PowerXL

DE1, DC1, DB1, DA1, Rapid Link 5

Update DX-COM-Stick-3

Level 2	1 – Fundamental – No previous experience necessary 2 – Basic – Basic knowledge recommended 3 – Advanced – Reasonable knowledge required 4 – Expert – Good experience recommended

Powering Business Worldwide

Break-Down Service

Please call your local representative:

Eaton.com/us/en-us/services.html

Eaton.com/us/en-us/support.html

Hotline After Sales Service:

+49 (0) 1805 223822 (de, en)

AfterSalesEGBonn@eaton.com

Original Application Note is the German version of this document.

All non-German language versions of this document are translations of the original application note.

1. Edition 2019, publication date 02/2019

2. Edition 2021, publication date 02/2021

Content

Danger! - Dangerous electrical voltage!

- Disconnect the power supply of the device.
- Ensure that devices cannot be accidentally restarted.
- Verify isolation from the supply.
- Cover or enclose any adjacent live components.
- Follow the engineering instructions (AWA/IL) for the device concerned.
- Only suitably qualified personnel in accordance with EN 50110-1/-2 (VDE 0105 Part 100) may work on this device/system.
- Before installation and before touching the device ensure that you are free of electrostatic charge.
- The functional earth (FE, PES) must be connected to the protective earth (PE) or the potential equalization. The system installer is responsible for implementing this connection.
- Connecting cables and signal lines should be installed so that inductive or capacitive interference does not impair the automatic control functions.
- Suitable safety hardware and software measures should be implemented for the I/O interface so that an open circuit on the signal side does not result in undefined states.
- Deviations of the mains voltage from the rated value must not exceed the tolerance limits given in the specification, otherwise this may cause malfunction and/or dangerous operation.
- Emergency stop devices complying with IEC/EN 60204-1 must be effective in all operating modes. Unlatching of the emergency-stop devices must not cause a restart.
- Devices that are designed for mounting in housings or control cabinets must only be operated and controlled after they have been properly installed and with the housing closed.
- Wherever faults may cause injury or material damage, external measures must be implemented to ensure a safe operating state in the event of a fault or malfunction (e.g. by means of separate limit switches, mechanical interlocks etc.).
- The used device may have hot surfaces during and immediately after operation.
- Removal of the required covers, improper installation or incorrect operation of motor or device may destroy the device and may lead to serious injury or damage.
- The applicable national safety regulations and accident prevention recommendations must be applied to all work carried on live device.
- The electrical installation must be carried out in accordance with the relevant electrical regulations (e. g. with regard to cable cross sections, fuses, PE).
- Transport, installation, commissioning and maintenance work must be carried out only by qualified personnel (IEC 60364, HD 384 and national occupational safety regulations).
- Installations containing device must be provided with additional monitoring and protective devices in accordance with the applicable safety regulations. Modifications to the device using the operating software are permitted.
- All covers and doors must be kept closed during operation.
- To reduce the hazards for people or equipment, the user must include in the machine design measures that restrict the consequences of a malfunction or failure of the device (increased motor speed or sudden standstill of motor). These measures include: – Other independent devices for monitoring safety related variables (speed, travel, end positions etc.).
  – Electrical or non-electrical system-wide measures (electrical or mechanical interlocks).
  – Never touch live parts or cable connections of the device after it has been disconnected from the power supply. Due to the charge in the capacitors, these parts may still be alive after disconnection. Consider appropriate warning signs.

Disclaimer

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1 General

In this Application Note you will learn how to upgrade the DX-COM-STICK3 to the latest firmware. This may be necessary to use new functions or to solve communication problems. As cybersecurity policies are constantly changing, you should always use the latest firmware on your DX-COM-STICK3 to be protected against all threats.

2 Update via Smartphone

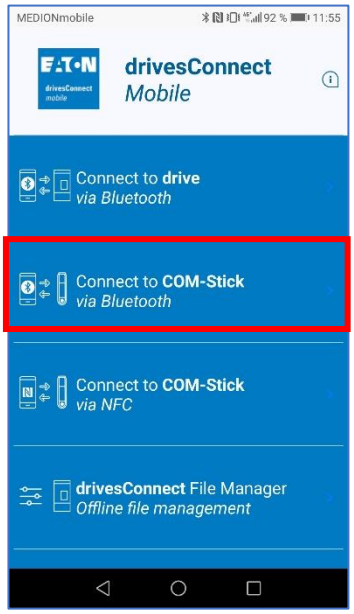
2.1 Required hardware

The following components are required for an update via the smartphone:

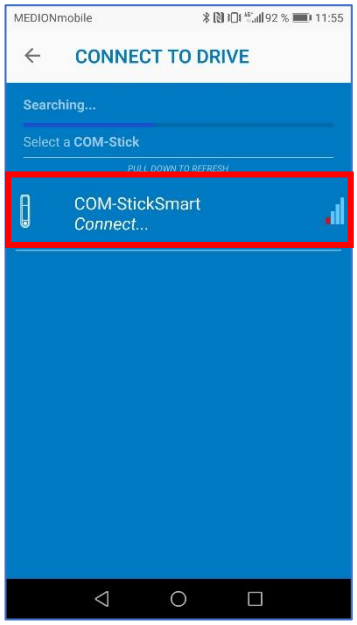
- PowerXL inverter DE1, DC1, DB1, DA1 or Rapid Link 5 supplied with power
- DX-COM-STICK3
- Smartphone with installed drivesConnect mobile

2.2 Update process

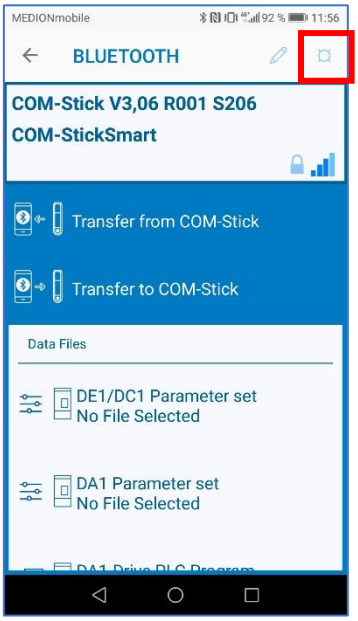
Choose „Connect to drive via Bluetooth“. The DX-COM-STICK3 needs to be insert in a powered PowerXL DE1, DC1, DB1, DA1 or Rapid Link 5.



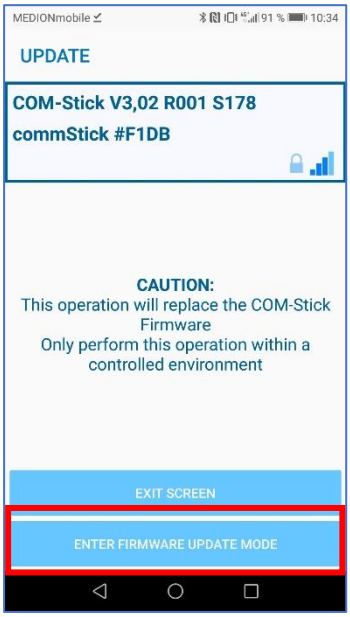
Choose the relevant COM-Stick to update.



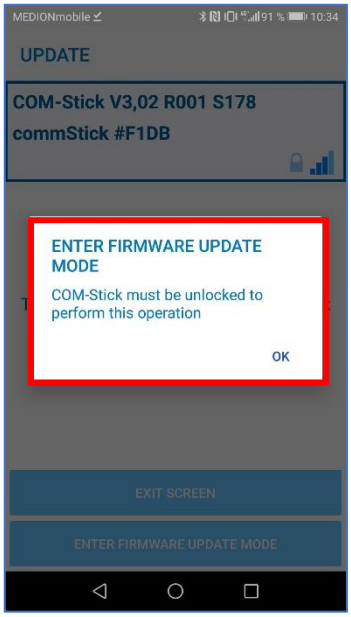
Open the Update menu via the symbol in the right top corner.



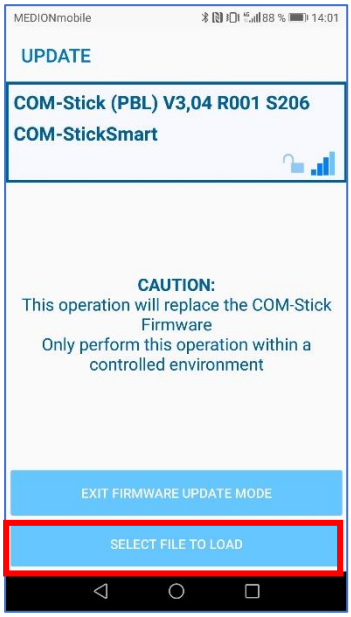
Choose „Enter Firmware Update Mode“



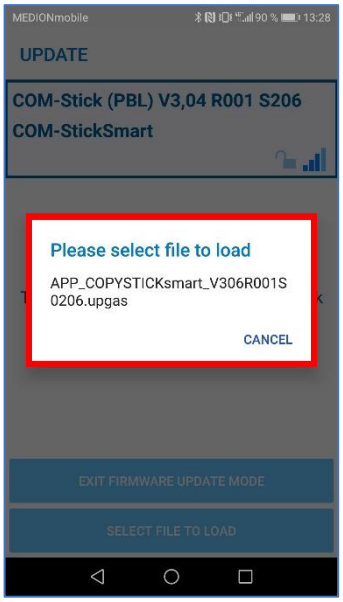
If the DX-COM-STICK3 is not yet enabled, push the red padlock until two green arrows appear.



Choose „Select File to Load“

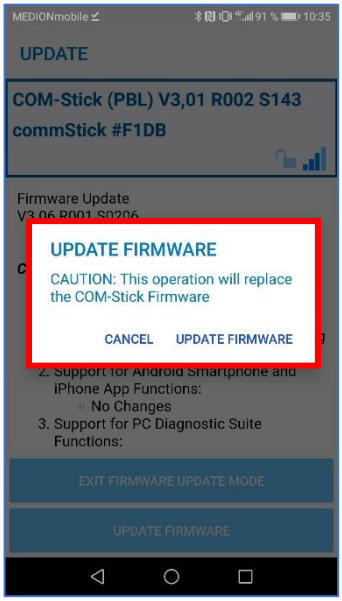


Choose the relevant firmware file.

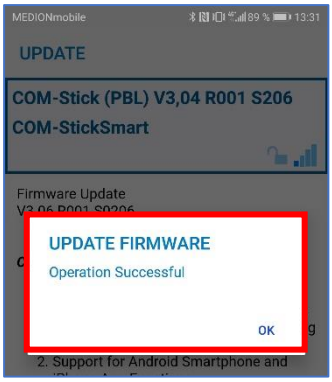


Start the Update by „Update Firmware“.

For security reasons, a second confirmation must be made.



After a successful update, a confirmation will be sent. Afterwards, the DX-COM-STICK3 can be fully used again.



3 Update via PC

3.1 Required hardware

The following components are required for an update via PC:

- PowerXL inverter DE1, DC1, DB1, DA1 or Rapid Link 5 supplied with power
- DX-COM-STICK3
- PC with installed drivesConnect and USB interface
- Splitter DX-SPL-RJ45-2SL1PL or splitter DX-SPL-RJ45-3SL and DX-CBL-RJ45-0M5
- Programming cable DX-CBL-PC-3M0

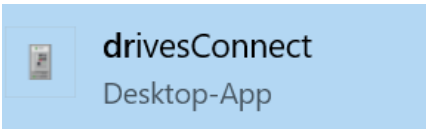
3.2 Update process

With the update via PC, the bootload firmware can also be updated. Especially with older DX-COM-STICK3 devices this can help to solve communication problems. Proceed as follows:

Perform the following hardware setup:

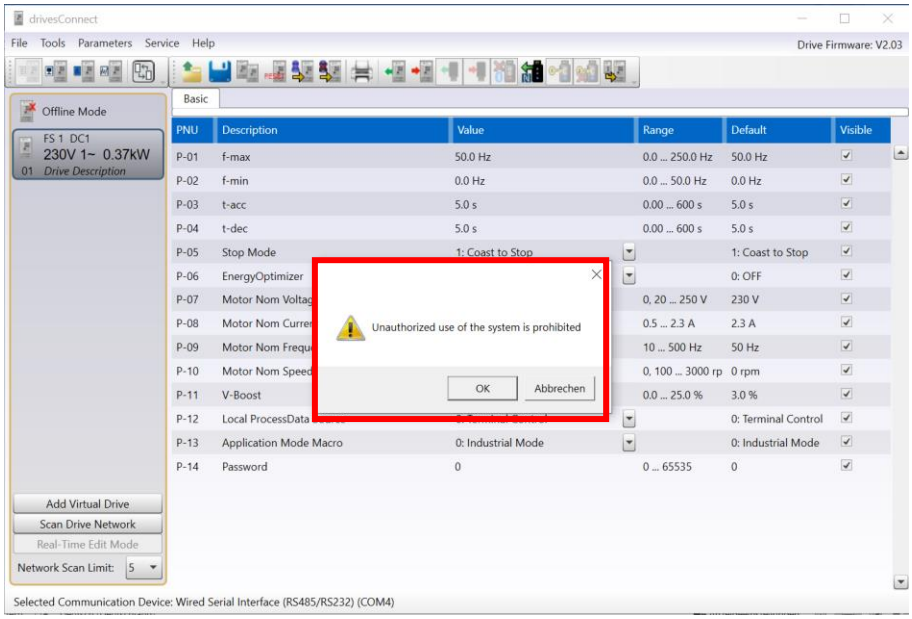
- ▶ Plug the splitter into the inverter
- ▶ plug the DX-COM-STICK3 into one port and the DX-CBL-PC-3M0 programming cable into the other port
- ▶ Supply the drive with rated voltage
- ▶ IMPORTANT! Set the "RS485-0 address" in the inverter to an address >1.

Open the drivesConnect PC version

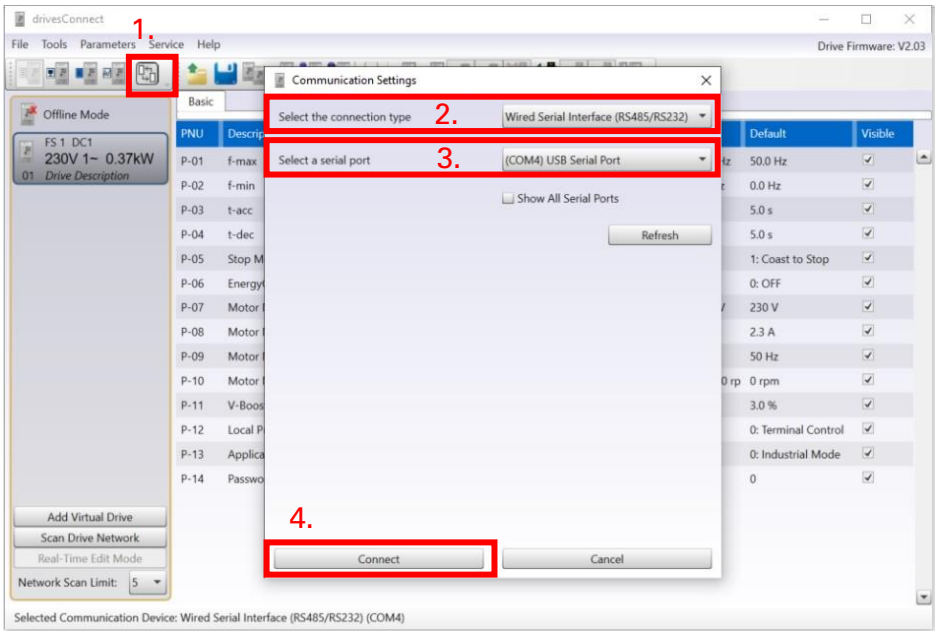


Select the parameter editor

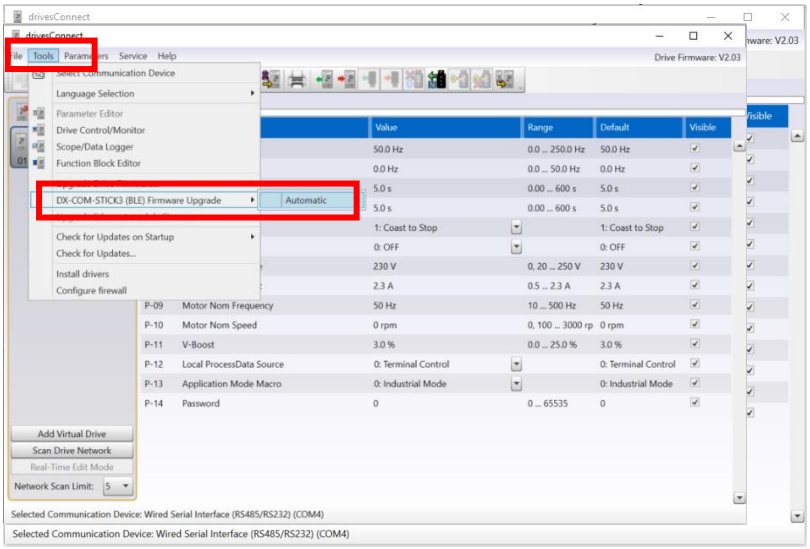
Confirm the message. This message comes from Eaton's CyberSecurity policy and is intended to protect against unauthorized access.



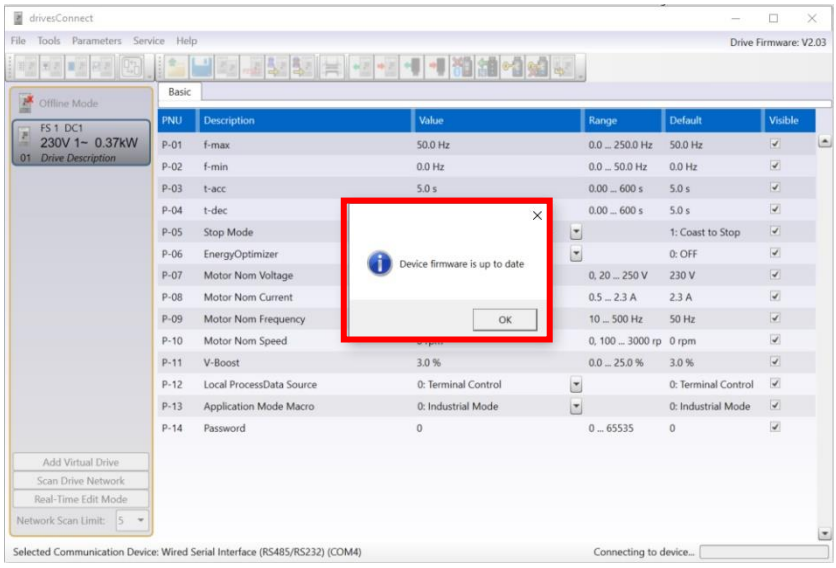
1. Call up the "Communication Settings" menu.
2. Select "Wired Serial Interface (RS485/RS232)" as the connection type
3. Select the corresponding COM port
4. Then click on "Connect".



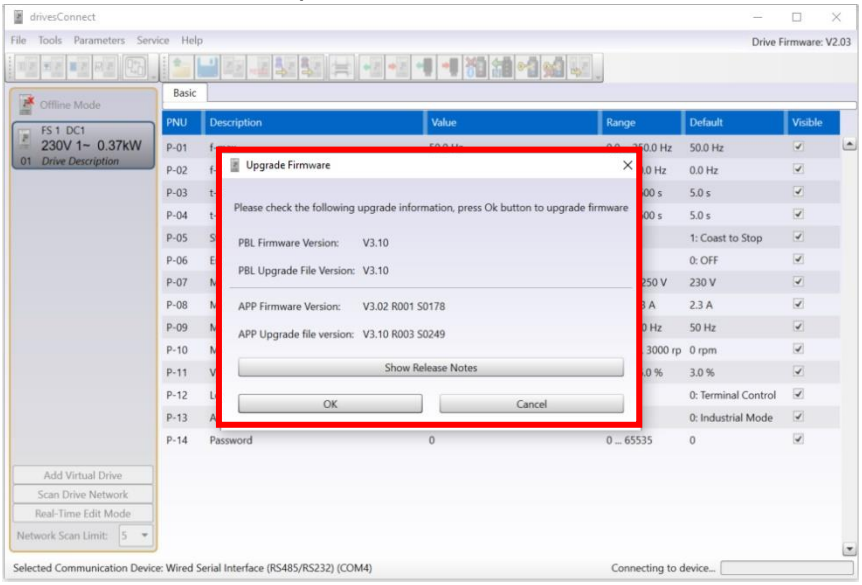
Then select under "Extras" → "DX-COM-STICK3 (BLE) Firmware Upgrade" the item "Automatic



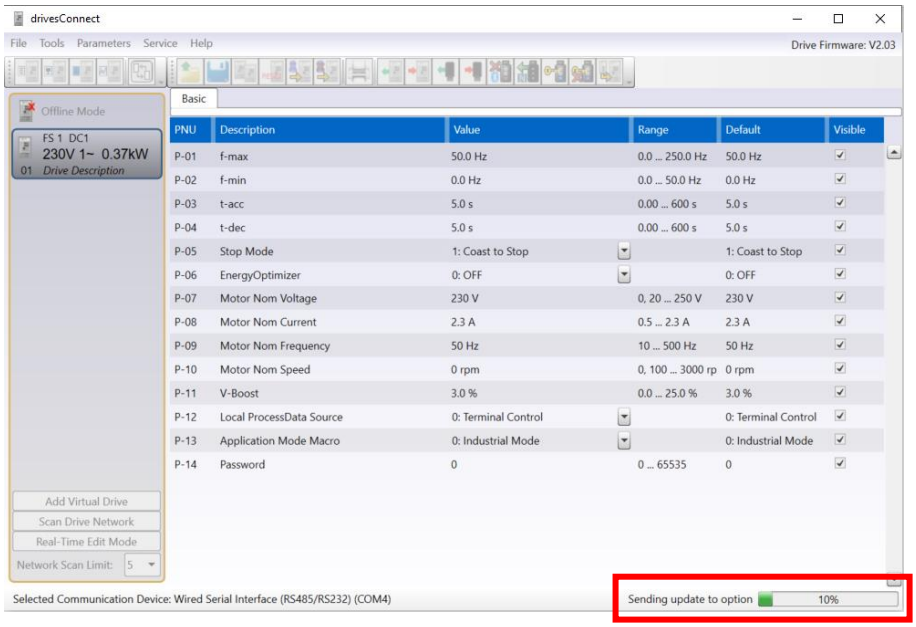
Make sure that no other devices are connected to the RJ45 interface of the inverter and confirm the message with "Yes”



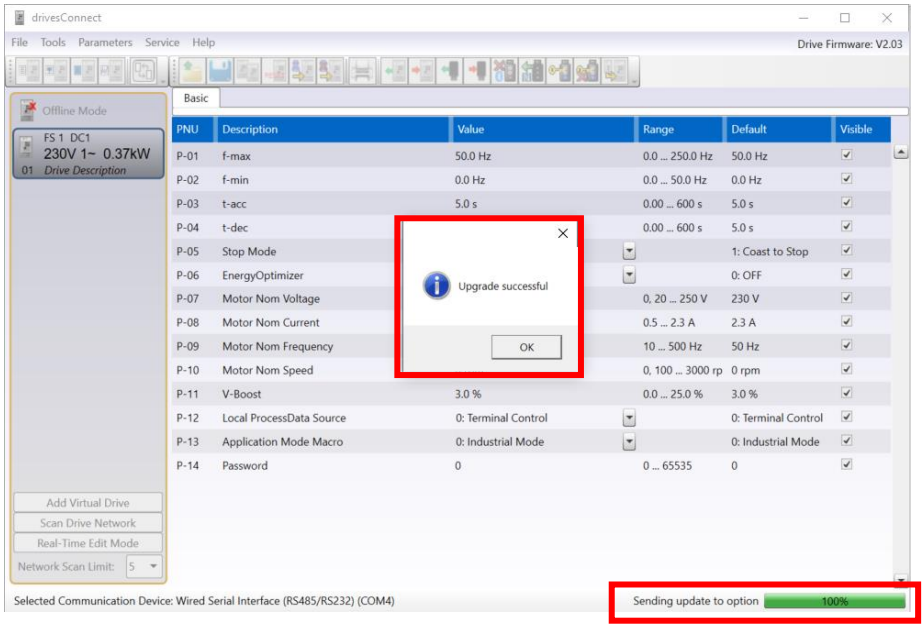
If the DX-COM-STICK3 is already equipped with the latest firmware, the message "Device firmware is up to date”



If one of the firmware versions is not up to date, the differences are displayed. You can look at the release notes and start the update by clicking "OK".



You can follow the upgrade process in the lower right corner of the software.



The successful upgrade is confirmed with a message. After that the DX-COM-STICK3 is on the latest firmware and can be used again directly.

4 References

Documentation		
	Number	**LINK**
Manuals…		DownloadCenter
Instruction Leaflets…		DownloadCenter
DX-COM-STICK3 Connection, Parametrization via Bluetooth	AP040189EN	Drives AP Note Overview Document

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