

Product information combined device with binary input / output, single BRE2-EB

Safety instructions

General safety regulations

! Attention! Mounting, installation, commissioning and repair of electronic devices have to be carried out only by qualified electricians. The standards for the prevention of accidents must be observed.

When working in systems with mains connection 230 V, the safety regulations according to DIN VDE 0100 must be observed.

When installing TCS:BUS® systems, the general safety regulations for telecommunication systems according to VDE 0800 must be observed. Inter alia:

- separated conduit of heavy and low current lines,
- minimum distance of 10 cm in case of common conduit,
- use of separators between heavy and low current lines within shared cable ducts,
- use of standard communication lines, e.g. J-Y (St) Y with 0.8 mm diameter,
- existing lines (modernisation) with deviating cross-sections can be used in compliance with the loop resistance.

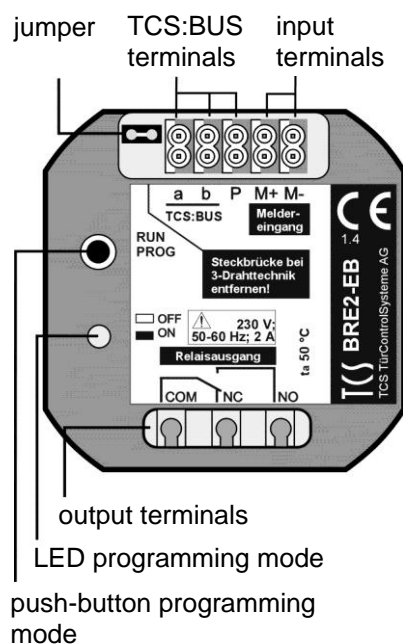
Attention!

- The ingress of liquids or electronically conductive parts can cause short-circuits, fire or an electronic shock. Thus, provide water or other liquids from entering the device. Further provide electronically conductive parts from entering the device.

Installation – protective measures

- Outside the device, an easy accessible separator to disconnect the power supply must be provided.
- An overcurrent protective device must be installed upstream.
- The device must be installed in such way, that the user has no direct access to the mains connection terminal after the installation.
- With suitable measures to protect against lightning, it has to be ensured that a voltage of each 32 V DC is not exceeded at the TCS:BUS wires a, b and P.
- The device corresponds to the overvoltage category II.

Device overview



Technical data

supply voltage:	+24 V \pm 8 % (TCS:BUS power supply and control unit)
housing:	built-in housing
dimension (in mm):	52 x 52 x 23
weight:	32 g
permitted operating temp.:	-20 °C ... +50 °C
input current (binary input):	2.5 mA
input current (2-wire):	I(a) = 1.5 mA without load
input current (3-wire):	I(a) = 0.4 mA, I(P) = 2.8 mA without load
max. input current (3-wire):	I(Pmax) = 4.4 mA
current via input contact:	2.5 mA
min. necessary duration at the input:	100 ms
relay output, two-way contact:	230 V, 50 - 60 Hz / 2 A



Mains fuse for relay output: 2 A necessary!

Intended use

The BRE2-EB is suitable to execute switching and detection functions in TCS:BUS systems. To be built-in into flush-mounted sockets.

Suitable for: 3-wire connection (a, b and P)
2-wire connection with max. of 3 pieces BRE2-EB within the TCS:BUS system

Short description

Basic functions

output (potential-free)	for switching functions, to trigger the switch time by pressing: bell buttons of any front-door station, floor push-button / door release button at any indoor station activates the opening or closing contact when triggering a BUS action (programmable) can be reset with further BUS actions or after an adjustable period has expired
input	to trigger control functions distinguishes opening and closing (sends different TCS:BUS protocols, programmable) connection of a potential-free switch necessary

Programming options

manually	additional options with PC / configo™
<p>Switch time of the output: 0.5 to 128 s factory setting 1s</p> <p>Switching functions of the output:</p> <ul style="list-style-type: none"> calling the device's serial number floor call, front-door door call and internal call to the serial number door release with serial number, start of a voice connection and control function of a serial number <p>Function of the input:</p> <ul style="list-style-type: none"> as closing contact to create any TCS:BUS protocol 	<p>Switch time of the output:</p> <ul style="list-style-type: none"> up to 30 min or unlimited pull-in delay up to 30 min <p>Switching functions of the output:</p> <ul style="list-style-type: none"> start of a voice connection at the front-door station reset at the end of a voice connection second serial number control functions and front-door calls of 10 further serial numbers <p>switch ON / OFF function, switch ON / OVER function linkage of several relay switch functions setting a programming lock</p> <p>Function of the input:</p> <ul style="list-style-type: none"> as opener to create any TCS:BUS protocol open the device's output

Connecting the lines

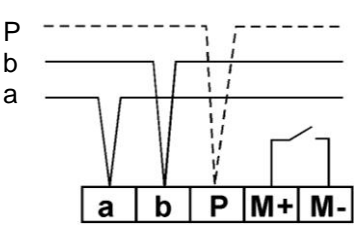
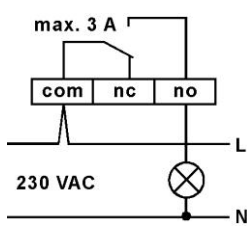
Connection lines per terminal

TCS:BUS, input terminals: 0.12 ... 0.5 mm² (diameter: 0.4 ... 0.8 mm) possible

output terminals: 0.5 ... 1.5 mm² (diameter: 0.8 ... 1.4 mm) possible

Connect the lines according to the following connection schemata

! When using 3-wire technique, remove the jumper (see device overview)!

TCS:BUS terminals, input terminals	output terminal
	

Important note for commissioning

During the transport, the relay can be exposed to impacts. Thus, the contact can be moved into working position (K1-K2 closed).

! When starting the commissioning, connect the TCS:BUS to the relay and the TCS:BUS to the power supply to move the contact into rest position.

Manual programming

Legend

Press button until ...		LED blinks slowly	
Shortly press the button		LED is ON	
Release the button		further period until ...	

Allocating the output to a bell button that is not programmed

shortly press	LED blinks	shortly press, LED blinks ¹	shortly press, ring tone sounds	short press	LED is ON
Programming mode of the system is switched ON			Output is allocated to a bell button	Programming mode of the system is switched OFF	

Allocating the output to a programmed bell button

shortly press	LED blinks	shortly press, LED blinks (for 30 s)	press as long as Prog2 tone, light switch tone and ring tone sound at the front-door station, release	shortly press	LED is ON
			output is allocated to a bell button	Programming mode of the system is switched OFF	

Delete the allocation to a bell button




shortly press	LED blinks	press until the delete tone sounds, release	shortly press	LED is ON
Programming mode of the system is switched ON		bell button deleted	Programming mode of the system is switched OFF	

Allocate the output to a BUS action





press until the LED lights up	release	press the door opener or press floor push-button or...	shortly press, LED is OFF
		execute required BUS action	Output is allocated to the BUS action.

1) The BRE2 returns into the operating mode after 30 s, the LED expires. If you want to cancel the programming at this point, switch off the programming mode of the system at the BVS.





Adjust the switch time of the output

BRE2  shortly press, LED blinks	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">0,5 ... 128 s</div>	 after the required lapse of time is over release, the LED expires switch time is adjusted
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Allocate a BUS action to the input


BRE2  press until the LED lights up  release	press door opener or press floor push-button or... (free BUS actions by entry via Service Device TCSK-01) execute required BUS action	 press until the LED lights up shortly  release, LED OFF input is allocated to BUS actions
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Reload factory setting²: switch time of the output = 1 s, input sends door release protocol AS=0

BRE2  press until the LED is ON  release	 press until the LED expires shortly, is ON, expires  release programming deleted
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²) Factory setting is identical to delivery state.

Conformity

 Declarations of conformity are available under www.tcsag.de, Downloads, trade information.

Information on disposal



The adjoining symbol shows, that the device has to be disposed separately from domestic waste. The material used are recycable. Please do help protecting our environment and dispose the device via a collection point for electronic scrap.



Dispose the parts of the packaging in collecting tanks for cardboard and paper resp. plastics.

Warranty

We offer a **simplified processing** in case of warranty for electricians.

- Please note our **conditions of sale and delivery**, download from www.tcsag.de, downloads, trade information.
- Please contact the **TCS HOTLINE**.

Service

Please send your questions and inquiries to
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