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## Firmware update release 1.2.3 for SSC600 1.0 Feature Pack 2

### Scope

Firmware update release 1.2.3 is for the following product:

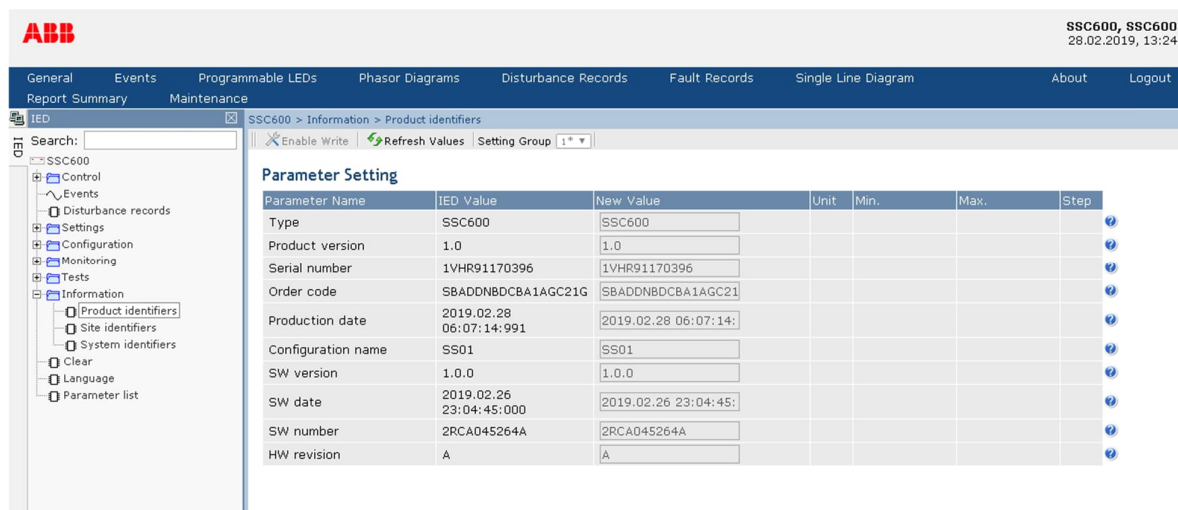
- SSC600 1.0 Feature Pack 2

To verify that the firmware update applies to the product version, ensure that the last two characters of the order code on the human-machine interface (WHMI) match the corresponding characters of the order code in Fig. 1.

SBAxxxxxxxxxxxxx3G  


Fig 1. Order code of the SSC600 protection relays

To identify the current firmware revision of the SSC600, please refer to Fig. 2.



The screenshot shows the ABB WHMI interface with the 'Parameter Setting' table for the SSC600 product. The table lists various parameters and their current values.

Parameter Name	IED Value	New Value	Unit	Min.	Max.	Step
Type	SSC600	SSC600				
Product version	1.0	1.0				
Serial number	1VHR91170396	1VHR91170396				
Order code	SBADDNBDCBA1AGC21G	SBADDNBDCBA1AGC21				
Production date	2019.02.28 06:07:14;991	2019.02.28 06:07:14;				
Configuration name	SS01	SS01				
SW version	1.0.0	1.0.0				
SW date	2019.02.26 23:04:45:000	2019.02.26 23:04:45;				
SW number	2RCA045264A	2RCA045264A				
HW revision	A	A				

Fig. 2 Current firmware revision of the SSC600 product

## Implemented usability improvements

The firmware update release includes usability improvement but introduces no new functionality. Firmware updates are cumulative.

The following improvement has been implemented:<sup>1</sup>

### Firmware update release 1.2.3:

#### Protection

- Improve robustness of the application when multiple SPCGAPC instances are in use.
- Added LEDPTRC support for ARCSARC, DSTPDIS and BBPBDF.

#### Performance

- Introduced support for a new communication card variant.

#### Communication

- Improved robustness in a scenario where misbehaving MMS client caused connection to fail.
- Improved robustness in a scenario where misbehaving IEC 60870-5-104 client caused unwanted behaviour in SSC600.
- Improved robustness of firmware update interface
- Improved robustness in case when PRP was used with combined process bus and station bus. Earlier it was possibility for PTP errors in big systems.

#### Engineering

- Avoided unnecessary reboot cycle when writing IEC 60870-5-104 configuration on big systems.

#### Monitoring

- Corrected Ethernet port link and activity statuses in the monitoring menu.

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<sup>1</sup> The relay firmware update may also include some minor usability improvements not listed in this note.

## **Firmware update release 1.2.2:**

### **Protection**

- BBPBDF: Increased stability in a situation where inaccuracy of measurement could cause unintended OPEN\_CT activation during through fault.
- PHLPTOC: Low overshoot with *Operating curve type* values “Programmable” and “UK rectifier” might cause too fast operation.

### **Security**

- Updated OpenSSL to latest version.

## **Update procedure**

Firmware updates represent an integral part of ABB's life cycle management of distribution protection and control relays. The updates ensure optimized usability throughout the relay's entire life cycle by offering the latest improvements. The ideal time for a firmware update would be during periodical testing or a maintenance break.

All SSC600 1.0 Feature Pack 2 (3G) product deliveries dispatched later than January 26, 2024 include the stated relay firmware update 1.2.3. Process of updating the latest firmware to the SSC600 can be found in the Engineering Manual, Chapter 4.6 “IED Update”.

Please note that ABB will not be liable for any direct or indirect costs related to the firmware update procedure. The update procedure shall be performed at the sole responsibility of the possessor of the devices.