

- PFC LED: green
- INVERTER LED: green
- LOAD LED: green
- LOAD PROTECTED LED: green
- Environment and minor fault LED: orange
- Other LEDs: **OFF**

**NOTE:** In this case, the UPS 1 static switch cannot be closed in static bypass operation, and there is no voltage output on static bypass of UPS 1.

2. Turn UPS 2 into static bypass operation from normal operation.
3. Check the LEDs to see if the two UPS units are in static bypass operation:
  - LOAD LED: green (if the output breaker (**QOP**) is turned **ON (closed)** - otherwise the LED is red)
  - BYPASS LED: green
  - LOAD UNPROTECTED LED: red

## Turn into Maintenance Bypass Operation from Normal Operation

**NOTE:** Do not turn the maintenance bypass breaker (Q3BP) into ON (closed) position when the load is supported by the inverter of the other UPS.

1. Confirm that the static bypass breaker (**QM2**) is in **ON (closed)** position on both UPS units.
2. Turn UPS 1 into static bypass operation from normal operation. UPS 1 is now locked to load **OFF**. The load is supported by UPS 2 which is still running in normal operation.

**NOTE:** Please refer to *Turn into Static Bypass Operation from Normal Operation, page 17* for details on the operation.

**NOTE:** **Q3BP** must not be closed.

3. Turn the UPS 1 output breaker (**QOP**) into **OFF (opened)** position.
4. Turn UPS 2 into static bypass operation from normal operation.
 

**NOTE:** The load is supported by the static bypass of UPS 2.
5. Turn the UPS 2 maintenance bypass breaker (**Q3BP**) into **ON (closed)** position.

**NOTE:** The load is supported by the static bypass and maintenance bypass of UPS 2.

6. Turn the UPS 2 output breaker (**QOP**) into **OFF (opened)** position.
 

**NOTE:** UPS 2 is completely isolated from the load, and the load is supported by the maintenance bypass of UPS 2.
7. Turn the UPS 1 maintenance bypass breaker (**Q3BP**) into **ON (closed)** position.

**NOTE:** Now UPS 1 is also completely isolated from the load, and the load is supported by the maintenance bypass of the two UPS units.

8. Turn the input breaker (**QM1**) and the static bypass breaker (**QM2**) into **OFF (opened)** position on both UPS units.
9. Do **one** of the following depending on your configuration on both UPS units:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **OFF (opened)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **OFF (opened)** position.

## Turn into Normal Operation from Maintenance Bypass Operation

1. Ensure that the parallel cable is connected between the two parallel UPS units.
2. Turn the output breaker (**QOP**) into **ON (closed)** position on UPS 1.
3. Turn the maintenance bypass breaker (**Q3BP**) of UPS 2 into **OFF (opened)** position.
4. Turn the UPS 1 input breaker (**QM1**) and the static bypass breaker (**QM2**) into **ON (closed)** position.
5. When the prompt **Parallel UPS lost, enable single UPS output?** is displayed on UPS 1 about 20 seconds later, press the Enter key to enable single UPS output.
 

**NOTE:** Now the load is supported by the static bypass and maintenance bypass of UPS 1.
6. Turn the UPS 1 maintenance bypass breaker (**Q3BP**) into **OFF (opened)** position.
7. Turn UPS 1 from static bypass operation into normal operation.
 

**NOTE:** Please refer to *Turn into Static Bypass Operation from Normal Operation*, page 17 for details on the operation.
8. Turn the UPS 2 input breaker (**QM1**) and the static bypass breaker (**QM2**) into **ON (closed)** position.
 

**NOTE:** UPS 1 will exit single UPS output operation automatically and keep the current status when UPS 2 is powered ON.

**NOTE:** If the alarm **Parallel unit error** is displayed on both UPS units, please perform a total power OFF of UPS 2 and contact a Schneider Electric-certified service partner.
9. Turn the UPS 2 output breaker (**QOP**) into **ON (closed)** position.
 

**NOTE:** There is no voltage output in UPS 2 static bypass even if **QM 2** and **QOP** is turned into **ON (closed)** position as UPS 1 has already been turned into normal operation.
10. Turn UPS 2 from static bypass operation into normal operation.
11. Do **one** of the following depending on your configuration on both UPS units:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **ON (closed)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **ON (closed)** position.
12. Make sure that the INVERTER is **ON**. Check the LEDs to see if the UPS units are in normal operation:
  - PFC LED: green
  - INVERTER LED: green
  - LOAD LED: green
  - LOAD PROTECTED LED: green
  - Other LEDs: **OFF**

## Perform a Total Power Off

**NOTE:** To carry out this procedure the load supported by the UPS units must be turned **OFF**.

1. Check that the load which is supported by the UPS units is turned **OFF**.
2. Turn into static bypass operation via the display or via the **INVERTER OFF** button on both UPS units. See *Turn into Static Bypass Operation from Normal Operation*, page 17.
3. Turn the output breaker (**QOP**) and the static bypass breaker (**QM2**) into **OFF (opened)** position on both UPS units.
4. Turn the input breaker (**QM1**) into **OFF (opened)** position on both UPS units.
5. Do **one** of the following depending on your configuration on both UPS units:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **OFF (opened)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **OFF (opened)** position.

## Isolate one UPS in a Parallel System

**NOTE:** The UPS which needs to be isolated is named UPS 1, and the other UPS is named UPS 2 in the following procedure.

1. Check the current system load ratio under **MEASUREMENT>LOAD MEASUREMENT** using the display and confirm that UPS 2 can support the load.
2. Turn UPS 1 into static bypass operation from normal operation. Press the **INVERTER OFF** button on UPS 1. Now UPS 1 is locked to load OFF. Only UPS 2 is still running in normal operation, and load is supported by UPS 2.

**NOTE:** If UPS 2 is in normal operation mode, static bypass of UPS 1 will not be allowed to output even if it has been turned into static bypass operation.

3. Turn the UPS 1 output breaker (**QOP**) into **OFF (opened)** position.

**NOTE:** Ensure that step 3 is performed before step 4, or UPS 2 cannot enter single UPS output operation automatically with the risk of load loss.

**NOTE:** Now UPS 2 has entered single UPS output operation automatically and supports the load independently.

4. Turn the UPS 1 static bypass breaker (**QM2**) into **OFF (opened)** position.
5. Turn the UPS 1 input breaker (**QM1**) into **OFF (opened)** position.
6. Do **one** of the following depending on your UPS 1 configuration:
  - a. Configuration with internal batteries: Turn the battery breaker (**QB**) to the **OFF (opened)** position.
  - b. Configuration without internal batteries: Turn the battery cabinet breaker **QFB** to the **OFF (opened)** position.
7. Unplug the parallel cable between the two UPS units.

**NOTE:** UPS 2 will display the alarms

```
Parallel UPS lost
```

```
Single output enabled
```

and it will keep the current status and work as a single UPS since single UPS output is enabled automatically.

## Turn the Isolated UPS into Normal Operation

**NOTE:** Before turning on power to the isolated UPS, please ensure that the parallel cable is well connected between two UPS units.

**NOTE:** The isolated UPS is named UPS 1, and the other UPS is named UPS 2 in the following procedure.

1. Turn the UPS 1 input breaker (**QM1**) and the static bypass breaker (**QM2**) into **ON (closed)** position.
  - If the wizard is enabled, please refer to step 2-7 of *Start Up the UPS System with the Wizard Enabled*, page 13 to complete the wizard on UPS 1. It is strongly recommended to disable the wizard as single system.
  - If the following prompt appears on the display screen, please refer to the error codes for UPS system initialization found under *Status and Alarm Messages*, page 46.

```
System init error! Error code: 1-X
```

- After system initialization and wizard (if enabled), if the following prompt appears on the display screen, please check the parallel cable connection. If the prompt does not disappear after that, perform a total power OFF on UPS 1 and contact a Schneider Electric-certified service partner.

```
Parallel UPS lost, enable single UPS output?
```

- If the following alarm is shown on both UPS units, perform a total power OFF on UPS 1 and contact a Schneider Electric-certified service partner.

```
Parallel init error
```

2. Turn the UPS 1 output breaker (**QOP**) into **ON (closed)** position.
3. Check the LEDs of UPS 1 to see if it is in static bypass operation.
  - If the load is supported by the inverter of the other UPS, the LEDs are:
    - BYPASS LED: OFF
    - LOAD LED: red
  - If the load is supported by the static bypass of UPS 2, the LEDs are:
    - BYPASS LED: green
    - LOAD LED: green
4. Turn UPS 1 from static bypass operation into normal operation via the display or the INVERTER ON button. See *Turn into Normal Operation from Static Bypass Operation*, page 15. Also if UPS 2 is in static bypass operation, turn it into normal operation.
5. Make sure that the **INVERTERS** are **ON**. Check the LEDs to see if the two UPS units are both in normal operation:
  - PFC LED: green
  - INVERTER LED: green
  - LOAD LED: green
  - LOAD PROTECTED LED: green
  - Other LEDs: **OFF**

## Common Procedures

### View Product Info

1. From the Default screen, press the Enter key.
2. Go to **PRODUCT INFO** by using the navigation keys and press the Enter key.
3. Scroll through the three screens to view UPS serial number, date and time, and firmware version by using the navigation keys.

```
MGE Galaxy 300
3:3 or 3:1 ser. no.
```

```
Current date
Current time
```

```
FIRMWARE VERSION
xx.xx.xx.xx
```

4. Press the **ESC** key to return to another screen or the Default screen.

### View Measurements (UPS and Battery)

1. From the Default screen, press the Enter key.
2. Go to **MEASUREMENTS** by using the navigation keys and press the Enter key.
3. Go to **one** of the measurements in the below table by using the navigation keys.
4. Press the **ESC** key to return to another measurement or the Default screen.

Measurement	Description
<b>VOLTAGE MEASUREMENTS</b>	Shows the output, input, and bypass voltage (V) on each phase.
<b>CURRENT MEASUREMENTS</b>	Shows the output, input, and bypass ampere (A) on each phase.
<b>POWER MEASUREMENTS</b>	Shows the apparent output power (kVA) and actual output power (kW) on each phase.
<b>FREQUENCY MEASUREMENTS</b>	Shows the input, bypass, and output frequency in Hertz (Hz).
<b>LOAD MEASUREMENTS</b>	Shows the percentage (%) of the unitary load (and system load if parallel mode is configured) in relation to total UPS capacity, its crest and power factor.
<b>BATTERY MEASUREMENTS</b>	Shows the battery voltage, current, charge level, and temperature, backup time and remaining battery lifetime.

### View Event Log

**NOTE:** The UPS supports the 100 most recent log events with date, time of occurrence, and event description. The next or previous event is found by using the navigation keys.

**NOTE:**

The screen displays the following characters:

- **A** indicates an alarm appearance (or other data types)

```
2009/12/31 23:59:59 A
PFC fuse blown
```

- **D** indicates an alarm disappearance

```
2009/12/31 23:59:59 D
PFC fuse blown
```

1. From the Default screen, press the **OK** key.
2. Go to **EVENT LOG** by using the navigation keys and press the **OK** key.
3. The screen displays the latest log event or the prompt **No event**.
4. Use the navigation keys to go through the latest events.
5. Press the **ESC** key until you return to the Default screen.

## Activate Controls

**NOTE:** When the command values **INVERTER OFF** or **FORCE LOAD TRANSFER TO BYPASS** are activated, the **Risk of load drop, continue or not?** prompt appears. Press the Enter key to continue (or the **ESC** key to return to previous screens).

1. From the Default screen, press the Enter key.
2. Go to **CONTROLS** by using the navigation keys and press the Enter key.
3. Go to one of the commands in the below table by using the navigation keys.
4. Press the Enter key to activate a command.

**NOTE:** When one of the command values from the below table has been activated, the prompt **Processing.....** will be displayed for three seconds followed by the prompt **Command is accepted!** if the command runs successfully, or **Command is not allowed!** if the command is refused, or **Command time has run out!** if no response has been given.

5. Press the **ESC** key to return to another command or the Default screen.

Command	Description
<b>RESET ALARM</b>	Resets all alarms.
<b>INVERTER ON</b>	Makes a secure transfer from static bypass operation to normal operation. The command will be refused if the bypass and inverter conditions are not synchronized.
<b>INVERTER OFF</b>	Makes a secure transfer from normal operation to static bypass operation. The command will be refused if the bypass and inverter conditions are not synchronized.
<b>FORCE LOAD TRANSFER TO INV</b>	Forces the UPS to transfer from static bypass operation to normal operation whereby the bypass condition is ignored. A short load drop may occur.
<b>FORCE LOAD TRANSFER TO BYPASS</b>	Forces the UPS to transfer from normal operation to static bypass operation whereby the bypass condition is ignored. A short load drop may occur.
<b>LED TEST</b>	Tests the LEDs and the buzzer.
<b>ENABLE LCM WARNING</b>	Enables all Life Cycle Monitoring (LCM) warnings, such as start-up, warranty expiring soon, and technical check needed warnings.
<b>DISABLE LCM WARNING</b>	Disables all LCM warnings, such as start-up, warranty expiring soon, and technical check needed warnings.
<b>ACKNOWLEDGE LCM ALARMS</b>	Temporarily acknowledge LCM warning when present. The repetitions quantity and interval between alarms can both be adjusted by a Schneider Electric-certified service partner.
<b>BATTERY TEST</b>	Launches a battery test if the load is supported by the inverter and if the batteries are available and fully charged without faults.
<b>ACKNOWLEDGE DUST FILTER ALARM</b>	Acknowledge Dust Filter Pre-alarm when present. Acknowledge Dust Filter Alarm and reset dust filter timer when present. The number of alarm repetitions and interval between alarms can both be adjusted by a Schneider Electric-certified service partner.
<b>RESET DUST FILTER TIMER</b>	Reset the dust filter elapsed time.
<b>ENABLE SINGLE UPS OUTPUT</b>	Enable single UPS output when the other parallel-installed UPS is powered down.

## View Alarms

**NOTE:** The UPS supports all active alarms. An alarm description is limited to one line. If an alarm is resolved, the UPS automatically removes the alarm from the list.

1. From the Default screen, press the Enter key.
2. Go to **FAULTS** by using the navigation keys and press the Enter key.

3. Scroll through the alarms by using the navigation keys.

**NOTE:**

The screen displays the alarm in the following format and characters:

**FAULT (x/y)****Alarm description**

- x - represents the number of the alarm
- y - represents the total sum of alarms

**Example**

```
FAULT (2/6)
Load short circuit
```

4. Press the **ESC** key to return to the Default screen.

### View the External Alarms via the Dry Contact (Optional)

**NOTE:** The optional dry connector on the upper rear side of the UPS makes it possible to monitor the UPS system from external relays regarding general alarms, the battery operation alarm, and the low battery alarm. See the installation manual for a precise location of the port and for voltage, current, and cable requirements.

**NOTE:** See *Status and Alarm Messages*, page 46 for alarm descriptions and corrective actions.

Output	Operating status condition	Description	
1,1	<b>General alarm</b>	PFC fault	
		Inverter fault	
		Bypass static switch fault	
		Charger fault	
		EPO activated	
		Battery backup time ended, shift to wait mode	
		Battery temperature fault >40° C or battery temperature sensor destroyed, charger shutdown	
		Abnormal presence of voltage on the output before closing the bypass static switch (frequency converter)	
		UPS in downgraded mode	
		CAN communication fault	
		UPS personalization fault	
		<b>Battery operation alarm</b>	The inverter is connected to the load and operating on battery power
		<b>Low battery alarm</b>	The battery has reached the low-battery warning level (voltage or time)



# Configuration

## Default Settings

**NOTE:** The configuration procedures in this chapter describe how to change UPS settings after initial start-up.

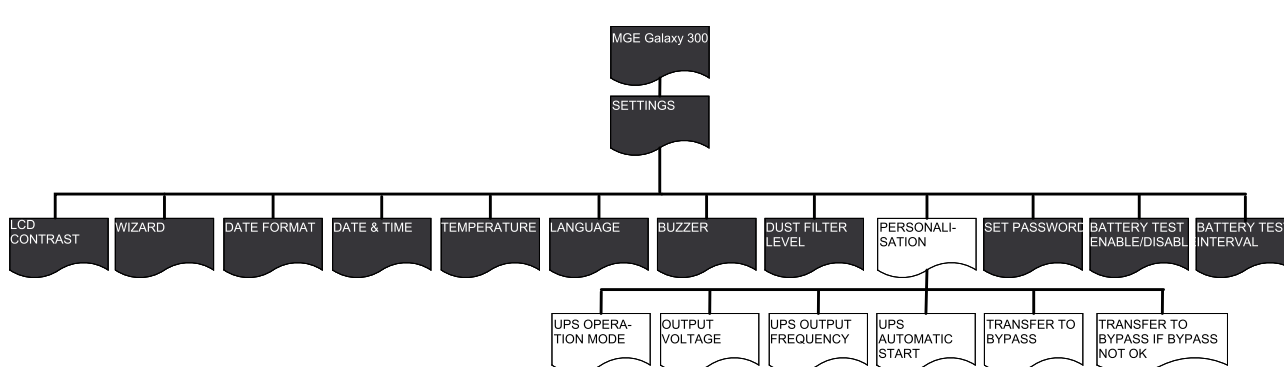
**NOTE:** Every new setting has to be confirmed by pressing the Enter key as described in the procedures. If this step is omitted, the display will return to its previous setting.

Setting	Default	Available settings
LCD CONTRAST	0	-4 to 4
WIZARD	ENABLE	DISABLE
DATE FORMAT	DD/MM/YYYY	YYYY/MM/DD, MM/DD/YYYY
DATE&TIME	01/01/2010 00:00:00	The range of year is from 2010 to 2035
TEMPERATURE	CELSIUS	FAHRENHEIT
LANGUAGE	ENGLISH	See <i>Setting the Language</i> , page 35
BUZZER	ENABLE	DISABLE
UPS OPERATION MODE <sup>2</sup>	NORMAL MODE	PARALLEL MODE, FREQUENCY CONVERTER MODE
OUTPUT VOLTAGE <sup>2</sup>	230 V	220 V, 240 V
UPS OUTPUT FREQUENCY <sup>2</sup>	50 Hz	60 Hz
UPS AUTOMATIC START <sup>2</sup>	DISABLE	ENABLE
TRANSFER TO BYPASS <sup>2</sup>	ENABLE	DISABLE
TRANSFER TO BYPASS IF BYPASS NOT OK <sup>2</sup>	ENABLE	DISABLE
SET PASSWORD	000	
BATTERY TEST	ENABLE	DISABLE
BATTERY TEST INTERVAL	1 month	X months (1–6)
DUST FILTER LEVEL	OFF	3 MONTHS, 4 MONTHS, 5 MONTHS or 12 MONTHS

2. These settings require a restart. See *Settings Requiring a Restart*, page 38.

## Settings Not Requiring a Restart

**NOTE:** In the below menu tree you will find eleven settings which may be changed without entering a password or making a UPS restart. Please read *General Information, page 34* before you start. For personalization settings, see *Settings Requiring a Restart, page 38*.



## General Information

**NOTE:** It is possible to change several settings under the **SETTINGS** menu without having to escape and reenter the menu. Before you escape the **SETTINGS** menu, the UPS will save all new settings by the prompt **Done!**

**NOTE:** When your new settings have been confirmed by the prompt **Done!**, press the **ESC** key until you return to the Default screen.

## Setting the LCD Contrast

**NOTE:** The smaller the digit the darker the screen.

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > LCD CONTRAST** by using the navigation keys and press the Enter key.
3. The contrast digit is now active. Select a contrast value between -4 and 4.

- 2

4. Press the Enter key to confirm the new display contrast value. After three seconds the UPS confirms the new setting by the prompt **Done!**
5. Press the **ESC** key until you return to the Default screen.

## Setting the Wizard

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > WIZARD** by using the navigation keys and press the Enter key.
3. Select **ENABLE** or **DISABLE** by using the navigation keys.
4. Press the Enter key to confirm the new wizard setting. After three seconds the UPS confirms the new setting by the prompt **Done!**
5. Press the **ESC** key until you return to the Default screen.

## Setting the Date Format

1. From the Default screen, press the Enter key.

2. Go to **SETTINGS > DATE FORMAT** by using the navigation keys and press the Enter key.
3. Select between values **YYYY/MM/DD**, **DD/MM/YYYY**, or **MM/DD/YYYY**.
4. Press the Enter key to confirm the new date format. After three seconds the UPS confirms the new setting by the prompt **Done!**.
5. Press the **ESC** key until you return to the Default screen.

## Setting the Date and Time

**NOTE:** The correct date and time must be set for event time-stamping purposes.

**NOTE:** The range of year runs from 2010 to 2035.

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > DATE&TIME** by using the navigation keys and press the Enter key.
3. The digit of year, month, or date is now active depending on the settings format.

```
2010-01-01
00:00:00
```

4. Use the navigation keys to select a value of the active digit and press the Enter key.
5. Use the navigation keys to select a value of the next active digit followed and press the Enter key and repeat this procedure until a value of the last digit has been chosen.

```
2010-01-01
00:00:00
```

6. Press the Enter key to confirm the last value. After three seconds the UPS confirms the new setting by the prompt **Done!**.
7. Press the **ESC** key until you return to the Default screen.

## Setting the Temperature

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > TEMPERATURE** by using the navigation keys and press the Enter key.
3. Select **CELSIUS** or **FAHRENHEIT**.
4. Press the Enter key to confirm the new temperature value. After three seconds the UPS confirms the new setting by the prompt **Done!**.
5. Press the **ESC** key until you return to the Default screen.

## Setting the Language

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > LANGUAGE** by using the navigation keys and press the Enter key.

3. Select between the following 18 languages:

French	Italian	Dutch
Russian	Turkish	Thai
English	Spanish	Swedish
Polish	Indonesian	Korean
German	Portuguese	Finnish
Greek	Chinese Simplified	Norwegian

4. Press the Enter key to confirm the new display language. After three seconds the UPS confirms the new setting by the prompt **Done!**.
5. Press the **ESC** key until you return to the Default screen.

## Setting the Buzzer

**NOTE:** The buzzer informs you of an alarm status change (appearance or disappearance) and can be switched **OFF** via the display. It is possible to stop the buzzer from the Default screen at any time by pressing the **ESC** key. New alarms activate the buzzer again. The buzzer has a single tone and a beep every 500 ms.

**NOTE:** The initial factory setting is **ENABLE**.

### Buzzer sounds:

- **Slow beep: ON (0.5 seconds)/ OFF (10 seconds).** The UPS is in battery operation, maintenance mode or with a minor environmental alarm (the environment and minor alarm LED is lit).
- **Quick beep: ON (0.5 seconds)/OFF (3 seconds).** The UPS is in battery operation and is reaching its pre-alarm threshold.
- **Continuous beep: ON.** The load is unprotected.

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > BUZZER** by using the navigation keys and press the Enter key.
3. Select between **ENABLE** and **DISABLE**.
4. Press the Enter key to confirm the new buzzer setting. After three seconds the UPS confirms the new setting by the prompt **Done!**.
5. Press the **ESC** key until you return to the Default screen.

## Setting the Password

**NOTE:** In order to change the password you need to fill in the previous or initial factory default password (000).

**NOTE:** If you press the **ESC** key any time during this procedure you will return to the **SET PASSWORD** prompt.

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > SET PASSWORD** by using the navigation keys and press the Enter key.
3. The first digit is now active. Use the navigation keys to select the first digit from 0 to 4 and press the Enter key.

000
-----

- The second digit is now active. Use the navigation keys to select the second digit from 0 to 4 and press the Enter key.

```
000
```

- The third digit is now active. Use the navigation keys to select the third digit from 0 to 4 and press the Enter key to confirm the password.

```
000
```

- When the password has been set, the prompt **Done!** is displayed for three seconds before the new password is displayed. Press the **ESC** key to return to the previous menu at any time.

## Entering the Password

**NOTE:** Default password is 000.

**NOTE:** If you choose a wrong digit, press the **ESC** key at any time during this procedure to return to the previous menu and reenter your password.

- When the first digit is active, use the navigation keys to select the first digit from 0 to 4 and press the Enter key.

```
Please enter password:  
000
```

- The second digit is now active. Use the navigation keys to select the second digit from 0 to 4 and press the Enter key.

```
Please enter password:  
000
```

- The third digit is now active. Use the navigation keys to select the third digit from 0 to 4 and press the Enter key to confirm the password.

```
Please enter password:  
000
```

**NOTE:** If the password is correct, you are allowed to continue your desired procedure. If the password is incorrect, the prompt **Wrong password!** is displayed for three seconds before the display returns to the previous menu and then you can try again.

## Setting the Battery Test Enable/Disable

- From the Default screen, press the Enter key.
- Go to **SETTINGS > BATTERY TEST ENABLE/DISABLE** by using the navigation keys and press the Enter key.
- Select between **ENABLE** or **DISABLE**.
- Press the Enter key to confirm the new battery test settings. After three seconds the UPS confirms the new setting by the prompt **Done!**
- Press the **ESC** key until you return to the Default screen.

## Setting the Battery Test Interval

- From the Default screen, press the Enter key.
- Go to **SETTINGS > BATTERY TEST INTERVAL** by using the navigation keys and press the Enter key.

3. The digit is now active. Select an interval value between 1 and 6.
4. Press the Enter key to confirm the new test interval value. After three seconds the UPS confirms the new setting by the prompt **Done!**
5. Press the **ESC** key until you return to the Default screen.

### Setting the Dust Filter Level

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > DUST FILTER LEVEL** by using the navigation keys and press the Enter key.
3. Select between values **3 MONTHS, 4 MONTHS, 5 MONTHS,** or **12 MONTHS.**
4. Press the Enter key to confirm the new dust filter interval. After three seconds the UPS confirms the new setting by the prompt **Done!**
5. Press the **ESC** key until you return to the Default screen.

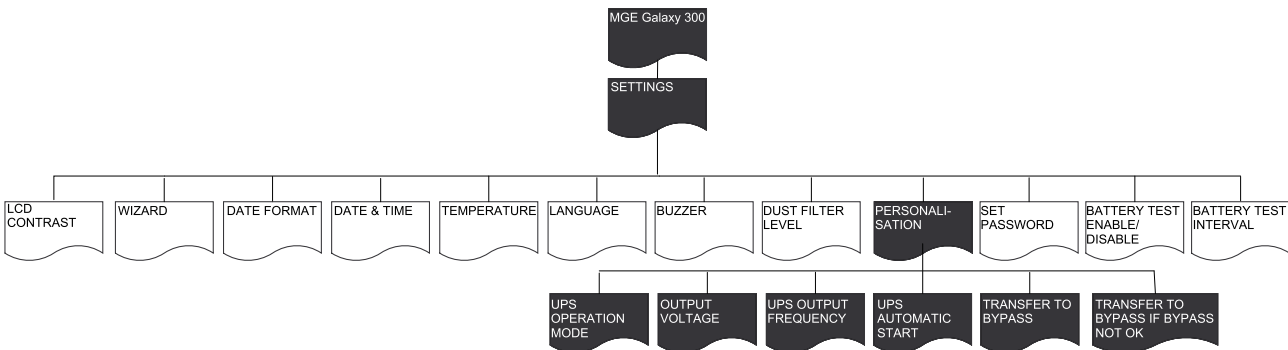
### Settings Requiring a Restart

**NOTE:** In the below menu tree you will find six personalization settings which can be changed by making a UPS restart and entering a password. Please read *General Information, page 38* before you start.

**NOTE:** In parallel system, the following six setting values should be exactly the same, otherwise the alarm

```
Parallel init error
```

will appear on both UPS units, and the inverters of both UPS units cannot be started.



### General Information

<b>NOTICE</b>
<ul style="list-style-type: none"> <li>• Only trained personnel following the required training course may undertake modifications to UPS system parameters.</li> <li>• All Personalization settings described below require a UPS restart and must not be performed if the UPS is up running and supports the load. Before starting the personalization sequence, the output breaker (<b>QOP</b>) must therefore be turned to the <b>OFF (opened)</b> position.</li> <li>• After the personalization sequence, the UPS will automatically turn into normal operation (after DC bus charging) if “UPS Automatic start” has been enabled under <b>SETTINGS &gt; PERSONALIZATION</b>. Otherwise, see the manual procedure under <i>Turn into Normal Operation from Static Bypass Operation, page 15</i>.</li> </ul> <p><b>Failure to follow these instructions can result in equipment damage.</b></p>

**NOTE:** You must have your password ready as you will be asked to enter it during the below procedures. If you are in doubt about how to enter or change your password, see *Entering the Password, page 37* and *Setting the Password, page 36*.

**NOTE:** When a setting value has been selected, the prompt **Selected!** will be displayed for three seconds where after the display will return to the option selected. Press the **ESC** key to return to the item menu and press the navigation keys to scroll to new setting items to make new settings.

**NOTE:** As mentioned above, it is possible to change several settings under the **PERSONALIZATION** menu without having to leave and reenter the menu via the **ESC** key. Before you go back to the **PERSONALIZATION** menu, the UPS will save all new settings by the prompts:

- **Save new settings?** (press the Enter key to confirm or the **ESC** key to return to the previous screen(s)).
- **Saving settings.....**
- **Setting success!**

**NOTE:** If the **Setting failed!** prompt appears, wait three seconds before the display returns to the **PERSONALIZATION** menu, and then try again.

## Setting the UPS Operation Mode

**NOTE:** Please be aware that this procedure does not describe how to turn from one operation mode into another when the UPS is up running. See *Operation Modes, page 12* instead.

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > PERSONALIZATION > UPS OPERATION MODE** by using the navigation keys and press the Enter key.
3. Select **Normal mode**, **Parallel mode**, or **Frequency converter mode** by using the navigation keys and press the Enter key.

## Setting the Output Voltage

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > PERSONALIZATION > OUTPUT VOLTAGE** by using the navigation keys and press the Enter key.
3. Select **220 V**, **230 V**, or **240 V** by using the navigation keys and press the Enter key.

## Setting the UPS Output Frequency

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > PERSONALIZATION > UPS OUTPUT FREQUENCY** by using the navigation keys and press the Enter key.
3. Select **50 Hz** or **60 Hz** by using the navigation keys and press the Enter key.

## Setting the UPS Automatic Start

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > PERSONALIZATION > UPS AUTOMATIC START** by using the navigation keys and press the Enter key.
3. Select **ENABLE** or **DISABLE** by using the navigation keys and press the Enter key.

## Setting the Transfer to Bypass

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > PERSONALIZATION > TRANSFER TO BYPASS** by using the navigation keys and press the Enter key.
3. Select **ENABLE** or **DISABLE** by using the navigation keys and press the Enter key.

## Setting the Allow Transfer with Break

1. From the Default screen, press the Enter key.
2. Go to **SETTINGS > PERSONALIZATION > ALLOW TRANSFER WITH BREAK** by using the navigation keys and press the Enter key.
3. Select **ENABLE** or **DISABLE** by using the navigation keys and press the Enter key.



# Maintenance

## Parts Replacement

### Determine if you need a Replacement Part

To determine if you need a replacement part, contact Schneider Electric and follow the procedure below so that the representative can assist you promptly:

1. In the event of an alarm condition, scroll through the alarm lists, record the information, and provide it to the representative.
2. Write down the serial number of the unit so that you will have it easily accessible when you contact Schneider Electric.
3. If possible, call Schneider Electric from a telephone that is within reach of the display so that you can gather and report additional information to the representative.
4. Be prepared to provide a detailed description of the problem. A representative will help you solve the problem over the telephone, if possible, or will assign a return material authorization (RMA) number to you. If a module is returned to Schneider Electric, this RMA number must be clearly printed on the outside of the package.
5. If the unit is within the warranty period and has been started up by Schneider Electric, repairs or replacements will be performed free of charge. If it is not within the warranty period, there will be a charge.
6. If the unit is covered by a Schneider Electric service contract, have the contract available to provide information to the representative.

### Network Management Card

**NOTE:** A network management card must only be replaced by qualified personnel.

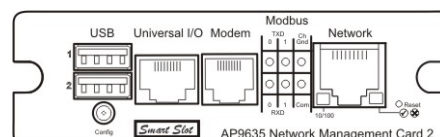
**NOTE:** The UPS is equipped with the default network management card AP9630CH.

The default network management card (AP9630CH) can be replaced with the network management card **AP9635CH** which gives access to additional features such as:

- Modbus RTU over RS485
- One universal input/output port, to which you can connect:
  - Temperature (AP9335T) or temperature/humidity sensors (AP9335TH)
  - Relay input/output connectors that support two input contacts and one output relay (using AP9810 Dry Contact I/O Accessory)
- Access to PowerChute, DATA CENTER Expert, RMS over Ethernet, TLS over Modem, Modbus monitoring, and 18 language variations

A network management card can be replaced with the UPS configuration up running.

#### AP9635CH



**NOTE:** Please refer to the replacement procedures in the manual shipped with the card. Please also refer to the UPS installation manual on how to connect the communication cables.

## Dust Filter

**NOTE:** The UPS is equipped with a dust filter, which must be changed at intervals depending on the dust level present.

**NOTE:** Do not reuse the filter by cleaning the dust filter.

Dust filter	Part Number	Description
Galaxy 300/300i dust filter for narrow cabinet (400 mm)	G3HTOPT005	Protects the UPS from dust
Galaxy 300/300i dust filter for wide cabinet (500 mm)	G3HTOPT006	Protects the UPS from dust

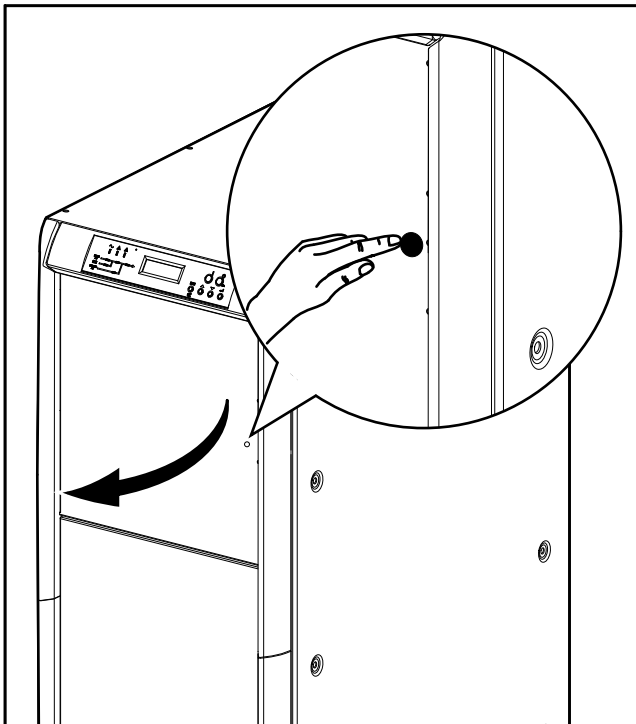
## Store the Dust Filter

Ambient Temperature	Relative Humidity
-10 °C to 60 °C (14 °F to 140 °F)	0%–90% Non-condensing

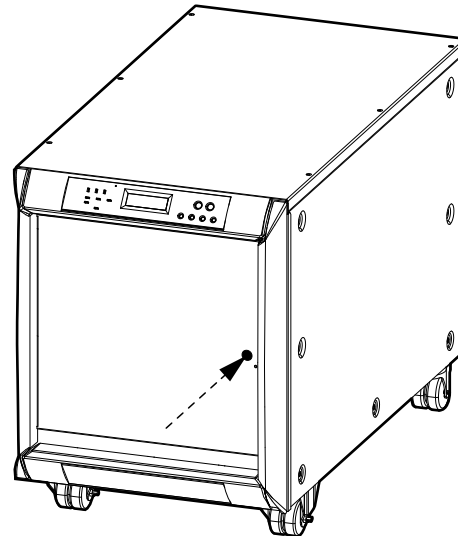
## Replace Dust Filter

1. Open the upper door at an 90° angle by pushing against the white dot on the right side of the door.

UPS with Internal Batteries

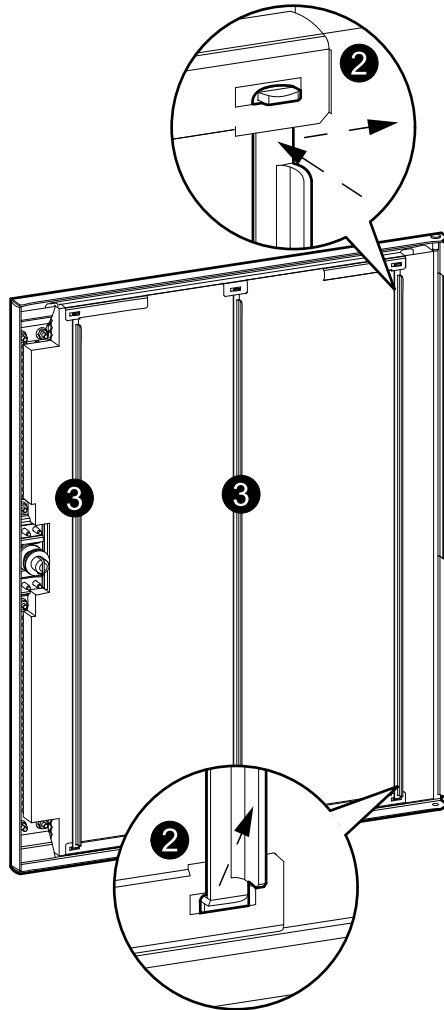


UPS without Internal Batteries

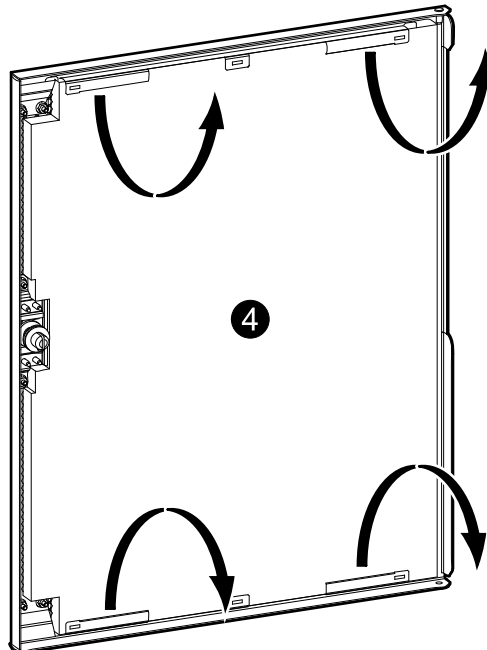


2. Press down on the top end of the sheet metal bar and push it to the right or left to release it from the rectangle hole in the clip bracket. Then remove the bottom end of the sheet metal bar by lifting it out of the rectangle hole.

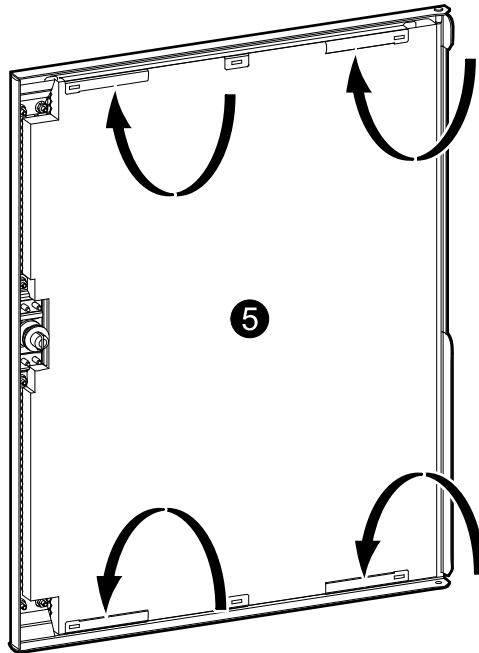
3. Remove the two remaining metal sheet bars in the same way.



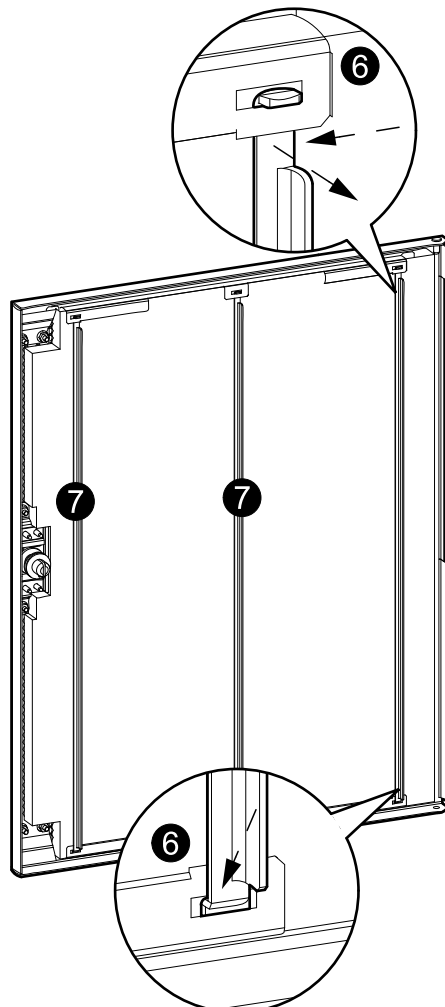
4. Release the old dust filter from the clip brackets and remove it from the door.



5. Insert the new dust filter into the rear of the door and fix it to the top and bottom clips.



6. Reinstall one of the sheet metal bars to protect the filter by inserting the bottom bent end of the bar into the corresponding rectangle hole in the bottom clip brackets. Then insert the top bent end of the sheet metal bar into the top clip bracket.
7. Reinstall the other two sheet metal bars (three in all) in the same way.



8. Reset the dust filter timer. See how in *Status and Alarm Messages, page 46* and *Setting the Dust Filter Level, page 38*.
9. Dispose of the used dust filter correctly.

# Troubleshooting

## Status and Alarm Messages

This section lists status and alarm messages from the display and the LEDs. The display messages are listed in alphabetical order, and a suggested corrective action is listed with each display alarm message to help you troubleshoot problems.

### Buzzer

**NOTE:** The buzzer turns on as soon as an alarm condition is detected. It can be turned off by pressing the **ESC** key from the Default screen. If a new alarm condition is detected, the buzzer turns on again. The buzzer turns OFF automatically when the last alarm has been cleared. The buzzer can be enabled or disabled under the Settings menu. See *Setting the Buzzer*, page 36.

### Alarm Pop-Ups

**NOTE:** An alarm automatically pops up on the display screen when an unexpected event or alarm condition occurs, unless the screen displays:

- an alarm in the alarm list
- a prompt as part of a command, password or settings process
- a viewing or settings prompt under the Personalization menu

An alarm is also prohibited from popping up for 30 seconds after one of the four navigation keys has been pressed in order to avoid disturbance when a menu is being viewed.

**NOTE:**

The screen displays the alarm in the following format:

**FAULT**

**Alarm description**

**Example**

```

FAULT
Load short circuit
    
```

**NOTE:** The display screen will show one alarm at a time. When several alarms occur at the same time, the latest alarm appears at the top of the list and can be deleted by pressing the ESC. If all alarms are deleted, the display returns to the screen displayed before the alarm(s) occurred. Deleted alarms can still be viewed. See *View Alarms*, page 31.

## Error Codes for UPS System Initialization

Display Message	Description	Corrective Action
1-1	HMIM board init error	Contact a Schneider Electric-certified service partner.
1-2	CAN communication loss	Contact a Schneider Electric-certified service partner.
1-3	Failure of technical level check	Contact a Schneider Electric-certified service partner.
1-4	UPS init error	Contact a Schneider Electric-certified service partner.

## Displayed Messages

Display Message	Description	Corrective Action
<b>AC bypass overload</b>	The AC bypass is overloaded and a transfer back to the inverter is prohibited	Remove part of the load.
<b>AC nor is in derating</b>	The AC normal voltage is low but within the derating range. The load support capability is derated based on the derating curve	Check the AC normal voltage.
<b>AC normal fault</b>	The AC normal voltage is abnormal (Voltage, frequency, phase order, mains neutral loss)	If the input breaker ( <b>QM1</b> ) is <b>ON (closed)</b> : Check the AC normal source. If ( <b>QM1</b> ) is <b>OFF (opened)</b> : Turn <b>QM1</b> to the <b>ON (closed)</b> position.
<b>AC normal voltage low</b>	The AC normal voltage is low but can supply the load	Check the AC normal source. If the AC normal source is working normal and the alarm still exists, Contact a Schneider Electric-certified service partner.
<b>Ambient temp high</b>	Ambient temperature is too high and exceeds the limitation	Try to reduce the ambient temperature with cooling.
<b>Battery breaker is open</b>	The battery breaker(s) ( <b>QB</b> ) or ( <b>QFB</b> ) is/are open	Check the status of the battery breakers.
<b>Batt chg incompatible</b>	Occurs in configurations with an internal charger installed and an external battery breaker ( <b>QFB</b> ) in the <b>ON (closed)</b> position <b>OR</b> in configurations with a CLA (long backup time charger) installed and the UPS battery breaker ( <b>QB</b> ) in the <b>ON (closed)</b> position	Check the charger type and battery breaker status.
<b>Battery deep discharge</b>	A battery deep discharge is in progress, and the inverter will shut down soon. The battery deep discharge is a settings parameter configured by the Schneider Electric-certified service partner and the customer	Reestablish the AC normal source.
<b>Battery fuse blown fault</b>	The battery fuse has blown	Contact a Schneider Electric-certified service partner.
<b>Battery not connected</b>	A negative or positive battery is not connected	Contact a Schneider Electric-certified service partner.
<b>Batt SCR short circuit</b>	The battery source (SCR) is short-circuited	Contact a Schneider Electric-certified service partner.
<b>Battery over voltage</b>	A positive or negative battery is above its voltage range	Contact a Schneider Electric-certified service partner.
<b>Battery test fault</b>	The battery test has failed due to an issue with the batteries	Contact a Schneider Electric-certified service partner.
<b>Battery temperature fault</b>	A battery (internal or external) is outside its temperature threshold or the sensor is destroyed	Contact a Schneider Electric-certified service partner.
<b>Breaker QM2 is open</b>	The static bypass breaker <b>QM2</b> is <b>OFF (open)</b> (except in frequency converter mode)	Turn <b>QM2</b> to the <b>ON (closed)</b> position.
<b>Breaker QOP is open</b>	The output breaker <b>QOP</b> is <b>OFF (open)</b>	Turn <b>QOP</b> to the <b>ON (closed)</b> position.
<b>Byp freq out of tolerance</b>	The AC bypass frequency is out of tolerance	Check the AC bypass frequency.

<b>Byp/Inv sync fault</b>	The inverter cannot synchronize with the AC bypass, and a break transfer will be performed	Check the AC bypass source. If the AC bypass is normal and the alarm still exists, Contact a Schneider Electric-certified service partner.
<b>Byp phase order fault</b>	The AC bypass phase order is wrong	Check the AC bypass cable connection to verify the phase order.
<b>Bypass SCR fault</b>	The bypass SCR or its driver is broken or the bypass temperature is outside its threshold	Contact a Schneider Electric-certified service partner.
<b>Byp volt out of tolerance</b>	The AC bypass voltage is out of tolerance	Check the AC bypass voltage.
<b>Call APC for startup</b>	The life cycle monitoring (LCM) module and Dust Filter Management (DFM) are not configured yet.	Contact a Schneider Electric-certified service partner to perform the configuration.
<b>Chg type setting conflict</b>	This message might appear for units with a CLA installed and where the charger type setting value is set to internal charger <b>OR</b> for units with an internal charger installed and where the charger type setting value is set to CLA	Contact a Schneider Electric-certified service partner.
<b>Charger fault</b>	<ul style="list-style-type: none"> <li>• The charger is outside the voltage range</li> <li>• The charger is outside the current range</li> <li>• The charger is outside the temperature threshold</li> <li>• A charger soft start alarm is present.</li> </ul> <p>If an internal charger is installed and the external battery breaker (<b>QFB</b>) is closed <b>OR</b> if a CLA (long backup time charger) is installed and the UPS battery breaker (<b>QB</b>) is closed this alarm might appear. An abnormal charger alarm has occurred (a regulation or charger hardware alarm)</p>	Check the battery breaker status or contact a Schneider Electric-certified service partner if the alarm is still present.
<b>Communication fault</b>	A CAN or McBSP internal communication alarm is present.	Contact a Schneider Electric-certified service partner.
<b>DC bus fault</b>	The DC bus is too high or the DC bus is too low	Contact a Schneider Electric-certified service partner.
<b>Dust filter expiring soon</b>	Dust Filter will be expired in 5 days	Replace the dust filter and launch <b>RESET DUST FILTER TIMER</b> command via the display under <b>CONTROLS &gt; RESET DUST FILTER TIMER</b> .
<b>Dust filter expired</b>	Dust Filter has already been expired	Replace the dust filter and launch <b>ACKNOWLEDGE DUST FILTER ALARM</b> command via the display under <b>CONTROLS &gt; ACKNOWLEDGE DUST FILTER ALARM</b> .
<b>End of backup time</b>	The battery backup time has run out	Reestablish the AC normal source and start the UPS again.
<b>End of battery life</b>	The battery has reached the end of its life time which is checked by a battery meter	Contact a Schneider Electric-certified service partner to replace the battery.
<b>Entry service test mode</b>	The entering of the service test mode (designed for the certified service partner) has been completed successfully	
<b>EPO active</b>	The EPO button is pressed down	Check the status of the EPO button.



<b>Fan fault</b>	A PFC fan or an inverter fan is inoperable	Contact a Schneider Electric-certified service partner.
<b>Inverter SCR fault</b>	The inverter SCR or its driver is broken	Contact a Schneider Electric-certified service partner.
<b>Inv thermal overload</b>	The inverter overload threshold has been exceeded	Remove part of the load and launch the <b>RESET ALARM</b> command under <b>CONTROLS &gt; RESET ALARM</b> .
<b>Inv current limitation</b>	The UPS transfers between the inverter and the bypass four times due to a momentary current limitation	Check the load status and launch the <b>RESET ALARM</b> command via the display under <b>CONTROLS &gt; RESET ALARM</b> .
<b>Inverter fault</b>	<ul style="list-style-type: none"> <li>• The inverter fuse is blown</li> <li>• The inverter SCR is defect</li> <li>• The inverter voltage is out of tolerance</li> <li>• The inverter IGBT (insulated gate bipolar transistor) is outside the temperature threshold</li> <li>• The inverter choke is outside the temperature threshold</li> <li>• A short circuit in the inverter capacitor has occurred</li> <li>• The inverter output voltage wave is not sinusoidal or the voltage value is out of tolerance</li> </ul>	Contact a Schneider Electric-certified service partner.
<b>Inverter overload</b>	The inverter is overloaded according to the overload curve	Remove part of the load.
<b>Load short circuit</b>	The output has short-circuited	Check the output and load connection, then launch the <b>RESET ALARM</b> command via the display under <b>CONTROLS &gt; RESET ALARM</b> .
<b>Neutral loss fault</b>	The AC normal neutral cable is lost	Power <b>OFF</b> the system and check the cable connection.
<b>Nor freq out of tolerance</b>	The AC normal frequency is out of tolerance	Check the AC normal frequency.
<b>Nor phase order fault</b>	The AC normal phase order is wrong	Check the AC normal cable connection to verify the phase order.
<b>Nor volt out of tolerance</b>	The AC normal voltage is out of tolerance	Check the AC normal voltage.
<b>Overload in batt mode</b>	The UPS is overloaded in a state where the batteries supply the load and the UPS will transfer to bypass operation mode	Remove part of the load and reestablish the AC normal source.
<b>Parallel init error</b>	Equipment number, firmware revision, or core settings conflict between two parallel UPSs	Contact a Schneider Electric-certified service partner.
<b>Parallel system fault</b>	The other UPS is inoperable	Contact a Schneider Electric-certified service partner.
<b>Parallel UPS detected</b>	Parallel UPS has been detected in a single system	Unplug parallel cable if a single system is desired, otherwise contact a Schneider Electric-certified service partner to install a parallel system.
<b>Parallel UPS lost</b>	Parallel cable is disconnected, or communication between two UPSs failed	<p>1: Reconnect parallel cable.</p> <p>2: Contact a Schneider Electric-certified service partner if the alarm still exists.</p>

<b>Personalization fault</b>	A personalization error has occurred	Contact a Schneider Electric-certified service partner.
<b>PFC fault</b>	<ul style="list-style-type: none"> <li>• A PFC fuse has blown</li> <li>• A PFC soft-start failure has occurred</li> <li>• The input SCR is outside its temperature threshold</li> <li>• The PFC current between the main board and the auxiliary board is unbalanced (only for 30, 40 kVA UPS units)</li> <li>• The PFC IGBT (insulated gate bipolar transistor) is outside its temperature threshold</li> <li>• A PFC auxiliary board fuse has blown (only for 30, 40 kVA)</li> </ul>	Contact a Schneider Electric-certified service partner.
<b>PFC overload</b>	The PFC is overloaded according to the overload curve	Remove part of the load.
<b>PFC thermal overload</b>	The PFC overload curve is outside its threshold	Remove part of the load and launch the <b>RESET ALARM</b> command via the display under <b>CONTROLS &gt; RESET ALARM</b> .
<b>Power supply 2 fault</b>	An auxiliary power supply fault has occurred	Contact a Schneider Electric-certified service partner.
<b>Pre end of backup time</b>	The battery backup time runs out soon	Reestablish the AC normal source to protect the load.
<b>Redundancy lost</b>	Redundancy is lost in a parallel system	<p>1: Start inverters on both UPSs if they have not started.</p> <p>2: Check if there are any alarms present and contact a Schneider Electric-certified service partner if necessary.</p> <p>3: Check if the system load is under 105%.</p>
<b>Setting fault</b>	Setting session failure	Perform the setting session again and launch the reset alarm command under <b>CONTROLS &gt; RESET ALARM</b> . If the alarm is still present, contact a Schneider Electric-certified service partner.
<b>Single output enabled</b>	One UPS has been isolated, and the other UPS is enabled to output as a single system	Contact a Schneider Electric-certified service partner.
<b>Sync source fault</b>	The synchronization source (AC bypass) is out of tolerance and the inverter is unable to synchronize with it	<p>Check if <b>QOP</b> is closed.</p> <p>Check the AC bypass source. If the AC bypass source is normal and the alarm still exists, contact a Schneider Electric-certified service partner.</p>
<b>Technical check needed</b>	Technical check is recommended	Contact a Schneider Electric-certified service partner.
<b>Transfer to byp denied</b>	A transfer to AC bypass is forbidden	Transferring to bypass is a personalization setting which can be modified via the display under <b>PERSONALIZATION &gt; TRANSFER TO BYPASS</b> .

<b>Transformer temp high</b>	Transformer temperature is too high and exceeds the limitation.	Contact a Schneider Electric-certified service partner.
<b>UPS not calibrated</b>	Some UPS acquisition channels are not calibrated	Contact a Schneider Electric-certified service partner.
<b>Volt detected on bypass</b>	Voltage is detected on AC bypass (maybe due to turning QM2 or Q3BP into closed position) in frequency converter mode	1: Turn <b>QM2</b> or <b>Q3BP</b> into open position if they have been turned into closed position before. 2: Contact a Schneider Electric-certified service partner if the alarm is still present.
<b>Warranty expiring soon</b>	Legal warranty will expire soon	Contact a Schneider Electric-certified service partner.
<b>Wrong batt +/- connect</b>	The battery connection is inversed	Check the battery cable connection.

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As standards, specifications, and design change from time to time,  
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