

Instructions for planning and executing SMI/KNX projects

Object planning:

- Before quoting a customer it is vital to consult one of the responsible SMI/KNX experts at Becker-Antriebe GmbH in Sinn. These are:

Mr. Oliver Axt, German and English

Tel: 02772 – 507 – 253

Mr. Pierre Erner, German and English

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Mr. Maik Wiegelmann, German, English, French and Spanish

Tel: 02772 – 507 – 241

Mr. Michael König, German

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- In preparation of the quote, the general suitability of the drives must be checked and approved. For any questions about this matter please address yourself to the „technical service“ department.
- The product range of SMI drives comprises drives with torques of 5 Nm up to 120 Nm in 35, 45 and 58 mm diameters.
- It is important to offer the Becker SMI actors when preparing the quote. The actor from Becker can control up to 8 drives via one connection cable.
- **Attention: The SMI-Technology requires different wiring than the usual KNX-System. Only one NYM 5x1.5 mm² cable per drive needs to be installed (see wiring diagram example).**
- Programming has to be executed by a KNX certified system integrator. This service is not offered by Becker-Antriebe and generally commissioned independently by the customer. On request and against payment, a Becker engineer can be requested as support during commissioning and connecting the drives to the bus system.



Scope of supply/Installation:

- SMI drives are produced on demand, for projects. Production and delivery times have to be taken into account when planning an SMI project. The serial number of the drives is the ID address which has to be used by the system integrator during programming. Due to this it is very important that the serial/ID numbers are documented with care. (see below):
 - During production at Becker Antriebe, ID-Serial labels will be connected to the cable and are not to be removed until final installation on site! Each label contains seven stickers, which allows a thorough installation document / file to be produced.
 - SMI drives are to be connected via colour coded wiring according to the SMI specification or a certified SMI plug connection - (STAS4, STAK4 from Hirschmann) has to be used.
 - Ensure the SMI Data wires I+ and I- are not mixed up.
 - The connection of the SMI/KNX drive cable has to be “serviceable” (for example using surface mounted or flush mounted junction boxes).
 - Make sure that the connections are good. Unsuitable connectors might lead to communication problems and/ or malfunctions. The SMI drive will be mounted inside an element. The first ID number label has to be fixed visible on the inside of the shutter box, awning or sun protection system.
 - After mounting the roller shutter system, the second label needs to be fixed to the inside of the open window sash.
 - The third ID serial number label will be placed in the allocation map (last page of the operating instructions) and the mounting location of the element/system has to be registered (e.g. 1. Floor, office, south facade, right element etc.)
 - For commissioning (setting the final limits) of the SMI drives, you will need a SMI installation set, which may be purchased at Becker GmbH or its subsidiaries/ representatives. This installation set has to be connected by colour. The rotating direction has to be assigned before setting the limits, in accordance with the operating instructions.
 - **Attention: Setting of the final limits on SMI drives has to take place before electrical termination.**
 - The setting of the final limits has to be recorded in the allocation map with signed approval sought from the responsible engineer/planner. The allocation map serves also as completion certificate of the duly effected installation. Before final electrical termination, the installer, has to ensure completion of the allocation maps.
 - The allocation table has to be completed in the documentation file and a copy has to be given to the KNX programmer/installer. A faulty or non-existing allocation table of the SMI drives will cause additional time and effort to set up the SMI actor. In this case the serial numbers have to be electronically read with a BECKER-USB-SMI-Tool and its software. The software may be downloaded with the following link:
<http://www.becker-antriebe-objektportal.de/html/software.html>
The BECKER-USB-SMI-Tool serves also for verification of the correct SMI installation (wiring SMI-side).



Fields of responsibility:

- The general sales conditions of Becker-Antriebe GmbH apply to all drives sold by Becker. The installing company is responsible for the intended use and the correct programming of the final and intermediate positions. The system integrator is responsible for the correct connection and programming to the KNX bus (see note about „recommended programmer“).
- Becker is not responsible for:
 - Planning or installation mistakes and the cost resulting from this.
 - Expenses caused by the inaccessibility of products.
 - Becker products have to remain accessible for maintenance and for the unlikely case of repair. Serviceable connections should be accessible without causing damage to connection boxes or surrounding fixings.
- Becker provides the necessary documentation like quotation texts, mounting and operating instructions and technical specifications, needed for planning and execution of an SMI project. Should additional documents be required, please address yourself to one of our SMI responsible experts (see above). Becker-Antriebe is able to produce a motor with the same serial number, in case of having to exchange a motor. This will avoid the need for re-programming the KNX side and therefore does not require the service of a system integrator.

