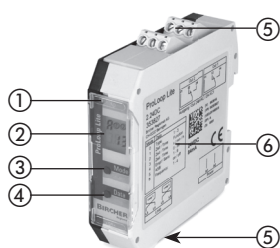


ProLoop Lite

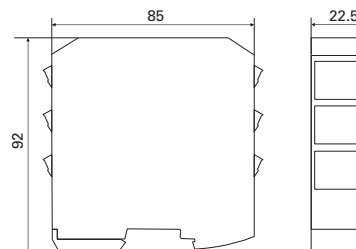
Loop detector for industrial doors and gates and car parks

Translation of the original instruction

General



- ① Information – light emitting diode
- ② LCD display
- ③ "Mode" key
- ④ "Data" key
- ⑤ Connecting terminals
- ⑥ Type plate



1 Safety instructions

- ⚠ – These devices and their accessories may only be operated in accordance with the operating instructions (intended use).
- These devices and their accessories may only be placed in operation by trained and qualified personnel.
- These devices may only be operated with the operating voltages and parameters intended for them.
- If malfunctions occur that cannot be eliminated, place the device out of operation and send it in for repair.
- These devices may only be repaired by the manufacturer. Tampering and alterations are not permitted. This will invalidate all guarantee and warranty claims.

2 Mechanical mounting in the switch cabinet

The ProLoop Lite is mounted in the switch cabinet on a 35 mm H-rail in accordance with EN 50022. The terminals can be plugged in and coded.

3 Connect electrical equipment

- ⓘ The loop connection wiring to a loop detector must be twisted at least 20 times per meter. Please wire the device according to the wiring diagram. Ensure correct assignment of the terminals and that the power supply is right in accordance with the type plate on the device.

3.1 Terminal connection diagram

Power supply	Loop connection 1-channel device	Loop connection 2-channel device	Output 1	Output 2

4 Value and parameter setting options

General

The settings of the ProLoop Lite devices in this chapter are depicted and explained using the 1-loop device. The settings for loop 2 of a 2-loop device should be made using the corresponding method.

4.1 Value and parameter setting options

Standard display 1-loop device	Standard display 2-loop device	Explanation of the LCD display Loop 1 Function — ① — Loop 2 Example: Time function set Example: Parameter "h" set	Explanation of the LEDs Info <table><tr><td>Red + Green</td><td>Start-up phase configuration</td></tr><tr><td>Green</td><td>Operation</td></tr><tr><td>Green flashing</td><td>Output 1 or / and 2 activated</td></tr><tr><td>Flashing red</td><td>Error</td></tr></table>	Red + Green	Start-up phase configuration	Green	Operation	Green flashing	Output 1 or / and 2 activated	Flashing red	Error
Red + Green	Start-up phase configuration										
Green	Operation										
Green flashing	Output 1 or / and 2 activated										
Flashing red	Error										

4.2 Basic functions of output relay status $\bar{D}$ (setting, see table 4.8)

Parameter		Loop unactivated	Loop activated	Fault
1	Door and gate			
2	Barrier			
3	Quiescent current			

4.3 Time functions $\bar{I}$, time unit $\bar{Z}$ and time factor $\bar{J}$ (settings, see table 4.8)

Activation of the loop pulls the relay on; the relay drops off when the loop is exited. t = typically ms or s	Switch-on delay: When the loop is activated, the relay is pulled on after the time t and drops off when the loop is exited. t = typically ms or s	Switch-off delay: When the loop is activated, the relay is pulled on drops off after time t after the loop is exited. t = typically ms or s
Activation pulse: When the loop is activated, the relay is pulled on and drops back off after time t. t = typically ms or s	Exit pulse: When the loop is exited, the relay is pulled on and drops back off after time t. t = typically ms or s	Maximum presence: When the loop is activated, the relay is pulled on and drops back off when exited, but not later than after time t. t = typically ms or s

4.4 Sensitivity $\bar{Y}$ (setting, see table 4.8)

The sensitivity $\bar{Y}$ of the loop detector can be adjusted in 9 steps:

$\bar{Y}7$ = lowest sensitivity (→ much metal, low recognition distance)	$\bar{Y}9$ = highest sensitivity (→ little metal, large recognition distance)	$\bar{Y}4$ = factory setting
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4.5 Automatic sensitivity boost ASB $\bar{S}$ (setting, see table 4.8)

ASB (= **A**utomatic **S**ensitivity **B**oost).

ASB is required in order to be able to detect trailer drawbars after activation.

4.6 Frequency $\bar{F}$ (setting, see table 4.8)

Four different frequencies F1, F2, F3 and F4 can be set. This helps to prevent crosstalk with adjacent loops. Factory setting: F4.

4.7 Switching from operating to configuration mode

1-loop device

Display after start-up:		Touch the «Mode» button once to change to configuration mode		
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2-loop device

Display after start-up:		Touch the «Mode» button once to change to configuration mode			① Loop 1 is selected			② Loop 2 is selected
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(Back to automatic mode: Press and hold Mode button > 1 second)

4.8 Configuration mode

Note on 2-loop device: For each function after Loop 1 is set, the parameters of Loop 2 are set (perform settings similarly).

Table Settings

Table Settings			Button operation parameter									
Function	LCD Display	Button operation functions										
0 Operating mode	0 11		Operating mode	0 11	Barrier		Quiescent current	Loop activation pulse	Loop exit pulse	Maximum presence	Note: Time unit multiplied by time factor gives the set time.	
1 Basic function	1 1		Door and gate*	1 1	Switch-on delay		Switch-off delay					
2 Time function	2 1h		∞*	2 1h	1 second*		1 minute	1 hour				
3 Time unit	3 1h		0.1 second	3 1h	Set value between 1 and 99 by touching or holding the «Data» button							
4 Time factor	4 1		1*	4 1								
5 Sensitivity	5 54		5 Sensitivity = responsiveness	5 54	Set value between 1 (lowest) and 9 (highest sensitivity) by touching or holding the «Data» button							
6 Automatic sensitivity boost ASB	6 10		ASB stands for Automatic Sensitivity Boost	6 10	Switched off*		Switched on					
7 Frequency	7 1h		Frequency F1	7 1h	Frequency F2	Frequency F3	Frequency F4*					

* Factory setting

5 Error display

E

When an error occurs, the operating mode "A" and the error display "E" are shown alternatingly.
The LED changes to flashing red.

6 Reset



2 seconds

Reset 1 (recalibration)

The loop(s) is/are recalibrated.

7 Technical data

Power supply voltage/ power consumption	24 VDC 24 VDC -10% to +20%, max. 1.5 W 230 VAC 230 VAC ± 10%, 50 Hz, max. 2.9 VA
Loop inductiveness	Max. 20 to 1000 µH Ideally 80 to 300 µH
Loop power line	For 20-40 µH: max. 100 m with 1.5 mm ² For >40 µH max. 200 m with 1.5 mm ² Min. twisting 20 times per metre
Loop resistance	< 8 ohms with connection wire
Output relay (loop)	Max. 240 VAC; 2 A / 30 VDC; 1 A; AC-1

Dimensions	22.5 x 92 x 85 mm (W x H x D)
Housing mounting	Direct DIN rail mounting
Connection type	Screw-in terminals
Protection class	IP 20
Operating temperature	-20°C to +60°C
Storage temperature	-40°C to +70°C
Air humidity	< 95% non-condensing

8 EU Declaration of Conformity



See attachment

9 WEEE



Devices with this symbol must be treated separately during disposal. This must be done in accordance with the laws of the respective countries for environmentally sound disposal, processing and recycling of electrical and electronic equipment.

10 Contact

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