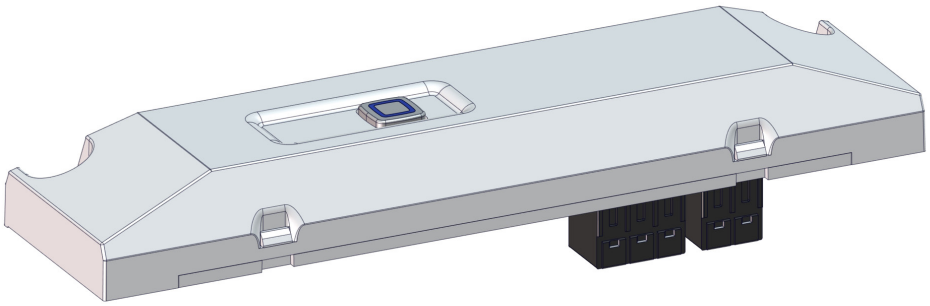
TEXINO

Window control FS-100



Installation and operating manual

Translation of the original installation manual
10.2022

Company information

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Trade register:	Amtsgericht (district court) Münster HRB 8282
Tax ID No.:	DE 123995034
WEEE register number:	DE 36122187

160-629a_00

1 About this manual

This manual contains descriptions and important information for safe use of the **FS-100.** The manual forms part of the **FS-100** control system (hereinafter simply referred to as **FS-100**) and must be kept in a safe place.

Prior to installation, this manual must have been read carefully and understood. The prerequisite for safe work is adherence to all specified safety instructions and warnings, as well as the action instructions contained in this manual.

In addition to the information in this manual, the local accident prevention regulations and national health and safety regulations apply.

Figures are intended to aid basic understanding and may differ from the actual design of the **FS-100**.

1.1 Target group

The purpose of this manual is to assist qualified personnel to safely install and commission the **FS-100**.

Moreover, it serves to ensure that the user will enjoy safe and reliable operation.

Lastly, it contains information for correct installation and disposal of the product.

1.2 Other applicable documents

This manual includes a copy of the declaration of incorporation.

1.3 Highlighting

Certain text is highlighted as follows:

Example	Highlighting	Explanation
Press *Cancel* button.	*Italics*	Operating, display, screen elements
Turn main switch to the **OFF** position.	**Bold**	Switch settings
See chapter “Technical Data”	"……"	Cross reference

1.4 Notes and additional information

Notes and additional information are highlighted as follows:

NOTE

Notes are highlighted as shown here.

- Notes contain additional information, recommendations and tips.
- Notes do not contain any warnings of danger.

1.5 Warnings

Signal words

Warnings are introduced by signal words that highlight the extent of the danger. The signal words DANGER, WARNING and CAUTION indicate danger for people.

Hazards for people are also indicated by the general danger sign ⚠. These warnings must always be observed to prevent injuries or death.

The signal word *ATTENTION* indicates dangers for property. There is no leading symbol for property damage.

Classification based on the severity of the danger

⚠ DANGER

Indicates a hazardous situation that will result in death or severe injury if it is not avoided.

⚠WARNING

Indicates a hazardous situation that may result in severe injuries if it is not avoided.

⚠CAUTION

Indicates a hazardous situation that may result in injuries if it is not avoided.

ATTENTION

Indicates measures for the prevention of property damage.

Section-specific warnings

Section-specific warnings relate to a whole chapter, a section or several paragraphs of this manual.

Representation of section-specific warnings

SIGNAL WORD

Type and source of the danger

Possible consequences of ignoring the danger.

- Measures for preventing the danger.

Embedded warnings

Embedded warnings are situation-dependent and relate to a particular action or a part of a section.

⚠ **SIGNAL WORD** – Type of danger. Measures for preventing the danger.

1.6 Exclusion of liability

The obligations agreed in the contract documents, the general terms and conditions, the delivery conditions of the manufacturer, and the legal regulations applicable at the time of conclusion of the contract apply.

The manufacturer reserves the right to make technical changes as part of the improvement and further development of the product.

The manufacturer accepts no liability in the following cases:

- Failure to observe this manual
- Use for any purpose other than the intended use
- Unauthorised conversions and technical changes
- Use of untrained personnel

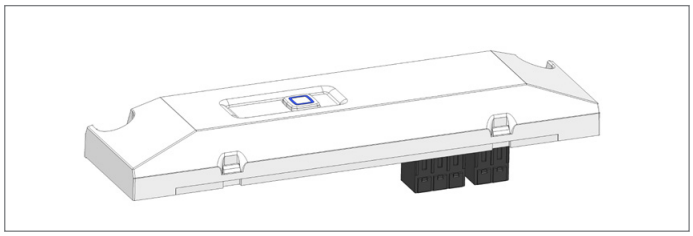
The warranty terms are contained in the general terms and conditions issued by the manufacturer.

2 Declaration of conformity

Manufacturer:	VEKA AG Dieselstraße 8 D-48324 Sendenhorst
Person authorised to compile the technical documentation:	Philipp Kalverkamp Dieselstraße 8 D-48324 Sendenhorst

We hereby declare under our sole responsibility that the following product

Product name:	Window control unit
Model name:	FS



Type designation:	100
Article number	187.106.000.000

complies with the regulations of the following directives and harmonised standards.

The following harmonised standards have been applied:

Directives	Harmonised standards
Radio equipment directive 2014/53/EU	EN 300 220-1 V3.1.1 EN 300 220-2 V3.1.1 & EN 300 220-2 V3.2.1 EN 62479:2010
EMC Directive 2014/30/EU	EN IEC 61000-6-1:2007 EN 61000-6-3:2007A1:2011
Low-voltage directive 2014/35/EU	EN 60335-1:2010
RoHS Directive 2011/65/EU	

The following guide has been applied:

Guide	Version	Designation
CENELEC Guide 32	1st issue, 2014-07	Guide for safety-relevant risk assessment and risk reduction for low voltage equipment

Location:	Sendenhorst
Date:	01/10/2022

ppa.

Hermann Schmitz, Head of Technology and Innovation

3 Safety

3.1 General information about safety

The chapter "Safety" contains basic information about safety and provides an overview of all important aspects. Other task-specific notes can be found in the sections on the individual life phases. Compliance with this information is for your own safety.

3.2 Intended use

The **FS-100** is intended for connecting and controlling window drives. Homematic IP control elements or the Homematic IP app are used for operation.

The **FS-100** is exclusively intended for fixed indoor installation.

3.3 Reasonably foreseeable misuse

The **FS-100** may not be used in the following areas:

- Explosion-protected zones
- Medical technology
- Outdoor areas
- Installation in escape routes

The **FS-100** is NOT intended for the following uses:

- Use in VdS-certified safety systems

The following always applies:

Any use other than the intended is regarded as unintended use.

The manufacturer shall not be responsible for any resulting damage. The user/operating organisation alone bears the risk for such use.

Moreover, use of the **FS-100** is regarded as use as intended if all applicable international and national safety regulations and the safety regulations in this manual are followed.

3.4 Personnel qualifications

The various tasks described in this manual imply different qualification requirements for the persons charged with performing the tasks.

Inexperienced and insufficiently qualified personnel cannot assess the risks when using the **DK-100** and consequently endanger themselves and other people.

- The work may only be carried out by persons who are experienced in performing the assigned work and who have been instructed about the dangers.
- For all tasks, only persons who are expected to perform the work reliably are permitted to carry it out.

Persons	Activity	Qualification	Life phase
Qualified personnel (installer)	Installation & commissioning	Professional qualification (TEXINO training)	Installation, connection, commissioning, troubleshooting, maintenance, removal from service, dismantling
User	Operation of the **FS-100**	None	Operation
Qualified personnel (disposal technician)	Correct disposal	Knowledge of the disposal regulations applicable at the place of use	Removal from service, dismantling, disposal

Tab. 1: Personnel qualifications

3.5 Danger due to electrical energy

In the event of contact with live components, there is a risk of death caused by electric current. Death or severe injuries are the consequence.

- Work on the electrical voltage supply, for instance with the aid of the power supply unit 24 V DC (TEXINO power supply unit NT-100, Art. No. 187.300) must be performed by a qualified electrician. Before starting work on the electrical system, ensure a voltage-free state. In doing so, observe the electrical safety rules:
  - Switch the **FS-100** and, if necessary, the NT-100 to a voltage-free state.
  - Secure to prevent reactivation.
  - Check that a voltage-free state exists.
  - Earth and short-circuit.
  - Cover adjacent live components.
- Use only electrically insulated tools.
- Look out for damage to the electrical equipment and check regularly. Danger due to loose cable connections and scorched wires. Immediately eliminate any defects.
- Keep moisture away from live parts. There is a risk of short-circuits

4 Product description

4.1 Function

The **FS-100** is intended for connecting and controlling 24 V window drives that are controlled through pole change or drives with a signal line via the WCB (Window Connect Bus). Homematic IP control elements or the Homematic IP app are used for operation.

The **FS-100** is intended for indoor installation.

4.2 General view

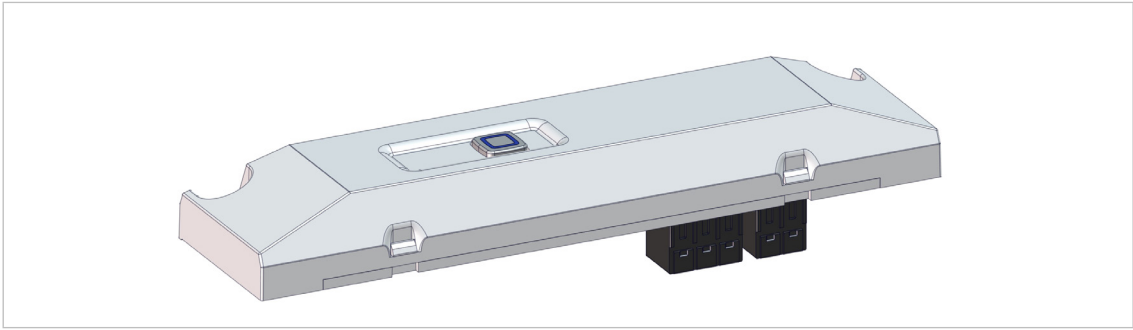


Abb. 1: FS-100

4.3 Operating elements and connections

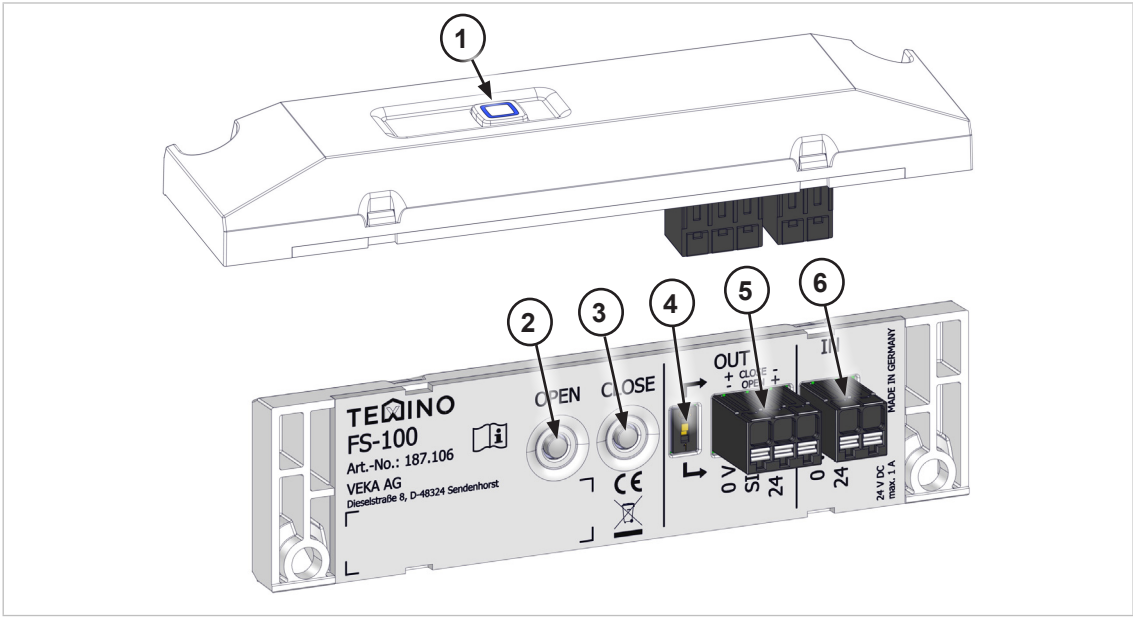


Abb. 2: Operating elements and connections

(1) System button (calibration button and LED)
(2) OPEN button
(3) CLOSE button
(4) DIP switch for setting the operating mode
(5) Connection terminal OUT
(6) Connection terminal IN

5 Technical data

5.1 Measurements, weight and housing

Description	Value
Measurements L x W x H	104 x 26 x 23 mm
Weight	26 g
Protection class	IP 20

Tab. 2: Measurements and weight

5.2 Performance data

Input	Type	Unit
Rated voltage	24	V
Rated current	750	mA
Rated power	18	W
Output drive		
Output voltage	24	V
Output current	750	mA
Output SIG		
Output voltage	24	V
Output current	160	mA

Tab. 3: Performance data FS-100

5.3 Radio data

Description	Value
Radio frequency	868.0 - 868.6 MHz / 869.4 – 869.65 MHz
Receiver category	SRD category 2
Maximum radio transmission power	10 dBm
Typical radio free-field range	250 m
Duty cycle	< 1 % per h / < 10 % per h

Tab. 4: Radio data FS-100

5.4 Electrical connections

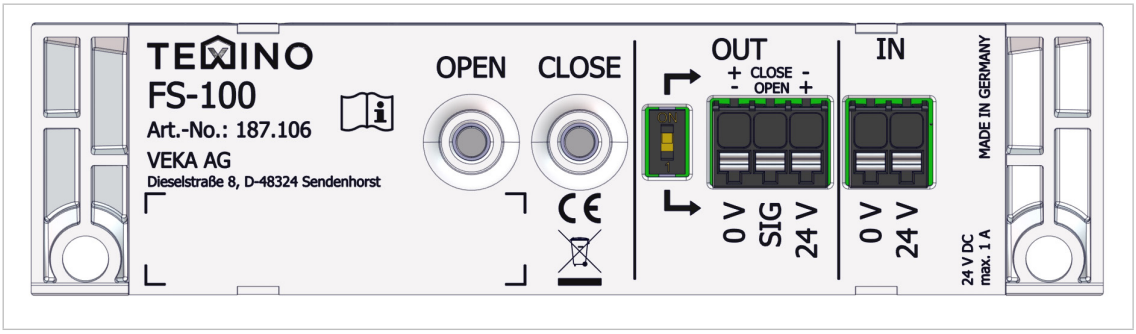


Abb. 3: FS-100 electrical connections

NOTE

The operating mode is set via the DIP switch (chapter „7.3 Setting the operating mode“)

Operating mode "Bus" 		Operating mode "Pole change" 	
Brief description	**Designation**	**Brief description**	**Designation**
0 V	Earth	±	Earth / 24 V voltage output
SIG	Bus/signal	Not assigned	
24 V	24 V voltage output	∓	24 V voltage output / earth

Tab. 5: Connections output (connection terminal "OUT")

5.5 Ambient conditions

Description	Value
E.g. interior space of a window sash	Sealed, dry
Temperature with fixed wire	0 to +70 °C
Temperature with moving wire	0 to +50 °C
Maximum relative air humidity	10 to 85 %

Tab. 6: Ambient conditions for operation

5.6 Type plate

The type plate is located on the bottom of the **FS-100**.

Abb. 4: Type plate FS-100

Stickers and signs can become dirty or otherwise become unrecognisable. Therefore, under certain circumstances, it may not be possible to identify dangers and follow important instructions.

- Always keep the type plate in legible condition.
- Do not remove signs.

Symbols on the type plate	Explanation
	Separate collection of electrical and electronic devices. Devices with this symbol must not be disposed of with domestic waste.
	Note operating manual / instruction manual Prior to installation, ensure that you have thoroughly read and understood this manual.

Tab. 7: Symbols

6 Transport and storage

6.1 Transport

NOTE

Only transport the **FS-100** in its original packaging.

6.2 Storage conditions

ATTENTION

Property damage due to incorrect storage!

Improper storage can result in material damage.

Observe the following conditions.

Observe the following points when storing:

- Only store the **FS-100** in enclosed rooms.

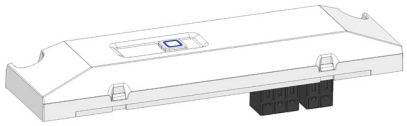
Description	Value
Storage location	Dry, clean and dust-free
Storage temperature range	-20 to +60 °C
Maximum relative air humidity	10 to 85 % non-condensing

Tab. 8: Ambient conditions for storage

6.3 Unpacking

1. Open the packaging and check the **FS-100** for damage.
2. Dispose of the packaging material correctly.

6.4 Items supplied FS-100 (set 187.106)

Item	Designation	Quantity	Unit	Image
1	FS-100	1	pcs.	
2	Sticker QR code	1	pcs.	(No image)
3	Short operating manual	1	pcs.	(No image)

Tab. 9: Items supplied FS-100

7 Installation, connection and commissioning

7.1 Safety

⚠WARNING

Electric shock!

A qualified electrician must establish the voltage supply.

ATTENTION

Property damage!

Property damage due to mechanical changes and drilling of fastening holes!

- Do not cut or grind the **FS-100**
- Do not drill any holes

7.2 Installation

NOTE

- The **FS-100** is installed after welding of the profiles.
- Route the cables while it is not yet installed.
- Prior to installation
  - select the operating mode on the DIP switch (chapter „7.3 Setting the operating mode“)
  - establish the electrical connection (chapter „7.5 Electrical connection“)
- All geometries shown here are intended as examples only, using a VEKA SOFTLINE 82 system.

7.2.1 Special characteristics for retrofitting

The **FS-100** automatically controls window drives. This makes it necessary to reassess the risk. For this purpose, note the drive manufacturer's specifications and use the risk assessment template from www.texino.eu.

If the window control system replaces an existing switch, this switch must be deactivated. If necessary, the drive must be re-adjusted. See drive operating manual.

7.2.2 Milling and drilling work

NOTE

Installation of the **FS-100** requires milling and drilling work on the profile.

All milling and drilling work can be performed on the individual profile pieces and may be performed prior to welding.

- Shavings can be removed from the hollow chambers by blowing them out.
- Do not damage previously installed lines of the drive or other electrical components while drilling.
- Do not damage weldable seals when milling or drilling.

The position of the **FS-100** is defined according to the following drawing for milling in the window profile. This can be freely selected and is defined in advance.

ATTENTION

Property damage!

Select the position of the **FS-100** so that fittings can be installed and the function of the **FS-100** and the fittings is not impaired.

7.2.3 Milling pattern and positioning FS-100

The milling pattern applies to VEKA SOFTLINE 82. When using other systems, ensure that the **FS-100** makes flat contact with the profile.

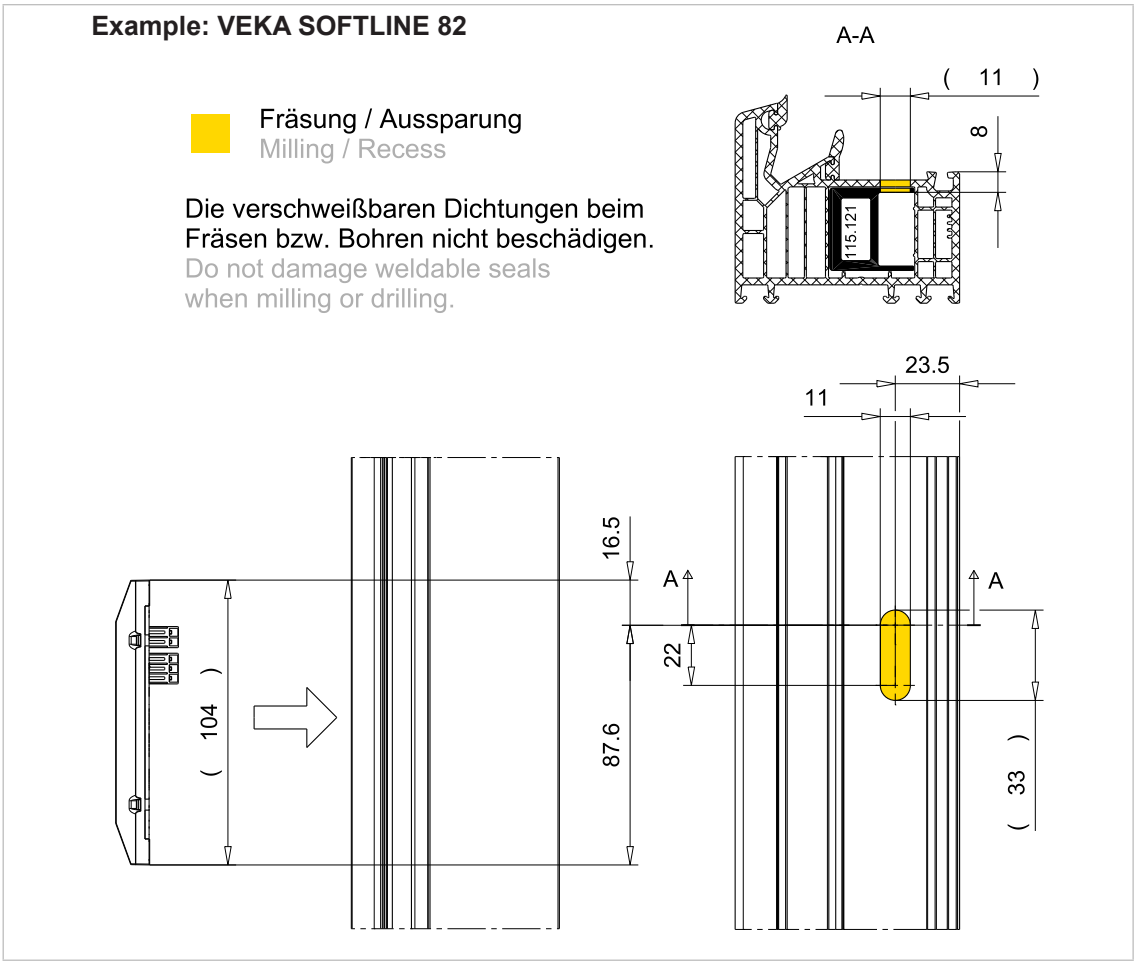
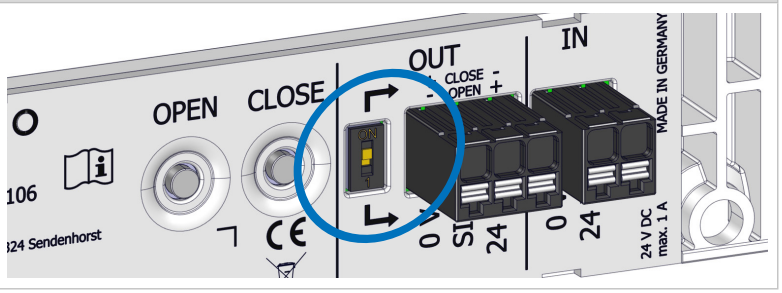


Abb. 5: Milling pattern and positioning FS-100

7.3 Setting the operating mode

NOTE

Only adjust operating mode in voltage-free state.

Description	Image
To adjust the operating modes, use a suitable tool to move the DIP switch to the desired position (see „Tab. 11: Operating modes“).	

Tab. 10: Changing the operating mode

Operating mode	Switch position	Image
Bus Select this operating mode when a drive with the bus (e.g. TEXINO tilt and turn drive DK-100) is used (chapter „7.5.2 Operating mode bus“).	**OFF**	
Pole change Select this operating mode when a drive with pole change is used (chapter „7.5.3 Operating mode pole change“).	**ON**	

Tab. 11: Operating modes

7.4 Connecting the FS-100

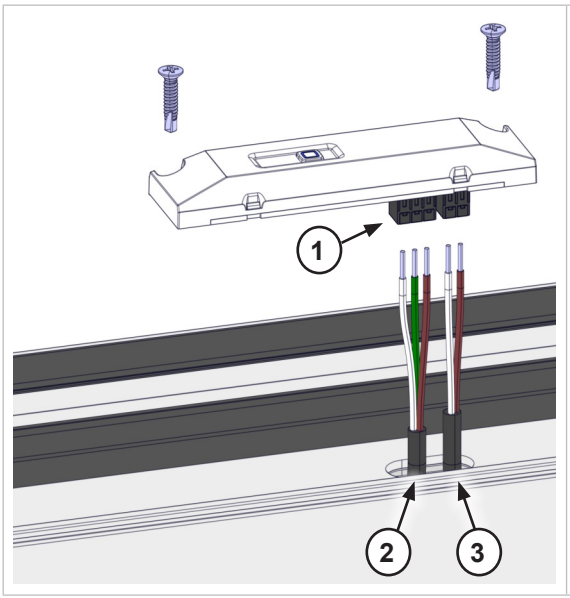


Abb. 6: Component installation (example: drive with bus)

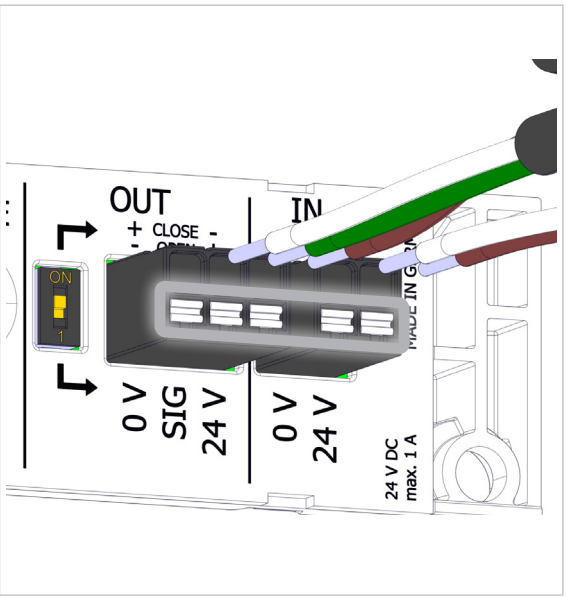


Abb. 7: Connecting the connection lines

a) The connection line of the drive (2) and the 24 V connection line of the power supply unit (3) must be
   - routed through the frame profile to the milled feature for the **FS-100** (fig. 6)
   - shortened to a suitable connection length
   - connected with the **FS-100** based on the selected operating mode according to the electrical connection („7.5 Electrical connection“).

b) Use a screwdriver to press a push button (white) into the connection terminal (1) in the highlighted area (fig. 7) and fasten the correct single conductor in the connection terminal. Repeat this process for all conductors.

NOTE

Ensure that the desired operating mode is selected on the corresponding DIP switch prior to installing the **FS-100** (chapter „7.3 Setting the operating mode“).

7.5 Electrical connection

7.5.1 Power pack

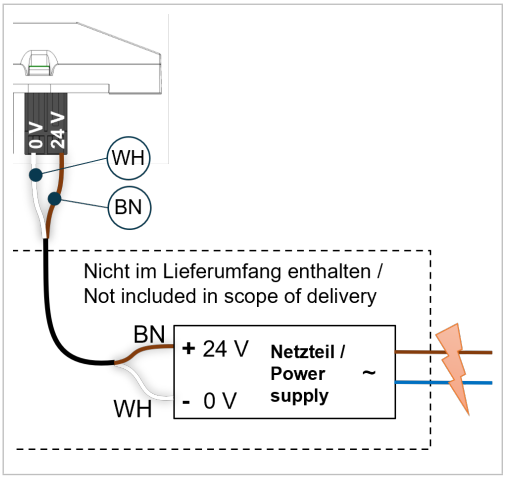


Abb. 8: Connection diagram FS-100 power supply unit

a) Insulate the conductors of the 24 V connection line of the power supply unit up to a suitable length and connect them to the IN terminal on the **FS-100** as shown in the connection diagram.
   - Connect the wire WH to the connection 0 V on the **FS-100**.
   - Connect the wire BN to the connection 24 V on the **FS-100**.

7.5.2 Operating mode bus

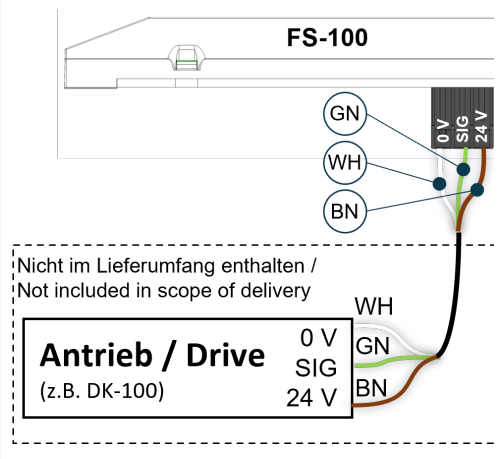


Abb. 9: Connection diagram FS-100 (e.g. DK-100)

a) Insulate the conductors of the drive connection line up to a suitable length and connect them to the OUT terminal on the **FS-100** as shown in the connection diagram (fig. 9).

- Connect the wire WH to the connection 0 V on the **FS-100**.
- Connect the wire GN to the connection SIG on the **FS-100**.
- Connect the wire BN to the connection 24 V on the **FS-100**.

Trial run
The drive can be controlled for a trial run by pressing the buttons OPEN or CLOSE and must be returned manually to its initial position with the aid of these buttons.

Reference run
A reference run can be started in the bus operating mode by simultaneously pressing OPEN and CLOSE.

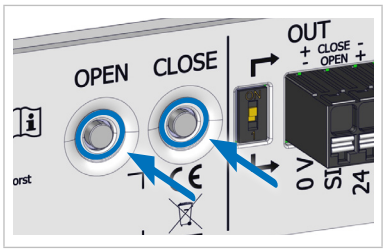


Abb. 10: Start reference run

7.5.3 Operating mode pole change

a) Insulate the conductors of the drive connection line up to a suitable length and connect them to the "OUT" terminal on the
FS-100 (fig. 11) based on the operating status as shown in the connection diagram.

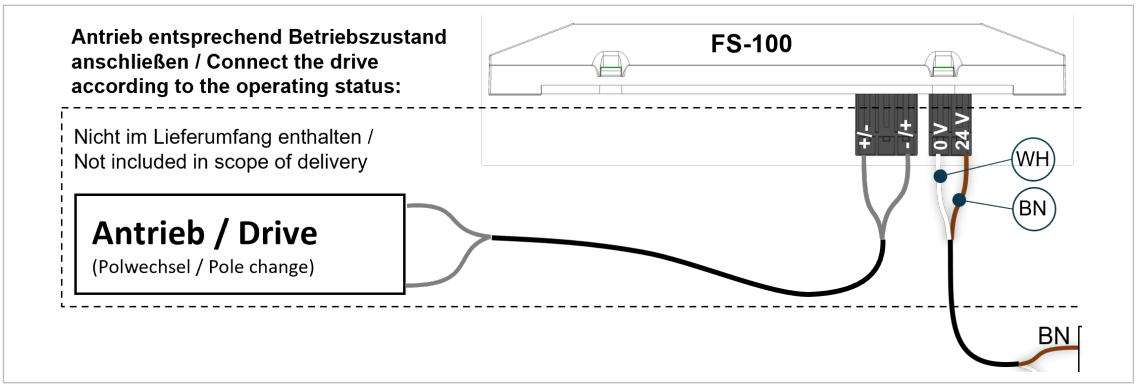


Abb. 11: Connection diagram FS-100 (pole change)

Trial run

The drive can be controlled for a trial run by pressing the buttons OPEN or CLOSE and must be returned manually to its initial position with the aid of these buttons.

7.6 Installing the FS-100

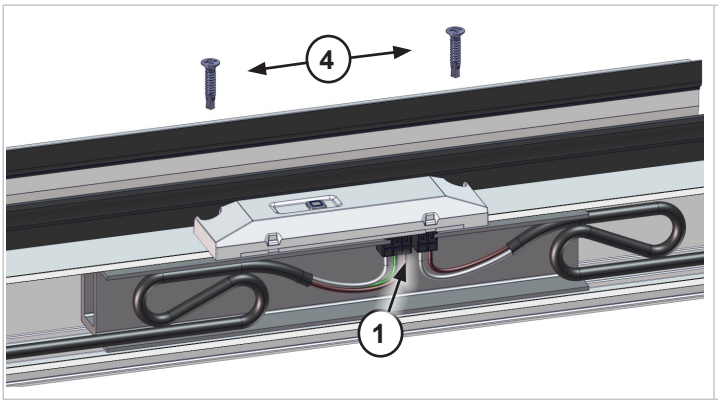


Abb. 12: Installed FS-100

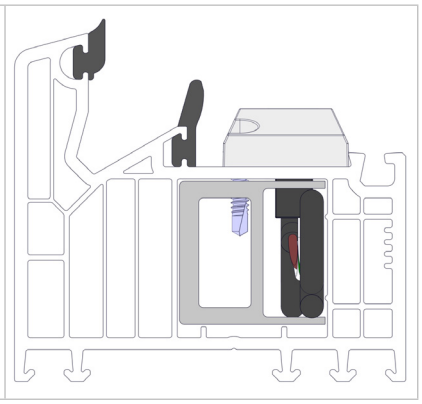


Abb. 13: Sectional view of the installed FS-100

a) Insert the **FS-100** with the connection terminals (1) into the milled feature in the frame.

b) Screw the **FS-100** into the profile using the fastening screws (4).

ATTENTION

Material damage due to crushing or stretching!

- Select the routing of the connection cable so that no damage to the cable occurs when the window is installed.
- Leave enough cable for a suitable loop!

7.7 Commissioning

7.7.1 Conditions

Commissioning may only be performed subject to the following conditions:

- The electrical connection of the **FS-100** has been correctly established.
- Window drive connected according to assembly and operating manual and risk assessment performed.

7.7.2 Risk assessment

NOTE

The builder of the complete machine must issue a final risk assessment to determine whether additional protective measures are required.

Possible additional protective measures include:

- Emergency Stop button.

The **FS-100** automatically controls window drives. Before it can be commissioned, a risk assessment must be performed.

- First use the document "Risk assessment and possible protective measures" to determine whether additional safety measures are required prior to commissioning.
- Ensure that the **FS-100** is installed according to the previous chapters and the correct operating mode has been selected according to chapter „7.3 Setting the operating mode“.

Note the drive manufacturer's specifications and use the risk assessment template from www.texino.eu.

7.7.3 Setting up the Homematic IP app

This unit is part of the smart home system Homematic IP and communicates via the Homematic IP radio protocol. All Homematic IP units can be configured conveniently and individually via smartphone using the Homematic IP app. Refer to the Homematic IP user manual to determine the extent of functions in the Homematic IP system based on interaction with additional components. To find all current technical documents and updates, visit www.eQ-3.de.

Free download of the Homematic IP app!

Free Download of the Homematic IP App!

Download on the App Store

Google play

7.7.4 Calibration

NOTE

First set up your Homematic IP Access Point via the Homematic IP app to use additional Homematic IP units in the system.

For further information, refer to the operating manual for the Access Point.

To integrate the **FS-100** into your system and allow it to communicate with other Homematic IP devices, it must first be calibrated for the Homematic IP Access Point.

To calibrate the **FS-100** proceed as follows:

a) Open the Homematic IP app on your device.

b) Select the menu item "Calibrate device".

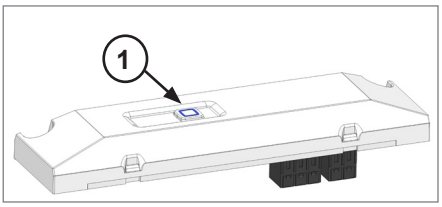


Abb. 14: System button FS-100

NOTE

Calibration mode is active for 3 minutes. You can manually start calibration mode again for another 3 minutes by briefly pressing the system button (1) (s. fig. 14).

c) The device appears automatically in the Homematic IP app.

d) To confirm, enter the final four digits of the device number (SGTIN) in the app or scan the QR code.

- You can find the device number on the supplied sticker or directly on the device.

e) Wait until the calibration process is complete.

- The LED lights up green to confirm a successful calibration process.
- The unit is now ready for use.

If the LED lights up red, repeat the steps listed above.

Enter a name for the device in the app and assign it to a room.

7.7.5 Trial run

We recommend performing a trial run for commissioning to confirm that the drive is connected correctly (see chapter „7.5.2 Operating mode bus“ or „7.5.3 Operating mode pole change“).

8 Operation

After calibration you can operate the **FS-100** e.g. with a calibrated Homematic IP remote control or via the Homematic IP app in order to control any connected drives.

9 General information about radio mode

The radio transmission uses a non-exclusive transmission path, meaning interference is possible. Interference can also be caused by switching processes, electric motors or defective electronic devices.

NOTE

The range in buildings may differ significantly from the free field range. In addition to the transmission power and the receiving properties of the receiver, environmental factors such as air humidity and the building conditions on site play an important role.

10 Malfunctions

10.1 Safety

The following always applies:

- In the event of a malfunction, immediately turn off the voltage supply.
- Determine the cause of the malfunction.
- Have malfunctions in the voltage supply eliminated by an authorised electrician.
- Ensure that all troubleshooting work is performed and completed in accordance with the specifications and instructions in this manual.
- Use only manufacturer-approved spare parts.
- In the event of malfunctions on mechanical components such as the drive or fitting, proceed as described by the manufacturer

Executing personnel

- Qualified electrician
- User

10.2 Troubleshooting

10.2.1 Command not confirmed

If at least one receiver does not confirm a command, the LED lights up red on completion of the faulty transmission. The reason for a faulty transmission may be radio interference (see „9 General information about radio mode“). The faulty transmission may have the following causes:

- Receiver cannot be reached
- Receiver cannot execute a command (load failure, mechanical blockage, etc.)
- Receiver faulty

10.2.2 Duty cycle

The duty cycle describes a legally mandated limit of transmission time of devices in the 868 MHz range.

The aim of this regulation is to ensure the function of all devices operating in the 868 MHz range.

In the frequency range of 868 MHz used by us, the maximum transmission time of each device is 1% of an hour (that is 36 seconds per hour). Once the 1 % limit is reached, the devices must not transmit until the time limit has elapsed. Homematic IP devices are developed and produced 100 % in compliance with this directive. In normal operation the duty cycle is generally not reached. However, in individual cases during commissioning or initial installation of a system, this may still occur due to multiple radio-intensive calibration processes. When the duty cycle limit is exceeded, this is indicated by the LED flashing slowly in red three times and the device may temporarily cease to function. After a brief time (max. 1 hour) the function of the device will be restored.

10.3 Error codes and flash sequences

Flashing code	Meaning	Solution
Brief orange flashing	Radio transmission/ attempted transmission/ data transmission	Wait until the transmission is complete.
1 x long green light	Process confirmed	You can continue operation.
Brief orange flashing (every 10 s)	Calibration mode active	Enter the final four digits of the device serial number for confirmation (see chapter „7.7.4 Calibration“)
1 x long red light	Process failed or duty cycle limit reached	Please try again (see „10.2.1 Command not confirmed“).
6 x long red flashing	Device defective	Check the display of your app or contact your specialist retailer.
1 x orange and 1x green light	Test display	After the test display has extinguished, you can continue.

Tab. 12: Error codes and flash sequences

10.4 Malfunction list

Malfunction	Possible cause	Correction
Drive does not run or only runs partially	Drive malfunctions	See malfunction list in drive operating manual
	Drive or power supply unit not correctly connected to **FS-100**	Check electrical connection and correct, if necessary
	FS-100 defective	Check and, if necessary, replace control system
	Incorrect operating mode set on DIP switch	Check and, if necessary, correct DIP switch on the **FS-100**
	Insufficient voltage supply	Use TEXINO power supply unit and check connection, if necessary
	Connection between **FS-100** and AccessPoint is malfunctioning or does not exist (see „10.3 Error codes and flash sequences“)	Check and, if necessary, recalibrate connection between **FS-100** and AccessPoint
	Fitting moving too sluggishly, defective or set incorrectly	Check fitting components, replace and / or grease if necessary
Drive moves in the wrong direction	Incorrect operating mode set on the **FS-100**	Check and, if necessary, correct DIP switch on the **FS-100**
	Drive on **FS-100** not correctly connected	Check and, if necessary, correct electrical connection (see „5.4 Electrical connections“).
	Drive malfunctions	See malfunction list in drive operating manual
	Incorrect operating mode set on the drive	Check DIP switch on the drive and, if necessary, correct as described in the drive operating manual
FS-100 is not displayed in the app	Calibration process has failed or connection lost	Switch off control system for 10 sec. Perform a factory reset of the **FS-100** and recalibrate the device
	Error AccessPoint, possibly no internet connection	Check the indicator light of the AccessPoint, ensure that connection is established between window control system and AccessPoint See error correction in AccessPoint operating manual
FS-100 is shown in the app but cannot be selected or shows statuses incorrectly	Connection problems between AccessPoint and **FS-100**	See error correction in AccessPoint operating manual
		Recalibrate **FS-100**

Tab. 13: Malfunction list

10.5 Switching back on after malfunctions

Only operate the **FS-100** if there are no defects that may affect safe operation.

11 Restoring the factory settings

NOTE

The factory settings of the device can be restored. All settings will be lost during this process.

To restore the factory settings of the **FS-100**, proceed as follows:

a) Press the system button (1) (fig. 13) for 4 s until the LED begins to flash orange rapidly.

b) Release the system button.

c) Press the system button for another 4 s until the LED lights up green.

d) Release the system button again to complete restoration of the factory settings.

The device performs a restart. After the restart you can reintegrate the device in your Homematic IP system.

12 Removal from service

12.1 Safety

The following always applies:

- Only work on the **FS-100** when it is voltage-free.

Executing personnel

- Trained and qualified personnel

13 Dismantling and disposal

At the end of its service life, dismantle the **FS-100** and ensure that it is disposed of in an environment-friendly manner.

NOTE

Used and defective electrical and electronic devices must not be disposed of with domestic waste. These devices contain valuable raw materials that can be reused.

Deliver the **FS-100** to an appropriate receiving point.

13.1 Safety

The intentional or unintentional reuse of used components can result in danger to people.

Observe the following points:

- The operating organisation is responsible for correct disposal.
- Only qualified personnel may carry out disposal.
- Observe the applicable local regulations and laws.

Executing personnel

- Trained and qualified personnel
- Qualified disposal technician

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