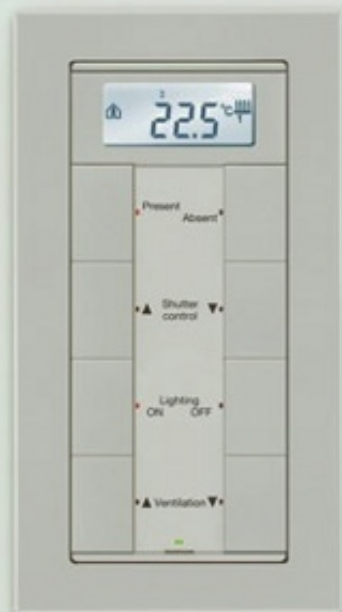


INSTABUS EIB THE SOLUTION FOR INTELLIGENT BUILDINGS



When leaving the house, do you want to check at the touch of a button that no lights or electrical appliances are still switched on? Or maybe in the evening you would like to lower the blinds with a single push of a button to create a pleasant ambiance with atmospheric lighting?

Just some of the many possibilities of Merten INSTABUS EIB intelligent building system technology. What used to take a great deal of effort in a traditional building can now be achieved in the twinkling of an eye.



All a bit too theoretical? Why not convince your customers with practical sample applications from the Merten CD. It can be ordered free of charge from Merten or online at www.mymerten.com

EIB EASY CLEVER, SIMPLE, FAST

CONTENTS

EIB EASY is the easily configurable bus system based on EIB. The EIB EASY base unit has everything an intelligent building needs: computer, logic and software.

Simple installation makes it easy for you to enter this lucrative market segment. With intelligent blind or lighting control, for example. The base unit automatically detects all the connected end devices. Just select, confirm and execute the desired function.

The ideal solution for detached houses, apartment buildings and smaller commercial buildings. And 100% compatible with INSTABUS EIB.



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The current product database can be obtained by calling the following telephone number or from the Internet at

<http://www.merten.com>

- E-mail: export@merten.de
- Telephone: +49 2261 702-203
- Fax: +49 2261 702-328

Technical information / InfoLine

- E-mail: info@merten.de
- Telephone: +49 2261 702-235
- Fax: +49 2261 702-680
- Notes on materials:
TP: Shatter-proof thermoplastic.
DP: Highly scratch-resistant duroplastic (duro).
ML: Shatter-proof thermoplastic, metal-coloured.
M: Metal.

■ **Technical Information:** INSTABUS EIB system features (⇒ p. 481)

System components

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



Power supply 160 REG-K

For generating the bus voltage for a line with up to 32 bus devices. With integrated choke to decouple the power supply from the bus and a switch to disconnect the power and reset the bus devices connected to the line.

Can be connected to the mains with plug-in screw terminals. For mounting on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary.

Mains voltage: AC 230 V, 50-60 Hz

Output voltage: DC 29 V ± 1 V

Output current: max. 160 mA, short-circuit-proof

Device width: 5 modules = approx. 90 mm

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	683329	1/21	9.3		



Power supply 320 REG-K

For generating the bus voltage for a line with up to 64 bus devices. With integrated choke to decouple the power supply from the bus and a switch to disconnect the power and reset the bus devices connected to the line.

Can be connected to the mains with plug-in screw terminals. For mounting on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary.

Mains voltage: AC 230 V, 50-60 Hz

Output voltage: DC 29 V ± 1 V

Output current: max. 320 mA, short-circuit-proof

Device width: 5 modules = approx. 90 mm

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	683429	1/21	9.3		



Power supply 320 REG-K with battery connection

For generating the bus voltage for a line with up to 64 bus devices. With integrated choke to decouple the power supply from the bus and a switch to disconnect the power and reset the bus devices connected to the line.

Can be connected to the mains with plug-in screw terminals. For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. External lead gel batteries with a DC 12 V (SELV) voltage can be connected to the emergency power input for buffering the bus voltage or IC 1 Internet controller power supply. The integral buffer circuit ensures that the 6-15 Ah lead gel batteries are used as buffers or recharged.

Mains voltage: AC 230 V, 50-60 Hz

Emergency input: for lead gel battery 6-15 Ah with DC 12 V (SELV)

Charge retention current: max. 250 mA

Output voltage: DC 29 V ± 1 V

Output current: max. 320 mA, short-circuit-proof

Device width: 5 modules = approx. 90 mm

■ **Accessories:** Lead gel battery, art. no. 668990.

Accessories from: IC 1 Internet controller REG-K, art. no. 6950...

IC 1 EIB Internet controller REG-K, art. no. 6951...

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	683129	1/21	9.3		



Lead gel battery

Lead gel battery to connect to the emergency input of the power supply 320 REG-K with battery connection.

Also for powering the outdoor siren with flashlight, TeleConnect or IC 1 Internet controller.

Nominal voltage: DC 12 V

Capacity: 7.2 Ah

■ **In INSTABUS EIB, to be completed with:** Power supply 320 REG-K with battery connection, art. no. 683129.

Version	Art. no.	PU	PG	Mat.	Info
7.2 Ah	668990	1/2	8.2		



Power supply 2x320 REG-K

For the generation of bus voltages for two lines, each with a maximum of 64 bus devices. With two integrated chokes to decouple the power supply from the bus, as well as switches to disconnect the power and to reset the bus devices connected to the respective line.

Can be connected to the mains with plug-in screw terminals. For mounting on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary.

Mains voltage: AC 230 V, 50-60 Hz

Output voltage: 2xDC 29 V ± 1 V

Output current: max. 2x320 mA, short-circuit-proof

Device width: 7 modules = approx. 126 mm

■ **Contents:** With 2 bus connecting terminals and 2 cable covers.

Version	Art. no.	PU	PG	Mat.	Info
light grey	683729	1/16	9.3		



Power supply 640 REG-K

For generating bus voltage for a maximum of two lines, each with 64 bus devices. With integrated choke to decouple the power supply from the bus and a switch to disconnect the power and reset the bus devices connected to the line. A further line can be provided with its own choke via a separate DC 29 V power supply.

For mounting on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary.

Mains voltage: AC 230 V, 50-60 Hz

Output voltage: DC 29 V \pm 1 V

Output current: max. 640 mA, short-circuit-proof

Device width: 7 modules = approx. 126 mm

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
light grey	683829	1/16	9.3		



Choke REG

To decouple the second line of the power supply 640 REG-K from the bus. With a switch to disconnect the power and reset the bus devices connected to the line.

For mounting on DIN rails EN 50022-35 x 7.5, with integrated data rail.

Mains voltage: DC 30 V

Nominal current: 0.5 A

Device width: 2 modules = approx. 36 mm

■ **In INSTABUS EIB, to be completed with:** Data rail, art. no. 6899 ..

Version	Art. no.	PU	PG	Mat.	Info
light grey	680401	1/70	9.3		



Bus coupler, flush-mounted

For connecting flush-mounted application modules with plug-in application interface.

For screw assembly in the size 60 installation box.

Flat design.. With LED and push-button for programming.

Mounting depth: 20 mm

■ **In INSTABUS EIB, to be completed with:** Flush-mounted application modules with plug-in application interface.

Accessories: Protective cover for plaster, art. no. 690098.

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	690099	1/50	9		



Bus coupler 2, flush-mounted

For the connection of flush-mounted application modules with plug-in application interface (e.g. for multi-function push-button or serial data interface 2, flush-mounted).

For screw assembly in the size 60 installation box.

Flat design.. With LED and push-button for programming.

Mounting depth: 20 mm

■ **In INSTABUS EIB, to be completed with:** Flush-mounted application modules with plug-in application interface.

Accessories: Protective cover for plaster, art. no. 690098.

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	690299	1/50	9		



Coupler REG-K

For logical connection and electrical isolation of lines and areas. For mounting on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. Contact established with the primary and secondary line via bus connecting terminal.

Device width: 2 modules = approx. 36 mm

■ **Contents:** With 2 bus connecting terminals.

Version	Art. no.	PU	PG	Mat.	Info
light grey	680203	1/70	9.3		



Data rail connector REG/2

For connecting up to eight bus lines to the data rail using bus connecting terminals. For mounting on DIN rails EN 50022-35 x 7.5, with integrated data rail.

Device width: 1 module = approx. 18 mm

■ **In INSTABUS EIB, to be completed with:** Data rail, art. no. 6899 ..

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
light grey	680603	2/140	9.3		



Data rail connector REG/4

For connecting up to eight bus lines and power supplies to the data rail via bus connecting terminals. For mounting on DIN rails EN 50022-35 x 7.5, with integrated data rail.

Device width: 1 module = approx. 18 mm

■ **In INSTABUS EIB, to be completed with:** Data rail, art. no. 6899 ..

■ **Contents:** With 2 bus connecting terminals.

Version	Art. no.	PU	PG	Mat.	Info
light grey	680602	2/140	9.3		



Adapter with data rail REG-K

For connecting up to eight bus lines to the data rail using bus connecting terminals. For mounting on DIN rails EN 50022-35 x 7.5, with integrated data rail.

Device width: 7 modules = approx. 126 mm

Version	Art. no.	PU	PG	Mat.	Info
light grey	680604	1/48	9.3		



Data rail

For connecting INSTABUS EIB devices installed in series in distribution panels on DIN rail. For bonding (self-adhesive) into the DIN rail EN 50022-35 x 7.5.

■ **Accessories:** Data rail cover, art. no. 689801.

Version	Art. no.	PU	PG	Mat.	Info
214 mm	689901	5/500	9		
243 mm	689902	5/500	9		
277 mm	689903	5/500	9		



Data rail cover

For covering unused data rail connectors by snapping onto the DIN rail EN 50022 35x7.5.

Length: 242 mm

▣ **In INSTABUS EIB, to be completed with:** Data rail, art. no. 6899 ..

Version	Art. no.	PU	PG	Mat.	Info
light grey	689801	5/50	9		



Bus connecting terminal

For connecting max. 4 core pairs to an INSTABUS EIB REG-K, flush-mounted, surface-mounted or built-in device, can also be used as a branch terminal.

Consists of two interlocked terminal parts in red ("+") and dark grey ("-"), each with 4 plug-in terminals. For solid conductors with a diameter of 0.6 to 0.8 mm.

Version	Art. no.	PU	PG	Mat.	Info
red/dark grey	689701	50/2500	9		



Branch terminal, yellow/white

Branch terminal comprising two interlocking terminal parts in yellow and white, each with 4 plug-in terminals. For solid conductors with a diameter of 0.6 to 0.8 mm.

For wiring the yellow/white cores of the bus cable.

Version	Art. no.	PU	PG	Mat.	Info
yellow/white	689702	50/2500	9		



Cable cover for REG-K

For covering the stripped bus cable in all REG-K devices. The cable cover guarantees a safe distance between the SELV bus voltage and the mains voltage.

Version	Art. no.	PU	PG	Mat.	Info
light grey	662929	5/500	9		



Connecting cable

For connecting an application module and the flush-mounted bus coupler on installation in two separate flush-type boxes.

▣ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099. Bus coupler, flush-mounted 2, art. no. 690299.

Version	Art. no.	PU	PG	Mat.	Info
	639880	1/100	9		



Protective cover for plaster

For protecting the bus coupler, flush-mounted actuators, Easy flush-mounted modules or actuators from damage during painting and decorating work.

▣ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099. Bus coupler, flush-mounted 2, art. no. 690299. Switch actuator, flush-mounted, art. no. 627099. Series actuator, flush-mounted, art. no. 627199. Blind actuator, flush-mounted, art. no. 627299.

Version	Art. no.	PU	PG	Mat.	Info
black	690098	10/300	9		



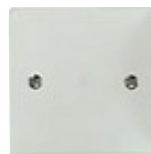
Blanking cover

For System M.

Screw-on cover for flush-mounted bus coupler or flush-mounted actuators.

▣ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099. Bus coupler, flush-mounted 2, art. no. 690299. Switch actuator, flush-mounted, art. no. 627099. Series actuator, flush-mounted, art. no. 627199. Blind actuator, flush-mounted, art. no. 627299. INSTABUS radio gateway, flush-mounted, art. no. 680999.

Version	Art. no.	PU	PG	Mat.	Info
white	662144	1/100	9	TP	
polar white	662119	1/100	9	TP	
anthracite	662114	1/100	9	TP	
aluminium	662160	1/100	9	ML	



Blanking cover

For System Design.

Screw-on cover for flush-mounted bus coupler or flush-mounted actuators.

▣ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099. Bus coupler, flush-mounted 2, art. no. 690299. Switch actuator, flush-mounted, art. no. 627099. Series actuator, flush-mounted, art. no. 627199. Blind actuator, flush-mounted, art. no. 627299. INSTABUS radio gateway, flush-mounted, art. no. 680999.

Version	Art. no.	PU	PG	Mat.	Info
white	662244	1/100	9	TP	
polar white	662219	1/100	9	TP	
vanilla	662282	1/100	9	TP	
ice blue	662288	1/100	9	TP	
light grey	662229	1/100	9	TP	
midnight blue	662278	1/100	9	TP	
dark brazil	662215	1/100	9	TP	
black grey	662269	1/100	9	TP	
aluminium	662260	1/100	9	ML	
stainless steel	662246	1/100	9	ML	



Bus coupler REG

Can be programmed as a logic, control or light-scene module, for example.
For connecting DIN rail mounted application modules with application interface (REG-S) plugged in at the side.
For mounting on DIN rails EN 50022-35 x 7.5, with integrated data rail. With LED and push-button for programming.

INSTABUS EIB software functions:

Lighting control

Lighting controls are used to control switching and dimming telegrams selectively, e.g. to toggle between single room and total room control for conference rooms with partition walls. When an incoming telegram is received, up to twelve different output telegrams can be sent. Four output channels can be activated individually or all together.

Lightszenes

Light settings can be activated automatically or at the push of a button. Up to eight lightszenes for four different actuators or actuator groups can be saved in a single bus coupler. The number of lightszenes and actuators can be infinitely increased with additional bus couplers. Lightszenes are activated by switching telegrams, such as those sent by standard INSTABUS push-buttons and binary inputs for example.

Logic operations

Different logic operation functions can be selected in three program applications. These functions contain up to three logic gates and eight inputs. All three applications support the logic operations AND, OR, NAND and NOR. One also supports the exclusive OR and equivalence functions. The telegrams can be individually parameterised on the input and output side.

Filter

Incoming ON/OFF telegrams are selected, processed and then issued again depending on the setting in the Filter/Time application. The telegrams can be sent on two output channels with a time delay. Both outputs can be locked using a blocking function. In such a way it is possible for example to block automatic, brightness-dependent blind control if necessary.

Device width: 1 module = approx. 18 mm

■ In INSTABUS EIB, to be completed with: Data rail, art. no. 6899 ..

Version	Art. no.	PU	PG	Mat.	Info
light grey	690599	1/70	9.3		



Mini-function module REG

Open and closed-loop control tasks are possible using the INSTABUS EIB thanks to the mini-function module REG. The received bus telegrams are interpreted and processed according to the freely programmable logic or mathematical functions. The results are sent to the actuators as telegrams via the bus (no floating point format).

The device is programmed using INSTABUS EIB (no integrated RS 232 interface). Projects may comprise 150 function blocks and 200 group addresses. Mini-function module projects can also be processed by the function module REG.

A real-time operating system performs control and management of the functional elements, which are programmed in a graphical language. The integrated real-time clock permits precise time-based control sequences. A library of functional elements permits creation of programs appropriate to the needs of any application, e.g. for complex heating, lighting and blind control.

The mini-function module tool software permits the selection of approx. 40 functional elements with diverse standardised EIB data telegrams from the function library, for combination in application programs. The programs are then loaded into the device and executed.

Power: A 29 V DC power supply is required via the two outer conductors of the data rail and a data rail connector REG/4.

Power consumption: Normal operation approx. 40 mA

Programming mode approx. 100 mA

Device width: 3 modules = approx. 54 mm

■ In INSTABUS EIB, to be completed with: Mini-function module tool software, art. no. 615011. Data rail, art. no. 6899.., data rail connector REG/4, art. no. 680602.

■ **Note:** The software, art. no. 615011, (Windows 98 or higher) for programming the mini-function module is available on the Internet or on the Merten info CD. The program FM Loader 32 is available over the Internet for operating systems Windows NT, 2000 and XP.

Version	Art. no.	PU	PG	Mat.	Info
light grey	676099	1/30	9.3		



Function module REG

Extensive open and closed-loop control tasks are possible using the INSTABUS EIB thanks to the function module REG. The sensors and actuators can be connected to the bus locally and cost-effectively. The received bus telegrams are interpreted and processed according to the freely programmable logic or mathematic functions. The results are sent to the actuators as telegrams via the bus.

A real-time multi-tasking operating system performs control and management of the functional elements, which are freely programmed in a graphical language. The integrated real-time clock permits precise time-based control sequences. A library of functional elements permits creation of programs appropriate to the needs of any application, e.g. for complex heating, lighting and blind control.

The function module tool software allows more than 50 functional elements, supporting a variety of standardised EIB data telegrams, to be selected from the function library and assembled into application programs. The programs are then loaded into the device and executed.

Power: A 29 V DC power supply is required via the two outer conductors of the data rail and a data rail connector REG/4.

Power consumption: Normal operation approx. 40 mA

Programming mode approx. 100 mA

Device width: 3 modules = approx. 54 mm

- **In INSTABUS EIB, to be completed with:** Function module tool software, art. no. 615014. Data rail, art. no. 6899.., data rail connector REG/4, art. no. 680602.

Version	Art. no.	PU	PG	Mat.	Info
light grey	676029	1/30	9.3		



Function module tool software

The function module tool software is used to configure the application programs of the function module REG.

An easy-to-use graphic editor that runs under Windows makes it possible to program the function module on a conventional PC, which can also be used for the ETS program. The program created with the graphic editor is loaded into the function module via the computer's RS 232 interface after compilation (translation into the language of the function module).

The function module and additional program FM Loader 32 can be programmed under Windows NT, 2000 and XP operating systems, and also via the bus.

The function module tool software consists of:

Graphic editor: Function block library with over 50 function elements, task images and compilers to create programs.

Loader: For loading the programs into the function module.

Documenter: For creating and printing out the documentation.

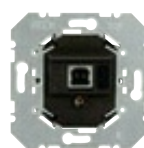
PC requirements: min. 486 processor with min. 1 MB available space on the hard drive and a free serial interface.

- **In INSTABUS EIB, to be completed with:** Function module REG, art. no. 676029.
- **Note:** The program FM Loader 32 is available over the Internet for operating systems Windows NT, 2000 and XP.
- **Contents:** Program diskettes with manual and copy-protected plug (dongle).

Version	Art. no.	PU	PG	Mat.	Info
	615014	1/1	9.1		

Interfaces/gateways

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



USB interface, flush-mounted

For connecting a programming or diagnostics device with a USB1.1 or USB2 interface to the INSTABUS EIB.

For screw mounting in the size 60 installation box. With integrated bus coupler. The device is connected to the bus with a bus connecting terminal. Compatible with ETS 3.

Mounting depth: 20 mm

- **To be completed with:** Central plate for telephone socket-outlet TAE, art. no. 2928.., 2979.., 2978.. or 2938...
- **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	681799	1/30	9		



USB interface REG-K

For connecting a programming or diagnostics device with a USB1.1 or USB2 interface to the INSTABUS EIB. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. With integrated bus coupler.

Device width: 2 modules = approx. 36 mm

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	681829	1/32	9.3		



Serial data interface, flush-mounted

Application module for System M.

To connect a programming or diagnostics device with an RS 232 interface to the INSTABUS.

With operating display and 9-pin D-SUB socket connector.

■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099.

Version	Art. no.	PU	PG	Mat.	Info
white	681144	1/50	9	TP	
polar white	681119	1/50	9	TP	
anthracite	681114	1/50	9	TP	
aluminium	681160	1/50	9	ML	



Serial data interface 2, flush-mounted

Application module for System M.

To connect a programming or diagnostics device with an RS 232 interface to the INSTABUS. For communication with the FT 1.2 protocol.

With operating display and 9-pin D-SUB socket connector.

■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299.

■ **Note:** When using the data interface for programming, use the ETS 3 with the FT 1.2 protocol.

Version	Art. no.	PU	PG	Mat.	Info
polar white	681219	1/50	9	TP	
anthracite	681214	1/50	9	TP	
aluminium	681260	1/50	9	ML	



Serial data interface, flush-mounted

Application module for System Design.

To connect a programming or diagnostics device with an RS 232 interface to the INSTABUS.

With operating display and 9-pin D-SUB socket connector.

■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099.

Version	Art. no.	PU	PG	Mat.	Info
white	681344	1/50	9	TP	
polar white	681319	1/50	9	TP	
vanilla	681382	1/50	9	TP	
ice blue	681388	1/50	9	TP	
light grey	681329	1/50	9	TP	
midnight blue	681378	1/50	9	TP	
dark brazil	681315	1/50	9	TP	
black grey	681369	1/50	9	TP	
aluminium	681360	1/50	9	ML	
stainless steel	681346	1/50	9	ML	



Serial data interface 2, flush-mounted

Application module for System Design.

To connect a programming or diagnostics device with an RS 232 interface to the INSTABUS. For communication with the FT 1.2 protocol.

With operating display and 9-pin D-SUB socket connector.

■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299.

■ **Note:** When using the data interface for programming, use the ETS 3 with the FT 1.2 protocol.

Version	Art. no.	PU	PG	Mat.	Info
white	681444	1/50	9	TP	
polar white	681419	1/50	9	TP	
vanilla	681482	1/50	9	TP	
ice blue	681488	1/50	9	TP	
light grey	681429	1/50	9	TP	
midnight blue	681478	1/50	9	TP	
dark brazil	681415	1/50	9	TP	
black grey	681469	1/50	9	TP	
aluminium	681460	1/50	9	ML	
stainless steel	681446	1/50	9	ML	



Serial data interface REG-K

For connecting a programming or diagnostics device with an RS 232 interface to the INSTABUS. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. Data traffic via the RS 232 interface is indicated by a yellow LED. The green operating LED indicates that the interface is ready for operation.

With 9-pin D-SUB socket connector and integrated bus coupler.

Device width: 2 modules = approx. 36 mm

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	681929	1/70	9.3		



INSTABUS radio gateway, flush-mounted

The radio gateway connects the INSTABUS EIB to the Merten radio system. Transmission is bi-directional. Smoke detectors with radio module can be connected to the radio gateway via the radio repeater.

The gateway can be installed in a size 60 flush-mounted box or a surface-mounted box.

INSTABUS EIB software functions:

From EIB to radio: Switching, toggling, dimming, blinds.

From radio to EIB: Switching, toggling, dimming, blinds, pulse edges, ARGUS.

Supply voltage: Bus, DC 24 V, approx. 10 mA

Channels: 25 (10 receiving blocks and 15 receiving/transmitting blocks)

Operating elements: Function selector switch, channel selector switch, programming button

Display elements: LED function displays, programming LED

Radio frequency: 868 MHz

Transmission capacity: max. 10 mW

Range: up to 100 m (free field)
up to 30 m (building)

Dimensions: 50x44x33 mm (WxHxD) without antenna and retaining ring

Type of protection: IP 20

■ **In INSTABUS EIB, to be completed with:** Blanking cover System M, art. no. 6621... Blanking cover System Design, art. no. 6622... Blanking cover OCTOCOLOR, art. no. 6620...

Transmitter: Radio remote control Distance 5010, art. no. 590722. Radio push-button, 1-gang, art. no. 5941..., 5921... Radio push-button, 2-gang, art. no. 5942..., 5922... Universal radio transmitter, flush-mounted, 4-gang, art. no. 592599. Radio module for ARGUS 220 movement detector, art. no. 565495. Radio repeater, art. no. 595959.

Receiver: Sensor cover with radio receiver, art. no. 5931..., 5930... Sensor cover with radio receiver for relay switch insert, art. no. 5932..., 5933... Radio receiver, flush-mounted, 1-gang, art. no. 592591. Blind push-button with radio receiver and sensor connection, art. no. 5936..., 5935... Plug adapter with radio receiver, art. no. 591019, 591519. Radio module for ARGUS 220 movement detector, art. no. 565495. Radio repeater, art. no. 595959.

■ **Technical Information:** Instabus radio gateway, flush-mounted (⇒ p. 440)

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	680999	1/50	9		



IC 1 EIB Internet controller REG-K

Monitoring and control of systems and buildings via the Internet.

An Internet connection is established using art. no.

- 695102 via the integrated analogue modem (56 kbit/s)
- 695103 via the integrated ISDN modem (64 kbit/s)

With LAN/Ethernet interface for networking up to 32 additional IC 1 devices. Commissioning via the Internet, Ethernet or PC.

With integrated bus coupler. For installation on DIN rails EN 50022, a data rail is not necessary. A separate power supply is not required.

Power consumption: 5 watt

Power supply: DC 12-30 V

EIB objects: 256

Interfaces: 2xUSB for video adapter

1xRJ45 Ethernet 10/100 Mbit/s

Art. no. 695102: 1xRJ45 analogue modem, 56 kbit/s

Art. no. 695103: 1xRJ45 ISDN, 64 kbit/s

Video images: 320x240 up to max. 640x480

Video memory: max. 128 images

Historical memory: 128,000 data points/channel

Year time switch: with 32 programs, DCF-77 synchronised via Domoport

Macros: max. 16 parallel macros, 32 programmable internal variables, logical, mathematical, comparative and chronological function modules.

Device width: 9 modules = 162 mm

■ **In INSTABUS EIB, to be completed with:** Power supply 24 V DC REG-K, art. no. 693001. Power supply, art. no. 683729 or art. no. 683829 (via free outlet). Power supply 320 REG-K with battery connection, art. no. 683129 and lead gel battery, art. no. 668990 for buffering the supply voltage in the case of a mains failure.

Accessories: USB video adapter REG-K, art. no. 668101.

■ **Note:** Devices will be available in Q1 2005 with the new user interface "Merten@Home".

Contents: User manual on CD, registration data for Domoport, 3 m cable for each network, crosslink and telephone, antenna with magnetic foot and connecting cable, art. no. 695104.

Version	Art. no.	PU	PG	Mat.	Info
analogue	695102	1/3	9.3		
ISDN	695103	1/3	9.3		



TeleConnect REG-S

TeleConnect REG-S can be used to connect the telephone network with conventional inputs/outputs and INSTABUS EIB systems. For mounting on DIN rails EN 50022-35 x 7.5, with integrated data rail. With lateral application interface for plugging onto the bus coupler REG (ordered separately).

Four conventional loads and six INSTABUS EIB functions can be controlled via a standard DTMF telephone or a DTMF hand-held transmitter. The status of the loads and device functions can be determined through speech output. The corresponding texts can be changed with the handset. The device states are indicated on the LCD in addition to speech output. A four-digit code number prevents unauthorised access. An alarm function can also be programmed. The alarm function can be activated via four conventional alarm inputs and two INSTABUS EIB telegrams. In the event of an alarm, up to three telephone numbers can be dialled.

Mains voltage: AC 230 V, 50-60 Hz

Inputs: 4

Outputs: 4 x DC 24 V

Device width: 8 modules = approx. 144 mm

- ▣ In INSTABUS EIB, to be completed with: Bus coupler REG, art. no. 690599. Data rail, art. no. 6899 ..

Accessories: Handset, art. no. 660790.

- ▣ **Contents:** Without bus coupler.

Version	Art. no.	PU	PG	Mat.	Info
light grey	680729	1/8	9.3		



TeleConnect

TeleConnect can be used to connect the telephone network to conventional inputs/outputs and INSTABUS EIB systems. With integrated bus coupler.

Four conventional loads and six INSTABUS EIB functions can be controlled via a standard DTMF telephone or a DTMF hand-held transmitter. The status of the loads and device functions can be determined through speech output. The corresponding texts can be changed with the handset. The device states are indicated on the LCD in addition to the speech output. A four-digit code number prevents unauthorised access. An alarm function can also be programmed. The alarm function can be activated via 4 conventional alarm inputs and 2 INSTABUS EIB telegrams. In the event of an alarm, up to three telephone numbers can be dialled.

Mains voltage: AC 230 V + 10 %/- 15 %, 50 Hz (via plug-in power supply unit)

Outputs: 4 x DC 24 V

Dimensions: 220 x 180 x 40 mm (L x W x H)

- ▣ **Accessories:** Handset, art. no. 660790.

- ▣ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
polar white	680732	1/4	9		



Handset for TeleConnect

Speech output of the various messages can be monitored and changed with the handset.

- ▣ In INSTABUS EIB, to be completed with: TeleConnect, art. no. 680732. TeleConnect REG-S, art. no. 680729.

Version	Art. no.	PU	PG	Mat.	Info
anthracite	660790	1/8	9.1		



INSTABUS DALI gateway REG-K/1/16/64

The DALI gateway connects the INSTABUS EIB with digital electronic ballasts, which are equipped with a DALI interface. The gateway is the DALI master and power supply for the electronic ballasts. It supports the switching and dimming of up to 64 electronic ballasts in 16 groups and the control of 16 lightscenes.

Brightness values or error messages in the DALI devices can be sent to the EIB and visualised on display units. The DALI is commissioned and configured with the integrated display and operator buttons. They also permit the user to change group assignments and scene settings at any time without software. With 2 inputs, e.g. for the connection of push-buttons.

For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. The network and the DALI cable as well as the switch inputs are connected via screw terminals on the device.

Supply voltage: AC 110-240 V, 50-60 Hz

Inputs: 2, passive DC 9-36 V or AC 9-24 V

Outputs: DALI D+, D in line with DALI specification DC 16-18 V, 150 mA, short-circuit-proof

Connecting cable: 1.5 - 2.5 mm²

Type of protection: IP 20

Device width: 6 modules = approx. 108 mm

- ▣ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	680129	1/20	9.3		

PLANTEC

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.

■ **Technical Information:** (⇒ p. 484)



PLANTEC with 8 function keys and display

Convenient control and display unit with 8 function keys. Functions are not only controlled using the function keys, but also via the display using menus. With integrated bus coupler for installation on a flush-type double mounting box.

Message text and actuator designations can be programmed as desired. Incoming information is shown on the display. The display lighting can be configured. The user can change scene settings any time without software. In order to guarantee the power supply of the device in the event of mains voltage failure, PLANTEC can also be supplied with DC 12 V.

For surface-mounted installation on solid walls: Merten double mounting box (art. no. 528668).

For surface-mounted installation in cavity walls: "Kaiser" junction box art. no. 9062-02.

INSTABUS EIB software functions:

Storing of max. 8 scenes. The scenes can be activated using extension objects.

Control of up to

- 10 groups of lamps (switching/dimming/value)
- 6 groups of blinds (up/down/step/position)
- 3 ventilation groups (switching/dimming/value)
- 2 room thermostats (night/comfort/standby)

Display of

- max. 20 texts, can be controlled with 10 objects
- Date/time

Function keys: Scenes or individual functions (lighting, blinds, ventilation or heating).

Operating elements: 8 function keys, 6 menu buttons, 1 programming button

Displays: LCD dot matrix 64x128, 7 rows with 21 characters each, Programming LED, status LEDs, Illuminated display

Bus voltage: DC 24 V, approx. 5 mA

External auxiliary voltage¹: AC 230 V, 50-60 Hz/1.5 VA

4 kV insulation voltage between bus and 230 V

Connections:

Bus: Bus connecting terminal

Auxiliary voltage: 2 screw terminals for max. 2.5 mm²

EC guidelines: Low voltage guideline 73/23/EEC and EMC guideline 89/336/EEC

Dimensions: Surface-mounted: 170x115x23 mm (HxWxD), Mounting depth in flush-type double mounting box: 31 mm

Type of protection: IP 20

- **Accessories:** Double mounting box, art. no. 528668. Protection against dismantling for surface-mounted devices, art. no. 623090. PLANTEC flush mounting box, art. no. 623099. PLANTEC design frame, art. no. 623095. PLANTEC labelling sheets, art. no. 623092.

■ **Technical Information:** PLANTEC (⇒ p. 484)

- ¹ **Alternative power supply via DC 12 V (SELV) / 100-200 mA: On request.**

Note: The PLANTEC tool software PTS, art. no. 615038, is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
aluminium	623014	1/6	9	M	



PLANTEC with 18 function keys and display

Convenient control and display unit with 18 function keys. Functions are not only controlled using the function keys, but also via the display using menus. With integrated bus coupler for installation on a flush-type double mounting box.

Message text and actuator designations can be programmed as desired. Incoming information is shown on the display. The display lighting can be configured. The user can change scene settings any time without software. In order to guarantee the power supply of the device in the event of mains voltage failure, PLANTEC can also be supplied with DC 12 V.

For surface-mounted installation on solid walls:

Merten double mounting box (art. no. 528668).

For surface-mounted installation in cavity walls:

"Kaiser" junction box art. no. 9062-02.

INSTABUS EIB software functions:

Storing of max. 8 scenes. The scenes can be activated using extension objects.

Control of up to

- 10 groups of lamps (switching/dimming/value)
- 6 groups of blinds (up/down/step/position)
- 3 ventilation groups (switching/dimming/value)
- 2 room thermostats (night/comfort/standby)

Display of

- max. 20 texts, can be controlled with 10 objects
- Date/time

Function keys: Scenes or individual functions (lighting, blinds, ventilation or heating).

Operating elements: 18 function keys, 6 menu buttons, 1 programming button

Displays: LCD dot matrix 64x128, 7 rows with 21 characters each, Programming LED, status LEDs, Illuminated display

Bus voltage: DC 24 V, approx. 5 mA

External auxiliary voltage¹: AC 230 V, 50-60 Hz/1.5 VA

4 kV insulation voltage between bus and 230 V

Connections:

Bus: Bus connecting terminal

Auxiliary voltage: 2 screw terminals for max. 2.5 mm²

EC guidelines: Low voltage guideline 73/23/EEC and EMC guideline 89/336/EEC

Dimensions: Surface-mounted: 285x115x23 mm (HxWxD), Mounting depth in flush-type double mounting box: 31 mm

Type of protection: IP 20

- **Accessories:** Double mounting box, art. no. 528668. Protection against dismantling for surface-mounted devices, art. no. 623090. PLANTEC flush mounting box, art. no. 623098. PLANTEC design frame, art. no. 623096. PLANTEC labelling sheets, art. no. 623093.

■ **Technical Information:** PLANTEC (⇒ p. 484)

- ¹ **Alternative power supply via DC 12 V (SELV) / 100-200 mA: On request.**

Note: The PLANTEC tool software PTS, art. no. 615038, is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
aluminium	623024	1/4	9	M	



PLANTEC multi-function push-button with IR receiver

Application module for PLANTEC.
Push-button with 8 operating buttons, 8 status displays, labelling field and IR receiver.
All functions of the respective buttons can be controlled via IR remote control Distance.

INSTABUS EIB software functions:

The push-buttons can be parameterised either as a pair (dual-surface) or individually (single-surface).

Single-surface: switching, dimming, pulse edge, send value, scenes.

Dual-surface: switching, dimming, blind control, send value.

Operating elements: 8 function buttons

Displays: Status LEDs

Dimensions: 101x115x23 mm (HxWxD)

Type of protection: IP 20

■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299.

Accessories: Protection against dismantling for surface-mounted devices, art. no. 623090. PLANTEC labelling sheets, art. no. 623091. PLANTEC flush mounting box, art. no. 623097. PLANTEC design frame, art. no. 623094.

Transmitter: IR remote control Distance, art. no. 570222, 570722.

■ **Technical Information:** PLANTEC (⇒ p. 484)

Version	Art. no.	PU	PG	Mat.	Info
aluminium	623008	1/6	9	M	



PLANTEC multi-function push-button with room temperature control unit

Application module for PLANTEC.

Convenient control unit with 6 function buttons, 2 buttons for display functions, IR receiver and parameterisable status LEDs next to the operating buttons. All functions of the respective buttons can be controlled via IR remote control Distance.

With room temperature control unit and display. Suitable only for surface mounting.

The room temperature control unit can be used for heating and cooling with infinitely adjustable INSTABUS valve drives or to control switch actuators. With white backlit display for indicating important information. Menu for setting default operating modes, setpoint value, working/non-working day, display mode, time, switching times and brightness.

The push-buttons are freely parameterisable as push-button pairs (dual surface) or as single push-buttons.

INSTABUS EIB software functions:

Functions of the multi-function push-button:

Switching, toggling, dimming, blind control (relative or absolute), pulse edges trigger 1-, 2- or 8-bit telegrams (distinction between short and long operation), pulse edges with 2-byte telegrams (distinction between short and long operation), 8-bit linear regulator, scene retrieval, disable functions, scene saving, timed control, alarm functions.

Functions of the room temperature control unit:

Type of thermostat: 2-step control, continuous PI control, switching PI control (PWM)

Output: Continuous in the range 0..100% or switching ON/OFF

Controller mode:

- Heating with one controller output
- Cooling with one controller output
- Heating and cooling with separate controller outputs
- 2-step heating with 2 control outputs
- 2-step cooling with 2 control outputs

Operating modes: Comfort, standby, night economy, frost/heat protection

Operation: Menu

Operating elements: 6 function buttons, 2 menu buttons

Displays: Status LEDs

Dimensions: 101x115x23 mm (HxWxD)

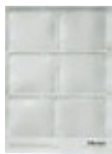
■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299.

Accessories: Protection against dismantling for surface-mounted devices, art. no. 623090.

■ **Note:** Do not use with flush mounting boxes.

Availability: Available 2nd quarter 2005

Version	Art. no.	PU	PG	Mat.	Info
aluminium	626008	1/6	9	M	



PLANTEC labelling sheets

For individual labelling of PLANTEC with text, logos or symbols.

For laser printers

- **Accessories:** Labelling software, art. no. 615022.
- **Contents:** For art. no. 623008: 1 sheet for 6 products. For art. no. 623014: 1 sheet for 3 products. For art. no. 623024: 1 sheet for 2 products.

Version	Art. no.	PU	PG	Mat.	Info
for 623008	623091	1/100	9		
for 623014	623092	1/100	9		
for 623024	623093	1/100	9		



PLANTEC design frame

Decorative PLANTEC aluminium frame for flush mounting.

- **To be completed with:** PLANTEC design frame, art. no. 623094 for PLANTEC multi-function push-button with IR receiver, art. no. 623008 and PLANTEC flush-mounting box, art. no. 623097. PLANTEC design frame, art. no. 623095 for PLANTEC with 8 function keys and display, art. no. 623014 and PLANTEC flush-mounting box, art. no. 623099. PLANTEC design frame, art. no. 623096 for PLANTEC with 18 function keys and display, art. no. 623024 and PLANTEC flush-mounting box, art. no. 623098.

Version	Art. no.	PU	PG	Mat.	Info
for 623008	623094	1/36	9	M	
for 623014	623095	1/36	9	M	
for 623024	623096	1/36	9	M	



PLANTEC flush mounting box

Flush-mounted box for the installation of PLANTEC devices. For solid or hollow walls.

- **To be completed with:** Flush mounting box, art. no. 623097 for PLANTEC multi-function push-button with IR receiver, art. no. 623008. Flush mounting box, art. no. 623099 for PLANTEC with 8 function keys and display, art. no. 623014. Flush mounting box, art. no. 623098 for PLANTEC with 18 function keys and display, art. no. 623024.

■ **Technical Information:** PLANTEC (⇒ p. 485)

■ **Contents:** With mounting box

Version	Art. no.	PU	PG	Mat.	Info
for 623008	623097	1/10	9	M	
for 623014	623099	1/6	9	M	
for 623024	623098	1/3	9	M	



Protection against dismantling for surface-mounted PLANTEC devices

PLANTEC devices can be safeguarded against theft with protection against dismantling for surface-mounted devices.

Only effective for surface-mounted devices.

- **To be completed with:** PLANTEC with 8 function keys and display, art. no. 623014, PLANTEC with 18 function keys and display, art. no. 623024, PLANTEC multi-function push-button with IR receiver, art. no. 623008 or PLANTEC multi-function push-button with room temperature control unit, art. no. 626008.

■ **Technical Information:** PLANTEC (⇒ p. 485)

Version	Art. no.	PU	PG	Mat.	Info
for all PLANTEC devices	623090	1/100	9	M	



Double mounting box

Plastic

Replaces two size 60 mounting boxes.

Box is suitable for all conventional twin combinations.

Double mounting box for surface installation of PLANTEC with 8/18 function keys and display in solid walls.

Version	Art. no.	PU	PG	Mat.	Info
	528668	1/30	1		

Push-buttons

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



Push-button, 1-gang

Application module for System M.

Push-button with 2 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

INSTABUS EIB software functions:

The push-buttons can be parameterised with different applications either as a pair (dual-surface) or individually (single-surface).

Single-surface: switching, pulse edge.

Dual-surface: switching, dimming, blind control, pulse edge.

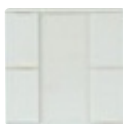
In combination with flush-mounted actuator, additionally:

send value, send temperature values, disable buttons.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618319/20.

Version	Art. no.	PU	PG	Mat.	Info
white	623344	1/100	9	TP	
polar white	623319	1/100	9	TP	
anthracite	623314	1/100	9	TP	
aluminium	623360	1/100	9	ML	



Push-button, 2-gang

Application module for System M.
Push-button with 4 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

INSTABUS EIB software functions:

The push-buttons can be parameterised with different applications either as a pair (dual-surface) or individually (single-surface).
Single-surface: switching, pulse edge.
Dual-surface: switching, dimming, blind control, pulse edge.
In combination with flush-mounted actuator, additionally:
send value, send temperature values, disable buttons.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618319/20.

Version	Art. no.	PU	PG	Mat.	Info
white	623444	1/100	9	TP	
polar white	623419	1/100	9	TP	
anthracite	623414	1/100	9	TP	
aluminium	623460	1/100	9	ML	



Push-button, 4-gang

Application module for System M.
Push-button with 8 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

INSTABUS EIB software functions:

The push-buttons can be parameterised with different applications either as a pair (dual-surface) or individually (single-surface).
Single-surface: pulse edge.
Dual-surface: switching, dimming, blind control.
In combination with flush-mounted actuator, additionally:
send value, send temperature values, disable buttons. Free functional selection.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618319/20.

Version	Art. no.	PU	PG	Mat.	Info
white	623844	1/100	9	TP	
polar white	623819	1/100	9	TP	
anthracite	623814	1/100	9	TP	
aluminium	623860	1/100	9	ML	



Multi-function push-button, 4-gang

Application module for System M.
Push-button with 8 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

INSTABUS EIB software functions:

The push-buttons can be parameterised either as a pair (dual-surface) or individually (single-surface).
Single-surface: switching, dimming, pulse edge, send value, scenes.
Dual-surface: switching, dimming, blind control, send value.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618319/20.

Version	Art. no.	PU	PG	Mat.	Info
white	624144	1/100	9	TP	
polar white	624119	1/100	9	TP	
anthracite	624114	1/100	9	TP	
aluminium	624160	1/100	9	ML	



Multi-function push-button, 4-gang with IR receiver

Application module for System M.
Push-button with 8 operating buttons, 8 status displays, labelling field and IR receiver.
All functions of the respective buttons can be controlled via IR remote control Distance.
The operating display can also be used as an orientation light.

INSTABUS EIB software functions:

The push-buttons can be parameterised either as a pair (dual-surface) or individually (single-surface).
Single-surface: switching, dimming, pulse edge, send value, scenes.
Dual-surface: switching, dimming, blind control, send value.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for multi-function push-button with IR receiver, art. no. 618419/20.

Transmitter: IR remote control Distance, art. no. 570222, 570722.

Version	Art. no.	PU	PG	Mat.	Info
white	624244	1/100	9	TP	
polar white	624219	1/100	9	TP	
anthracite	624214	1/100	9	TP	
aluminium	624260	1/100	9	ML	



Labelling sheets for push-buttons

For individual labelling of the System M push-buttons with text or symbols.

- ▣ **To be completed with:** System M push-buttons, 1-gang, 2-gang or 4-gang, art. no. 6233., 6234., 6238., 6241...
- Accessories:** Labelling software, art. no. 615022.
- ▣ **Contents:** 1 sheet for every 28 products.

Version	Art. no.	PU	PG	Mat.	Info
polar white	618319	1/100	9		
silver	618320	1/100	9		



Labelling sheets for multi-function push-button with IR receiver

For individual labelling of the System M multi-function push-button with IR receiver.

- ▣ **To be completed with:** System M multi-function push-button with IR receiver, art. no. 6242...
- Accessories:** Labelling software, art. no. 615022.
- ▣ **Contents:** 1 sheet for every 28 products.

Version	Art. no.	PU	PG	Mat.	Info
polar white	618419	1/100	9		
silver	618420	1/100	9		



Multi-function push-button, 2-gang with room temperature control unit

Application module for System M. Convenient control unit with 4 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light. With room temperature control unit and display. The room temperature control unit can be used for heating and cooling with infinitely adjustable INSTABUS valve drives or to control switch actuators. With white backlit display for indicating important information. Menu for setting default operating modes, setpoint value, working/non-working day, display mode, time, switching times and brightness. The push-buttons are freely parameterisable as push-button pairs (dual surface) or as single push-buttons.

INSTABUS EIB software functions:

Functions of the multi-function push-button:

Switching, toggling, dimming, blind control (relative or absolute), pulse edges trigger 1-, 2- or 8-bit telegrams (distinction between short and long operation), pulse edges with 2-byte telegrams (distinction between short and long operation), 8-bit linear regulator, scene retrieval, disable functions, scene saving, timed control, alarm functions.

Functions of the room temperature control unit:

Type of thermostat: 2-step control, continuous PI control, switching PI control (PWM)

Output: Continuous in the range 0..100% or switching ON/OFF

Controller mode:

- Heating with one controller output
- Cooling with one controller output
- Heating and cooling with separate controller outputs
- 2-step heating with 2 control outputs
- 2-step cooling with 2 control outputs

Operating modes: Comfort, standby, night economy, frost/heat protection

Operation: Menu

- ▣ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299.

Accessories: Labelling software, art. no. 615022.

- ▣ **Note:** If you already have the labelling software, you can download the form for the multi-function push-button at www.merten.com. Use to label conventional foils (max. thickness 0.15 mm).

Contents: Screw for protection against dismantling.

Version	Art. no.	PU	PG	Mat.	Info
white	623244	1/17	9	TP	
polar white	623219	1/17	9	TP	
anthracite	623214	1/17	9	TP	
aluminium	623260	1/17	9	ML	



Multi-function push-button, 4-gang with room temperature control unit

Application module for M-PLAN.

Convenient control unit with 8 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

With room temperature control unit and display.

With integrated piezoelectric buzzer to display alarm states and IR receiver. All functions of the respective buttons can be controlled via IR remote control Distance.

The room temperature control unit can be used for heating and cooling with infinitely adjustable INSTABUS valve drives or to control switch actuators. With white backlit display for indicating important information. Menu for setting default operating modes, setpoint value, working/non-working day, display mode, time, switching times and brightness.

The push-buttons are freely parameterisable as push-button pairs (dual surface) or as single push-buttons.

INSTABUS EIB software functions:

Functions of the multi-function push-button:

Switching, toggling, dimming, blind control (relative or absolute), pulse edges trigger 1-, 2- or 8-bit telegrams (distinction between short and long operation), pulse edges with 2-byte telegrams (distinction between short and long operation), 8-bit linear regulator, scene retrieval, disable functions, scene saving, timed control, alarm functions.

Functions of the room temperature control unit:

Type of thermostat: 2-step control, continuous PI control, switching PI control (PWM)

Output: Continuous in the range 0..100% or switching ON/OFF

Controller mode:

- Heating with one controller output
- Cooling with one controller output
- Heating and cooling with separate controller outputs
- 2-step heating with 2 control outputs
- 2-step cooling with 2 control outputs

Operating modes: Comfort, standby, night economy, frost/heat protection

Operation: Menu

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299 and frame, 2-gang without central bridge piece in M-PLAN design, art. no. 5873...

Accessories: Labelling software, art. no. 615022.

- **Note:** If you already have the labelling software, you can download the form for the multi-function push-button at www.merten.com. Use to label conventional foils (max. thickness 0.15 mm).

Contents: With screw for tamper-proofing, adhesive label, barrier covering the IR receiver.

Version	Art. no.	PU	PG	Mat.	Info
white	623644	1/17	9	TP	
polar white	623619	1/17	9	TP	
anthracite	623614	1/17	9	TP	
aluminium	623660	1/17	9	ML	



Push-button, 1-gang

Application module for System Design.

Push-button with 2 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

Green or red light circles around the operating buttons indicate the operating state.

INSTABUS EIB software functions:

The push-buttons can be parameterised with different applications either as a pair (dual-surface) or individually (single-surface).

Single-surface: switching, pulse edge.

Dual-surface: switching, dimming, blind control, pulse edge.

In combination with flush-mounted actuator, additionally:

send value, send temperature values, disable buttons.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618919/44.

Version	Art. no.	PU	PG	Mat.	Info
white	622344	1/100	9	TP	
polar white	622319	1/100	9	TP	
vanilla	622382	1/100	9	TP	
ice blue	622388	1/100	9	TP	
light grey	622329	1/100	9	TP	
midnight blue	622378	1/100	9	TP	
dark brazil	622315	1/100	9	TP	
black grey	622369	1/100	9	TP	
aluminium	622360	1/100	9	ML	
stainless steel	622346	1/100	9	M	



Push-button, 2-gang

Application module for System Design.
Push-button with 4 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.
Green or red light circles around the operating buttons indicate the operating state.

INSTABUS EIB software functions:

The push-buttons can be parameterised with different applications either as a pair (dual-surface) or individually (single-surface).
Single-surface: switching, pulse edge.
Dual-surface: switching, dimming, blind control, pulse edge.
In combination with flush-mounted actuator, additionally:
send value, send temperature values, disable buttons.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618919/44.

Version	Art. no.	PU	PG	Mat.	Info
white	622444	1/100	9	TP	
polar white	622419	1/100	9	TP	
vanilla	622482	1/100	9	TP	
ice blue	622488	1/100	9	TP	
light grey	622429	1/100	9	TP	
midnight blue	622478	1/100	9	TP	
dark brazil	622415	1/100	9	TP	
black grey	622469	1/100	9	TP	
aluminium	622460	1/100	9	ML	
stainless steel	622446	1/100	9	M	



Push-button, 3-gang

Application module for System Design.
Push-button with 6 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.
Green or red light circles around the operating buttons indicate the operating state.

INSTABUS EIB software functions:

The push-buttons can be parameterised with different applications either as a pair (dual-surface) or individually (single-surface).
Dual-surface: switching, dimming, blind control.
In combination with flush-mounted actuator, additionally:
Single-surface: switching, pulse edges, send value.
send temperature values, disable buttons.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618919/44.

Version	Art. no.	PU	PG	Mat.	Info
white	622544	1/100	9	TP	
polar white	622519	1/100	9	TP	
vanilla	622582	1/100	9	TP	
ice blue	622588	1/100	9	TP	
light grey	622529	1/100	9	TP	
midnight blue	622578	1/100	9	TP	
dark brazil	622515	1/100	9	TP	
black grey	622569	1/100	9	TP	
aluminium	622560	1/100	9	ML	
stainless steel	622546	1/100	9	M	



Push-button, 4-gang

Application module for System Design.

Push-button with 8 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

Green or red light circles around the operating buttons indicate the operating state.

INSTABUS EIB software functions:

The push-buttons can be parameterised with different applications either as a pair (dual-surface) or individually (single-surface).

Single-surface: pulse edge.

Dual-surface: switching, dimming, blind control.

In combination with flush-mounted actuator, additionally:

send value, send temperature values, disable buttons. Free functional selection.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618919/44.

Version	Art. no.	PU	PG	Mat.	Info
white	622644	1/100	9	TP	
polar white	622619	1/100	9	TP	
vanilla	622682	1/100	9	TP	
ice blue	622688	1/100	9	TP	
light grey	622629	1/100	9	TP	
midnight blue	622678	1/100	9	TP	
dark brazil	622615	1/100	9	TP	
black grey	622669	1/100	9	TP	
aluminium	622660	1/100	9	ML	
stainless steel	622646	1/100	9	M	



Multi-function push-button, 4-gang

Application module for System Design.

Push-button with 8 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

Green or red light circles around the operating buttons indicate the operating state.

With additional parameterisable button.

INSTABUS EIB software functions:

The push-buttons can be parameterised either as a pair (dual-surface) or individually (single-surface).

Single-surface: switching, dimming, pulse edge, send value, scenes.

Dual-surface: switching, dimming, blind control, send value.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618919/44.

Version	Art. no.	PU	PG	Mat.	Info
white	622744	1/100	9	TP	
polar white	622719	1/100	9	TP	
vanilla	622782	1/100	9	TP	
ice blue	622788	1/100	9	TP	
light grey	622729	1/100	9	TP	
midnight blue	622778	1/100	9	TP	
dark brazil	622715	1/100	9	TP	
black grey	622769	1/100	9	TP	
aluminium	622760	1/100	9	ML	
stainless steel	622746	1/100	9	M	



Multi-function push-button, 4-gang with IR receiver

Application module for System Design.

Push-button with 8 operating buttons, 8 status displays, labelling field and IR receiver.

All functions of the respective buttons can be controlled via IR remote control Distance.

Green or red light circles around the operating buttons indicate the operating state.

The operating display can also be used as an orientation light.

With additional button.

INSTABUS EIB software functions:

The push-buttons can be parameterised either as a pair (dual-surface) or individually (single-surface).

Single-surface: switching, dimming, pulse edge, send value, scenes.

Dual-surface: switching, dimming, blind control, send value.

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Accessories: Labelling sheets for push-buttons, art. no. 618919/44.

Transmitter: IR remote control Distance, art. no. 570222, 570722.

Version	Art. no.	PU	PG	Mat.	Info
white	622844	1/100	9	TP	
polar white	622819	1/100	9	TP	
vanilla	622882	1/100	9	TP	
ice blue	622888	1/100	9	TP	
light grey	622829	1/100	9	TP	
midnight blue	622878	1/100	9	TP	
dark brazil	622815	1/100	9	TP	
black grey	622869	1/100	9	TP	
aluminium	622860	1/100	9	ML	
stainless steel	622846	1/100	9	M	



Labelling sheets for push-buttons

For individual labelling of the System Design push-buttons with text or symbols.

The labelling sheet in polar white/silver can be used for polar white, aluminium-coloured and stainless steel push-buttons.

- **To be completed with:** System Design push-buttons, 1-gang, 2-gang, 3-gang or 4-gang, art. no. 6223..., 6224..., 6225..., 6226..., 6227..., 6228...

Accessories: Labelling software, art. no. 615022.

- **Contents:** 2 sheets for every 20 products.

Version	Art. no.	PU	PG	Mat.	Info
white	618944	1/100	9		
polar white/silver	618919	1/100	9		



Control electronics, 1- to 4-gang

For the TRACENT range.

The control electronics can be programmed as a 1-, 2- or 4-gang sensor cover.

With orientation LED. Operation of the glass cover is acknowledged with a short tone.

INSTABUS EIB software functions:

The covers facing each other can either be parameterised as a pair (dual-surface) or as individual buttons (single-surface). There are a total of 12 parameterisation options available.

Single-surface: dimming, toggling, pulse edges, temperature, scenes.

Dual-surface: blind control, switching, dimming, toggling, pulse edges, temperature, scene.

- ▣ In INSTABUS EIB, to be completed with: Bus coupler, flush-mounted 2, art. no. 690299. TRACENT glass sensor cover, art. no. 5691..., 5692..., 5693..., 5695...

Accessories: Cover foil for glass sensor cover, art. no. 569190, 569290, 569390.

Version	Art. no.	PU	PG	Mat.	Info
1- to 4-gang	623190	1/100	9		



Push-button module, 1-gang

For System M.

Push-button module without rocker. With programmable status display.

The device is connected to the bus line with a bus connecting terminal. With integrated bus coupler.

INSTABUS EIB software functions:

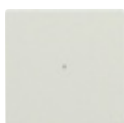
The push-buttons can be parameterised either as a pair (dual-surface) or individually (single-surface).

Single-surface: Switch ON or switch OFF, dimming, scenes.

Dual-surface: Switch ON or switch OFF, dimming, scenes, blinds.

- ▣ In INSTABUS EIB, to be completed with: Rocker for 1-gang push-button module, art. no. 6251... Rocker for 1-gang push-button module with 1/0 imprint, art. no. 625419. Rocker for 1-gang push-button module with up/down arrow imprint, art. no. 625519.

Version	Art. no.	PU	PG	Mat.	Info
	625199	1/60	9		



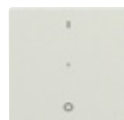
Rocker for 1-gang push-button module

For System M.

The rocker is attached to the 1-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 1-gang, art. no. 625199.

Version	Art. no.	PU	PG	Mat.	Info
white	625144	1/150	9	TP	
polar white	625119	1/150	9	TP	
anthracite	625114	1/150	9	TP	
aluminium	625160	1/150	9	ML	



Rocker for 1-gang push-button module with 1/0 imprint

For System M.

The rocker is attached to the 1-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 1-gang, art. no. 625199.

▣ **Availability:** Available March 2005

Version	Art. no.	PU	PG	Mat.	Info
polar white	625419	1/150	9	TP	



Rocker for 1-gang push-button module with up/down arrow imprint

For System M.

The rocker is attached to the 1-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 1-gang, art. no. 625199.

▣ **Availability:** Available March 2005

Version	Art. no.	PU	PG	Mat.	Info
polar white	625519	1/150	9	TP	



Push-button module, 2-gang

For System M.

Push-button module without rockers. With programmable status display.

The device is connected to the bus line with a bus connecting terminal. With integrated bus coupler.

INSTABUS EIB software functions:

The push-buttons can be parameterised either as a pair (dual-surface) or individually (single-surface).

Single-surface: Switch ON or switch OFF, dimming, scenes.

Dual-surface: Switch ON or switch OFF, dimming, scenes, blinds.

- ▣ In INSTABUS EIB, to be completed with: Rockers for 2-gang push-button module, art. no. 6252... Rockers for 2-gang push-button module with 1/0 and up/down arrow imprint, art. no. 625619. Rockers for 2-gang push-button module with up/down arrow and 1/0 imprint, art. no. 625719.

Version	Art. no.	PU	PG	Mat.	Info
	625299	1/60	9		



Rockers for 2-gang push-button module

For System M.

The rockers are attached to the 2-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 2-gang, art. no. 625299.

Version	Art. no.	PU	PG	Mat.	Info
white	625244	1/150	9	TP	
polar white	625219	1/150	9	TP	
anthracite	625214	1/150	9	TP	
aluminium	625260	1/150	9	ML	



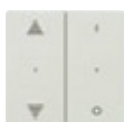
Rockers for 2-gang push-button module with 1/0 and up/down arrow imprint

For System M.
The rockers are attached to the 2-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 2-gang, art. no. 625299.

▣ Availability: Available March 2005

Version	Art. no.	PU	PG	Mat.	Info
polar white	625619	1/150	9	TP	



Rockers for 2-gang push-button module with up/down arrow and 1/0 imprint

For System M.
The rockers are attached to the 2-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 2-gang, art. no. 625299.

▣ Availability: Available March 2005

Version	Art. no.	PU	PG	Mat.	Info
polar white	625719	1/150	9	TP	



Push-button module, 1-gang

For System Design
Push-button module without rocker. With programmable status display.
The device is connected to the bus line with a bus connecting terminal. With integrated bus coupler.

INSTABUS EIB software functions:

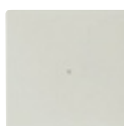
The push-buttons can be parameterised either as a pair (dual-surface) or individually (single-surface).

Single-surface: Switch ON or switch OFF, dimming, scenes.

Dual-surface: Switch ON or switch OFF, dimming, scenes, blinds.

- ▣ In INSTABUS EIB, to be completed with: Rocker for 1-gang push-button module, art. no. 6261... Rocker for 1-gang push-button module with 1/0 imprint, art. no. 626419. Rocker for 1-gang push-button module with up/down arrow imprint, art. no. 626519.

Version	Art. no.	PU	PG	Mat.	Info
	626199	1/60	9		

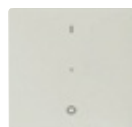


Rocker for 1-gang push-button module

For System Design.
The rocker is attached to the 1-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 1-gang, art. no. 626199.

Version	Art. no.	PU	PG	Mat.	Info
white	626144	1/150	9	TP	
polar white	626119	1/150	9	TP	
light grey	626129	1/150	9	TP	
aluminium	626160	1/150	9	ML	
stainless steel	626146	1/150	9	ML	



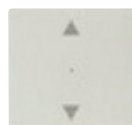
Rocker for 1-gang push-button module with 1/0 imprint

For System Design.
The rocker is attached to the 1-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 1-gang, art. no. 626199.

▣ Availability: Available March 2005

Version	Art. no.	PU	PG	Mat.	Info
polar white	626419	1/150	9	TP	



Rocker for 1-gang push-button module with up/down arrow imprint

For System Design.
The rocker is attached to the 1-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 1-gang, art. no. 626199.

▣ Availability: Available March 2005

Version	Art. no.	PU	PG	Mat.	Info
polar white	626519	1/60	9	TP	



Push-button module, 2-gang

For System Design
Push-button module without rockers. With programmable status display.
The device is connected to the bus line with a bus connecting terminal. With integrated bus coupler.

INSTABUS EIB software functions:

The push-buttons can be parameterised either as a pair (dual-surface) or individually (single-surface).

Single-surface: Switch ON or switch OFF, dimming, scenes.

Dual-surface: Switch ON or switch OFF, dimming, scenes, blinds.

- ▣ In INSTABUS EIB, to be completed with: Rockers for 2-gang push-button module, art. no. 6262... Rockers for 2-gang push-button module with 1/0 and up/down arrow imprint, art. no. 626619. Rockers for 2-gang push-button module with up/down arrow and 1/0 imprint, art. no. 626719.

Version	Art. no.	PU	PG	Mat.	Info
	626299	1/60	9		



Rockers for 2-gang push-button module

For System Design.
The rockers are attached to the 2-gang push-button module.

- ▣ In INSTABUS EIB, to be completed with: Push-button module, 2-gang, art. no. 626299.

Version	Art. no.	PU	PG	Mat.	Info
white	626244	1/150	9	TP	
polar white	626219	1/150	9	TP	
light grey	626229	1/150	9	TP	
aluminium	626260	1/150	9	ML	
stainless steel	626246	1/150	9	ML	



Rockers for 2-gang push-button module with 1/0 and up/down arrow imprint

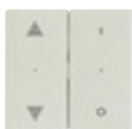
For System Design.

The rockers are attached to the 2-gang push-button module.

■ **In INSTABUS EIB, to be completed with:** Push-button module, 2-gang, art. no. 626299.

■ **Availability:** Available March 2005

Version	Art. no.	PU	PG	Mat.	Info
polar white	626619	1/150	9	TP	



Rockers for 2-gang push-button module with up/down arrow and 1/0 imprint

For System Design.

The rockers are attached to the 2-gang push-button module.

■ **In INSTABUS EIB, to be completed with:** Push-button module, 2-gang, art. no. 626299.

■ **Availability:** Available March 2005

Version	Art. no.	PU	PG	Mat.	Info
polar white	626719	1/150	9	TP	



IP 20

Bus coupling insert, 1-gang

The rocker for switches and push-button switches, the rocker marked "0"/ "1", the rocker with labelling field and the rocker with opening for symbols from System Basis, System Design and OctoColor can all be fitted on the 1-gang bus coupling insert. With programmable operating or status display for rockers with opening for symbols. We can also adapt the switch ranges AQUADESIGN, AQUACLASSIC and ANTI-VANDALISM for the 1-gang bus coupling insert as a special version.

With integrated bus coupler. In the version with middle position, the rockers can be moved up and down (three-way rocker). In the version without middle position, telegrams are only generated when the lower half of the rocker is pressed (two-way rocker).

For mounting in the size 60 installation box. With push-button and LED for programming.

INSTABUS EIB software functions:

For art. no. 671198: Switching. Toggling. Status display.

For art. no. 671199: Switching. Dimming. Blinds. Toggling. Status display.

Version	Art. no.	PU	PG	Mat.	Info
with middle position	671199	1/50	9		
without middle position	671198	1/50	9		



IP 20

Bus coupling insert, 2-gang

The rocker for two-circuit switches, the rocker for roller shutter switches and push-buttons from System Basis, System M, System Design and OCTOCOLOR can all be fitted on the 2-gang bus coupling insert. We can also adapt the switch ranges AQUADESIGN and AQUACLASSIC for the 2-gang bus coupling insert as a special version.

With integrated bus coupler. In the version with middle position, the rockers can be moved up and down (three-way rocker). In the version without middle position, telegrams are only generated when the lower half of the rocker is pressed (two-way rocker).

For mounting in the size 60 installation box. With push-button and LED for programming.

INSTABUS EIB software functions:

For art. no. 671298: Switching. Toggling. Dimming. 1 group of blinds.

For art. no. 671299: Switching. Toggling. Dimming. 2 groups of blinds.

Version	Art. no.	PU	PG	Mat.	Info
with middle position	671299	1/50	9		
without middle position	671298	1/50	9		



Labelling software

For professional labelling of DIN A4 labelling sheets in System Basis, System M, System Design and OCTOCOLOR.

Version	Art. no.	PU	PG	Mat.	Info
	615022	1/20	9.1		

Binary inputs

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.

**Binary input, flush-mounted/4x10**

For connecting four conventional push-buttons or floating contacts to the INSTABUS EIB. Internally generates a signal voltage SELV, electrically isolated from the bus.

With integrated bus coupler 2. Insertion in a 40 mm deep installation box.

INSTABUS EIB software functions:

Switching, dimming or blind control via 1 or 2 inputs. Positioning values for blind control (8-bit). Pulse edges with 1-, 2- or 8-bit telegrams. Differentiation between short/long operation. Initialisation telegram. Cyclical sending. Pulse edges with 2-byte telegrams. 8-bit linear regulator. Disable function. Break/make contact. Debounce time.

Inputs: 4

Contact voltage: max. 10 V, clocked

Contact current: max. 2 mA, pulsing

Cable length: max. 50 m, bus connecting cable or bell wire (Y, J-FY, YR)

Dimensions: 48x44x33 mm (HxWxD)

Contents: With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	639898	1/50	9		

**Binary input REG-K/4x10**

For connecting four conventional push-buttons or floating contacts to the INSTABUS EIB. Internally generates a signal voltage SELV, electrically isolated from the bus.

With integral bus coupler 2 and plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary.

The input voltage level is displayed at each input with a yellow LED. After the application has been loaded, readiness for operation is indicated by a green LED.

INSTABUS EIB software functions:

Switching, dimming or blind control via 1 or 2 inputs. Positioning values for blind control (8-bit). Pulse edges with 1-, 2- or 8-bit telegrams. Differentiation between short/long operation. Initialisation telegram. Cyclical sending. Pulse edges with 2-byte telegrams. 8-bit linear regulator. Disable function. Break/make contact. Debounce time.

Inputs: 4

Contact voltage: max. 10 V, clocked

Contact current: max. 2 mA, pulsing

Cable length: max. 50 m

Device width: 2.5 modules = approx. 45 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	644490	1/30	9.3		

**Binary input REG-K/8x10**

For connecting eight conventional push-buttons or floating contacts to the INSTABUS EIB. Internally generates a signal voltage SELV, electrically isolated from the bus.

With integral bus coupler 2 and plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary.

The input voltage level is displayed at each input with a yellow LED. After the application has been loaded, readiness for operation is indicated by a green LED.

INSTABUS EIB software functions:

Switching, dimming or blind control via 1 or 2 inputs. Positioning values for blind control (8-bit). Pulse edges with 1-, 2- or 8-bit telegrams. Differentiation between short/long operation. Initialisation telegram. Cyclical sending. Pulse edges with 2-byte telegrams. 8-bit linear regulator. Disable function. Break/make contact. Debounce time.

Inputs: 8

Contact voltage: max. 10 V, clocked

Contact current: max. 2 mA, pulsing

Cable length: max. 50 m

Device width: 4 modules = approx. 70 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	644590	1/30	9.3		

**Binary input REG-K/4x24**

For connecting four conventional devices with AC/DC 24 V outputs to the INSTABUS EIB.

With integral bus coupler 2 and plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary.

The input voltage level is displayed at each input with a yellow LED. After the application has been loaded, readiness for operation is indicated by a green LED.

INSTABUS EIB software functions:

Switching, dimming or blind control via 1 or 2 inputs. Positioning values for blind control (8-bit). Pulse edges with 1-, 2- or 8-bit telegrams. Differentiation between short/long operation. Initialisation telegram. Cyclical sending. Pulse edges with 2-byte telegrams. 8-bit linear regulator. Disable function. Break/make contact. Debounce time.

Input voltage: AC / DC 24 V

Inputs: 4

Input current: DC 15 mA (30 V),

AC 6 mA (27 V)

0 signal: ≤ 5 V

1 signal: ≥ 11 V

Cable length: max. 100 m

Device width: 2.5 modules = approx. 45 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	644890	1/30	9.3		



Binary input REG-K/8x24

For connecting eight conventional devices with AC/DC 24 V outputs to INSTABUS EIB. With integral bus coupler 2 and plug-in screw terminals. For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. The input voltage level is displayed at each input with a yellow LED. After the application has been loaded, readiness for operation is indicated by a green LED.

INSTABUS EIB software functions:

Switching, dimming or blind control via 1 or 2 inputs. Positioning values for blind control (8-bit). Pulse edges with 1-, 2- or 8-bit telegrams. Differentiation between short/long operation. Initialisation telegram. Cyclical sending. Pulse edges with 2-byte telegrams. 8-bit linear regulator. Disable function. Break/make contact. Debounce time.

Input voltage: AC / DC 24 V

Inputs: 8

Input current: DC 15 mA (30 V),

AC 6 mA (27 V)

0 signal: ≤ 5 V

1 signal: ≥ 11 V

Cable length: max. 100 m

Device width: 4 modules = approx. 70 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	644790	1/30	9.3		



Binary input REG-K/4x230

For connecting four conventional devices with AC 230 V outputs to the INSTABUS EIB. With integral bus coupler 2 and plug-in screw terminals. For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. The input voltage level is displayed at each input with a yellow LED. After the application has been loaded, readiness for operation is indicated by a green LED.

INSTABUS EIB software functions:

Switching, dimming or blind control via 1 or 2 inputs. Positioning values for blind control (8-bit). Pulse edges with 1-, 2- or 8-bit telegrams. Differentiation between short/long operation. Initialisation telegram. Cyclical sending. Pulse edges with 2-byte telegrams. 8-bit linear regulator. Disable function. Break/make contact. Debounce time.

Input voltage: AC 230 V, 50-60Hz

Inputs: 4

Input current: AC 12 mA

0 signal: ≤ 40 V

1 signal: ≥ 160 V

Cable length: max. 100 m

Device width: 2.5 modules = approx. 45 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	644990	1/30	9.3		



Binary input REG-K/8x230

For connecting eight conventional devices with AC 230 V outputs to the INSTABUS EIB. With integral bus coupler 2 and plug-in screw terminals. For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. The input voltage level is displayed at each input with a yellow LED. After the application has been loaded, readiness for operation is indicated by a green LED.

INSTABUS EIB software functions:

Switching, dimming or blind control via 1 or 2 inputs. Positioning values for blind control (8-bit). Pulse edges with 1-, 2- or 8-bit telegrams. Differentiation between short/long operation. Initialisation telegram. Cyclical sending. Pulse edges with 2-byte telegrams. 8-bit linear regulator. Disable function. Break/make contact. Debounce time.

Input voltage: AC 230 V, 50-60Hz

Inputs: 8

Input current: AC 12 mA

0 signal: ≤ 40 V

1 signal: ≥ 160 V

Cable length: max. 100 m

Device width: 4 modules = approx. 70 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	644690	1/30	9.3		



Binary input, built-in/4x24

For connecting four conventional devices with AC/DC 24 V outputs to the INSTABUS EIB. The binary input can supply 24 V with a separate 230 V connection.

With integrated bus coupler, suitable for surface mounting and installation in equipment boxes.

INSTABUS EIB software functions:

Switching, dimming, blinds, pulse edges and value sending. 2 separate channels are assigned for dimming and blind control (dual-surface operation).

Inputs: 4, floating contacts

Input voltage: AC/DC, 24 V

Input current: < 15 mA

Dimensions: 240x32x42 mm (LxWxH)

Version	Art. no.	PU	PG	Mat.	Info
polar white	654919	1/28	9		



Binary input, built-in/4x230

For connecting four conventional devices with AC 230 V outputs to the INSTABUS EIB. With integrated bus coupler, suitable for surface mounting and installation in equipment boxes.

INSTABUS EIB software functions:

Switching, dimming, blinds, pulse edges and value sending. 2 separate channels are assigned for dimming and blind control (dual-surface operation).

Input voltage: AC 230 V $\pm 10\%$, 50 Hz

Input current: < 4 mA

Dimensions: 240x32x42 mm (LxWxH)

Version	Art. no.	PU	PG	Mat.	Info
polar white	654819	1/28	9		

Other sensors

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



IR remote control Distance 2010

10-channel IR remote control. For the control of all TELE sensor covers, blind push-buttons with IR receiver, presence detectors with IR receiver and INSTABUS devices with IR receivers.

Battery: 2 microcells (IEC LR 03, AAA)

Range: up to 20 m

- Receiver:** TELE sensor cover, art. no. 5748..., 5703..., 5709..., 5749... Blind push-button with IR receiver, art. no. 5864..., 5844..., 5804..., 5824... ARGUS Presence with IR receiver, art. no. 550591, 630591. INSTABUS IR receiver, flush-mounted, art. no. 6235..., 6218..., 6217... INSTABUS multi-function push-button with IR receiver, art. no. 623008, 6242..., 6236..., 6228...

- Contents:** Without battery.

Version	Art. no.	PU	PG	Mat.	Info
black	570222	1/48	8		



IP55

INSTABUS ARGUS 220 Connect

INSTABUS movement detector for outdoors.

Potentiometers for setting functions are located underneath the cover plate. With integrated bus coupler. A programming magnet is necessary to program the physical address.

INSTABUS EIB software functions:

The function of a staircase timer can be configured with an OFF delay of one second to 152 hours. It can also be switched or blocked by the bus. The switch threshold of the light-sensitive switch can be configured with a potentiometer. The status of the light-sensitive switch can be issued as a telegram on the bus. Cyclical transmission of the detected movement can be programmed. Up to 4 functions can be activated simultaneously when a movement is detected.

Angle of detection: 220°

Range: max. 16 m

Number of levels: 7

Number of zones: 112 with 448 switching segments

Light sensor: infinitely adjustable from 3-1000 lux

Time: can be set externally from 1 sec. to approx. 8 min. in 6 levels or via ETS from approx. 3 sec. to approx. 152 hours.

Sensitivity: infinitely adjustable

Possible to set the sensor head

Wall mounting: 9° up, 24° down, 12° left/right, $\pm 12^\circ$ axial

Ceiling mounting: 4° up, 29° down, 25° left/right, $\pm 8.5^\circ$ axial

EC guidelines: Low voltage guideline 73/23/EEC and EMC guideline 89/336/EEC

Type of protection: IP 55

- Accessories:** Mounting bracket, art. no. 565291/92/93. Programming magnet for valve drive EMO, art. no. 639190.
- Technical Information:** ARGUS 220 Connect/Timer (\Rightarrow p. 451)
- Contents:** With cover plate and segments to limit the area of detection, screws and plugs.

Version	Art. no.	PU	PG	Mat.	Info
polar white	631519	1/12	9		
dark brazil	631515	1/6	9		
aluminium	631569	1/6	9		



ARGUS 180, flush-mounted

Application module for System M.
Movement detector for indoors.
When a movement is detected, a data telegram defined by the programming is transmitted.

INSTABUS EIB software functions:

The function of a staircase timer can be set with an OFF delay of one second to 152 hours and can also be switched or blocked by the bus. The switch threshold of the light-sensitive switch can be configured with a potentiometer. The status of the light-sensitive switch can be issued as a telegram on the bus. Cyclical transmission of the detected movement can be programmed. Up to 4 functions can be activated simultaneously when a movement is detected.

Range: 8 m

Area of detection: 180°

Light sensors: infinitely adjustable from approx. 5 to 1000 lux

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

Version	Art. no.	PU	PG	Mat.	Info
white	624344	1/50	9	TP	
polar white	624319	1/50	9	TP	
anthracite	624314	1/50	9	TP	
aluminium	624360	1/50	9	ML	



ARGUS 180, flush-mounted

Application module for System Design.
Movement detector for indoors.
When a movement is detected, a data telegram defined by the programming is transmitted.

INSTABUS EIB software functions:

The function of a staircase timer can be set with an OFF delay of one second to 152 hours and can also be switched or blocked by the bus. The switch threshold of the light-sensitive switch can be configured with a potentiometer. The status of the light-sensitive switch can be issued as a telegram on the bus. Cyclical transmission of the detected movement can be programmed. Up to 4 functions can be activated simultaneously when a movement is detected.

Range: 8 m

Area of detection: 180°

Light sensors: infinitely adjustable from approx. 5 to 1000 lux

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099, switch actuator, flush-mounted, art. no. 627099, series actuator, flush-mounted, art. no. 627199, blind actuator, flush-mounted, art. no. 627299.

- **Antique brass on request.**

Version	Art. no.	PU	PG	Mat.	Info
white	621444	1/50	9	TP	
polar white	621419	1/50	9	TP	
vanilla	621482	1/50	9	TP	
ice blue	621488	1/50	9	TP	
light grey	621429	1/50	9	TP	
midnight blue	621478	1/50	9	TP	
dark brazil	621415	1/50	9	TP	
black grey	621469	1/50	9	TP	
aluminium	621460	1/50	9	ML	
stainless steel	621446	1/50	9	ML	



INSTABUS ARGUS Presence

Indoor presence detection.
The INSTABUS ARGUS Presence detects the slightest movement in a room and transmits data telegrams via the INSTABUS EIB.
If the lighting is controlled by brightness-dependent movement detection, the device constantly monitors the brightness in the room, and when there is sufficient natural light, it deactivates the actuator for the artificial light even if there is still someone in the room. The overshoot time can be adjusted using the ETS.
With integrated bus coupler. For mounting on the ceiling in a 60 mm installation box. Optimum height 2.50 m. With the surface-mounted housing for ARGUS Presence, the device can also be installed in non-suspended ceilings.

INSTABUS EIB software functions:

Movement detection can trigger up to three functions simultaneously (1x presence function).
Dynamic overshoot time, which is determined depending on the use of the room. Interconnection of large systems possible (master/slave).

Angle of detection: 360°

Range: a radius of max. 7 m from installation site (at a mounting height of 2.50 m).

Number of levels: 6

Number of zones: 136 with 544 switching segments

Light sensor: infinitely adjustable from approx. 10 to 1000 lux using the ETS

EC guidelines: Low voltage guideline 73/23/EEC and EMC guideline 89/336/EEC

- **Accessories:** Surface-mounted housing for ARGUS Presence, art. no. 550619.

- **Technical Information:** ARGUS Presence (⇒ p. 464)

- **Contents:** With bus connecting terminal and supporting plate.

Version	Art. no.	PU	PG	Mat.	Info
polar white	630590	1/6	9		



INSTABUS ARGUS Presence with IR receiver

Indoor presence detection.

As for INSTABUS ARGUS Presence, art. no. 630590.

IR remote control. The infrared commands are converted into the corresponding data telegrams. Up to 10 channels can be controlled. With integrated bus coupler.

If the lighting is controlled by brightness-dependent movement detection, the device constantly monitors the brightness in the room and when there is sufficient natural light, it deactivates the actuator for the artificial light even if there is still someone in the room. The overshoot time can be adjusted using the ETS.

Angle of detection: 360°

Range: a radius of max. 7 m from installation site (at a mounting height of 2.50 m).

Number of levels: 6

Number of zones: 136 with 544 switching segments

Light sensor: infinitely adjustable from approx. 10 to 1000 lux using the ETS

EC guidelines: Low voltage guideline 73/23/EEC and EMC guideline 89/336/EEC

■ **Accessories:** Surface-mounted housing for ARGUS Presence, art. no. 550619.

Transmitter: IR remote control Distance, art. no. 570222, 570722.

■ **Technical Information:** ARGUS Presence (⇒ p. 464)

■ **Contents:** With bus connecting terminal and supporting plate.

Version	Art. no.	PU	PG	Mat.	Info
polar white	630591	1/6	9		



INSTABUS ARGUS Presence with constant lighting control

Indoor presence detection.

Features as for INSTABUS ARGUS Presence, art. no. 630590.

Lighting control triggered by presence is achieved using an integral brightness sensor. With integrated bus coupler.

If the lighting is controlled by brightness-dependent movement detection, the device constantly monitors the brightness in the room. ARGUS regulates the artificial light or switches it off when there is sufficient natural light, even if there is still someone in the room. The overshoot time can be adjusted using the ETS.

Angle of detection: 360°

Range: a radius of max. 7 m from installation site (at a mounting height of 2.50 m).

Number of levels: 6

Number of zones: 136 with 544 switching segments

Light sensor: infinitely adjustable from approx. 10 to 1000 lux using the ETS

EC guidelines: Low voltage guideline 73/23/EEC and EMC guideline 89/336/EEC

■ **Accessories:** Surface-mounted housing for ARGUS Presence, art. no. 550619.

■ **Technical Information:** ARGUS Presence (⇒ p. 464)

■ **Contents:** With bus connecting terminal and supporting plate.

Version	Art. no.	PU	PG	Mat.	Info
polar white	630592	1/6	9		



Surface-mounted housing for ARGUS Presence

The surface-mounted housing for ARGUS Presence devices also allows them to be surface mounted.

■ **To be completed with:** ARGUS Presence, art. no. 550590/91. INSTABUS ARGUS Presence, art. no. 630590/91/92.

■ **Technical Information:** ARGUS Presence (⇒ p. 464)

Version	Art. no.	PU	PG	Mat.	Info
polar white	550619	1/21	8		



Analogue input REG-K 4-gang

The analogue input records and processes analogue sensor signals. Up to four analogue sensors can be connected in any combination. In connection with the analogue input module REG/4-gang, 8 analogue inputs are available, to which the connection is made using the sub-bus.

For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary.

Evaluation and limit value processing is performed in the analogue input. With continuity checking of the 4 ... 20 mA inputs.

Supply voltage: AC 24 V (+/-10 %), DC 24 V (+25 % / -10%)

Analogue inputs: 4

Current interface: 0 ... 20 mA, 4 ... 20 mA

Voltage interface: 0 ... 1 V, 0 ... 10 V

Outputs: DC 24 V, 100 mA

Continuity checking: 4 ... 20 mA

Device width: 4 modules = approx. 72 mm

■ **In INSTABUS EIB, to be completed with:** Power supply REG, AC 24 V / 1 A, art. no. 663629.

Accessories: Analogue input module REG/4-gang, art. no.

682192. Wind sensor with 0-10 V interface, art. no. 663591. Wind

sensor with 0-10 V interface and heating, art. no. 663592. Rain

sensor, art. no. 663595. Brightness sensor, art. no. 663593. Twi-

light sensor, art. no. 663594. Temperature sensor, art. no.

663596.

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	682191	1/21	9.3		



Analogue input module REG/4-gang

Extension module to extend weather station REG-K/4-gang and analogue input REG-K/4-gang from 4 to 8 analogue outputs. Connections are made using the sub-bus. Up to four analogue sensors can be connected in any combination. For installation on DIN rails EN 50022. Evaluation and limit value processing is performed in the analogue input or weather station. With continuity checking of the 4 ... 20 mA inputs.

Auxiliary voltage: AC 24 V ($\pm 15\%$)

Rating: max. 4 VA

Analogue inputs: 4

Current interface: 0 ... 20 mA, 4 ... 20 mA

Voltage interface: 0 ... 1 V, 0 ... 10 V (DC)

A/D conversion: 14 bit

Outputs: DC 24 V, 100 mA

Continuity checking: 4 ... 20 mA

Device width: 4 modules = approx. 72 mm

- In INSTABUS EIB, to be completed with:** Weather station REG-K/4-gang, art. no. 682991. Analogue input REG-K/4-gang, art. no. 682191.

Accessories: Wind sensor with 0-10 V interface, art. no. 663591. Wind sensor with 0-10 V interface and heating, art. no. 663592. Rain sensor, art. no. 663595. Brightness sensor, art. no. 663593. Twilight sensor, art. no. 663594. Temperature sensor, art. no. 663596.

- Contents:** With sub-bus jumper.

Version	Art. no.	PU	PG	Mat.	Info
light grey	682192	1/21	9.3		



Analogue input, built-in/4-gang

For gathering and processing measurement signals. The information can be transferred directly via the INSTABUS EIB as a data telegram. There are four independent measuring channels for recording signals. The analogue input can supply sensors with power. With integrated bus coupler, suitable for surface mounting and installation in equipment boxes.

Auxiliary voltage: AC 230 V $\pm 10\%$, 50 Hz

Power consumption: ≤ 2 VA

Inputs: 4

Current interface: 0...20 mA or 4...20 mA

Voltage interface: 0...10 V

Optional sensor power supply: DC 18 V, max. 100 mA

Dimensions: 240x32x42 mm (LxWxH)

- Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
polar white	650719	1/28	9		



Brightness controller, built-in/HR1

For brightness-dependent control and regulation of switch actuators and dimmer actuators. The device is suitable for surface mounting and for installing in devices, e.g. in lamps. With integrated bus coupler.

The light sensor is installed in the ceiling with the clamping spring and rosette. The brightness values measured by the light sensor are transmitted to the controller which then controls the lighting via the INSTABUS EIB.

INSTABUS EIB software functions:

Device adjusts to the lighting conditions. Lighting control. Transmission of brightness value. Two-step control.

Controller:

Adjustment range: 150 ... 1950 Lux

Connections:

To the light sensor: Screwless plug-in terminal

To the bus: Bus connecting terminal

Dimensions: 243 x 42 x 28 mm (L x W x H)

Light sensor:

Connections: 3 x 0.6 mm² with 1.5 m cable

Length of connecting cable

Controller/light sensor: 1.5 m, cannot be extended

Dimensions: 77.4 x 26 x 25 mm (L x W x H)

- Contents:** With bus connecting terminal, lighting controller, light sensor with cable, clamping spring and rosette.

Version	Art. no.	PU	PG	Mat.	Info
light grey	650629	1/7	9		



Lighting controller/control unit 0-10 V REG-K/2-gang

For connecting 2 devices with 0 - 10 V interface to INSTABUS EIB for switching and dimming. In addition the device has 2 inputs available for light sensors, suitable for mounting in suspended ceilings. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. With integrated bus coupler.

When light sensors are connected, it is possible to implement lighting control with sensor and actuator in the same device. The brightness values measured by the light sensor are transmitted to the controller which then controls the lighting via the INSTABUS EIB. With indication of the switching state; can also be used for manual operation.

INSTABUS EIB software functions:

Behaviour on bus voltage failure/recovery. Dimming speed. Upper/lower dimming limit. Preset. Control behaviour.

Power supply: Bus, DC 24 V

Outputs: 2, passive, 0-10 V interfaces, for switching and dimming luminaires with electronic ballast and 0-10 V control input

Loading capacity: < 30 mA

Cable length: max. 100 m

Connection: Screw terminals 0.5 - 2.5 mm²

Load circuit: 2, floating contacts

Switching voltage: AC 230 V

Switching current: 16 A, $\cos\varphi = 1$; 10 A, $\cos\varphi = 0.6$

Connection: Screw terminals 0.5 - 2.5 mm²

Inputs: 2, for light sensor (art. no. 663690)

Control range: 200 to 1200 lux

Type of protection: IP 20

Device width: 4 modules = approx. 72 mm

▣ **Accessories:** Light sensor, flush-mounted, art. no. 663690.

▣ **Technical Information:** Lamps/dimmer matrix (⇒ p. 423)

▣ **Contents:** With bus connecting terminals.

Version	Art. no.	PU	PG	Mat.	Info
light grey	648029	1/30	9.3		



Light sensor, flush-mounted for lighting controller/control unit 0-10 V REG-K/2-gang

The light sensor measures the brightness in enclosed rooms. For installation in suspended ceilings in a flush-mounted box.

The lighting control sensor is used in connection with the 2-gang lighting controller/control unit 0-10 V REG-K/2-gang.

Cable length: max. 100 m

Type of protection: IP 20

Dimensions: 54 x 20 mm

▣ **In INSTABUS EIB, to be completed with:** Lighting controller/control unit 0-10 V REG-K/2-gang, art. no. 648029.

▣ **Contents:** With two Plexiglas rods and cover, and fixing screws.

Version	Art. no.	PU	PG	Mat.	Info
polar white	663690	1/30	9		



Light-sensitive switch REG-S/DS1

For brightness-dependent control of switch and blind actuators for example. For mounting on DIN rails EN 50022-35 x 7.5, with integrated data rail. Without bus coupler, with light sensor and application interface looped through at the side for plugging onto the bus coupler REG (ordered separately).

INSTABUS EIB software functions:

Possible to program behaviour when the switch threshold is reached. ON and OFF delay times can also be programmed.

Connection length for twilight switch / brightness sensor: max. 100 m

Adjustment ranges: 2-300 lux and 200-20,000 lux

Hysteresis: approx. 1.3 times the set value

Device width: 2 modules = approx. 36 mm

▣ **In INSTABUS EIB, to be completed with:** Bus coupler REG, art. no. 690599. Data rail, art. no. 6899 ..

Version	Art. no.	PU	PG	Mat.	Info
light grey	670601	1/24	9.3		



Weather station REG-K/4-gang

The weather station records and processes analogue sensor signals such as wind speed, brightness, twilight, precipitation and a DCF-77 signal. Up to four analogue sensors and the DCF-77 weather combi-sensor can be connected in any combination.

In connection with the 4-gang analogue input module, 8 analogue inputs are available, to which the connection is made using the sub-bus.

For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary.

If DCF-77 weather combi-sensors are used, it is possible to access a pre-configured setting in the software.

The measured values are converted by the weather station into 1 byte / 2 byte telegrams (EIS 6/5 value). This enables bus devices (visualisation software, measured value displays) to access the control processes, generate signals or control weather-dependent processes. Programming is performed using the ETS tool for the weather station.

Functions:

- Two limit values per sensor (not for rain)
- Connection of multiple wind sensors
- 14 signals can be evaluated
- Evaluation of DCF-77 time signal (date and time)
- Astro function
- Logic operation controller for application of limit-value-dependent actions (even external)
- Shading of individual façade segments
- Signal monitoring of the combi-sensors with object for the following protective measures
- Checking the wind signal for conclusiveness with object for the following protective measures
- Selective façade shading (for 4 façades) with adjustment of the basic brightness, façade alignment, angle of opening relative to the sun.
- External objects for intervention in basic brightness, angle of opening and limit values
- Alarm byte
- Continuity monitoring with report on the bus

Supply voltage: AC 24 V (+/-10 %), DC 24 V (+25 % / -10%)

Analogue inputs: 4

Current interface: 0 ... 20 mA, 4 ... 20 mA

Voltage interface: 0 ... 1 V, 0 ... 10 V

Outputs: DC 24 V, 100 mA

Device width: 4 modules = approx. 72 mm

- **In INSTABUS EIB, to be completed with:** Power supply REG, AC 24 V / 1 A, art. no. 663629. ETS tool for weather station, art. no. 615048.

Accessories: Analogue input module REG/4-gang, art. no. 682192. Weather combi-sensor/DCF-77, art. no. 663692. Wind sensor with 0-10 V interface, art. no. 663591. Wind sensor with 0-10 V interface and heating, art. no. 663592. Rain sensor, art. no. 663595. Brightness sensor, art. no. 663593. Twilight sensor, art. no. 663594. Temperature sensor, art. no. 663596.

- **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	682991	1/25	9.3		



ETS tool for weather station

Programming software for the ETS for parameterising the weather station REG-K/4-gang.

- **In INSTABUS EIB, to be completed with:** Weather station REG-K/4-gang, art. no. 682991.

- **Price on request.**

Note: The software is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
	615048	1/1	9		



Weather combi-sensor DCF-77

The weather combi-sensor includes a wind sensor, precipitation sensor, twilight sensor and three brightness sensors (East, South, West). With integral DCF-77 receiver, antenna rotatable through 45° and integral heating. Suitable for external installation on a wall or on a mast. The sensor is connected to a weather station REG-K/4-gang.

The weather data is evaluated in the weather station. The necessary power supplies are provided by the weather station with connected power supply REG.

Power supply: AC 24 V (± 15 %), DC 24 V (± 25 %)

Power consumption: max. 600 mA (with heating)

Sensors: 6

Wind speed: 1 ... 40 m/s (≤ 0.5 m/s)

Brightness: 0 ... 110 klux (± 10 %)

Twilight: 0 ... 250 lux

Type of protection: IP 65 when installed

Temperature range: - 40 °C ... + 60 °C (ice-free)

Fixing method: Mounting bracket

Dimensions: 130x200 mm (ØxH)

- **In INSTABUS EIB, to be completed with:** Weather station REG-K/4-gang, art. no. 682991.

Version	Art. no.	PU	PG	Mat.	Info
black	663692	1/1	9		



IP65

Wind sensor with 0-10 V interface

The wind sensor evaluates the wind speed and converts it into an analogue 0-10 V output voltage. For external installation and connection to the weather station REG-K/4-gang or the analogue input REG-K/4-gang. These two devices provide the supply voltage necessary to operate the sensor.

Measuring range: 0.7 ... 40 m/s, linear

Output: 0 ... 10 V

External power supply:

Voltage: 24 V DC (18-32 V DC)

Power consumption: approx. 12 mA

General specifications:

Type of protection: IP 65

Load: max. 60 m/s transient

Incoming cable: 3 m, LiYY 6 x 0.25 mm²

Fixing method: Mounting bracket

Mounting position: vertical

- ▶ **In INSTABUS EIB, to be completed with:** Weather station REG-K/4-gang, art. no. 682991. Analogue input REG-K/4-gang, art. no. 682191. Analogue input module REG/4-gang, art. no. 682192. Weather station REG-K/4-gang, art. no. 682929.

- **Contents:** With mounting bracket.

Version	Art. no.	PU	PG	Mat.	Info
polar white	663591	1/2	9		



IP65

Wind sensor with 0-10 V interface and heating

The wind sensor evaluates the wind speed and converts it into an analogue 0-10 V output voltage. The integrated heater can be operated via an external power supply of AC 24 V/500 mA for trouble-free operation in frosty weather.

For external installation and connection to the weather station REG-K/4-gang or the analogue input REG-K/4-gang. These two devices provide the supply voltage necessary to operate the sensor.

Measuring range: 0.7 ... 40 m/s, linear

Output: 0 ... 10 V

External power supply:

Voltage: 24 V DC (18-32 V DC)

Power consumption: approx. 12 mA

Heating: 24 V DC/AC PTC element (80° C)

General specifications:

Type of protection: IP 65

Load: max. 60 m/s transient

Incoming cable: 3 m, LiYY 6 x 0.25 mm²

Fixing method: Mounting bracket

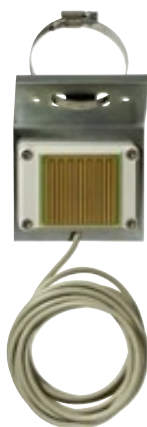
Mounting position: vertical

- ▶ **In INSTABUS EIB, to be completed with:** Weather station REG-K/4-gang, art. no. 682991. Analogue input REG-K/4-gang, art. no. 682191. Analogue input module REG/4-gang, art. no. 682192. Weather station REG-K/4-gang, art. no. 682929.

Accessories: Power supply REG, AC 24 V / 1 A, art. no. 663629. Power supply REG, AC 24 V/500 mA for wind and rain sensor, art. no. 663590.

- **Contents:** With mounting bracket.

Version	Art. no.	PU	PG	Mat.	Info
polar white	663592	1/2	9		



IP65

Rain sensor

The rain sensor is used to record and evaluate precipitation and is intended for external mounting. A sensor evaluates the conductivity of the rainwater. The heating is controlled by a microprocessor which supplies an output signal of 0 V or 10 V. The end of the rainfall can be recorded almost immediately with the help of an in-built heater. The heater requires an additional voltage of 24 V AC or DC. For external installation and connection to the weather station REG-K/4-gang or the analogue input REG-K/4-gang. These two devices provide the supply voltage necessary to operate the sensor.

Output: 0 V dry, 10 V rain

External power supply:

Voltage: 24 V DC (15-30 V DC)

Power consumption: approx. 10 mA (without heating)

Heating: 24 V DC/AC max. 4.5 W

General specifications:

Type of protection: IP 65

Incoming cable: 3 m, UYY 5 x 0.25 mm²

Fixing method: Mounting bracket

Mounting position: approx. 45°

- ▶ **In INSTABUS EIB, to be completed with:** Weather station REG-K/4-gang, art. no. 682991. Analogue input REG-K/4-gang, art. no. 682191. Analogue input module REG/4-gang, art. no. 682192. Weather station REG-K/4-gang, art. no. 682929.

Accessories: Power supply REG, AC 24 V / 1 A, art. no. 663629. Power supply REG, AC 24 V/500 mA for wind and rain sensor, art. no. 663590.

- **Contents:** With holder for installing the sensor on walls and masts.

Version	Art. no.	PU	PG	Mat.	Info
	663595	1/5	9		



IP65

Brightness sensor

The brightness sensor is required for recording and evaluating brightness. Brightness is recorded via a photoelectric diode and electronically converted into an analogue output signal of 0 V - 10 V. For external installation and connection to the weather station REG-K/4-gang or the analogue input REG-K/4-gang. These two devices provide the supply voltage necessary to operate the sensor.

Measuring range: 0 to 60,000 lux, linear

Output: 0 ... 10 V short-circuit-proof

External power supply:

Voltage: 24 V DC (15-30 V DC)

Power consumption: approx. 5 mA

General specifications:

Incoming cable: using PG7 screw fitting

Recommended cable: 3 x 0.25 mm²

Type of protection: IP 65

Dimensions: 58 x 35 x 64 (W x H x D)

- ▶ **In INSTABUS EIB, to be completed with:** Weather station REG-K/4-gang, art. no. 682991. Analogue input REG-K/4-gang, art. no. 682191. Analogue input module REG/4-gang, art. no. 682192. Weather station REG-K/4-gang, art. no. 682929.

Version	Art. no.	PU	PG	Mat.	Info
light grey	663593	1/80	9		



IP65

Twilight sensor

The twilight sensor is required to record and evaluate brightness. Brightness is recorded via a photo-electric diode and electronically converted into an analogue output signal of 0 V - 10 V.
For external installation and connection to the weather station REG-K/4-gang or the analogue input REG-K/4-gang. These two devices provide the supply voltage necessary to operate the sensor.

Measuring range: 0 to 255 lux, linear

Output: 0 ... 10 V short-circuit-proof

External power supply:

Voltage: 24 V DC (15-30 V DC)

Power consumption: approx. 5 mA

General specifications:

Incoming cable: using PG7 screw fitting

Recommended cable: 3 x 0.25 mm²

Type of protection: IP 65

Dimensions: 58 x 35 x 64 (W x H x D)

- **In INSTABUS EIB, to be completed with:** Weather station REG-K/4-gang, art. no. 682991. Analogue input REG-K/4-gang, art. no. 682191. Analogue input module REG/4-gang, art. no. 682192. Weather station REG-K/4-gang, art. no. 682929.

Version	Art. no.	PU	PG	Mat.	Info
light grey	663594	1/80	9		



Power supply REG, AC 24 V/ 1 A

Power supply for weather station REG-K/4-gang, analogue input REG-K/4-gang, analogue actuator REG-K/4-gang etc.

For installation on DIN rails EN 50022.

With integrated short-circuit protection.

Primary supply: AC 230 V ±10 %

Output voltage: AC 24 V ±15 %

Output current: max. 1 A

Type of protection: IP 20 in line with DIN 40 050 (IEC 529)

Device width: 4 modules = approx. 72 mm

- **Accessories:** Weather station REG-K/4-gang, art. no. 682991. Analogue input REG-K/4-gang, art. no. 682191. Analogue actuator REG-K/4-gang, art. no. 682291. Rain sensor, art. no. 663595. Wind sensor with 0-10 V interface and heating, art. no. 663592.

Version	Art. no.	PU	PG	Mat.	Info
light grey	663629	1/1	9.3		



IP65

Temperature sensor

The temperature is measured with the temperature sensor and converted into an analogue output signal of 0-10 V.

For external installation and connection to the weather station REG-K/4-gang or the analogue input REG-K/4-gang. These two devices provide the supply voltage necessary to operate the sensor.

Measuring range: -30° C to +70° C linear

Output: 0 ... 10 V short-circuit-proof

External power supply:

Voltage: 24 V DC (15-30 V DC)

Power consumption: approx. 3 mA

General specifications:

Incoming cable: using PG7 screw fitting

Recommended cable: 3 x 0.25 mm²

Type of protection: IP 65

Dimensions: 58 x 35 x 64 (W x H x D)

- **In INSTABUS EIB, to be completed with:** Weather station REG-K/4-gang, art. no. 682991. Analogue input REG-K/4-gang, art. no. 682191. Analogue input module REG/4-gang, art. no. 682192. Weather station REG-K/4-gang, art. no. 682929.

Version	Art. no.	PU	PG	Mat.	Info
light grey	663596	1/80	9		

Time switch

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



Year time switch REG-K/4/324

Quartz-controlled four-channel year time switch. The device can be programmed manually on the device itself or on the PC using the CTS Chip Tool software. With bus coupler. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. After programming on the PC, all switching times are exported to a memory chip available as an accessory, and transmitted from this into one or more time switches.

Time functions:

- 324 non-volatile switching times for selectable daily, weekly and date commands, impulse commands
- 1x switching operation for holiday/public holidays
- 10 weekly programs for holidays and public holidays per channel
- Free formation of channel and weekday blocks
- Manual switching is possible via preselection and permanent switches
- Random program can be activated
- Operation with mains connection possible
- High reserve power
- Quartz-controlled
- Automatic changeover between summer and winter time

INSTABUS EIB software functions:

Switching. Dimming. Send time and date. Scene. Priority.

Operating voltage: Bus, DC 24 V

Accuracy: $\leq \pm 1$ s/day

Reserve power: 1.5 years at full operability. Data backup in disconnected state approx. 40 years (EEPROM)

Type of protection: IP 20

Device width: 6 modules = approx. 105 mm

- **Accessories:** CTS ChipTool software, art. no. 615034. Memory chip for year time switches, art. no. 668092.

Version	Art. no.	PU	PG	Mat.	Info
light grey	677129	1/10	9.3		



Year time switch REG-K/4/324 DCF-77

4-channel year time switch with power supply unit and integrated DCF receiver. To be completed with the DCF-77 antenna for radio-controlled time synchronisation. Time and date can be issued on the bus. The device can be programmed manually on the device itself or on the PC using the CTS Chip Tool software. With bus coupler. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. After programming on the PC, all switching times are exported to a memory chip available as an accessory, and transmitted from this into one or more time switches.

Time functions:

- 324 non-volatile switching times for selectable daily, weekly and date commands, impulse commands
- 1x switching operation for holiday/public holidays
- 10 weekly programs for holidays and public holidays per channel
- Free formation of channel and weekday blocks
- Manual switching is possible via preselection and permanent switches
- Random program can be activated
- High reserve power
- Automatic changeover between summer and winter time
- Automatic time synchronisation with DCF possible

INSTABUS EIB software functions:

Switching. Dimming. Send time and date. Scene. Priority.

Operating voltage: Bus, DC 24 V

AC 230 V $\pm 10\%$, 50-60 Hz for antenna

Accuracy: $\leq \pm 1$ s/day

Reserve power: 1.5 years at full operability. Data backup in disconnected state approx. 40 years (EEPROM)

Type of protection: IP 20

Device width: 6 modules = approx. 105 mm

- **In INSTABUS EIB, to be completed with:** DCF-77 antenna, art. no. 668091.

Accessories: CTS ChipTool software, art. no. 615034. Memory chip for year time switches, art. no. 668092.

Version	Art. no.	PU	PG	Mat.	Info
light grey	677029	1/10	9.3		



DCF-77 antenna

Antenna for receiving the time by radio signal. The antenna should be connected to a year time switch REG-K/4/324 DCF-77.

Type of protection: IP 65



- **In INSTABUS EIB, to be completed with:** Year time switch REG-K/4/324 DCF-77, art. no. 677029.

- **Contents:** With mounting bracket.

Version	Art. no.	PU	PG	Mat.	Info
light grey	668091	1/20	9		



Chip tool software CTS

Software for convenient entry of the switching times for the year time switches REG-K/4/324 on a PC. With adapter for the serial interface to load the program to the memory chip.

System requirements:

IBM-compatible, 386 or higher, Windows 95, 98

- **In INSTABUS EIB, to be completed with:** Year time switch REG-K/4/324, art. no. 677129. Year time switch REG-K/4/324 DCF-77, art. no. 677029.

Accessories: Memory chip for year time switches, art. no. 668092.

- **Contents:** With adapter and a memory chip.

Version	Art. no.	PU	PG	Mat.	Info
	615034	1/4	9.1		



Memory chip for year time switches

EEPROM memory chip for 324 switching times for programming the year time switch REG K/4/324. The program which is created with the chip tool software CTS is loaded into the memory chip and can then be imported into one or several year time switches.

- **In INSTABUS EIB, to be completed with:** Year time switch REG-K/4/324, art. no. 677129. Year time switch REG-K/4/324 DCF-77, art. no. 677029. CTS ChipTool software, art. no. 615034.

Version	Art. no.	PU	PG	Mat.	Info
	668092	1/80	9.1		



Time switch REG-S/2/42

2-channel day and week time switch. Without bus coupler, with application interface looped through at the side. Other REG-S devices can be attached to the REG bus coupler. For installation on DIN rails EN 50022-35 x 7.5 with integrated data rail. Time functions:

- 2 channels and 42 memory slots
- Toggling between manual/automatic mode
- Daily and weekly program
- Free formation of weekday blocks
- Free formation of channel blocks
- Holiday program
- Random-check generator
- Manual changeover between summer and winter time
- Reserve power

INSTABUS EIB software functions:

Behaviour when ON or OFF time is reached. ON and OFF delays.

Device width: 2 modules = approx. 36 mm

- **In INSTABUS EIB, to be completed with:** Bus coupler REG, art. no. 690599.

Version	Art. no.	PU	PG	Mat.	Info
light grey	670301	1/42	9.3		

Switch actuators

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



Switch actuator, flush-mounted/230/10

For switching a load via make contact. For screw mounting in the size 60 installation box. With integrated bus coupler 2 and screw terminals. The device is connected to the bus with a bus connecting terminal.

INSTABUS EIB software functions:

Actuator functions: Switching. Staircase lighting function. Logic operation. Blocking. Status feedback. Relay operation as break contact/make contact. Behaviour on bus voltage failure. Behaviour on bus voltage recovery
Push-button functions: Switching. Dimming. Blind control. Toggling. Pulse edge evaluation. Transmitting values. Disable function.

Switch contact: 1 x make contact, floating

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 10 A, $\cos\phi = 1$; 10 A, $\cos\phi = 0.6$

Capacitor load: 10 A, $C \leq 140 \mu F$

Connected loads:

Incandescent lamps: AC 230 V, max. 2,300 W

Halogen lamps: AC 230 V, max. 2,000 W

Fluorescent lamps: 10 A, $C \leq 140 \mu F$

AC 230 V, max. 900 W, uncompensated

AC 230 V, max. 320 W, with parallel compensation

AC 230 V, max. 1,500 W, twin-lamp circuit

- **In INSTABUS EIB, to be completed with:** Flush-mounted application modules for push-buttons 1- to 4-gang, multi-function push-button 4-gang with/without IR receiver, ARGUS 180 flush-mounted or blanking cover from System M, System Design or OCTOCOLOR.

Accessories: Protective cover for plaster, art. no. 690098.

- **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	627099	1/60	9		



Series actuator, flush-mounted/230/6

For independent switching of two loads via make contacts. For screw mounting in the size 60 installation box. With integrated bus coupler 2 and screw terminals. The device is connected to the bus with a bus connecting terminal.

INSTABUS EIB software functions:

Actuator functions: Switching. Staircase lighting function. Logic operation. Blocking. Status feedback. Relay operation as break contact/make contact. Behaviour on bus voltage failure. Behaviour on bus voltage recovery
Push-button functions: Switching. Dimming. Blind control. Toggling. Pulse edge evaluation. Transmitting values. Disable function.

Switch contact: 2 x make contacts, floating

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 6 A, $\cos\phi = 1$; 6 A, $\cos\phi = 0.6$

Capacitor load: 6 A, $C \leq 4 \mu F$

Connected loads:

Incandescent lamps: AC 230 V, max. 1000 W

Halogen lamps: AC 230 V, max. 800 W

Fluorescent lamps: 6 A, $C \leq 4 \mu F$

AC 230 V, max. (10x58) W, uncompensated

■ **In INSTABUS EIB, to be completed with:** Flush-mounted application modules for push-buttons 1- to 4-gang, multi-function push-button 4-gang with/without IR receiver, ARGUS 180 flush-mounted or blanking cover from System M, System Design or OCTOCOLOR.

Accessories: Protective cover for plaster, art. no. 690098.

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	627199	1/60	9		



Switch actuator, flush-mounted/230/16

For switching a load via a make contact. With integrated bus coupler and screw terminals. The device is connected to the bus with a bus connecting terminal. The actuator can be built into a 47 mm ceiling socket with hook or a flush-mounted switch box.

INSTABUS EIB software functions:

Operating mode as break contact or make contact. Staircase lighting functions with/without manual OFF function and status feedback function. Behaviour on bus voltage failure. Behaviour on bus voltage recovery. ON delay. OFF delay. Logic operation. Blocking. Priority control.

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 16 A, ohmic load

10 A, $\cos\phi = 0.6$

Nominal output

Incandescent lamps: AC 230 V, max. 3000 W

Halogen lamps: AC 230 V, max. 2000 W

Fluorescent lamps: AC 230 V, max. 1500 VA, with parallel compensation

Capacitive load: AC 230 V, max. 140 μF

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
polar white	629999	1/100	9		



Switch actuator REG-K/2x230/10

For independent switching of two loads via make contacts. With integrated bus coupler and plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A yellow LED indicates the switching state of the bus for each output. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

ON delay. OFF delay. Staircase timer function.

Logic operation. Feedback function.

Per switch contact:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 10 A, $\cos\phi = 0.6$

Nominal capacity: AC 230 V, max. 2300 VA

Incandescent lamps: AC 230 V, max. 2000 W

Halogen lamps: AC 230 V, max. 2000 W

Fluorescent lamps: AC 230 V, max. 900 W uncompensated

Capacitive load: AC 230 V, max. 140 μF

Device width: 2.5 modules = approx. 45 mm

■ **Note:** In the ARGUS control system to control the alarm siren with flashlight, art. no. 665192.

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647229	1/30	9.3		



Switch actuator REG-K/8x230/16 with manual mode

For independent switching of two loads via make contacts. With integrated bus coupler and screw terminals. For installation on DIN rails EN 50022. The 230 V switch output can be operated with a manual switch.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A yellow LED indicates the switching state of the bus for each output. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

OFF delay Staircase lighting function with/without manual OFF. Behaviour on bus voltage failure. Behaviour on bus voltage recovery

Nominal voltage: AC 230 V, 50-60 Hz

Per switch contact:

Nominal current: 16 A, $\cos\phi = 1$; 10 A, $\cos\phi = 0.6$

Capacitive load: AC 230 V, 16 A, max. 140 μF

Connected load:

Incandescent lamps: AC 230 V, max. 3000 W

Halogen lamps: AC 230 V, max. 2000 W

Capacitive load: AC 230 V, max. 140 μF

Device width: 2 modules = approx. 36 mm

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647329	1/70	9.3		



Switch actuator REG-K/4x230/10

For independent switching of four loads via make contacts. With integrated bus coupler 2 and plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A yellow LED indicates the switching state of the bus for each output. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Operation as break or make contact, staircase lighting function with/without manual OFF function and status feedback functions can be programmed for each channel. Behaviour after RESET/bus voltage failure and recovery can be set. Delay function for each channel, logic operation, blocking and priority control.

Per switch contact:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 10 A, $\cos\phi = 0.6$

Nominal capacity: AC 230 V, max. 2300 VA

Incandescent lamps: AC 230 V, max. 2000 W

Halogen lamps: AC 230 V, max. 2000 W

Fluorescent lamps: AC 230 V, max. 900 W uncompensated

Capacitive load: AC 230 V, max. 140 μF

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647490	1/30	9.3		



Switch actuator REG-K/4x230/16 with manual mode

For independent switching of four loads via make contacts. With integrated bus coupler 2 and screw terminals. For installation on DIN rails EN 50022. The 230 V switch output can be operated with a manual switch.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A yellow LED indicates the switching state of the bus for each output. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Operation as break or make contact, staircase lighting function with/without manual OFF function and status feedback functions can be programmed for each channel. Behaviour after RESET/bus voltage failure and recovery can be set. Delay function for each channel, logic operation, blocking and priority control.

Nominal voltage: AC 230 V, 50-60 Hz

Per switch contact:

Nominal current: 16 A, $\cos\phi = 1$; 10 A, $\cos\phi = 0.6$

Incandescent lamps: AC 230 V, max. 3000 W

Halogen lamps: AC 230 V, max. 2000 W

Capacitive load: AC 230 V, 16 A, max. 140 μF

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647590	1/30	9.3		



Switch actuator REG-K/8x230

For independent switching of eight loads via make contacts. With integrated bus coupler and plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Operation as break or make contact and logic operation can be programmed for each channel. Staircase lighting function with/without manual ON/OFF and status feedback function for channel A.

Nominal voltage: AC 230 V, 50-60 Hz

4 switch contacts with:

Nominal current: 10 A, $\cos\phi = 0.6$

Nominal capacity: AC 230 V, max. 2300 VA

Incandescent lamps: AC 230 V, max. 2000 W

Halogen lamps: AC 230 V, max. 2000 W

Fluorescent lamps: AC 230 V, max. 900 W uncompensated

Capacitive load: AC 230 V, max. 140 μF

4 switch contacts with:

Nominal current: 6 A

Nominal capacity: AC 230 V, max. 1380 VA

Incandescent lamps: AC 230 V, max. 1000 W

Capacitive load: AC 230 V, max. 4 μF

Device width: 4 modules = approx. 70 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647829	1/30	9.3		



Switch actuator REG-K/8x230 2

For independent switching of eight loads via make contacts. With integrated bus coupler 2 and plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Operation as break or make contact, staircase lighting function with/without manual OFF function and status feedback functions can be programmed for each channel. Behaviour after bus voltage recovery can be set. Delay function for each channel, logic operation, blocking.

Nominal voltage: AC 230 V, 50-60 Hz

4 switch contacts with:

Nominal current: 10 A, $\cos\varphi = 0.6$

Nominal capacity: max. 2300 VA

Incandescent lamps: max. 2000 W

Halogen lamps: AC 230 V, max. 2000 W

Fluorescent lamps: AC 230 V, max. 900 W uncompensated

Capacitive load: AC 230 V, max. 140 μF

4 switch contacts with:

Nominal current: 6 A

Nominal capacity: AC 230 V, max. 1380 VA

Incandescent lamps: AC 230 V, max. 1000 W

Capacitive load: AC 230 V, max. 4 μF

Device width: 4 modules = approx. 70 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647890	1/30	9.3		



Switch actuator REG-K/8x230 with manual mode

For independent switching of eight loads via make contacts. Four 230 V switch outputs can be operated with manual switches. With integrated bus coupler 2 and screw or plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Operation as break or make contact, staircase lighting function with/without manual OFF function, status feedback functions per channel, behaviour after bus voltage failure and recovery, delay function for each channel, logic operation, blocking, priority control, central switching function.

Nominal voltage: AC 230 V, 50-60 Hz

4 switch contacts with manual mode:

Nominal current: 16 A, $\cos\varphi = 1$; 10 A, $\cos\varphi = 0.6$

Incandescent lamps: AC 230 V, max. 3000 W

Halogen lamps: AC 230 V, max. 2000 W

Capacitive load: AC 230 V, 16 A, max. 140 μF

4 switch contacts without manual mode:

Nominal current: 10 A, $\cos\varphi = 1$; 6 A, $\cos\varphi = 0.6$

Incandescent lamps: AC 230 V, max. 1200 W

Halogen lamps: AC 230 V, max. 1000 W

Capacitive load: AC 230 V, 6 A, max. 21 μF

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647891	1/30	9.3		



Switch actuator REG-K/8x230/16 with manual mode

For independent switching of 8 loads via make contacts. All 230 V switch outputs can be operated with manual switches. With integrated bus coupler. For installation on DIN rails EN 50022. The device is connected to the mains via screw terminals; every second L connection is bridged internally. The bus is connected using a bus connecting terminal; a data rail is not necessary. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Operation as break or make contact, delay functions for each channel, staircase lighting function with/without manual OFF function, cut-out warning for staircase lighting function, blocking and additional logic operation or priority control, scenes, status feedback function per channel, central function, comprehensive parameterisation for bus voltage failure and recovery, parameterisable download behaviour.

Nominal voltage: AC 230 V, 50-60 Hz

Per switch contact:

Nominal current: 16 A, $\cos\varphi = 0.6$

Incandescent lamps: AC 230 V, max. 3600 W

Halogen lamps: AC 230 V, max. 2500 W

Fluorescent lamps: AC 230 V, max. 2500 VA

Capacitive load: AC 230 V, 16 A, max. 200 μF

Device width: 8 modules = approx. 144 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647893	1/6	9.3		



Switch actuator REG-K/12x230/16, with manual mode

For independent switching of 12 loads via make contacts. All 230 V switch outputs can be operated with manual switches. With integrated bus coupler.

The device is connected to the mains via screw terminals; every second L connection is bridged internally. For installation on DIN rails EN50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Operation as break or make contact, delay functions for each channel, staircase lighting function with/without manual OFF function, cut-out warning for staircase lighting function, blocking and additional logic operation or priority control, scenes, status feedback function per channel, central function, comprehensive parameterisation for bus voltage failure and recovery, parameterisable download behaviour.

Nominal voltage: AC 230 V, 50-60 Hz

Per switch contact:

Nominal current: 16 A, $\cos\varphi = 0.6$

Incandescent lamps: AC 230 V, max. 3600 W

Halogen lamps: AC 230 V, max. 2500 W

Fluorescent lamps: AC 230 V, max. 2500 VA

Capacitive load: AC 230 V, 16 A, max. 200 μF

Device width: 12 modules = approx. 216 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	648493	1/6	9.3		



Switch actuator, built-in/230/10 with extension input

For switching one load via a make contact. Local operation is possible via a conventional push-button. With integrated bus coupler. Suitable for surface-mounting or installation in equipment boxes.

INSTABUS EIB software functions:

Operation as break or make contact. Staircase lighting function. Logic operation. Extension unit. Priority control. Status feedback. 2-step heating. Behaviour on bus voltage failure.

Nominal voltage: AC 230 V $\pm 10\%$, 50 Hz

Inputs:

Signal voltage: AC 230 V $\pm 10\%$, 50 Hz

Cable length: 100 m

Outputs:

Switching voltage: AC 230 V $\pm 10\%$, 50 Hz

Switching current: 10 A, $\cos\varphi = 0.5$

Dimensions: 240x32x42 mm (LxWxH)

Version	Art. no.	PU	PG	Mat.	Info
polar white	657019	1/28	9		



Switch actuator, built-in/ 2x230/10

For independent switching of two loads via make contacts. With integrated bus coupler and plug-in terminals on the output side. Suitable for surface mounting or installation in equipment boxes.

INSTABUS EIB software functions:

Input telegrams can be logically linked in the actuator. ON delay, OFF delay, staircase lighting and status feedback functions can be programmed.

Per switch contact:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 10 A

Nominal capacity: AC 230 V, max. 2300 VA

Incandescent lamps: AC 230 V, max. 2300 W

Halogen lamps: AC 230 V, max. 2000 W

Fluorescent lamps: AC 230 V, max. 900 W uncompensated

Capacitive load: AC 230 V, max. 140 µF

Dimensions: 280x40x35 mm (LxWxH)

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
polar white	650101	1/28	9		

Blind actuators

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



Blind actuator, flush-mounted/ 230/6

To control a blind/roller shutter drive. For screw mounting in the size 60 installation box. With integrated bus coupler 2 and screw terminals. The device is connected to the bus with a bus connecting terminal.

INSTABUS EIB software functions:

Actuator functions: Blind with slat adjustment, roller shutters without slat adjustment, safety function

Push-button functions: Switching, dimming, blind control, toggling, pulse edges, send value, disable function

Switch contact: Changeover contact in series with make contact, floating

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 6 A, $\cos\phi = 1$; 6 A, $\cos\phi = 0.6$

Motor load: AC 230 V, 500 W/VA

■ **In INSTABUS EIB, to be completed with:** Flush-mounted application modules for push-buttons 1- to 4-gang, multi-function push-button 4-gang with/without IR receiver, ARGUS 180 flush-mounted or blanking cover from System M, System Design or OCTOCOLOR.

Accessories: Protective cover for plaster, art. no. 690098.

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	627299	1/60	9		



Blind actuator REG-K/ 2x(1x230)/10

For independent switching of two blind/roller shutter drives. With integrated bus coupler and plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary.

INSTABUS EIB software functions:

Running time, slat adjustment and the safety function of the blind.

Per switch contact:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 10 A, $\cos\phi = 0.6$

Nominal capacity: AC 230 V, max. 2300 VA

Device width: 4 modules = approx. 72 mm

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	648229	1/30	9.3		



Blind actuator REG/2x(2x230)/6

For independent switching of two blind or roller shutter groups. Two motors can be connected for each group. With integrated bus coupler and plug-in terminals on the output side. For installation on DIN rails EN 50022-35 x 7.5, with integrated data rail.

INSTABUS EIB software functions:

Slat adjustment and safety function of the blinds.

Per switch contact:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 6 A

Nominal capacity: AC 230 V, max. 1380 VA

Device width: 3 modules = approx. 54 mm

■ **In INSTABUS EIB, to be completed with:** Data rail, art. no. 6899 ..

Version	Art. no.	PU	PG	Mat.	Info
light grey	679501	1/30	9.3		



Blind actuator REG-K/4x(1x24)/6 with manual mode

For independent control of four blind/roller shutter drives. With manual switches for central continuous operation and stop. With integrated bus coupler and plug-in screw terminals on the output side. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary.

INSTABUS EIB software functions:

Running time, slat adjustment, pause, behaviour after bus voltage failure, safety functions (e.g. wind alarm) and ventilation flap mode.

Per switch contact:

Nominal voltage: DC 24 V $\pm 10\%$ ripple

Nominal current: 6 A

Load types: 24 V direct current drives

Device width: 4 modules = approx. 72 mm

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	648729	1/24	9.3		



Blind actuator REG-K/4x(1x230)/6 with manual mode

For independent control of four blind/roller shutter drives. With integrated bus coupler and plug-in screw terminals. For installation on DIN rails EN 50022. Each actuator channel has two channel buttons with which the outputs can be switched manually, independently of the input objects.

The bus is connected using a bus connecting terminal; a data rail is not necessary. The channel buttons with backlighting indicate the channel status. A green LED indicates readiness for operation.

INSTABUS EIB software functions:

Running time, idle time, step interval, safety functions, switching, 1-bit positioning and behaviour on bus voltage recovery per actuator channel.

Per switch contact:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 6 A, $\cos\phi = 0.6$

Motor load: AC 230 V, max. 1000 W

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	648190	1/30	9.3		



Roller shutter actuator REG-K/4x(1x24)/6 with manual mode

For independent control of 4 roller shutter drives. With integrated bus coupler and plug-in screw terminals. For installation on DIN rails EN 50022. Each actuator channel has two channel buttons with which the outputs can be switched manually, independently of the input objects.

The bus is connected using a bus connecting terminal; a data rail is not necessary. The channel status is indicated by the channel buttons with backlighting. A green LED indicates readiness for operation.

INSTABUS EIB software functions:

Running time, idle time, safety functions, 1-bit positioning and behaviour on bus voltage recovery per actuator channel.

Per switch contact:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 6 A, $\cos\phi = 0.6$

Motor load: AC 230 V, max. 1000 W

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	648890	1/30	9.3		



Blind actuator REG-K/6x(1x230)

For independent switching of six blind/roller shutter drives. With integrated bus coupler and plug-in screw terminals. For installation on DIN rails EN 50022.

Three of the 6 blind channels can alternatively be configured as switching channels.

All channels can alternatively be configured as changeover contacts with neutral position. The bus is connected using a bus connecting terminal; a data rail is not necessary.

INSTABUS EIB software functions:

Blind functions: Slat adjustment, running time, positioning time, step interval, reverse pulse, pause on reverse, positioning movements to calibration, positioning value (0-255), behaviour on bus voltage recovery and safety function.

Switch actuator functions: Staircase lighting time, logic operation, status feedback and behaviour on bus voltage failure and recovery.

Auxiliary voltage: AC 230 V

Blind output:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 6 A, ohmic load

6 A, $\cos\phi = 0.6$

Motor power: AC 230 V, max. 1000 VA

Blind/switch output:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 10 A, ohmic load

10 A, $\cos\phi = 0.6$

Nominal output:

Incandescent lamps: AC 230 V, max. 2300 W

Halogen lamps: AC 230 V, max. 2000 W

Capacitive load: AC 230 V, max. 140 μ F

Device width: 8 modules = approx. 144 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	648629	1/12	9.3		



Blind actuator REG-K/8x/10 with manual mode

For independent control of 8 blind/roller shutter drives. The functions of the blind channels is freely configurable. All blind outputs can be operated manually using push-buttons. With integrated bus coupler. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. Channel status display via LEDs. A green LED indicates readiness for operation.

INSTABUS EIB software functions:

Blind functions: Blind type. Running time. Idle time. Step interval. Differentiated disable function for weather alarms. 8-bit positioning for height and slat. Manual/automatic mode. 8-bit scenes. Alarm. Blocking. Status feedback.

Blind output:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 10 A, $\cos\phi = 0.6$

Nominal capacity: AC 230 V, max. 2300 VA

Device width: 8 modules = approx. 144 mm

Contents: With bus connecting terminal and cable cover.

Availability: Available May 2005

Version	Art. no.	PU	PG	Mat.	Info
light grey	649808	1/6	9.3		



Blind actuator, built-in/ 1x(2x230)/10

For switching one group of blinds or roller shutters. Two motors can be connected to the group. With integrated bus coupler, suitable for surface mounting and installation in equipment boxes.

INSTABUS EIB software functions:

Running time, slat adjustment and safety function of the blind.

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 10 A

Nominal capacity: AC 230 V, 2300 VA

Dimensions: 280x40x35 mm (LxWxH)

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
polar white	650301	1/28	9		



Multiple control relay insert for roller shutters

5 A, AC 250 V

Suitable for a size 60 flush-mounted box. With a multiple control relay, it is possible to control 2 motors locally by manual operation or centrally.

The multiple control relays can be cascaded.

► **To be completed with:** Blanking cover, art. no. 3920..., 3926..., 3919..., 3918...

■ **Technical Information:** Multiple control relay insert for roller shutters (⇒ p. 432)

Version	Art. no.	PU	PG	Mat.	Info
	576399	1/24	8		



Multiple control relay for roller shutters, flush-mounted

6 A, AC 250 V

Suitable for a size 60 flush-mounted box. Flat 22 mm design. For local control using push-buttons, installation in a deep flush-mounted box.

For controlling up to 2 roller shutter motors locally, in groups or centrally. With separation of load and control circuit, as well as forced locking in both directions of movement.

Motors are controlled individually using a roller shutter rocker switch and centrally using the blind time switches or blind push-buttons of the Merten blind control system.

Mains voltage: AC 230 V, 50 Hz $\pm 10\%$

Control voltage: AC 230 V $\pm 10\%$

Power consumption: 10 mA in relay operation

Switching voltage: max. AC 250 V

Switching current: max. 6 A

Temperature range: 0 -60 °C

Terminals: max. 1.5 mm²

Dimensions: 22x49x52 mm (HxWxD)

Installation: (deep) flush-mounted box

► **To be completed with:** Blanking cover, art. no. 3920..., 3926..., 3919..., 3918...

■ **Technical Information:** Multiple control relay for roller shutters, flush-mounted (⇒ p. 433)

Version	Art. no.	PU	PG	Mat.	Info
	576398	1/100	8		



Multiple control relay for roller shutters REG

2 A, AC 250 V

For installation on DIN rails.

For controlling up to 2 roller shutter motors locally, in groups or centrally. With separation of load and control circuit, as well as forced locking in both directions of movement.

Motors are controlled individually using a roller shutter rocker switch and centrally using the blind time switches or blind push-buttons of the Merten blind control system.

Mains voltage: AC 230 V, 50 Hz $\pm 10\%$

Power consumption: 10 mA in relay operation

Switching voltage: max. AC 250 V

Switching current: max. 2 A

Temperature range: 0 -60 °C

Terminals: max. 1.5 mm²

Device width: 2 modules = approx. 36 mm

■ **Technical Information:** Multiple control relay for roller shutters REG (⇒ p. 434)

Version	Art. no.	PU	PG	Mat.	Info
	576397	1/40	8		

Dimming actuators/control units

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



Dimming actuator REG-K/ 230/400 W

AC 230 V, 50 Hz

For switching and dimming incandescent lamps and LV halogen lamps (via electrical transformers).

(Phase alignment)

With integrated bus coupler, plug-in screw terminals, short-circuit and overload protection. The functions "ON", "OFF" and "Bus" can be selected with the manual switch. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A voltage level at the output is indicated by a yellow LED. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Starting behaviour, memory function, dimming speed and behaviour on bus voltage failure can be programmed.

Mains voltage: AC 230 V, 50 Hz

Nominal capacity: AC 230 V, 400 W

Device width: 4 modules = approx. 72 mm

■ **Technical Information:** Dimmer selection (⇒ p. 415)

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	649429	1/30	9.3		



Dimming actuator REG-K/ 230/400 W

AC 230 V, 60 Hz

For switching and dimming incandescent lamps and LV halogen lamps (via electrical transformers).

(Phase alignment)

With integrated bus coupler, plug-in screw terminals, short-circuit and overload protection. The functions "ON", "OFF" and "Bus" can be selected with the manual switch. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A voltage level at the output is indicated by a yellow LED. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Starting behaviour, memory function, dimming speed and behaviour on bus voltage failure can be programmed.

Mains voltage: AC 230 V, 60 Hz

Nominal capacity: AC 230 V, 400 W

Device width: 4 modules = approx. 72 mm

■ **Technical Information:** Dimmer selection (⇒ p. 415)

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	649493	1/30	9.3		



Dimming actuator REG-K/ 230/600 W

AC 230 V, 50 Hz

For switching and dimming incandescent lamps and dimmable "wound" transformers (ohmic/ inductive load).

(Phase control)

With integrated bus coupler, plug-in screw terminals, short-circuit and overload protection and soft start function to extend the lamp life. The functions "ON", "OFF" and "Bus" can be selected with the manual switch. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A voltage level at the output is indicated by a yellow LED. A red LED indicates when the dimmer has been switched off by overload protection. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Starting behaviour, memory function, dimming speed, switching off by relative dimming, configurable minimum brightness and behaviour on bus voltage failure/recovery are programmable. An application to control motor speed can be selected.

Mains voltage: AC 230 V, 50 Hz

Nominal capacity: AC 230 V, 25-600 VA

Short-circuit protection: via fuse

Device width: 4 modules = 72 mm

■ **Technical Information:** Dimmer selection (⇒ p. 415)

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	649629	1/30	9.3		



Dimming actuator REG-K/ 230/600 W

AC 230 V, 60 Hz

For switching and dimming incandescent lamps and dimmable wound transformers (ohmic / inductive load).

(Phase control)

With integral bus coupler, plug-in screw terminals, short-circuit and overload protection and soft start function to protect the lamps. The manual switch offers the functions switch ON, switch OFF and bus operation. For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. A voltage level at the output is indicated by a yellow LED. A red LED indicates when the dimmer has been switched off by overload protection. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Starting behaviour, memory function, dimming speed, switching off by relative dimming, configurable minimum brightness and behaviour on bus voltage failure/recovery are programmable. An application to control motor speed can be selected.

Mains voltage: AC 230 V, 60 Hz

Nominal capacity: AC 230 V, 25-600 VA

Short-circuit protection: via fuse

Device width: 4 modules = approx. 72 mm

■ **Technical Information:** Dimmer selection (⇒ p. 415)

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	649693	1/30	9.3		



Universal dimming actuator REG-K/2x230/500 W

For switching and dimming incandescent lamps, HV halogen lamps and LV halogen lamps using dimmable wound transformers or electronic transformers.

(Phase control and phase alignment)

With integrated bus coupler, screw terminals, protection against short circuits and overheating (automatic restart after cool down), soft start function. For installation on DIN rails EN 50022.

The dimming actuator automatically recognises the connected load. Do not connect mixed loads. The bus is connected using a bus connecting terminal; a data rail is not necessary.

INSTABUS EIB software functions:

Starting behaviour, dimming behaviour, soft ON, soft OFF, time dimmer, dimming and jumping to brightness values, time-delayed disconnection if cut-out brightness level is exceeded, lightscenes (retrieval of up to eight internally-saved brightness values), blocked operation with defined brightness values at start and end, status feedback, behaviour on bus voltage recovery.

Nominal voltage: AC 230 V, 50/60 Hz

Nominal capacity: max. 500 W / VA

50 W / VA minimum load

Power loss: 4.5 W

Device width: 4 modules = approx. 72 mm

■ **Technical Information:** Dimmer selection (⇒ p. 415)

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	649129	1/22	9.3		



Universal dimming actuator REG-K/2x230/300 W

To switch and dim incandescent lamps, HV halogen lamps and LV halogen lamps using dimmable wound or electric transformers.

(Phase control and alignment)

Different types of loads can be operated independently of one another at both outputs. With integrated bus coupler, screw terminals, protection against short circuits and overheating (automatic restart after cool down), soft start function. For installation on DIN rails EN 50022. The dimming actuator automatically recognises the connected load. Do not connect mixed loads. The bus is connected using a bus connecting terminal; a data rail is not necessary.

INSTABUS EIB software functions:

Starting behaviour, dimming behaviour, soft ON, soft OFF, time dimmer, dimming and jumping to brightness values, time-delayed disconnection if cut-out brightness level is exceeded, lightscenes (retrieval of up to eight internally-saved brightness values), blocked operation with defined brightness values at start and end, status feedback, behaviour on bus voltage recovery.

Nominal voltage: AC 230 V, 50/60 Hz

Nominal output

per channel: max. 300 W / VA

50 W / VA minimum load

Power loss: 4.5 W

Device width: 4 modules = approx. 72 mm

■ **Technical Information:** Dimmer selection (⇒ p. 415)

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	649029	1/22	9.3		



Dimming actuator, built-in/ 230/215 W

For switching and dimming incandescent lamps and LV halogen lamps (via electrical transformers).

(Phase alignment)

With integrated bus coupler, short-circuit and overload protection. Suitable for surface mounting or installation in equipment boxes.

INSTABUS EIB software functions:

Starting behaviour, memory function and dimming speed can be programmed.

Mains voltage: AC 230 V, 50 Hz

Nominal capacity: AC 230 V, 20-215 W

Dimensions: 280x40x35 mm (LxWxH)

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
polar white	650501	1/28	9		



Universal dimming actuator, built-in/ 230/400 W with extension input

For switching and dimming incandescent lamps, 230 V halogen lamps and LV halogen lamps (via conventional or electronic transformers).

(Phase control or alignment)

With integrated bus coupler. Local operation is possible via conventional push-buttons. Suitable for surface mounting or installation in equipment boxes.

Mixed operation with conventional and electronic transformers is not permitted.

Power supply

Mains voltage: AC 230 V ±10 %, 50 Hz

Inputs:

Signal voltage: AC 230 V ±10 %, 50 Hz

Cable length: 100 m

Outputs:

Voltage: AC 230 V ±10 %, 50 Hz

Power range: 40 VA ... 400 VA

Incandescent lamps: 40 W to 400 W, AC 230 V

LV halogen: 40 W to 400 W (electr. transformers)

LV halogen: 100 W to 320 W (conv. transformers)

Dimensions: 240x32x42 mm (LxWxH)

■ **Technical Information:** Dimmer selection (⇒ p. 415)

Version	Art. no.	PU	PG	Mat.	Info
polar white	657319	1/28	9		



Dimming actuator, built-in/ 230/500 W

For switching and dimming of incandescent lamps, 230 V halogen lamps and LV halogen lamps (using electronic transformers).

(Phase alignment)

Can also be operated via conventional push-buttons.

With integral bus coupler, short-circuit protection and overload protection. Suitable for surface mounting and mounting within devices.

INSTABUS EIB software functions:

Starting behaviour, memory function and dimming speed can be programmed.

Mains voltage: AC 230 V, 50 Hz

Nominal capacity: AC 230 V, 20-500 W

Dimensions: 280x40x35 mm (LxWxH)

■ **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
polar white	659519	1/28	9		



Control unit 1-10 V REG-K

For connecting devices with 1-10 V interface to the INSTABUS EIB. With integrated bus coupler and plug-in screw terminals. The 230 V switch output can be operated with a manual switch. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A yellow LED indicates the output voltage level. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

Starting behaviour, memory function, dimming behaviour, dimming speed and behaviour on bus voltage failure and recovery can be programmed.

Switch contact: to switch the electronic ballasts/transformers etc.

Nominal current: 10 A, $\cos\phi = 0.6$

Capacitive load: AC 230 V, max. 140 μF

1-10 V interface: to dim the electronic ballasts/transformers etc.

Voltage range: DC 1-10 V

Output current: max. 50 mA

Device width: 2 modules = approx. 36 mm

■ **Technical Information:** Lamps/dimmer matrix (\Rightarrow p. 423)

■ **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647029	1/30	9.3		



Lighting controller/control unit 0-10 V REG-K/2-gang

For connecting 2 devices with 0 - 10 V interface to INSTABUS EIB for switching and dimming. In addition the device has 2 inputs available for light sensors, suitable for mounting in suspended ceilings. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. With integrated bus coupler.

When light sensors are connected, it is possible to implement lighting control with sensor and actuator in the same device. The brightness values measured by the light sensor are transmitted to the controller which then controls the lighting via the INSTABUS EIB. With indication of the switching state; can also be used for manual operation.

INSTABUS EIB software functions:

Behaviour on bus voltage failure/recovery. Dimming speed. Upper/lower dimming limit. Preset. Control behaviour.

Power supply: Bus, DC 24 V

Outputs: 2, passive, 0-10 V interfaces, for switching and dimming luminaires with electronic ballast and 0-10 V control input

Loading capacity: < 30 mA

Cable length: max. 100 m

Connection: Screw terminals 0.5 - 2.5 mm²

Load circuit: 2, floating contacts

Switching voltage: AC 230 V

Switching current: 16 A, $\cos\phi = 1$; 10 A, $\cos\phi = 0.6$

Connection: Screw terminals 0.5 - 2.5 mm²

Inputs: 2, for light sensor (art. no. 663690)

Control range: 200 to 1200 lux

Type of protection: IP 20

Device width: 4 modules = approx. 72 mm

■ **Accessories:** Light sensor, flush-mounted, art. no. 663690.

■ **Technical Information:** Lamps/dimmer matrix (\Rightarrow p. 423)

■ **Contents:** With bus connecting terminals.

Version	Art. no.	PU	PG	Mat.	Info
light grey	648029	1/30	9.3		



Control unit 1-10 V REG-K/3-gang with manual mode

For connecting devices with 1-10 V interface to INSTABUS EIB. With integrated bus coupler and screw terminals. Each individual 230 V switch output can be operated manually with a manual switch. For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary.

INSTABUS EIB software functions:

Starting behaviour, dimming behaviour, soft ON, soft OFF, time dimmer, dimming and jumping to brightness values, time-delayed disconnection if cut-out brightness level is exceeded, lightscenes (retrieval of up to eight internally-saved brightness values), blocked operation with defined brightness values at start and end, status feedback, behaviour on bus voltage recovery.

Switch contact: to switch the electronic ballasts/transformers

Switching voltage: AC 230 V

Switching capacity: AC 230 V, 2500 W, $\cos\phi = 1$

Capacitive load: AC 230 V, 10 A, 80 μF

1-10 V interface: to dim the electronic ballasts/transformers.

Voltage range: DC 1-10 V

Output current: max. 100 mA per channel

Input cable: max. 500 m with 0.5 mm

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	646929	1/22	9.3		



Control unit 0-10 V, built-in with extension input

For switching and dimming devices with 0-10 V interface. Local operation (switching On/Off) is possible using conventional push-buttons. With integrated bus coupler. Can be surface-mounted or installed in device boxes.

Power supply

Mains voltage: AC 230 V $\pm 10\%$, 50 Hz

Inputs:

Signal voltage: AC 230 V $\pm 10\%$, 50 Hz

Cable length: 100 m

Outputs:

Switching voltage: AC 230 V $\pm 10\%$, 50 Hz

Switching current: 10 A, $\cos\phi = 0.6$

Control circuit: 50 mA (0-10 V)

Dimensions: 240x32x42 mm (LxWxH)

Technical Information: Lamps/dimmer matrix (\Rightarrow p. 423)

Version	Art. no.	PU	PG	Mat.	Info
polar white	657219	1/28	9		



MET S electronic transformer with 1-10 V control input 105 W

AC 230 V

Electronic transformer with integrated phase alignment dimmer.

Control via the electronic potentiometer insert 1-10 V, control unit 1-10 V or INSTABUS control units.

No built-in fuse because short-circuit-proof in secondary circuit. With overload protection, thermal protection, soft start function.

Output voltage: AC 12 V

Protection class: II

Cable length: max. 2 m in secondary circuit (in line with VDE)

Colour: Polar white

Dimensions: 180 x 34 x 49 mm (WxHxD)

Diagonal size: 55 mm

Technical Information: MET S (\Rightarrow p. 424)

Version	Art. no.	PU	PG	Mat.	Info
35-105 W	577795	1/40	8.1		

Other actuators

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



Info display, flush-mounted

Application module for System M.

LC display with max. 4 x 16 characters and acoustic signalling device. The info display is used to indicate freely-programmable texts and values and to control functions.

Functions and texts can be allocated on up to 12 pages with a maximum of 4 lines. 12 lines of alarm signals can also be allocated. Automatic allocation of alarm signal priority which can be changed manually.

Signals that are not shown are selected using two buttons on the display. The functions of two additional buttons are allocated to the display line.

INSTABUS EIB software functions:

Switching, dimming, blind control, temperature control, continuous status control, ASCII text provision, 8-bit scene retrieval, priority control, display of texts, values, date, time, date+time

Display: Illuminated LCD

4-line (16 characters) or

2-line (8 characters) or

1-line (4 characters)

Operating elements: 4 buttons

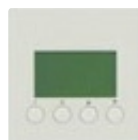
Signalling device: 2 signal tones

Alarm signals: max. 12

- In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099.

- Note:** The display tool software V2.0, art. no. 615046, for programming the flush-mounted info display is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
white	629444	1/100	9	TP	
polar white	629419	1/100	9	TP	
anthracite	629414	1/100	9	TP	
aluminium	629460	1/100	9	ML	



Info display, flush-mounted

Application module for System Design.

LC display with max. 4 x 16 characters and acoustic signalling device. The info display is used to indicate freely-programmable texts and values and to control functions.

Functions and texts can be allocated on up to 12 pages with a maximum of 4 lines. 12 lines of alarm signals can also be allocated. Automatic allocation of alarm signal priority which can be changed manually.

Signals that are not shown are selected using two buttons on the display. The functions of two additional buttons are allocated to the display line.

INSTABUS EIB software functions:

Switching, dimming, blind control, temperature control, continuous status control, ASCII text provision, 8-bit scene retrieval, priority control, display of texts, values, date, time, date+time

Display: Illuminated LCD

4-line (16 characters) or

2-line (8 characters) or

1-line (4 characters)

Operating elements: 4 buttons

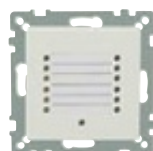
Signalling device: 2 signal tones

Alarm signals: max. 12

- In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099.

- Note:** The display tool software V2.0, art. no. 615046, for programming the flush-mounted info display is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
white	629544	1/100	9	TP	
polar white	629519	1/100	9	TP	
aluminium	629560	1/100	9	ML	
stainless steel	629546	1/100	9	ML	



Display unit, flush-mounted

For System M.

The flush-mounted display unit reports the status of up to 12 different monitoring systems using 12 LEDs and the status of the system (armed or not armed). The flush-mounted or surface-mounted arming device is connected to the monitored input. With integrated bus coupler.

The flush-mounted display unit indicates the status depending on the respective status of the detection zone and activates various functions when the alarm is set off (e.g. switches on sirens, sends out signals).

INSTABUS EIB software functions:

Display unit: For up to 12 binary states.

Monitoring unit: Display of up to 12 detection zones, activated/deactivated display, connection for arming device, sabotage monitoring of other components.

- Accessories:** ANTI-VANDALISM arming device, flush-mounted, art. no. 624040. Arming device, surface-mounted, art. no. 663292.
- Contents:** With bus connecting terminal and supporting plate.

Version	Art. no.	PU	PG	Mat.	Info
white	628644	1/50	9	TP	
polar white	628619	1/50	9	TP	
anthracite	628614	1/50	9	TP	
aluminium	628660	1/50	9	ML	



Analogue actuator REG-K/4-gang

The output channels can be parameterised for different current and voltage signals to control different analogue variables (e.g. servomotors). The actuator has four analogue outputs. For use in connection with the analogue actuator module REG/4-gang, 8 analogue outputs are provided. Connections are made using the sub-bus. For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. With continuity checking of the current outputs.

Supply voltage: AC 24 V (+/-10 %), DC 24 V (+25 % / -10%)

Analogue outputs: 4

Current signals: 0 ... 20 mA, 4 ... 20 mA

Voltage signals: 0 ... 1 V, 0.. 10 V

Continuity checking: 4 ... 20 mA

Device width: 4 modules = approx. 72 mm

■ **In INSTABUS EIB, to be completed with:** Power supply REG, AC 24 V / 1 A, art. no. 663629.

Accessories: Analogue actuator module REG/4-gang, art. no. 682292.

■ **Contents:** With bus connecting terminal and cable cover.

Availability: Available 2nd quarter 2005

Version	Art. no.	PU	PG	Mat.	Info
light grey	682291	1/21	9.3		



Analogue actuator module REG/4-gang

Extension module to extend analogue actuator REG-K/4-gang from 4 to 8 analogue outputs. Connections are made using the sub-bus. The output channels can be independently parameterised for different current and voltage signals to control different control values (e.g. servomotors). For installation on DIN rails EN 50022.

Auxiliary voltage: AC / DC 24 V ($\pm 15\%$)

Rating: max. 4 VA

Analogue outputs: 4

Current signals: 0 ... 20 mA, 4 ... 20 mA

Voltage signals: 0 ... 1 V, 0.. 10 V (DC)

A/D conversion: 14 bit

Outputs: DC 24 V, 100 mA (total)

Device width: 4 modules = approx. 72 mm

■ **In INSTABUS EIB, to be completed with:** Analogue actuator REG-K/4-gang, art. no. 682291.

■ **Contents:** With sub-bus jumper.

Availability: Available 2nd quarter 2005

Version	Art. no.	PU	PG	Mat.	Info
light grey	682292	1/21	9.3		

Combination units with accessories

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



IP54

Combination unit, waterproof, surface-mounted

Depending on requirements, the surface-mounted device can be used to independently switch either four loads with make contacts or two blind/roller shutter drives with two motors each. It is also possible to control two loads and one blind/shutter roller drive with two motors via the outputs. Local operation is possible using conventional push-buttons. The extension inputs can also be used as 24 V or 230 V binary inputs. With integrated bus coupler. All connections are made via plug-in terminals with screw connection. Suitable for surface-mounting, preferably in false ceilings.

Power supply:

Nominal voltage: AC 230 V $\pm 10\%$, 50 Hz

Power consumption: < 35 mA

Inputs: 4

Signal voltage: AC 230 V $\pm 10\%$ -15 %, 50-60 Hz or AC/DC 24 V (but no mixed operation). The contact interrogation voltage of AC 24 V can be taken from the device itself.

Cable length: max. 100 m

Outputs:

Blind actuator mode: 2x2 changeover contacts

Switching voltage: AC 230 V

Switching current: each channel 5 A, $\cos\phi = 0.5$.

Total current max. 10 A for all channels measured at the mains terminals.

Switch actuator mode: 4 switch contacts

Switching voltage: AC 230 V

Switching current: in single-phase operation with $T_u < 45^\circ\text{C}$, the total current is max. 10 A for all channels measured at the mains terminals. In multi-phase operation at $T_u < 30^\circ\text{C}$: 3x10 A and 1x2 A, $\cos\phi = 0.5$. At $T_u < 45^\circ\text{C}$: 3x6 A and 1x2 A, $\cos\phi = 0.5$

Type of protection: IP 54 in line with DIN 40 050

Dimensions: 187x160x50 mm (HxWxD)

Version	Art. no.	PU	PG	Mat.	Info
light grey	636929	1/6	9		



Combination unit, built-in/2x230/230/10 with extension input

For independent switching of two loads or for controlling a blind/roller shutter drive. Local operation is possible via a conventional push-button. With integrated bus coupler. Suitable for surface mounting or installation in equipment boxes.

Nominal voltage: AC 230 V $\pm 10\%$, 50 Hz

Inputs:

Signal voltage: AC 230 V $\pm 10\%$, 50 Hz

Cable length: 100 m

Outputs:

Switching voltage: AC 230 V $\pm 10\%$, 50 Hz

Switching current: 10 A, $\cos\phi = 0.5$

Dimensions: 240x32x42 mm (LxWxH)

Version	Art. no.	PU	PG	Mat.	Info
polar white	657119	1/28	9		

Panel control devices

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



Universal I/O panel control REG-K/32x24

Input/output module with integrated bus coupler and 2 plug-in strips, each with 16 screw terminals for controlling 32 push-buttons or signal lamps in operating or display panels for example. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. The 32 channels can be configured as either inputs or outputs.

INSTABUS EIB software functions:

Outputs: Switching. Inverted switching. Flashing.
Inputs: Pulse edges. Dimming. Blinds. Send value.

External power supply: DC 12/24 V, permitted DC 10 ... 30 V

Power consumption: max. 2.8 A at max. load

Inputs/outputs: 32 freely parameterisable as input/output

Cable length: ≤ 10 m

Inputs: DC 24 V, scanning voltage

Outputs: DC 24 V, supply voltage

Output current: 80 mA per output, 700 mA per group of 8, 2.8 A per device

Load type: ohmic

Safety: short-circuit-proof, overload protection, reverse voltage protection

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
light grey	675201	1/30	9.3		



Panel control REG-K/12x24

Output module with integrated bus coupler and plug-in screw terminals to control 12 signal lamps or relays. For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. The connected signal lamps or loads can be checked via a separate lamp test terminal.

INSTABUS EIB software functions:

Switching loads. Reading in the status. Flashing.

External power supply: Nominal DC 24 V, SELV in line with VDE 0551

min. DC 12 V, max. DC 36 V

Total current: max. 2 A for all outputs

Per output: for ohmic, inductive and capacitive loads

Output current: 160 mA, short-circuit-proof, max. 400 mA

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	675001	1/30	9.3		



Panel control REG-K/8-4x24

Input/output module with integrated bus coupler and plug-in screw terminals to control eight push-buttons and four signal lamps or relays. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary.

The connected signal lamps or loads can be checked via a separate lamp test terminal.

INSTABUS EIB software functions:

The inputs can be used in pairs to control switch actuators. Can also be programmed as eight individual switches and to control scenes.

External power supply: Nominal DC 24 V, SELV in line with VDE 0551

min. DC 12 V, max. DC 36 V

Total current: max. 1.6 A for all outputs

Per output: for ohmic, inductive and capacitive load

Output current: max. 400 mA, short-circuit-proof

Per input: max. 50 m cable length for cable with shielding.

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	675101	1/30	9.3		



Flush-mounted housing with control electronics, power supply unit and bus coupler

The control electronics with bus coupler are used for communicating between the front plates and the INSTABUS EIB. Various front plates can be installed in the housing. Free fields are covered with the cover plate. A ribbon cable connects the front plates with the control electronics.

The maximum configuration comprises up to 240 LEDs or 90 push-buttons with one LED each. With integrated bus coupler. AC 230 V mains voltage is the required power supply.

INSTABUS EIB software functions:

Parameterisation using panel programming software EIB TAB 2 with the following capabilities:

- Switching/toggling/push-buttons
- Dimming
- Blinds
- Valuator (8 bit, 16 bit etc.)
- Internal linking capabilities for switch status displays
- Sending of multiple (different) telegrams with a single press of a button

Mains voltage: AC 230 V

Outer dimensions:

For 2 front plates: 320x320 mm (HxW)

Opening: 310x310x93 mm (HxWxD)

For 3 front plates: 445x320 mm (HxW)

Opening: 435x310x93 mm (HxWxD)

For 4 front plates: 570x320 mm (HxW)

Opening: 560x310x93 mm (HxWxD)

- **In INSTABUS EIB, to be completed with:** Front plate push-button/display, module TL 15, art. no. 671490. Front plate LED display, module L 40, art. no. 671590. Front plate measured-value display/monitor, module MW 4, art. no. 682029. Cover plate, art. no. 671390.

Accessories: Ribbon cable, art. no. 6645...

- **Note:** The panel programming software EIB TAB 2, art. no. 615901, is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
for 2 front plates	672092	1/2	9		
for 3 front plates	672093	1/1	9		
for 4 front plates	672094	1/1	9		



Surface-mounted housing with control electronics, power supply unit and bus coupler

The control electronics with bus coupler are used for communicating between the front plates and the INSTABUS EIB. Various front plates can be installed in the housing. Free fields are covered with the cover plate. A ribbon cable connects the front plates with the control electronics.

The maximum configuration comprises up to 240 LEDs or 90 push-buttons with one LED each. With integrated bus coupler. AC 230 V mains voltage is the required power supply.

INSTABUS EIB software functions:

Parameterisation using panel programming software EIB TAB 2 with the following capabilities:

- Switching/toggling/push-buttons
- Dimming
- Blinds
- Valuator (8 bit, 16 bit etc.)
- Internal linking capabilities for switch status displays
- Sending of multiple (different) telegrams with a single press of a button

Mains voltage: AC 230 V

Outer dimensions:

For 2 front plates: 320x320x93 mm (HxWxD)

For 3 front plates: 445x320x93 mm (HxWxD)

For 4 front plates: 570x320x93 mm (HxWxD)

- **In INSTABUS EIB, to be completed with:** Front plate push-button/display, module TL 15, art. no. 671490. Front plate LED display, module L 40, art. no. 671590. Front plate measured-value display/monitor, module MW 4, art. no. 682029. Cover plate, art. no. 671390.

Accessories: Ribbon cable, art. no. 6645...

- **Note:** The panel programming software EIB TAB 2, art. no. 615901, is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
for 2 front plates	673092	1/2	9		
for 3 front plates	673093	1/1	9		
for 4 front plates	673094	1/1	9		



Front plate LED display, module L 40

The front plate with 40 LEDs acts as a signal panel and shows binary states of the INSTABUS EIB. Connection via ribbon cable to surface-/flush-mounted housing with control electronics or control module REG with power supply REG, DC 5 V/ 2 A.

In addition to the LEDs, the front plate can also be individually labelled.

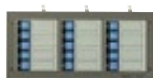
Dimensions: H 124.5 x W 270 mm.

- **In INSTABUS EIB, to be completed with:** Flush-mounted housing with control electronics, art. no. 6720.. or surface-mounted housing with control electronics, art. no. 6730.. Control module REG, art. no. 684129 with power supply REG, DC 5 V/2 A, art. no. 683629 and a ribbon cable.

Accessories: Ribbon cable, art. no. 6645...

- **Contents:** With a ribbon cable.

Version	Art. no.	PU	PG	Mat.	Info
L 40 module	671590	1/10	9		



Front plate push-button/display, module TL 15

The front plate with 15 push-buttons and 15 LEDs is used as a signal and control panel for controlling the various bus devices such as switch, dimming and blind actuators. Several bus devices can be controlled simultaneously using a single push-button.

Connection via ribbon cable to surface-/flush-mounted housing with control electronics or control module REG with power supply REG, DC 5 V/2 A.

In addition to the push-buttons with LED, the front plate can also be individually labelled.

Dimensions: H 124.5 x W 270 mm.

- **In INSTABUS EIB, to be completed with:** Flush-mounted housing with control electronics, art. no. 6720.. or surface-mounted housing with control electronics, art. no. 6730.. Control module REG, art. no. 684129 with power supply REG, DC 5 V/2 A, art. no. 683629 and a ribbon cable.

Accessories: Ribbon cable, art. no. 6645...

- **Contents:** With a ribbon cable.

Version	Art. no.	PU	PG	Mat.	Info
TL 15 module	671490	1/10	9		



Front plate measured-value display/monitor, module MW 4

The measured-value module MW 4 has four mutually independent display channels with five-digit, 7-segment display.

The data telegrams of measuring signals transmitted via the bus are internally processed so that physical parameters are displayed with the required dimensions. Units of measurement can be attached next to the measured value with the aid of slide-in strips. An upper and a lower limit value can be assigned to each channel. The limit values can be set directly in the measured-value module without additional reprogramming. Connection via ribbon cable to surface-/flush-mounted housing with control electronics.

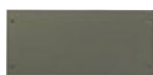
Dimensions: H 124.5 x W 270 mm.

- **In INSTABUS EIB, to be completed with:** Flush-mounted housing with control electronics, art. no. 6720.. or surface-mounted housing with control electronics, art. no. 6730..

Accessories: Ribbon cable, art. no. 6645...

- **Contents:** With a ribbon cable.

Version	Art. no.	PU	PG	Mat.	Info
MW 4 module	682029	1/10	9		



Cover plate

Made from grey PVC. For covering unused fields in the surface-/flush-mounted housing with control electronics.

Dimensions: H 124.5 x W 270 mm.

- **In INSTABUS EIB, to be completed with:** Flush-mounted housing with control electronics, art. no. 6720.. or surface-mounted housing with control electronics, art. no. 6730..

Version	Art. no.	PU	PG	Mat.	Info
grey	671390	1/10	9		



LCD mini-panel MT 701 V2.0

Current building states can be centrally controlled and functions influenced via the LCD mini-panel.

The LCD mini-panel is ideal for private and office use thanks to its compact, flat design (213 mm x 125 mm) and functional scope.

An LCD graphic display capable of displaying up to eight rows and 16 different states at the same time is used as the display medium. It is operated interactively via a touch-sensitive keyboard.

The user menu is freely programmable, thus permitting the creation of function groups specifically adapted to the building and resulting in a clear display of the various applications. Detailed functions can be displayed and operated using the sub-menus. When planning the LCD mini-panel, the menus and submenus are compiled in line with requirements and assigned to the various EIB functions. Standard functions can be planned, such as: switching, dimming, blind control and display of measured values. Limit values can also be created.

Bus processes can be linked in order to group INSTABUS actions and the result can be displayed.

INSTABUS EIB software functions:

Parameterisation using panel programming software EIB TAB 2 or ETS tool for MT 701 V2.0.

Mains voltage: AC 230 V

Dimensions: 125x213 mm (HxW)

Opening: 121.5x209 mm (HxW)

- **In INSTABUS EIB, to be completed with:** Flush mounting box for mini-panel, art. no. 682591.

Accessories: Design frame for mini-panel, art. no. 682592/93.

- **Note:** The panel programming software EIB TAB 2, art. no. 615901 and ETS tool for MT 701 V2.0, art. no. 615047 are available over the Internet or from the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
MT 701 module	682590	1/6	9		



Mini-panel MT 618

The mini-panel MT 618 is an independent signal and control panel. A touch-sensitive keyboard with six push-buttons and 18 signal LEDs is used for operation and display.

Due to its flat design in a flush-mounted housing (213 mm x 125 mm), its uses range from home applications to purpose-built applications. The assigned functions are indicated on slide-in strips with a labelling option.

INSTABUS EIB software functions:

Parameterisation using panel programming software EIB TAB 2.

Mains voltage: AC 230 V

Dimensions: 125x213 mm (HxW)

Opening: 121.5x209 mm (HxW)

- **In INSTABUS EIB, to be completed with:** Flush mounting box for mini-panel, art. no. 682591.

Accessories: Design frame for mini-panel, art. no. 682592/93.

- **Note:** The panel programming software EIB TAB 2, art. no. 615901, is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
MT 618 module	682690	1/3	9		



Flush mounting box for mini-panel

For flush-mounted cavity wall installation of the mini-panels MT 701 V2.0 and MT 618.

- **In INSTABUS EIB, to be completed with:** Mini-panel MT 701, art. no. 682590. Mini-panel MT 618, art. no. 682690.

Version	Art. no.	PU	PG	Mat.	Info
black	682591	1/6	9		



Design frame for mini-panel

Decorative frame for mini-panels MT 701 V2.0 and MT 618.

- **In INSTABUS EIB, to be completed with:** Mini-panel MT 701, art. no. 682590. Mini-panel MT 618, art. no. 682690.

Version	Art. no.	PU	PG	Mat.	Info
polar white	682592	1/10	9	TP	
aluminium	682593	1/10	9	ML	



Panel programming software EIB TAB 2

Programming software for the surface-/flush-mounted housing with control electronics, control module REG, LCD mini-panel MT 701 V2.0 and mini-panel MT 618.

- **In INSTABUS EIB, to be completed with:** Flush-mounted housing with control electronics, art. no. 6720.. or surface-mounted housing with control electronics, art. no. 6730.. Control module REG, art. no. 684129 and ribbon cable, art. no. 6645... Mini-panel MT 701, art. no. 682590. Mini-panel MT 618, art. no. 682690.

Price on request.

Note: The software is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
	615901	1/1	9.9		



ETS tool for MT 701 V2.0

Programming software for the ETS for parameterising the LCD mini-panel MT 701 V2.0.

- **In INSTABUS EIB, to be completed with:** Mini-panel MT 701, art. no. 682590.

Price on request.

Note: The software is available on the Internet or on the Merten info CD.

Version	Art. no.	PU	PG	Mat.	Info
	615047	1/1	9		

Devices for individual room temperature control

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



PLANTEC multi-function push-button with room temperature control unit

Application module for PLANTEC.

Convenient control unit with 6 function buttons, 2 buttons for display functions, IR receiver and parameterisable status LEDs next to the operating buttons. All functions of the respective buttons can be controlled via IR remote control Distance. With room temperature control unit and display. Suitable only for surface mounting.

The room temperature control unit can be used for heating and cooling with infinitely adjustable INSTABUS valve drives or to control switch actuators. With white backlit display for indicating important information. Menu for setting default operating modes, setpoint value, working/non-working day, display mode, time, switching times and brightness.

The push-buttons are freely parameterisable as push-button pairs (dual surface) or as single push-buttons.

INSTABUS EIB software functions:

Functions of the multi-function push-button:

Switching, toggling, dimming, blind control (relative or absolute), pulse edges trigger 1-, 2- or 8-bit telegrams (distinction between short and long operation), pulse edges with 2-byte telegrams (distinction between short and long operation), 8-bit linear regulator, scene retrieval, disable functions, scene saving, timed control, alarm functions.

Functions of the room temperature control unit:

Type of thermostat: 2-step control, continuous PI control, switching PI control (PWM)

Output: Continuous in the range 0..100% or switching ON/OFF

Controller mode:

- Heating with one controller output
- Cooling with one controller output
- Heating and cooling with separate controller outputs
- 2-step heating with 2 control outputs
- 2-step cooling with 2 control outputs

Operating modes: Comfort, standby, night economy, frost/heat protection

Operation: Menu

Operating elements: 6 function buttons, 2 menu buttons

Displays: Status LEDs

Dimensions: 101x115x23 mm (HxWxD)

- **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299.

Accessories: Protection against dismantling for surface-mounted devices, art. no. 623090.

- **Note:** Do not use with flush mounting boxes.

Availability: Available 2nd quarter 2005

Version	Art. no.	PU	PG	Mat.	Info
aluminium	626008	1/6	9	M	



Multi-function push-button, 2-gang with room temperature control unit

Application module for System M.

Convenient control unit with 4 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

With room temperature control unit and display. The room temperature control unit can be used for heating and cooling with infinitely adjustable INSTABUS valve drives or to control switch actuators. With white backlit display for indicating important information. Menu for setting default operating modes, setpoint value, working/non-working day, display mode, time, switching times and brightness.

The push-buttons are freely parameterisable as push-button pairs (dual surface) or as single push-buttons.

INSTABUS EIB software functions:

Functions of the multi-function push-button:

Switching, toggling, dimming, blind control (relative or absolute), pulse edges trigger 1-, 2- or 8-bit telegrams (distinction between short and long operation), pulse edges with 2-byte telegrams (distinction between short and long operation), 8-bit linear regulator, scene retrieval, disable functions, scene saving, timed control, alarm functions.

Functions of the room temperature control unit:

Type of thermostat: 2-step control, continuous PI control, switching PI control (PWM)

Output: Continuous in the range 0..100% or switching ON/OFF

Controller mode:

- Heating with one controller output
- Cooling with one controller output
- Heating and cooling with separate controller outputs
- 2-step heating with 2 control outputs
- 2-step cooling with 2 control outputs

Operating modes: Comfort, standby, night economy, frost/heat protection

Operation: Menu

■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299.

Accessories: Labelling software, art. no. 615022.

■ **Note:** If you already have the labelling software, you can download the form for the multi-function push-button at www.merten.com. Use to label conventional foils (max. thickness 0.15 mm).

Contents: Screw for protection against dismantling.

Version	Art. no.	PU	PG	Mat.	Info
white	623244	1/17	9	TP	
polar white	623219	1/17	9	TP	
anthracite	623214	1/17	9	TP	
aluminium	623260	1/17	9	ML	



Multi-function push-button, 4-gang with room temperature control unit

Application module for M-PLAN.

Convenient control unit with 8 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

With room temperature control unit and display.

With integrated piezoelectric buzzer to display alarm states and IR receiver. All functions of the respective buttons can be controlled via IR remote control Distance.

The room temperature control unit can be used for heating and cooling with infinitely adjustable INSTABUS valve drives or to control switch actuators. With white backlit display for indicating important information. Menu for setting default operating modes, setpoint value, working/non-working day, display mode, time, switching times and brightness.

The push-buttons are freely parameterisable as push-button pairs (dual surface) or as single push-buttons.

INSTABUS EIB software functions:

Functions of the multi-function push-button:

Switching, toggling, dimming, blind control (relative or absolute), pulse edges trigger 1-, 2- or 8-bit telegrams (distinction between short and long operation), pulse edges with 2-byte telegrams (distinction between short and long operation), 8-bit linear regulator, scene retrieval, disable functions, scene saving, timed control, alarm functions.

Functions of the room temperature control unit:

Type of thermostat: 2-step control, continuous PI control, switching PI control (PWM)

Output: Continuous in the range 0..100% or switching ON/OFF

Controller mode:

- Heating with one controller output
- Cooling with one controller output
- Heating and cooling with separate controller outputs
- 2-step heating with 2 control outputs
- 2-step cooling with 2 control outputs

Operating modes: Comfort, standby, night economy, frost/heat protection

Operation: Menu

■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299 and frame, 2-gang without central bridge piece in M-PLAN design, art. no. 5873...

Accessories: Labelling software, art. no. 615022.

■ **Note:** If you already have the labelling software, you can download the form for the multi-function push-button at www.merten.com. Use to label conventional foils (max. thickness 0.15 mm).

Contents: With screw for tamper-proofing, adhesive label, barrier covering the IR receiver.

Version	Art. no.	PU	PG	Mat.	Info
white	623644	1/17	9	TP	
polar white	623619	1/17	9	TP	
anthracite	623614	1/17	9	TP	
aluminium	623660	1/17	9	ML	



Room temperature control unit, flush-mounted/PI

Application module for System M.
The device can be used for heating and cooling with infinitely adjustable INSTABUS valve drives or to control switch actuators.

INSTABUS EIB software functions:

Controller type: PI controller/2-step/3-step with switched integral-action component, 2-step heating, 2-step cooling

Output: Continuous in the range 0.. 100%, switching ON/OFF

Controller mode: Heating with one controller output, cooling with one controller output, heating and cooling with shared controller outputs, or heating and cooling with separate controller outputs.

Operating modes: Comfort, standby, night economy, frost protection, dew point alarm

Operation: Setpoint adjustment can be parameterised in the range with rotary knob; presence button functions can be parameterised/switched off

■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099.

Version	Art. no.	PU	PG	Mat.	Info
white	624744	1/50	9	TP	
polar white	624719	1/50	9	TP	
anthracite	624714	1/50	9	TP	
aluminium	624760	1/50	9	ML	



Room temperature control unit, flush-mounted/PI

Application module for System Design.
The device can be used for heating and cooling with infinitely adjustable INSTABUS valve drives or to control switch actuators.

INSTABUS EIB software functions:

Controller type: PI controller/2-step/3-step with switched integral-action component, 2-step heating, 2-step cooling

Output: Continuous in the range 0.. 100%, switching ON/OFF

Controller mode: Heating with one controller output, cooling with one controller output, heating and cooling with shared controller outputs, or heating and cooling with separate controller outputs.

Operating modes: Comfort, standby, night economy, frost protection, dew point alarm

Operation: Setpoint adjustment can be parameterised in the range with rotary knob; presence button functions can be parameterised/switched off

■ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted, art. no. 690099.

Version	Art. no.	PU	PG	Mat.	Info
white	624944	1/50	9	TP	
polar white	624919	1/50	9	TP	
vanilla	624982	1/50	9	TP	
ice blue	624988	1/50	9	TP	
light grey	624929	1/50	9	TP	
midnight blue	624978	1/50	9	TP	
dark brazil	624915	1/50	9	TP	
black grey	624969	1/50	9	TP	
aluminium	624960	1/50	9	ML	
stainless steel	624946	1/50	9	ML	



EMO valve drive with 2 binary inputs

Electromotive proportional valve drive with integrated bus coupler and microprocessor control with automatic valve lift detection. With two integrated binary inputs.

The valve drive can be connected directly to the INSTABUS. A separate power supply is not required.

INSTABUS EIB software functions:

Control value. Actual position. Status. Forced position (window "Open" detection, lower and upper limit for basic temperature control of underfloor heating for example). Binary inputs. Limit value.

Power consumption: typ. 10 mA (= 240 mW; approx. 2 BCU modules)

Lift: min. 1.0 mm; max. 4.5 mm

Running time: 25 s/mm

Type of protection: IP 43 in line with EN 60529 (for vertical installation)

Protection class: III in line with EN 60730

Connecting cable: 1 m fixed; J(E)YY 3x2x0.6

Connection to bus line: via bus connecting terminal

Installation: suitable for all Heimeier thermostatic valve bodies and three-way changeover valves

■ **Accessories:** Programming magnet for valve drive EMO, art. no. 639190.

Version	Art. no.	PU	PG	Mat.	Info
polar white	639118	1/30	9		



EMO valve drive

Electromotive proportional valve drive with integrated bus coupler and microprocessor control with automatic valve lift detection.

The valve drive can be connected directly to the INSTABUS. A separate power supply is not required.

INSTABUS EIB software functions:

Setpoint position (control value). Actual position. Status signal. Forced position. Cyclical monitoring.

Power consumption: max. 12 mA at 20 V (= 240 mW)

Lift: max. 4.5 mm

Running time: 25 s/mm

Type of protection: IP 44 in line with EN 60529 (for vertical installation)

Protection class: III in line with EN 60730

Connection cable: 1 m fixed; J-Y (St) Y 1 x 2 x 0.6

Connection to bus line: via bus connecting terminal

Installation: Fits all Heimeier thermostat valve bases

■ **Accessories:** Programming magnet for valve drive EMO, art. no. 639190.

Version	Art. no.	PU	PG	Mat.	Info
polar white	639119	1/30	9		



Programming magnet for EMO valve drive

Non-contact programming of the physical address of the EMO valve drive or INSTABUS ARGUS 220.

- **In INSTABUS EIB, to be completed with:** Valve drive EMO, art. no. 639119. Valve drive EMO, with 2 binary inputs, art. no. 639118. INSTABUS ARGUS 220 Connect, art. no. 6315...

Version	Art. no.	PU	PG	Mat.	Info
	639190	10/180	9.1		



Heating actuator REG-K/6x230/0.05 A

For actuation of thermoelectric valve drives for heating or cooling ceilings. The heating actuator has 6 electronic outputs. Up to 4 valve drives can be connected to each output. The outputs are either switch activated (1 bit) or PWM signal (1 byte) activated. Each output is overload-protected and short-circuit-protected.

For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary.

INSTABUS EIB software functions:

Cycle time, status feedback, summer and winter operation, cyclical monitoring of variables, locking each output in a forced position, behaviour on bus power failure and recovery, overload and short circuit status, mains power loss reporting, collective fault reporting connected to all valves, transmission of the largest 1 byte variable value.

Nominal voltage: AC 230 V, 50-60 Hz

Outputs: 6, electronic

Nominal current: 0.05 A, ohmic

Starting current: max. 1.5 A

Minimum load per used output: 1 valve drive

Number of valve drives max. 4 per output

Device width: 4 modules = approx. 72 mm

- **In INSTABUS EIB, to be completed with:** PLANTEC multi-function push-button with room temperature control unit, art. no. 626008. Multi-function push-button, 2-gang with room temperature control unit, art. no. 6232... Multi-function push-button, 4-gang with room temperature control unit, art. no. 6236... Room temperature control unit, flush-mounted/PI, art. no. 6247..., 6249..., 6246..., 6248... Thermoelectric valve drive 230 V, art. no. 639123.

- **Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	645129	1/22	9.3		



Thermoelectric valve drive 230 V

Thermoelectric valve drive for opening and closing valves. For 2-step or PWM control of heating, air conditioning and ventilation systems, individual room control of surface heaters, control of heating circuit distributors, radiators, convector heaters, cooling ceilings. Operation is carried out by the heating actuator REG-K/ 6x230/0.05 A or a room temperature control unit (230 V) with 2-step or PWM output.

Valve adapters permit compatibility with a variety of valve bodies and heating circuit distributors.

Functions:

- First-open function: The drive is factory-set to de-energised open. This allows the heating to be operated during the building shell phase.
- De-energised closed
- Overvoltage protection
- Functional display (open, closed, intermediate settings)
- Adjustment control
- Protection against dismantling
- Plug-in connecting cable
- Plug-in assembly

Supply voltage: AC/DC 230 V \pm 10%, 0-60 Hz

Starting current: max. 300 mA for max. 200 ms

Operating current: 9 mA

Power consumption: 2 W

Lift: approx. 3 mm

Running time: 60 s/mm

Positioning force: 90 N

Circulating medium temperature: 0-100 °C

Type of protection: IP 44 / II

Connecting cable: 1 m fixed, 2x0.5 mm

Dimensions: 53x43x53 mm (HxWxD)

- **To be completed with:** Room temperature control insert with switch, art. no. 536302. Valve adapter VA10, art. no. 639110. Valve adapter VA50, art. no. 639150. Valve adapter VA78, art. no. 639178. Valve adapter VA80, art. no. 639180.

In INSTABUS EIB, to be completed with: Heating actuator REG-K/ 6x230/0.05 A, art. no. 645129.

- **Note:** Protective cap AA SK 1000 (aluminium, white RAL 9016) available on request. To install the protective cap, a higher valve adapter must be used (available on request). Check compact radiators in advance to see if they are suitable.

Version	Art. no.	PU	PG	Mat.	Info
polar white	639123	1/70	9		



Thermoelectric valve drive 24 V

Thermoelectric valve drive for opening and closing valves. For 2-step or PWM control of heating, air conditioning and ventilation systems, individual room control of surface heaters, control of heating circuit distributors, radiators, convector heaters, cooling ceilings. Operation is carried out by the fan coil controller REG-K or a room temperature control unit (24 V) with 2-step or PWM output. Valve adapters permit compatibility with a variety of valve bodies and heating circuit distributors.

Functions:

- First-open function: The drive is factory-set to de-energised open. This allows the heating to be operated during the building shell phase.
- De-energised closed
- Overvoltage protection
- Functional display (open, closed, intermediate settings)
- Adjustment control
- Protection against dismantling
- Plug-in connecting cable
- Plug-in assembly

Supply voltage: AC/DC 24 V + 20%/- 10%, 0-60 Hz

Starting current: max. 250 mA for max. 2 min

Operating current: 80 mA

Power consumption: 2 W

Lift: approx. 3 mm

Running time: 60 s/mm

Positioning force: 90 N

Circulating medium temperature: 0-100 °C

Type of protection: IP 44 / II

Connecting cable: 1 m fixed, 2x0.5 mm

Dimensions: 53x43x53 mm (HxWxD)

- ❑ **To be completed with:** Room temperature control insert with switch, art. no. 536304. Power supply 24 V DC REG-K, art. no. 693001. Power supply REG, AC 24 V / 1 A, art. no. 663629. Valve adapter VA10, art. no. 639110. Valve adapter VA50, art. no. 639150. Valve adapter VA78, art. no. 639178. Valve adapter VA80, art. no. 639180.

In INSTABUS EIB, to be completed with: Fan coil controller REG-K, art. no. 645029.

- ❑ **Note:** Protective cap AA SK 1000 (aluminium, white RAL 9016) available on request. To install the protective cap, a higher valve adapter must be used (available on request). Check compact radiators in advance to see if they are suitable.

Version	Art. no.	PU	PG	Mat.	Info
polar white	639124	1/70	9		



Valve adapter VA10 for thermoelectric valve drive

For Dumser, Vescal, Simplex. Valve adapters permit compatibility with a variety of valve bodies and heating circuit distributors

- ❑ **To be completed with:** Thermoelectric valve drive 230 V, art. no. 639123. Thermoelectric valve drive 24 V, art. no. 639124.

Version	Art. no.	PU	PG	Mat.	Info
	639110	5/400	9		



Valve adapter VA50 for thermoelectric valve drive

For Honeywell+Braukmann, Reich, Landis+Gyr, MNG, Cazzagniga.

Valve adapters permit compatibility with a variety of valve bodies and heating circuit distributors

- ❑ **To be completed with:** Thermoelectric valve drive 230 V, art. no. 639123. Thermoelectric valve drive 24 V, art. no. 639124.

Version	Art. no.	PU	PG	Mat.	Info
	639150	5/400	9		



Valve adapter VA78 for thermoelectric valve drive

For Danfoss RA.

Valve adapters permit compatibility with a variety of valve bodies and heating circuit distributors

- ❑ **To be completed with:** Thermoelectric valve drive 230 V, art. no. 639123. Thermoelectric valve drive 24 V, art. no. 639124.

Version	Art. no.	PU	PG	Mat.	Info
	639178	5/400	9		



Valve adapter VA80 for thermoelectric valve drive

For Heimeier, Herb, Onda, Schlösser (from 1993), Oventrop M30x1.5, TeSa.

Valve adapters permit compatibility with a variety of valve bodies and heating circuit distributors

- ❑ **To be completed with:** Thermoelectric valve drive 230 V, art. no. 639123. Thermoelectric valve drive 24 V, art. no. 639124.

Version	Art. no.	PU	PG	Mat.	Info
	639180	5/400	9		

Fan coil controller



Room control unit, flush-mounted

Application module for System M.

For controlling the fan coil controller REG-K.

With presence button (toggle standby/comfort mode), button for controlling fan speeds 1 to 3 and automatic mode as well as a rotary knob for setpoint adjustment. Status displays for comfort/standby mode, fan automatic mode and for heating/cooling mode.

- ❑ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299.

Accessories: Fan coil controller REG-K, art. no. 645029.

Version	Art. no.	PU	PG	Mat.	Info
polar white	625019	1/60	9	TP	



Room control unit, flush-mounted

Application module for System Design. For controlling the fan coil controller REG-K. With presence button (toggle standby/comfort mode), button for controlling fan speeds 1 to 3 and automatic mode as well as a rotary knob for setpoint adjustment. Status displays for comfort/standby mode, fan automatic mode and for heating/cooling mode.

- ▣ **In INSTABUS EIB, to be completed with:** Bus coupler, flush-mounted 2, art. no. 690299.

Accessories: Fan coil controller REG-K, art. no. 645029.

Version	Art. no.	PU	PG	Mat.	Info
polar white	624419	1/60	9	TP	



Fan coil controller REG-K

For heating, ventilation and air conditioning control. For controlling fan convectors with up to three speeds, as well as for controlling three-step motor drives (continuous/pulse-width-modulated) or two-step thermal drives. Alternatively, the valve drives can also be controlled via EIB. The valve drives are powered by the fan coil controller.

For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. Connection of the temperature sensor available as an accessory for recording the actual temperature and control potentiometer for setpoint adjustment. Two floating binary inputs for window contact and level contact for condensed water container. Connection of 1-speed to 3-speed fans. The unused fan switch outputs can alternatively be used as switch actuator channels. The flush-mounted room control units, the multi-function push-button with room temperature control unit or a control potentiometer can be used to control the fan coil controller.

INSTABUS EIB software functions:

Fan control:

In automatic mode, the fan speeds are activated depending on the control value of the controller. The three fan speeds and automatic mode can be switched via EIB telegram. The fan can be controlled either directly or via actuators / suitable dimming actuators.

Valve control:

Type of thermostat: PI controller (PWM and continuous).

Controller mode: Heating and/or cooling with common or separate controller outputs.

Operating modes: Comfort. Comfort extension. Standby. Night economy. Frost/heat protection.

Power supply: Integrated power supply unit AC 230 V ±10%, 50/60 Hz

Power consumption: 5 VA

Outputs: 3 floating contacts (fan coil), 2 semiconductor switches (valve connections)

Inputs: 2 for signalling contacts, 1 for temperature sensor

Bus connection: EIB connecting terminal

Device width: 6 modules = approx. 108 mm

- ▣ **Accessories:** Temperature sensor, art. no. 645091. Room control unit, flush-mounted, art. no. 624419, 625019.

- ▣ **Note:** The fan coil controller can also be operated without an EIB connection.

Version	Art. no.	PU	PG	Mat.	Info
light grey	645029	1/18	9.3		



Temperature sensor

The sensor for temperature recording is connected to the fan coil controller REG-K.

Cable length: max. 30 m

- ▣ **In INSTABUS EIB, to be completed with:** Fan coil controller REG-K, art. no. 645029.

- ▣ **Contents:** With 2 m connecting cable and plug.

Version	Art. no.	PU	PG	Mat.	Info
	645091	1/100	9.3		

Instabus B-CON building management



B-CON2004 Basic with EIB OPC server

Internet-capable software for visualising and automating building technology functions. Fully graphical project design of all the functions for visualisation and automation and thereby increased productivity during project implementation.

Contains comprehensive function libraries as well as a variety of program modules. High compatibility with building and information technology standards.

- Intuitive graphic creation of visualisation projects.
- Integrated web server for displaying visualisation pages in a web browser.
- Management of user nodes
- Program modules for alarm processing, time management, data exchange
- No limit to data points and screens
- Connection of the bus systems via OPC
- For Windows 2000/XP

- ▣ **Price on request.**

English version on request. USB dongle on request.

Contents: Manual, CD including EIB OPC server, parallel dongle.

Version	Art. no.	PU	PG	Mat.	Info
	615023	1/1	9.9		



B-CON2004 Pro with EIB OPC server

Internet-capable software for visualising and automating building technology functions. As B-CON2004 Basic, but with additional functional scope.

Additional functions:

- Integrated web server for remote control via Internet Explorer
- Connection of SQL/ODBC databases
- Event-oriented transmission of messages by e-mail and SMS
- Creation of network-capable client-server applications
- Graphic analysis and representation of historical data
- Program module for energy and load management
- Advanced function libraries

Price on request.

English version on request. USB dongle on request.

Contents: Manual, CD including EIB OPC server, parallel dongle.

Version	Art. no.	PU	PG	Mat.	Info
	615024	1/1	9.9		



B-CON2004 upgrade of Basic to Pro

Update of B-CON Basic to Pro by replacing the dongle.

Price on request.

USB dongle on request.

Contents: Manual, CD, parallel dongle.

Version	Art. no.	PU	PG	Mat.	Info
	615025	1/1	9.9		



B-CON Basic project licence

Runtime licence to execute a B-CON2004 project. Projects which are carried out as a runtime version cannot be edited by the end user.

Price on request.

USB dongle on request.

Contents: With parallel dongle.

Version	Art. no.	PU	PG	Mat.	Info
	615026	1/1	9.9		



B-CON Pro project licence

Runtime licence for the B-CON Pro software version which no longer has to be edited by the end user. When a project runtime licence is used.

Price on request.

Contents: Dongle.

Version	Art. no.	PU	PG	Mat.	Info
	615027	1/1	9.9		



B-CON update

Update of B-CON software to current version.

Price on request.

Version	Art. no.	PU	PG	Mat.	Info
Update	615037	1/1	9.9		

Teaching aids



Merten info CD

The Merten info CD contains information and data on the products.

Contents:

- INSTABUS product manual. The book provides detailed descriptions of INSTABUS devices with electrical and mechanical data, as well as descriptions of the application programs and the parameters that can be configured.
- Product databases (German/English)
- Mini-function module tool software
- PLANTEC tool software PTS
- Panel programming software EIB TAB 2.
- Panel programming software ETS tool for MT 701
- Display tool software DTS
- Tender documents (Ansi/Gaeb format)
- Documentation on Merten products

Price on request.

Language: German.

Version	Art. no.	PU	PG	Mat.	Info
	616002	1/1	9.9		



ZVEI/ZVEH Building Services Management Manual, Basics

Manufacturer-neutral description of EIB with hints for planning, engineering, installation and commissioning.

Price on request.

Language: German.

Version	Art. no.	PU	PG	Mat.	Info
	616001	1/1	9.9		



ZVEI/ZVEH Building Services Management Manual, Applications

The manual gives selected examples of representative EIB installations.

Price on request.

Language: German.

Version	Art. no.	PU	PG	Mat.	Info
	616003	1/1	9.9		



Merten CD

The interactive CD gives comprehensive information on the subject of INSTABUS EIB. Uses typical situations in homes, offices and hotels to show how Merten INSTABUS makes life and work easier, more flexible, more productive and more secure. The CD leads you through the Merten product spectrum, giving ideas for new function and demonstrating solutions. Checklists help you determine what components you need, so that system planning can be performed even more efficiently.

Price on request.

Note: The CD can be ordered over the Internet at www.mymerten.com.

Language: German. English. French. Spanish. Italian. Portuguese. Dutch. Polish. Swedish. Norwegian. Russian. Chinese.

- Notes on materials:
TP: Shatter-proof thermoplastic.
DP: Highly scratch-resistant duroplastic (duro).
ML: Shatter-proof thermoplastic, metal-coloured.
M: Metal.

ARGUS CONTROL

- The devices have protection type IP 20 and can only be used indoors. Devices with a different type of protection are labelled separately.



Power supply 320 REG-K with battery connection

For generating the bus voltage for a line with up to 64 bus devices. With integrated choke to decouple the power supply from the bus and a switch to disconnect the power and reset the bus devices connected to the line.

Can be connected to the mains with plug-in screw terminals. For installation on DIN rails EN 50022. The bus is connected using a bus connecting terminal; a data rail is not necessary. External lead gel batteries with a DC 12 V (SELV) voltage can be connected to the emergency power input for buffering the bus voltage or IC 1 Internet controller power supply. The integral buffer circuit ensures that the 6-15 Ah lead gel batteries are used as buffers or recharged.

Mains voltage: AC 230 V, 50-60 Hz

Emergency input: for lead gel battery 6-15 Ah with DC 12 V (SELV)

Charge retention current: max. 250 mA

Output voltage: DC 29 V ± 1 V

Output current: max. 320 mA, short-circuit-proof

Device width: 5 modules = approx. 90 mm

- Accessories:** Lead gel battery, art. no. 668990.

Accessories from: IC 1 Internet controller REG-K, art. no. 6950...
IC 1 EIB Internet controller REG-K, art. no. 6951...

- Contents:** With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	683129	1/21	9.3		



Lead gel battery

Lead gel battery to connect to the emergency input of the power supply 320 REG-K with battery connection.

Also for powering the outdoor siren with flashlight, TeleConnect or IC 1 Internet controller.

Nominal voltage: DC 12 V

Capacity: 7.2 Ah

- In INSTABUS EIB, to be completed with:** Power supply 320 REG-K with battery connection, art. no. 683129.

Version	Art. no.	PU	PG	Mat.	Info
7.2 Ah	668990	1/2	8.2		



Loudspeaker insert with cover

For System Basis.

The loudspeaker is connected via the yellow/white branch terminal and fitted on the supporting plate. The messages from the speech module can be announced at any point in the building via the loudspeaker (e.g. via the yellow/white cores of the bus cable).

- Contents:** With supporting plate and branch terminal.

Version	Art. no.	PU	PG	Mat.	Info
polar white	665319	1/50	8.2	DP	



Loudspeaker, flush-mounted

The loudspeaker can be mounted in deep switch terminal boxes behind devices such as INSTABUS EIB devices or central plates. The loudspeaker has a solder connection.

The messages from the speech module can be announced at any point in the building via the loudspeaker (e.g. via the yellow/white cores of the bus cable).

- Note:** It is impermissible to fit loudspeakers behind 230 V inserts.

Version	Art. no.	PU	PG	Mat.	Info
black	665499	1/100	8.2		



IC 1 EIB Internet controller REG-K

Monitoring and control of systems and buildings via the Internet.

An Internet connection is established using art. no.

- 695102 via the integrated analogue modem (56 kbit/s)
- 695103 via the integrated ISDN modem (64 kbit/s)

With LAN/Ethernet interface for networking up to 32 additional IC 1 devices. Commissioning via the Internet, Ethernet or PC.

With integrated bus coupler. For installation on DIN rails EN 50022, a data rail is not necessary. A separate power supply is not required.

Power consumption: 5 watt

Power supply: DC 12-30 V

EIB objects: 256

Interfaces: 2xUSB for video adapter

1xRJ45 Ethernet 10/100 Mbit/s

Art. no. 695102: 1xRJ45 analogue modem, 56 kbit/s

Art. no. 695103: 1xRJ45 ISDN, 64 kbit/s

Video images: 320x240 up to max. 640x480

Video memory: max. 128 images

Historical memory: 128,000 data points/channel

Year time switch: with 32 programs, DCF-77 synchronised via Domoport

Macros: max. 16 parallel macros, 32 programmable internal variables, logical, mathematical, comparative and chronological function modules.

Device width: 9 modules = 162 mm

- **In INSTABUS EIB, to be completed with:** Power supply 24 V DC REG-K, art. no. 693001. Power supply, art. no. 683729 or art. no. 683829 (via free outlet). Power supply 320 REG-K with battery connection, art. no. 683129 and lead gel battery, art. no. 668990 for buffering the supply voltage in the case of a mains failure.

Accessories: USB video adapter REG-K, art. no. 668101.

- **Note:** Devices will be available in Q1 2005 with the new user interface "Merten@Home".

Contents: User manual on CD, registration data for Domoport, 3 m cable for each network, crosslink and telephone, antenna with magnetic foot and connecting cable, art. no. 695104.

Version	Art. no.	PU	PG	Mat.	Info
analogue	695102	1/3	9.3		
ISDN	695103	1/3	9.3		



TeleConnect

TeleConnect can be used to connect the telephone network to conventional inputs/outputs and INSTABUS EIB systems. With integrated bus coupler.

Four conventional loads and six INSTABUS EIB functions can be controlled via a standard DTMF telephone or a DTMF hand-held transmitter. The status of the loads and device functions can be determined through speech output. The corresponding texts can be changed with the handset. The device states are indicated on the LCD in addition to the speech output. A four-digit code number prevents unauthorised access. An alarm function can also be programmed. The alarm function can be activated via 4 conventional alarm inputs and 2 INSTABUS EIB telegrams. In the event of an alarm, up to three telephone numbers can be dialled.

Mains voltage: AC 230 V + 10 %/- 15 %, 50 Hz (via plug-in power supply unit)

Outputs: 4 x DC 24 V

Dimensions: 220 x 180 x 40 mm (L x W x H)

- **Accessories:** Handset, art. no. 660790.

- **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
polar white	680732	1/4	9		



TeleConnect REG-S

TeleConnect REG-S can be used to connect the telephone network with conventional inputs/outputs and INSTABUS EIB systems. For mounting on DIN rails EN 50022-35 x 7.5, with integrated data rail. With lateral application interface for plugging onto the bus coupler REG (ordered separately).

Four conventional loads and six INSTABUS EIB functions can be controlled via a standard DTMF telephone or a DTMF hand-held transmitter. The status of the loads and device functions can be determined through speech output. The corresponding texts can be changed with the handset. The device states are indicated on the LCD in addition to speech output. A four-digit code number prevents unauthorised access. An alarm function can also be programmed. The alarm function can be activated via four conventional alarm inputs and two INSTABUS EIB telegrams. In the event of an alarm, up to three telephone numbers can be dialled.

Mains voltage: AC 230 V, 50-60 Hz

Inputs: 4

Outputs: 4 x DC 24 V

Device width: 8 modules = approx. 144 mm

- **In INSTABUS EIB, to be completed with:** Bus coupler REG, art. no. 690599. Data rail, art. no. 6899 ..

Accessories: Handset, art. no. 660790.

- **Contents:** Without bus coupler.

Version	Art. no.	PU	PG	Mat.	Info
light grey	680729	1/8	9.3		



Display unit, flush-mounted

For System M.

The flush-mounted display unit reports the status of up to 12 different monitoring systems using 12 LEDs and the status of the system (armed or not armed). The flush-mounted or surface-mounted arming device is connected to the monitored input. With integrated bus coupler.

The flush-mounted display unit indicates the status depending on the respective status of the detection zone and activates various functions when the alarm is set off (e.g. switches on sirens, sends out signals).

INSTABUS EIB software functions:

Display unit: For up to 12 binary states.

Monitoring unit: Display of up to 12 detection zones, activated/deactivated display, connection for arming device, sabotage monitoring of other components.

- **Accessories:** ANTI-VANDALISM arming device, flush-mounted, art. no. 624040. Arming device, surface-mounted, art. no. 663292.
- **Contents:** With bus connecting terminal and supporting plate.

Version	Art. no.	PU	PG	Mat.	Info
white	628644	1/50	9	TP	
polar white	628619	1/50	9	TP	
anthracite	628614	1/50	9	TP	
aluminium	628660	1/50	9	ML	



IP54

Arming device, surface-mounted

Surface-mounted arming device for semi-cylinder locks. With sabotage protection against cover being opened and against being removed from the wall.

- Sabotage-proof housing.
- Connecting cable monitored for sabotage.
- For commercially available cylinder locks (e.g. cylinder lock of a locking system).
- LEDs for the information of the system operator.

Cylinder lock: DIN Euro semi-cylinder lock with adjustable locking lug, lug position 1.30 hours, total length 41 mm and 36 mm from centre of hole to front

Display: Status via 2 LEDs

Installation: locked with special screws

Dimensions: 66 x 84 x 125 mm (H x W x D)

- **To be completed with:** Display unit, flush-mounted, art. no. 628519, 6286...
- **Contents:** Complete device without lock.

Version	Art. no.	PU	PG	Mat.	Info
polar white	663292	1/10	8.2		



IP44

ANTI-VANDALISM arming device, flush-mounted

Splash-proof, flush-mounted arming device for semi-cylinder locks. With thick-walled, die-cast metal covers and sealed screws.

For installation in a size 60 device box or mounting box for the ANTI-VANDALISM range.

- With sabotage protection against being removed from the wall.
- LEDs for the information of the system operator

Cylinder lock: for standard semi-cylinder locks of 40 mm in length.

Display: Status via 2 LEDs

- **To be completed with:** Display unit, flush-mounted, art. no. 628519, 6286...

Accessories: Mounting box, art. no. 528068.

- **Contents:** Complete device with gasket and frame but without lock.

Version	Art. no.	PU	PG	Mat.	Info
matt silver	624040	1/16	8.2	M	



Binary input, flush-mounted/4x10

For connecting four conventional push-buttons or floating contacts to the INSTABUS EIB. Internally generates a signal voltage SELV, electrically isolated from the bus.

With integrated bus coupler 2. Insertion in a 40 mm deep installation box.

INSTABUS EIB software functions:

Switching, dimming or blind control via 1 or 2 inputs. Positioning values for blind control (8-bit). Pulse edges with 1-, 2- or 8-bit telegrams. Differentiation between short/long operation. Initialisation telegram. Cyclical sending. Pulse edges with 2-byte telegrams. 8-bit linear regulator. Disable function. Break/make contact. Debounce time.

Inputs: 4

Contact voltage: max. 10 V, clocked

Contact current: max. 2 mA, pulsing

Cable length: max. 50 m, bus connecting cable or bell wire (Y, J-FY, YR)

Dimensions: 48x44x33 mm (HxWxD)

- **Contents:** With bus connecting terminal.

Version	Art. no.	PU	PG	Mat.	Info
	639898	1/50	9		



Magnetic contact

Magnetic contact and magnet for installation in window and door frames to monitor opening. The magnetic contact and magnet are installed parallel to or facing one another in window frames/door leaves and window and door jambs.

A plastic tube is supplied for mounting the magnet. The magnet must be fixed inside it using cyanoacrylate adhesive (superglue). Magnetic contacts can be connected in series in the detection zone.

Contact type: 1-pole make contact

Switching voltage: max. DC 100 V

Loading capacity: max. 10 W

Operating voltage: max. 40 V

Connecting cable: 5m LIYY 2x0.14 mm²

Type of protection: VdS environmental class IV, IP 68

VdS no.: G191 701

Note: Can be connected to INSTABUS EIB using the binary input, flush-mounted/REG-K/4/8x10.

Contents: Magnetic contact, magnet, plastic duct, 2 surface-mounted enclosures, 2 caps, 4 washers, 2 mounting flanges and fixing screws.

Version	Art. no.	PU	PG	Mat.	Info
polar white	663092	1/38	8.2		
brown	663093	1/38	8.2		



Glass breakage sensor

The glass breakage sensor monitors flat glass surfaces within a radius of max. 2 metres. The typical ultrasonic signals produced by breaking or damaged glass are evaluated by the sensor according to frequency and amplitude.

The alarm signal is activated by the breaking force, which is converted into electrical signals by a piezoceramic oscillator.

The sensor opens for approx. 0.5 to 5 seconds if the glass breaks, depending on the type of glass concerned. Up to 15 sensors can be connected in series in the detection zone.

Contact type: 1-pole break contact

Line voltage: max. DC 18 V

Idle current: max. 10 mA

Switching capacity: max. 350 mW

Alarm duration: 0.5 ... 5 s (depending on type of glass breakage noise)

Effective radius: 2 m

Adhesive: Loctite no. 15168 or Loctite no. 19382

Connecting cable: 5m LIYY 2x0.14 mm²

Temperature range: -30 °C to +70 °C

Type of protection: VdS environmental class IV, IP 67

Dimensions: 37 x 19 x 12 mm

Note: Can be connected to INSTABUS EIB using the binary input, flush-mounted/REG-K/4/8x10.

Version	Art. no.	PU	PG	Mat.	Info
polar white	663192	1/38	8.2		
brown	663193	1/38	8.2		



ARGUS glass smoke detector Connect

Battery-powered smoke detector for early detection of smouldering fires and open fires with development of smoke indoors. With integrated wiring terminal for networking up to 40 smoke detectors. The smoke detector operates according to the scattered light principle and therefore contains no radioactive materials whatsoever. If light scattered with smoke particles penetrates the measuring chamber, this is indicated by a loud warning signal (approx. 85 dB(A)) and an LED. The smoke detector regularly carries out checks to ensure that it is in working order. This is indicated by the LED flashing briefly. The device indicates a low battery approx. every 45 seconds for a maximum of 30 days by emitting an acoustic signal. The LED also flashes in this case. With test button to check that the device is functioning correctly. Can be extended with relay module, art. no. 663490, (connection of external signalling device) or radio module, art. no. 663491 (wireless networking). Connected to INSTABUS EIB using an integrated relay module and the binary inputs flush-mounted/4x10, REG-K/4x10, REG-K/8x10.

Functional principle: Scattered light (Tyndall effect)

Sensitivity: in line with ISO 12239

Operating voltage: DC, 9V

Battery type: 6LR61 monobloc battery (alkali-manganese)

Battery failure signal: approx. every 45 seconds, max. 30 days long

Signal: pulsating approx. 85 dB(A)

Display: red LED

Networking: max. 40 detectors

Network cable: rigid, 2-core, 0.12 to 0.5 mm²

Ambient operating temperature: 0 °C to 50 °C

Dimensions: Ø 110 mm, H = 55 mm

Type of protection: IP 42

With VdS certification

Accessories: Radio module for ARGUS smoke detector, art. no. 663491. Relay module for ARGUS smoke detector, art. no. 663490.

Technical Information: ARGUS smoke detector (⇒ p. 470)

Contents: With battery.

Version	Art. no.	PU	PG	Mat.	Info
polar white	663719	1/12	8.3		
aluminium	663760	1/12	8.3		



ARGUS smoke detector Connect

Battery-powered smoke detector for early detection of smouldering fires and open fires with development of smoke indoors. With integrated wiring terminal for networking up to 40 smoke detectors. The smoke detector operates according to the scattered light principle and therefore contains no radioactive materials whatsoever. If light scattered with smoke particles penetrates the measuring chamber, this is indicated by a loud warning signal (approx. 85 dB(A)) and an LED. The smoke detector regularly carries out checks to ensure that it is in working order. This is indicated by the LED flashing briefly. The device indicates a low battery approx. every 45 seconds for a maximum of 30 days by emitting an acoustic signal. The LED also flashes in this case. With test button to check that the device is functioning correctly. Can be extended with relay module, art. no. 663490, (connection of external signalling device) or radio module, art. no. 663491 (wireless networking). Connected to INSTABUS EIB using an integrated relay module and the binary inputs flush-mounted/4x10, REG-K/4x10, REG-K/8x10.

Functional principle: Scattered light (Tyndall effect)

Sensitivity: in line with ISO 12239

Operating voltage: DC, 9V

Battery type: 6LR61 monobloc battery (alkali-manganese)

Battery failure signal: approx. every 45 seconds, max. 30 days long

Signal: pulsating approx. 85 dB(A)

Display: red LED

Networking: max. 40 detectors

Network cable: rigid, 2-core, 0.12 to 0.5 mm²

Ambient operating temperature: 0 °C to 50 °C

Dimensions: Ø 110 mm, H = 42 mm

Type of protection: IP 42

With VdS certification

- **Accessories:** Radio module for ARGUS smoke detector, art. no. 663491. Relay module for ARGUS smoke detector, art. no. 663490. Gasket for ARGUS smoke detector, art. no. 663492.

- **Technical Information:** ARGUS smoke detector (⇒ p. 470)

- **Note:** With pipe cabling systems, a gasket must be installed between the ceiling and the smoke detector.

Contents: With battery.

Version	Art. no.	PU	PG	Mat.	Info
polar white	663419	1/12	8.3		
aluminium	663460	1/12	8.3		
dark brazil	663415	1/12	8.3		



Relay module for ARGUS smoke detector

Relay module to extend the ARGUS smoke detector. The relay module can be retrofitted into the smoke detector. External devices can be integrated into the system with the relay module. With changeover contact. Closed-circuit protection available (for alarm loop with break contact) or connection of external alarm signalling devices such as sirens, vibration cushions or also INSTABUS binary inputs.

Contact type: Changeover contact, floating

Switching voltage: max. DC 30 V

Switching current: max. 1 A

With VdS certification

- **To be completed with:** ARGUS smoke detector Connect, art. no. 6634... ARGUS glass smoke detector Connect, art. no. 6637...

- **Technical Information:** ARGUS smoke detector (⇒ p. 470)

Version	Art. no.	PU	PG	Mat.	Info
Relay module	663490	1/60	8.3		



Gasket for smoke detector

The gasket is installed between the ceiling and the smoke detector. In pipe cabling systems, variations in pressure or draughts mean that smoke detection is no longer guaranteed.

- **To be completed with:** ARGUS smoke detector Connect, art. no. 6634...

Version	Art. no.	PU	PG	Mat.	Info
	663492	1/150	8		



Distribution board, surface-mounted, with screw terminals

Surface-mounted distribution board with 16 screw connections for wiring and distribution of wired sensors and alarm zones.

Operating voltage: max. 40 V

Conductor cross-section: single-core and finely stranded up to 2.5 mm²

Temperature range: -25 °C to +65 °C

Type of protection: VdS environmental class II

VdS no.: G193 528

Version	Art. no.	PU	PG	Mat.	Info
polar white	669192	1/42	8.2		



Distribution board, flush-mounted, with screw terminals

Flush-mounted distribution board with 16 screw connections for wiring and distribution of wired sensors and alarm zones.

Operating voltage: max. 40 V

Conductor cross-section: single-core and finely stranded up to 2.5 mm²

Temperature range: -25 °C to +65 °C

Type of protection: VdS environmental class II

VdS no.: G194 520

- **Design cover on request.**

Version	Art. no.	PU	PG	Mat.	Info
polar white	669092	1/42	8.2		



Switch actuator REG-K/2x230/10

For independent switching of two loads via make contacts. With integrated bus coupler and plug-in screw terminals. For installation on DIN rails EN 50022.

The bus is connected using a bus connecting terminal; a data rail is not necessary. A yellow LED indicates the switching state of the bus for each output. A green LED indicates readiness for operation after the application has been loaded.

INSTABUS EIB software functions:

ON delay. OFF delay. Staircase timer function. Logic operation. Feedback function.

Per switch contact:

Nominal voltage: AC 230 V, 50-60 Hz

Nominal current: 10 A, $\cos\phi = 0.6$

Nominal capacity: AC 230 V, max. 2300 VA

Incandescent lamps: AC 230 V, max. 2000 W

Halogen lamps: AC 230 V, max. 2000 W

Fluorescent lamps: AC 230 V, max. 900 W uncompensated

Capacitive load: AC 230 V, max. 140 μF

Device width: 2.5 modules = approx. 45 mm

Note: In the ARGUS control system to control the alarm siren with flashlight, art. no. 665192.

Contents: With bus connecting terminal and cable cover.

Version	Art. no.	PU	PG	Mat.	Info
light grey	647229	1/30	9.3		



IP34

Alarm siren with flashlight

Sabotage-proof housing.

Optical and acoustic signal generator for indoors and outdoors. The alarm siren and the flashlight are controlled via two separate channels.

Supply voltage: DC 12 V

Sabotage protection: Monitors the cover of the housing and its wall fixing.

Dimensions: 300 x 220 x 103 (H x W x D).

Note: Can be connected to INSTABUS EIB via switch actuators.

Version	Art. no.	PU	PG	Mat.	Info
polar white	665192	1/1	8.2		



Bus connecting terminal

For connecting max. 4 core pairs to an INSTABUS EIB REG-K, flush-mounted, surface-mounted or built-in device, can also be used as a branch terminal.

Consists of two interlocked terminal parts in red ("+") and dark grey ("-"), each with 4 plug-in terminals. For solid conductors with a diameter of 0.6 to 0.8 mm.

Version	Art. no.	PU	PG	Mat.	Info
red/dark grey	689701	50/2500	9		



Branch terminal, yellow/white

Branch terminal comprising two interlocking terminal parts in yellow and white, each with 4 plug-in terminals. For solid conductors with a diameter of 0.6 to 0.8 mm.

For wiring the yellow/white cores of the bus cable.

Version	Art. no.	PU	PG	Mat.	Info
yellow/white	689702	50/2500	9		