

## DESIGO™ PX PXM20, PXM20-E: Download with adapter PXA-C4 User's guide

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# 1 About this document

## 1.1 Revision history

Version	Date	Changes	Section	Pages
_02	2013-06-11	Connecting the power supply of PXM20-E	3.2	7
_01	12.08.2009	First edition		

## 1.2 Reference documents

Ref.	Document title	Type of document	Document No.
[1]	Operating unit PXM20	Data sheet	CA1N9231
[2]	Operating unit PXM20-E	Data sheet	CM1N9234

## 1.3 Before you start

### 1.3.1 Copyright

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This document may be duplicated and distributed only with the express permission of Siemens, and may be passed only to authorized persons or companies with the required technical knowledge.

### 1.3.2 Quality assurance

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These documents were prepared with great care.

- The contents of all documents are checked at regular intervals.
- Any corrections necessary are included in subsequent versions.
- Documents are automatically amended as a consequence of modifications and corrections to the products described.

Please make sure that you are aware of the latest document revision date.

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### 1.3.3 Document use / request to the reader

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## 1.4 Purpose of this document

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In the case of the PXC64-U und PXC128-U, the operating units can be plugged directly into the automation station. This is not the case with the new types PXC100 and PXC200. Therefore, Siemens Building Technologies offers the PXA-C4 adapter.

This document describes, for the PXM20 and PXM20-E operating units,

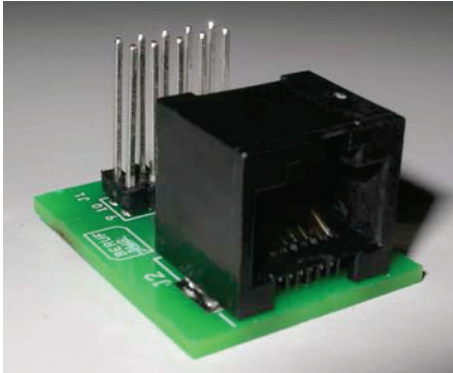
- the Download of the firmware loader and the firmware over the RS232 interface using the PXA-C4 adapter
- the different possibilities of powering the operating unit with AC / DC 24 V.

## 1.5 Target readers

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Service personnel

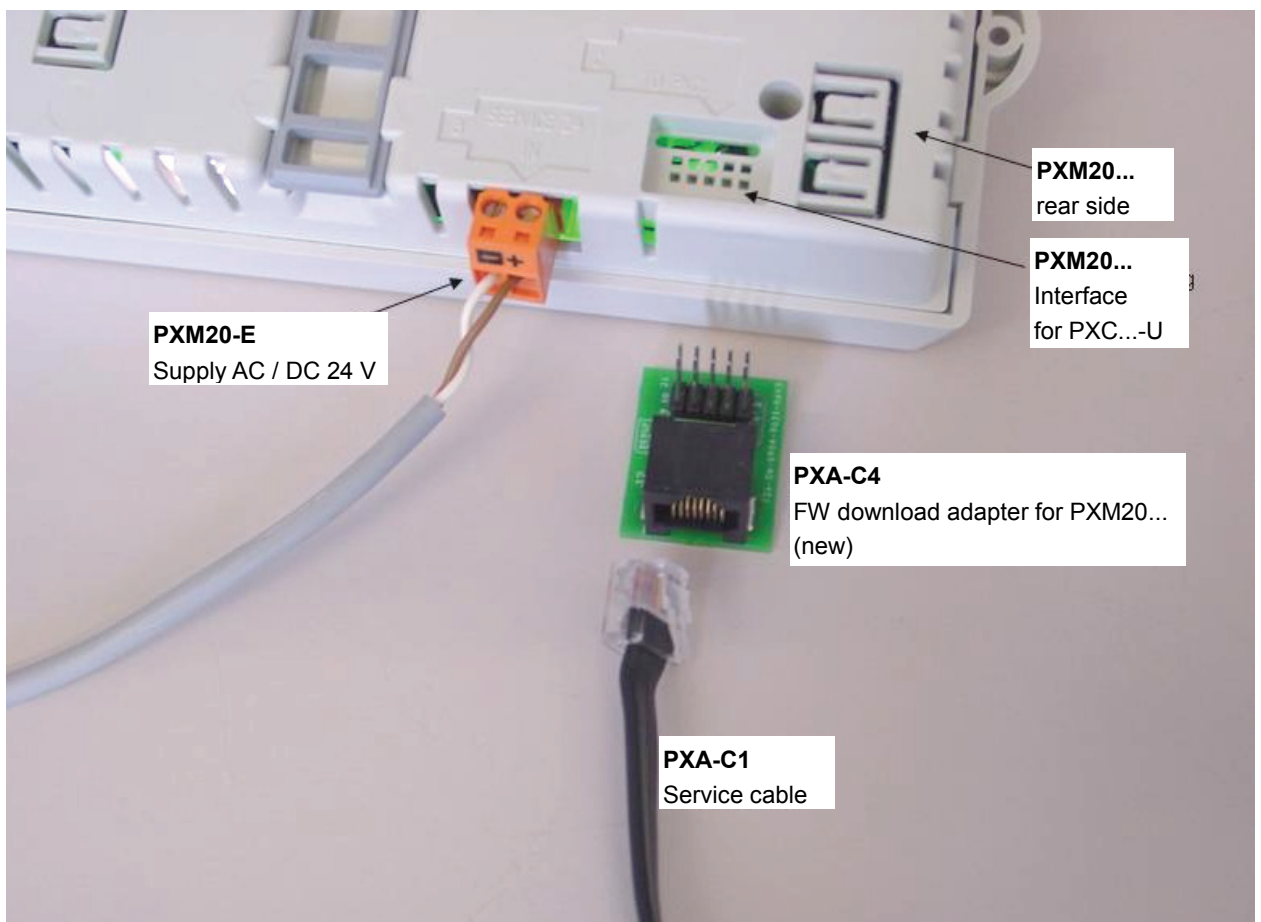
## 2 Adapter PXA-C4 for the download of the firmware loader and the firmware



Designation	FW download adapter for PXM20, PXM20-E
ASN	PXA-C4
SSN	S55372-C108

The PXA-C4 adapter allows you to download the firmware loader and the firmware into at PXM20-E or PXM20 operator unit. It is required because the new modular PXC100/200 automation station do not support the direct plugging of PXM20 / PXM20-E.

The download operation from the PC (firmware loader and firmware) requires that the PXM20-E / PXM20 operating unit is powered with AC/DC 24 V.



**Caution!**

PXM20-E: Observe the polarity of the supply (  = GND)

# 3 Download into a PXM20-E

## 3.1 Powering the PXM20-E

The supply is done with a separate cable

- either via the supply terminals from a supply unit AC / DC 24 V
- or via a POE supply via an Ethernet cable and the RJ45 interface for Ethernet.

### Variant1: Supply via supply terminals



Example 1: Transformer AC 24 V



Example 2: Supply unit DC24 V

### Variant 2: Supply via Ethernet cable

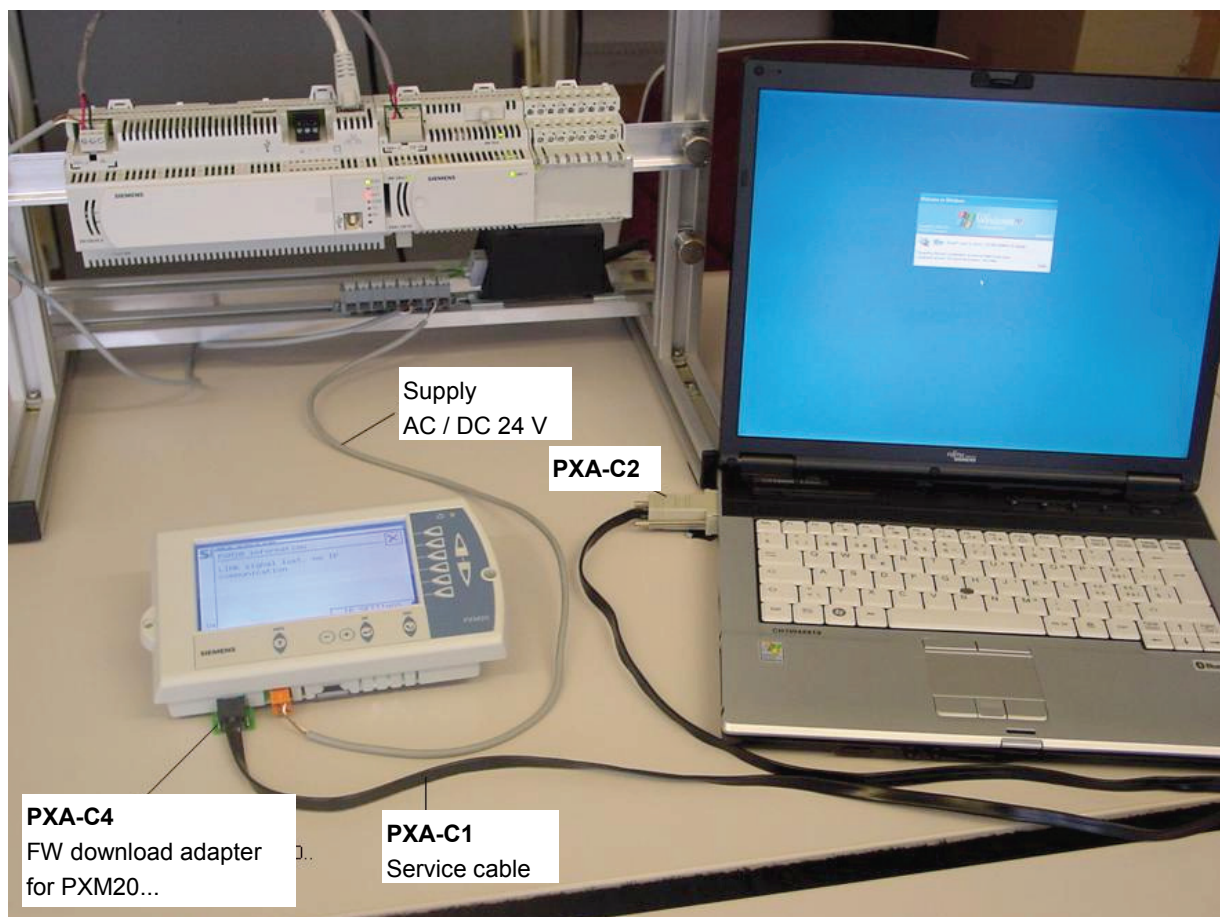


Example 1:  
Power over Ethernet Injector  
Compatibility: IEEE802.3af



Example 2:  
Power over Ethernet Switch  
Compatibility: IEEE802.3af

### 3.2 Download via PXA-C4, PXA-C2, and service cable PXA-C1



#### Caution!

1. Connect the AC / DC 24 V supply  
**Observe the polarity (  $\ominus$  = GND)**
2. Plug the PXA-C4 FW download adapter into the rear side of the PXM20-E
3. Plug the PXA-C2 adapter into the tool PC
4. Connect the PXM20-E and the tool PC by means of the PXA-C1 service cable
5. Perform the download (firmware and associated firmware loader).





## 4 Download into a PXM20

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The download of the firmware loader and the firmware into the PXM20 is done

- either via the RJ45 interface for the service tool
- or via the PXA-C4 adapter and a PXA-C1 service cable (as for the PXM20-E) following the description in section 3.2.

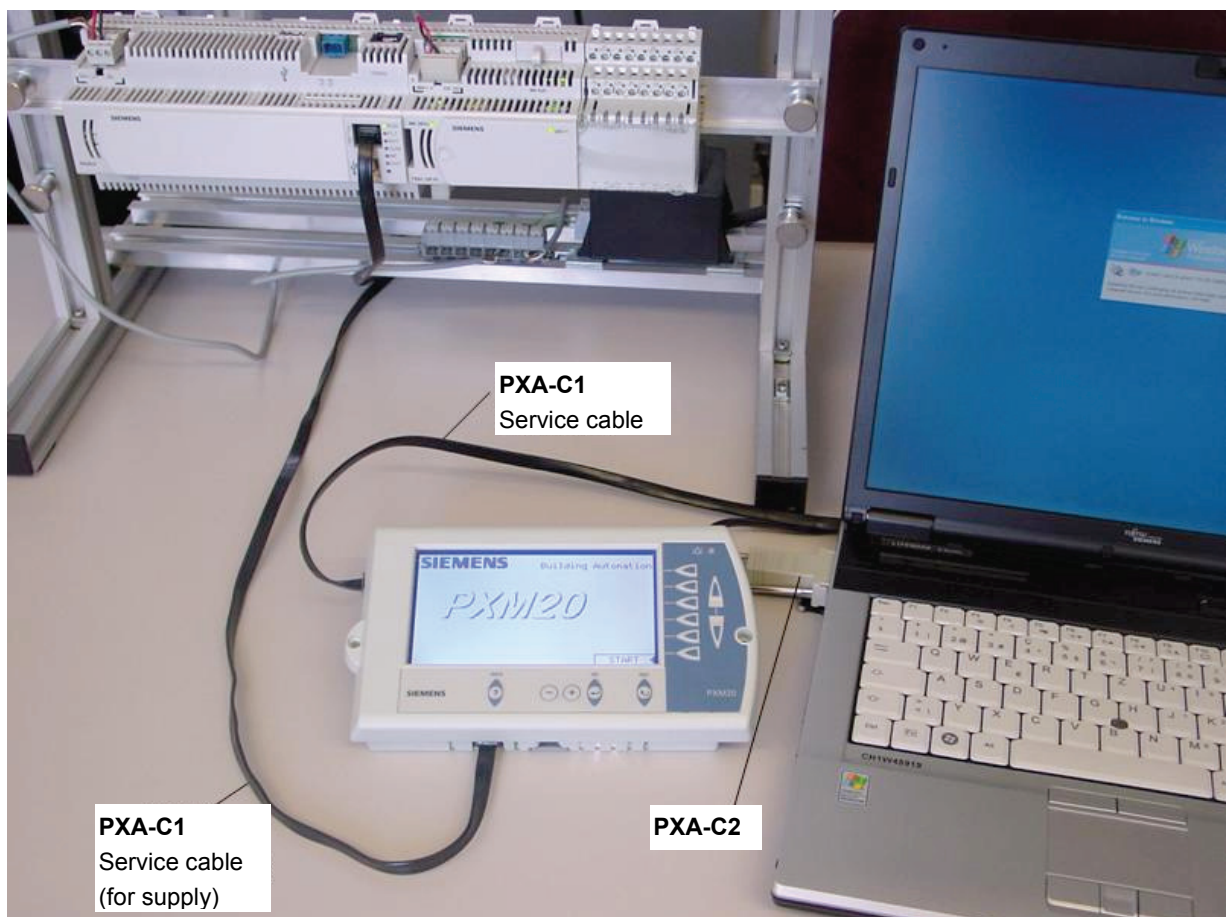
### 4.1 Powering the PXM20

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The supply of the PXM20 is done with a separate PXA-C1 service cable via the RJ45 interface from any PXC... automation station.

### 4.2 Download via PXA-C2 and RJ45 interface

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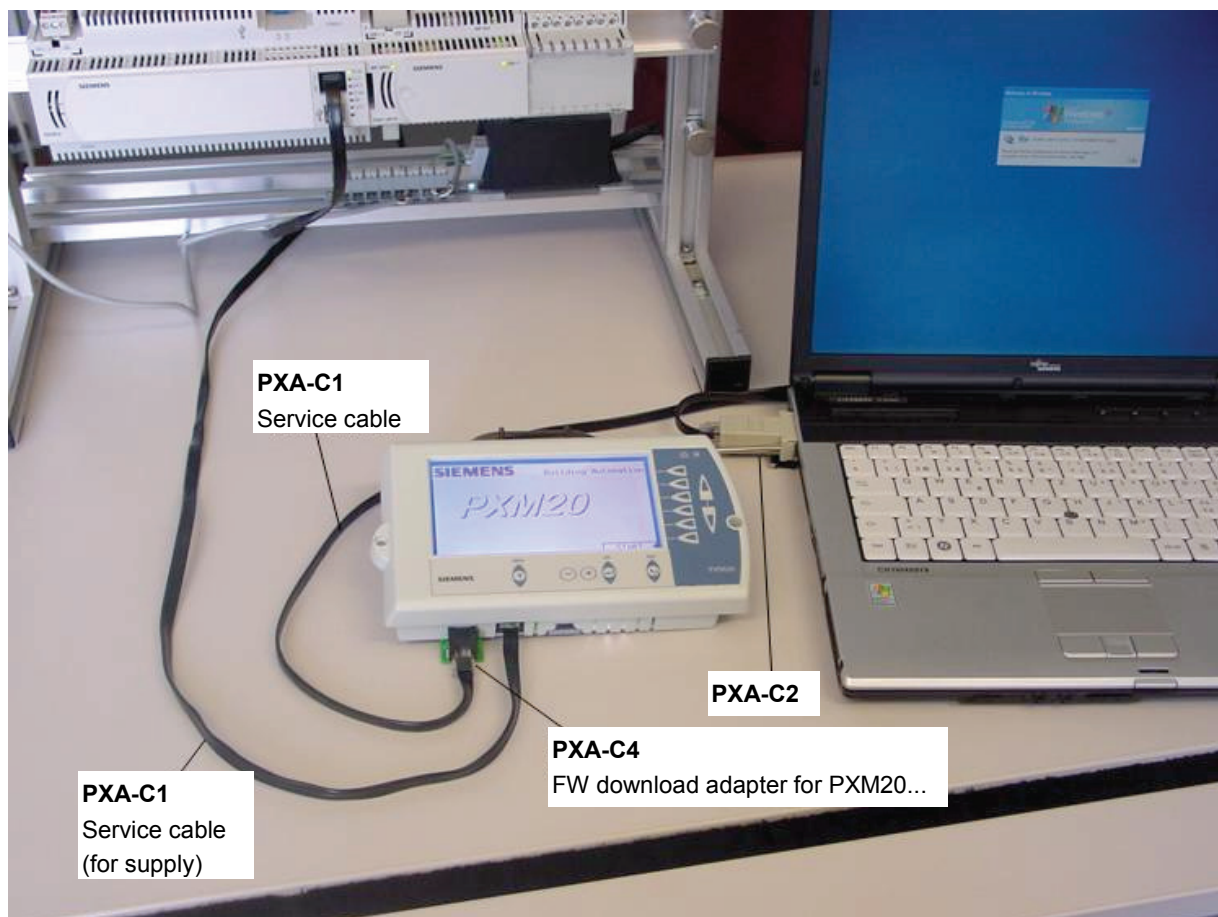


1. Plug the PXA-C2 adapter into the tool PC
2. Connect the PXM20 and the tool PC by means of a PXA-C1 service cable
3. Perform the download (firmware and associated firmware loader).



## 4.3 Download via PXA-C4 and PXA-C1 service cable

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As for PXM20-E:

1. Plug the PXA-C4 FW download adapter into the rear side of the PXM20
2. Plug the PXA-C2 adapter into the tool PC
3. Connect the PXM20 and the tool PC by means of the PXA-C1 service cable
4. Perform the download (firmware and associated firmware loader).

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