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# **Technical Reference Manual**

**Busch-SmartTouch®** 

Busch-SmartTouch® 7" 6136/07-xxx-500



# 4 Product description



Fig. 1: Product overview

The Busch-SmartTouch® 7" serves as indoor video station for the ABB-Welcome door communication system and the display and operation of standard KNX functions see chapter "Overview of KNX functions" on page 17). It has a capacitive touch display with 1024 x 600 pixel.

The product is part of the ABB-Welcome door communication system and operates exclusively with the components of this system.

The touch panel is linked with both bus systems, the ABB i-bus® KNX and the ABB-Welcome bus. The audio/video signals are transmitted and the power for the device is supplied exclusively via the ABB-Welcome bus. This means that at least one ABB-Welcome central control system or one additional power supply is to be provided to ensure the power supply for the touch panel.

It is also possible to operate the touch panel without a connection to the ABB-Welcome bus. This means that an additional power supply is to be provided to ensure the power supply for the touch panel.

Up to 16 KNX functions can be positioned on one operating page. And up to 30 operating pages with a total of 480 control elements are possible. The room temperature controller and the scene control element each occupy two function positions. The audio control element occupies at least four function positions.

The device can also be used for fault and alarm messages.

The KNX touch panel is configured with the commissioning tool. The commissioning tool is integrated in the ETS and makes direct access to group addresses and flags of communication objects possible. The control element consists of freely programmable touch surfaces.

### 4.1 Scope of supply

The panel is included in the scope of supply. It further includes a micro SD card (SDHC) with adapter, e.g. for the slot of a PC.

The enclosed bus connection terminal serves for the connection with the ABB i-bus® KNX and/or the ABB-Welcome bus.

The special Surface-mounted mounting frame (6136/27-xxx-500) and the associated Flush-mounted installation box (6136/07 UP-500; windproof) are not included in the scope of supply.

The necessary power adapters (e.g. 6358-101) are also not included in the scope of supply.

## 4.2 Additional necessary components

- Power adapter for the 20 32 V DC (SELV) auxiliary power supply (power supply of device) or the central control system ABB-Welcome (no additional power supply is necessary in this case).
- Associated flush-mounted installation box or surface-mounted mounting frame (if the device is not mounted on the associated flush-mounted installation box).

## 4.3 Overview of types

Article no.	Product name	Colour	Display diagonal
6136/07-811-500	Busch-SmartTouch® 7"	White	17.8 cm (7")
6136/07-825-500	Busch-SmartTouch® 7"	Black	17.8 cm (7")

Table 1: Overview of types

#### 4.4 Overview of KNX functions

The following table provides an overview of the possible functions and applications of the device:

Standard KNX functions	Applications
<ul> <li>Switching</li> <li>Dimming</li> <li>Slide controller functions</li> <li>Blind control</li> <li>RGBW operation</li> <li>Fan control (step switching)</li> <li>Scene control</li> <li>Display functions (display elements)</li> <li>Room temperature controller (RTC)</li> <li>Page link functions</li> <li>Audio control</li> </ul>	<ul> <li>Door communication</li> <li>Fault and alarm messages</li> <li>Scene actuator</li> <li>Presence simulation</li> <li>Time programs</li> <li>Logical functions</li> <li>Internal RTC</li> </ul>

Table 2: Overview of functions

## 4.5 Additional function of hearing loop

The device is equipped with a hearing loop for coupling the audio signals with hearing aids.



To be able to use such hearing loops, the hearing aid must have a so-called telephone coil ("T-coil" for short), which takes up the magnetic alternating field of the hearing loop. Normally the microphone of the hearing aid is deactivated when the telephone coil is in use.

The maximum distance to the device for optimum reception should be 80 cm.

#### 4.6 Device overview

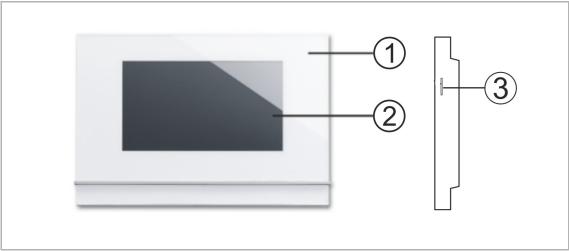


Fig. 2: Overview of device Busch-SmartTouch® 7"

- [1] Front of device
- [2] Touch-sensitive user interface
- [3] Slot for micro SD card (SDHC)

# 5 Technical data

Designation	Value	
Display resolution	1024 x 600 pixel	
Aspect ratio	16:9	
Colour resolution	16 million colours	
Display size	17.78 cm (7")	
Viewing angle  - Horizontal:  - Vertical:	80° / 80° > 70° / 60° minimal viewing angle at 12 o'clock	
Background illumination	LED	
Maximum brightness	±240 cd/m <sup>2</sup>	
Service life	±20 000 h (at maximum brightness of > 125cd/m²)	
Touch technology  – Calibration:	Capacitive Automatic	
Operating temperature	-5°C - +45°C	
Storage temperature	20°C - +70°C	
Protection	IP20	
Single-wire clamps	2 x 0.6 mm <sup>2</sup> - 2 x 1 mm <sup>2</sup>	
Fine-wire clamps	2 x 0.6 mm <sup>2</sup> - 2 x 0.75 mm <sup>2</sup>	
Mains supply (Welcome bus voltage or nominal voltage)	20 V - 32 V DC	
KNX bus voltage	21 V - 32 V DC	
<ul><li>Energy consumption (power input)</li><li>Maximum:</li><li>Standby:</li></ul>	< 9.5 W < 3 W	
KNX bus connection terminal	0.6 mm - 0.8 mm single-wire	
Micro SD card (SDHC)	Slot for micro SD card	
Commissioning  - Parameter setting:  - Programming:	ETS 5 Via KNX bus or micro SD card	

Table 3: Technical data

# 6 Circuit diagrams and dimensional drawings

## 6.1 Dimensional drawings

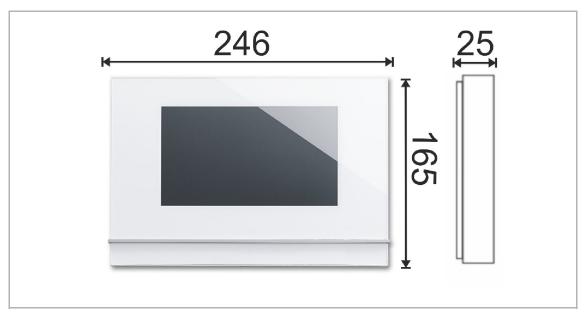


Fig. 3: Dimensions of all described device types

All dimensions are in millimetres.

The installation height of the device is 13 mm.

The installation depth is 15 mm.

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#### Note

The dimensions of the associated flush-mounted installation boxes (not included in the scope of supply) are as follows:

- Dimension for flush-mounting (H x W x D): 152 x 235 x 60.
- Dimension for hollow wall mounting (H x W x D): 146 x 227 x 50.

The dimensions of the surface-mounted mounting frame (not included in the scope of supply) are as follows:

(H x W x D): 165 x 246 x 12

# 6.2 Circuit diagrams

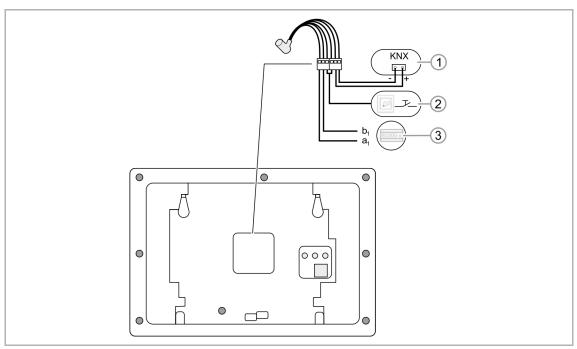


Fig. 4: Electrical connection

No.	Function
1	Connection for the ABB i-bus® KNX
2	Connection for the floor call button
3	Connection for the central control system or external power supply (e.g. 6358-101) When using several indoor stations: connection for the internal bus.

Table 4: Function of connection