

Translation of the original instructions

Safety and warning notices

- The electrical connection may only be set up by an electrician. → The arrangement of the components depends on the structural conditions and the gate design. → Switch off the operating voltage before working on the system. → The switching device monitors pressure-sensitive protective devices from Bircher Reglomat AG (proper use). → Use of components not supplied by Bircher-Reglomat (including safety edges) will render the guarantee and liability null and void. → Connect all operating and switching voltages to the same fuse. → Connect the operating voltage to the same circuit as the industrial door controller. → Disconnect device from mains in the event of a fault. → Protection max. 10 A

1 Electrical connection and terminal diagram

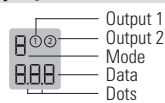
Version	Operating voltage	safety edge ①	safety edge ②	Output 1*	Output 2*	Signal output
EsGate 3 EsGate 3.LVAC						

* The outputs are monitored → need to be connected, otherwise an error code is displayed (E007)!

2 Operation

Control buttons on device: «Mode» button «Data» button

Display



= Symbol for display flashes

3 Standard operation

When everything is connected correctly:

Status LED lights up green Dots flash

Displays shown when safety edge is actuated: Status LED lights up orange

① actuated: ② actuated:

4 Diagnostic menu

Press the «Mode» and «Data» buttons simultaneously for 2 s → status LED flashes orange. Press «Mode» button briefly to change to the next mode. Press the «Mode» button for 2 s to exit diagnostic menu.

Error display mode

The 5 most recent errors can be interrogated. Press the «Data» key briefly in each case, and the errors are displayed one after the other. End appears when the «Data» button is pressed for the 5th time. The malfunctions are displayed in chronological order (new → old)

Mode «r» Resistance

The resistances of the safety edges are displayed
Example:
---8 = Resistance between 7 and 9 kohm.
-----1 = safety edge ①
To access the next safety edge: Press the «Data» button

Mode «S» Output 1

– Output 1 is deactivated
 – No current flow → OK
 – Current flow → error
– Press the «Data» button
 – Output 1 is activated
 – Current flow → OK
 – No current flow → Error (consumer missing)

Mode «S» Output 2

– Output 2 is deactivated
 – No current flow → OK
 – Current flow → error
– Press the «Data» button
 – Output 2 is activated
 – Current flow → OK
 – No current flow → Error (consumer missing)

Mode «S» Both outputs

– Both outputs deactivated
 – No current flow → OK
 – At least 1 output with current flow → Error
– Press the «Data» button
 – Both outputs are activated
 – Current flow → OK
 – At least 1 output without current flow
 → Consumer missing

Mode «C» current configuration

Displays current configuration of safety edge inputs, see configuration table.
Configuration → chapter 5

Mode «h» current fall-delay time

Displays current fall-delay time, see fall-delay time table.
Configuration → chapter 5
To access the configuration mode: Press the «Mode» button

5 Configuration mode (for configuration before starting up, via diagnostic menu, after mode «h»)

Please read chapters 5.1 to 5.3 in full before attempting configuration.

5.1 Activating configuration menu

Status LED flashes orange, press «Data» button

Press the «Mode» and «Data» buttons simultaneously for 2 s. Configuration menu is activated.

Configuration menu can be **exited** at any time by pressing the «Mode» button (2 s). «End» is displayed → Press «Data» button and release → Restart undertaken with new configuration.

5.2 Configuration of safety edge inputs

The current setting for the safety edge inputs is displayed.

Use the «Data» button to set the **configuration** you want for the safety edge inputs (according to Table 1).

Dysplay	safety edge ①	safety edge ②
unc	not configured	
001*	X	X
002	X	
003		X

Table 1

*) Factory setting

5.3 Configuration fall-delay time



Use the «Data» button to set the required **fall-delay time** (according to Table 2). Then briefly press the «Mode» button and End appears.



- The system is configured.
- Press «Data» button to restart.



Error messages may occur when restarting after configuration if the inputs do not match the configuration.

Display	Fall-delay time
001	none
002	100 ms
003*	200 ms
004	500 ms
005	1000 ms

Table 2

*) Factory setting

6 Signal output

Signal output closed when **both** outputs, 1 and 2, are closed. Actuation or fault → signal output open.

7 Error displays



If an error is detected then the outputs are deactivated and symbols ① & ② and an error code are displayed. The status LED lights up red.

Display	E001	E002	E006	E007	E101/ E102
Error	Safety edge malfunct. ①	Safety edge malfunct. ②	Mounting ≠config. mode	Outputs not OK	Undervoltage/overvoltage
Remedy	Check safety edge ①	Check safety edge ②	Check configuration	Check connection for outputs	Check supply

Should other fault messages appear, please contact your supplier.

8 Most important technical data

Operating voltage	EsGate 3	24 V AC/DC ± 15%,
	EsGate 3.LVAC	100-240 V AC 50/60 Hz
Power consumption	max. 3 VA	
Safety edges	8,2 kOhm	

Outputs	Semiconductor relay, 24 V DC, max. 50 mA
Dimensions (W x H x D)	22,5 x 94 x 88 mm

9 EC Declaration of conformity, date of production

9.1 EC Declaration of conformity

Manufacturer: Bircher Reglomat AG, Wiesengasse 20, CH-8222 Beringen
 Employee responsible for documentation: Bircher Reglomat GmbH, Dr. Marc Loschonsky, Robert-Bosch-Strasse 3, DE-71088 Holzgerlingen
 Product: Safety switching device
 Models: EsGate 2, EsGate 3
 Notified Body: Suva, Bereich Technik, SCESp 008, Kenn-Nr. 1246
 Type-examination certificate: E 6936, E 6937
 Fulfills the essential requirements in acc. with: 2006/42/EG, 1999/5/EG
 Following standards were applied: EN ISO 13849-1:2008+AC:2009
 Signee: CTO Dr. Marc Loschonsky, COO Daniel Nef

9.2 Date of production

See shield → week/year, e.g. 12/10 = week 12, 2010

10 Contact data

Authorised representative & Manufacturer:

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