

TECHNICAL BULLETIN

TB # 01123.1

DATE: March 4th, 2019

PRODUCT: BES3 electrical system

SUBJECT: Recovery after a power failure

DESCRIPTION: What follows are details of how the system should recover from a power failure. This will help when diagnosing battery and power supply issues.

DEFINITIONS:

Type A power failure; a power failure where the battery voltage under load does not drop below the shutoff voltage, which is approximately 21vdc.

Type B power failure; a power failure where the Battery voltage under load does drop below the shutoff voltage, which is approximately 21vdc.

EXPLANATION:

The low voltage shutoff feature is designed to turn off the system before the system voltage is too low for the elevator to operate properly.

A BES3 system with newer batteries and no door operators can operate in standby during a power failure for over 20 hours before the system voltage drops below the shutoff voltage which is approximately 21vdc. Older batteries with faulty cells, batteries that are not fully charged, undersized batteries, poor connections and higher standby current draw will all reduce the amount of time that a system can operate in standby without the system voltage dropping below the shutoff voltage.

If there is a type A power failure, when the power comes back on the system will be able to return to service without automatically restarting or being restarted by the customer. Within 30 minutes or less the system voltage will be sufficient to run the elevator without issue.

If there is a type B power failure, the batteries will need to charge for up to 30 minutes before the system will attempt to restart itself and go back into normal operation. If after 30 minutes the batteries are still too weak, the system will shut down and a service call will be required to look at the batteries and the charger to determine which is at fault.

Call CE technical support if you have any questions call us: Toll-free at 1-866-209-3421