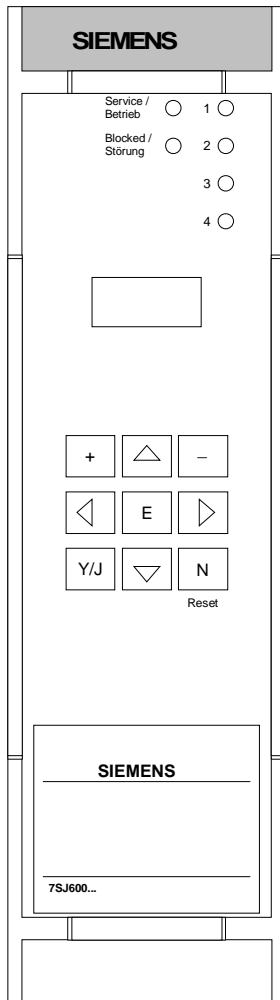


Service Information 7SJ600 and 7SJ601 Firmware Update to V3.21 (EPROM Exchange)



Firmware version V3.21 for the numerical overcurrent and overload relay 7SJ600 is available now.

The update is only possible for devices of hardware version /BB and firmware version V0.10/1.00/2.XX.

This service information describes the upgrade by exchanging EPROMs / FLASHPROMs on the LES processor card.

The update set can be ordered at:

SIEMENS AG
PTD PA PTL1
Wernerwerkdamm 5
13623 Berlin
Germany

Order numbers for update sets 7SJ600 and 7SJ601:

Device	Firmware	EPROM-Satz
7SJ600	V3.21	C73207-A309-D144-2
7SJ601	V3.21	C73207-A309-D163-2

Please specify in your order:

- Number of devices
- MLFB and serial number
- Previous firmware version
- Required firmware version (V3.21)

Orders via AGAVE, LABIV, SAP etc.


Order forms to UMWB.

The firmware exchange may only be carried out by qualified persons.

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				Name	Zachariae		
				Tested			
				Stand.			
				(readme_EPROM)			
1C	firmware	31.07.03	Zi	SIEMENS AG			Page
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If the exchange is carried out on site, the following procedure is recommended

1. Observe the ESD guidelines.

	<p>ACHTUNG Nur geschultes Personal darf die Verpackung öffnen Elektrostatisch gefährdete Bauelemente (EGB)</p> <p>ATTENTION Observe Precautions for Handling Electrostatic Sensitive Devices</p>	<p>WARNING When carrying out modifications locally, it is absolutely necessary to observe the guidelines for handling electrostatic sensitive devices (ESD).</p>
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2. After the firmware exchange, the protection device will revert to the original factory settings.
3. Before exchanging the firmware, read out or write down the settings and marshallings of the protection device by using a laptop/PC with DIGSI or the operator panel.
4. Switch off the device (e.g. at the front-side slide-switch).
5. Remove the plastic covers at the top and at the bottom of the front face of the device. Loosen the two slotted screws underneath.
6. Pull the unit out of the housing, and put it on the ESD base (p-c board facing downwards).
7. Loosen the Aluminium frame by pulling it gently from the five snap-in clips (see fig. 1 on page 6).
8. By pressing the two plastic snap-in levers (see fig. 1, page 6) you can remove the Aluminium frame from the front face of the device.
9. Carefully remove the two plugs of the cable joints (coming from the front face) from the p-c board (sockets X2 and X13).
10. Turn the unit around (p-c board facing upwards) and remove the front face of the device from the p-c board by pressing the two remaining snap-in levers.

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11. Turn the unit back (p-c board facing downwards), that the connector faces to the left.
12. The EPROM, which has to be changed, is now located in the lower right corner of the p-c board (position see fig. 2 on page 7).
13. Extract the EPROM (position see fig. 1 on page 7) using the appropriate PLCC extracting tool. Carefully insert the new EPROM/FLASHEPROM, in accordance with the below table, into the base on the processor board LES. Make sure that the IC-identifier corresponds to the base identifier.

7SJ600/1 V3.21
P73506-A1-A148-2

WARNING!

Improper handling of the PLCC extracting tools or incorrect insertion of the EPROM may cause irreparable damage to the EPROM base.

14. Replace the p-c board back in the guides of the front face until the two levers are snapping in the drilled holes of the p-c board.
15. Move the Aluminium frame back in the guides of the front face until the two levers are snapping in the drilled holes of the frame.
16. Fix the Aluminium frame by pressing it gently on the five snap-in clips (see fig. 1 on page 6).
17. Finally push the unit back into its housing and fix it with the two slotted screws.
18. Switch on the device.

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				and Distribution		
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19a. Possibility 1: For the Upgrade of V0.10/1.00 --> V3.21:

Press key	Display german	Display english	Remark
	FEHLER MONITOR	ERROR MONITOR	
⇒	AXX XX.XX.XX	AXX XX.XX.XX	1 x arrow key to the right
↓↓↓↓	URANLAUF	orgSTART	4 x arrow key downwards
E	URANLAUF START ?	launch orgSTART ?	
Y/J	URANLAUF LAEUFT	orgSTART executed	device is carrying out an ORIGINAL START
	7SJ600 V3.21	7SJ600 V3.21	

19b. Possibility 2: For the Upgrade of V2.XX --> V3.21:

Press key	Display german	Display english	Remark
	7SJ600 VX.XX	7SJ600 VX.XX	oberste Bedienebene Firmwareversion
↓↓↓	ZUSATZ FKT.	ADDITION FUNCTION	3 x arrow key downwards
⇒	DATUM UHRZEIT	TIME SETTING	1 x arrow key to the right
↓↓	MONITOR	MONITOR	2 x arrow key downwards
E	CW:	CW:	
- + - E	CW OK_	CW OK_	
⇒⇒	AXX XX.XX.XX	AXX XX.XX.XX	2 x arrow key to the right
↓↓↓↓	URANLAUF	orgSTART	4 x arrow key downwards
E	URANLAUF START ?	launch orgSTART ?	
Y/J	URANLAUF LAEUFT	orgSTART executed	device is carrying out an ORIGINAL START
	7SJ600 V3.21	7SJ600 V3.21	

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				Stand.			
				(readme_EPROM)			
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1A	first edition	15.11.00	ZC				
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20. After a successful start, the green LED is switched on and indicates readiness of service. The display shows the MLFB code of the device indicating the newly installed firmware version. The firmware update is thus completed. The device settings correspond to the original factory settings.
21. The device is now ready for normal commissioning (input of the user-specific parameters etc.).
22. The replaced EPROM must be properly disposed of.
23. For internal statistics, SIEMENS should be informed about the changing of the firmware. Please provide MLFB and serial number to the following address:

SIEMENS AG
 PTD PA PTL1
 Wernerwerkdammm 5
 13623 Berlin
 Germany

In written inquiries, please always specify the serial number and the complete MLFB code of the device/component in question.

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1A	first edition	15.11.00	ZC	Power Transmission and Distribution			
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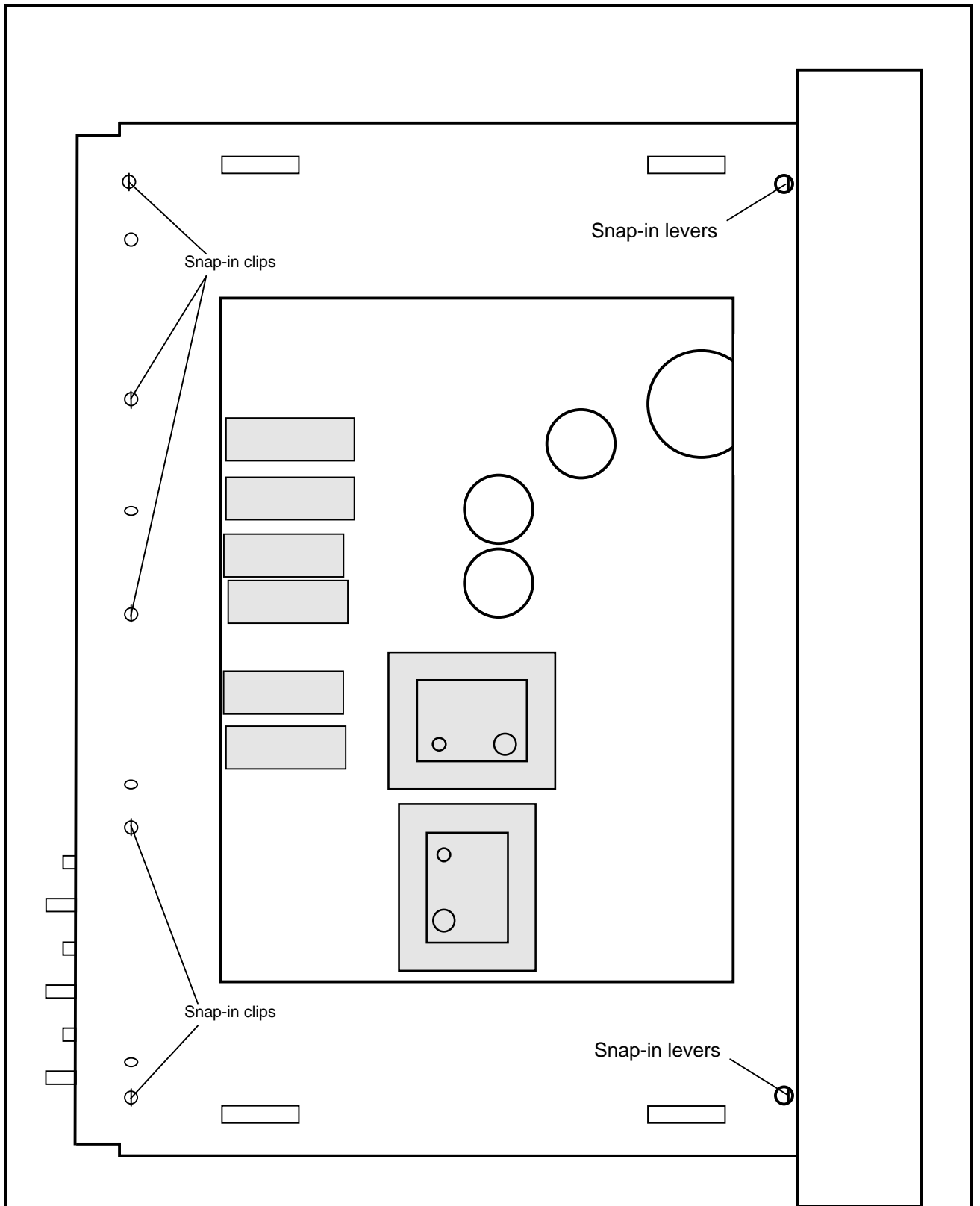


Fig. 1: 7SJ600/1, unit with Aluminium frame, positions of the snap-in clips and snap-in levers

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1A	first edition	15.11.00	ZC				
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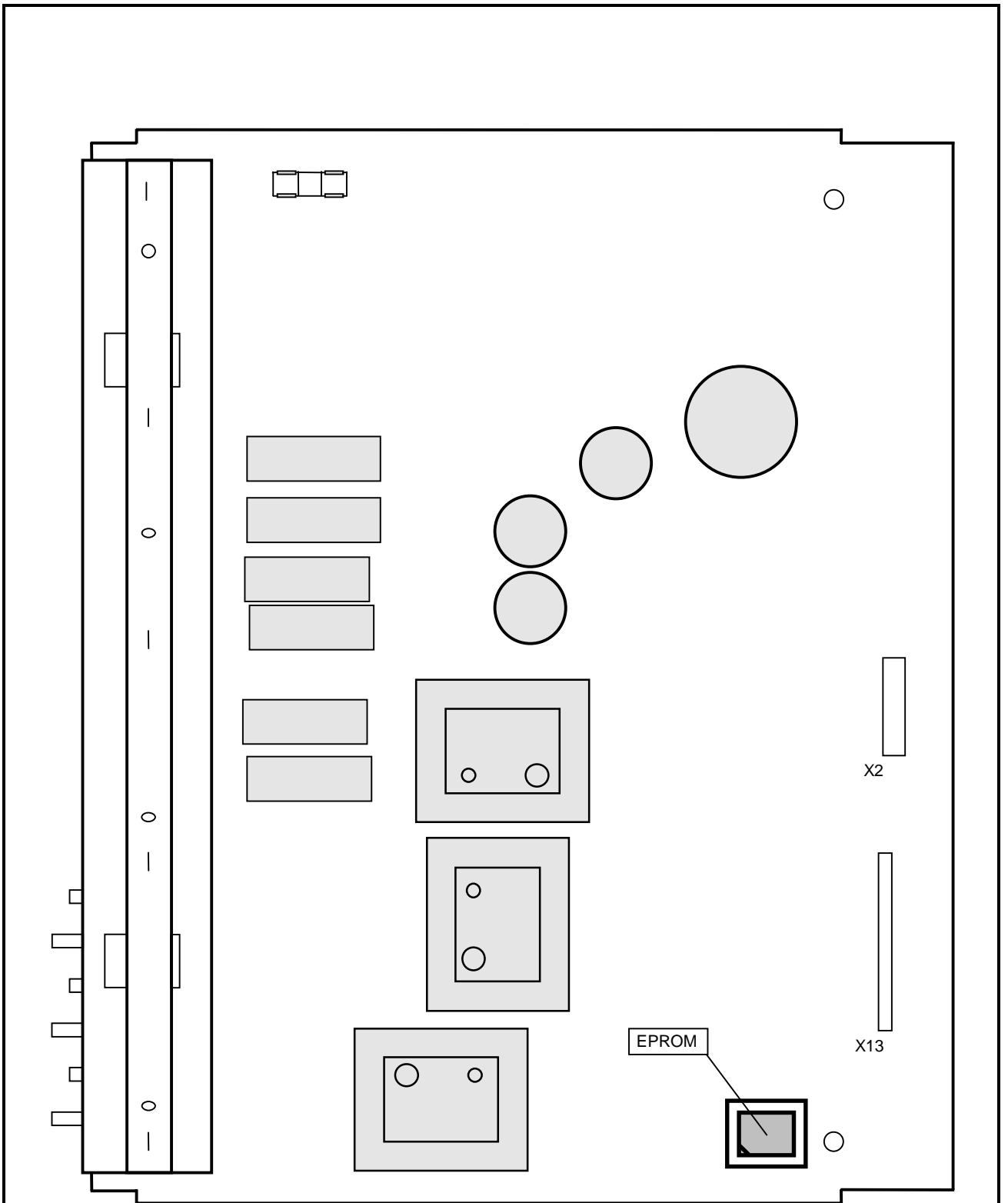


Fig. 2: 7SJ600/1, LES - p-c board, component side and position of EPROM

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WARNING

Dangerous voltages may occur in devices and modules during operation depending on the design and application. Incorrect use of these devices can therefore result in severe personal injury or substantial damage to property.

Only suitably qualified staff should work on this device.

Correct and safe operation of this device is dependent on proper handling, installation, operation and maintenance.

Should you require further information, or should particular problems occur which are not handled in sufficient depth in the Instructions, help can be requested through your local Siemens Office or representative.

QUALIFIED PERSON

A "qualified person" is one who is familiar with the installation, construction and operation of the device and who has the appropriate qualifications, e.g.

- is trained and authorized to operate and maintain devices/systems in accordance with established safety practices for devices with electrical circuits.
- is trained in the proper care and use of protective equipment in accordance with established safety practices.
- is trained in first aid.



WARNUNG

Beim Betrieb können in Geräten und Baugruppen je nach Ausführung und Anwendung gefährliche elektrische Spannungen auftreten; Unsachgemäßer Umgang mit diesen Geräten kann deshalb zu schweren Körperverletzungen oder erheblichen Sachschäden führen.

Nur entsprechend qualifiziertes Personal sollte an diesem Gerät arbeiten.

Der einwandfreie und sichere Betrieb dieses Gerätes setzt sachgemäßen Transport, fachgerechte Lagerung, Aufstellung und Montage sowie sorgfältige Bedienung und Instandhaltung voraus.

Sollten Sie weitere Informationen wünschen, oder sollten besondere Probleme auftreten, die in der Anleitung nicht ausführlich genug behandelt werden, können Sie die erforderliche Auskunft über die örtliche Siemens-Niederlassung anfordern.

QUALIFIZIERTES PERSONAL

sind Personen, die mit Aufstellung, Montage, Inbetriebsetzung und Betrieb des Produktes vertraut sind und über entsprechende Qualifikationen verfügen, wie z.B.:

- Ausbildung oder Unterweisung bzw. Berechtigung Geräte/Systeme gemäß den Standards der Sicherheitstechnik für elektrische Stromkreise zu betreiben und zu warten.
- Ausbildung oder Unterweisung gemäß den Standards der Sicherheitstechnik in Pflege und Gebrauch angemessener Sicherheitsausrüstung
- Schulung in Erster Hilfe

Subject to change without prior notice !

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