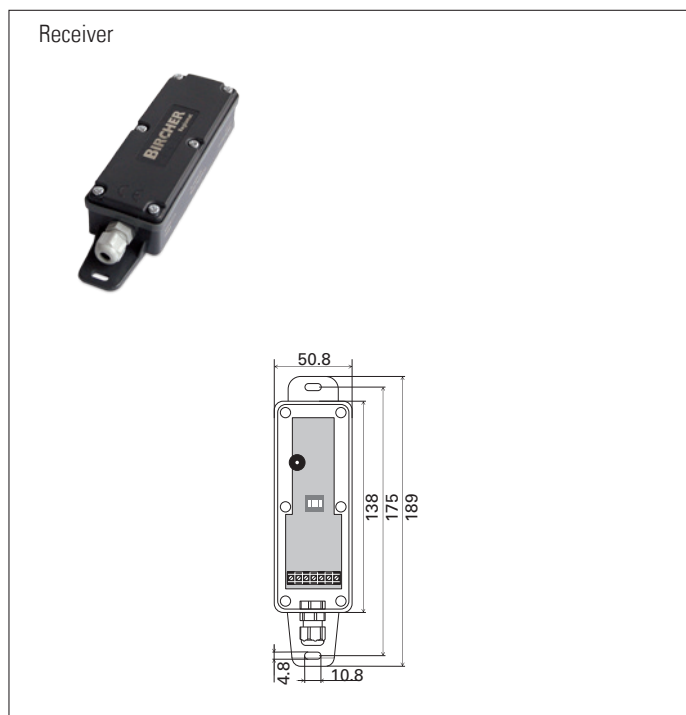
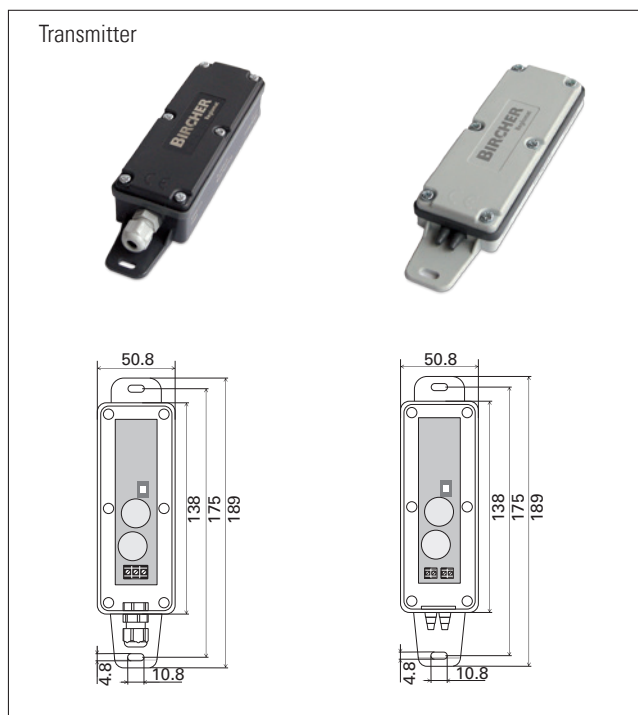


RFGate 2.1

Wireless signal transmission system for safety edges

Translation of original operating instructions

General



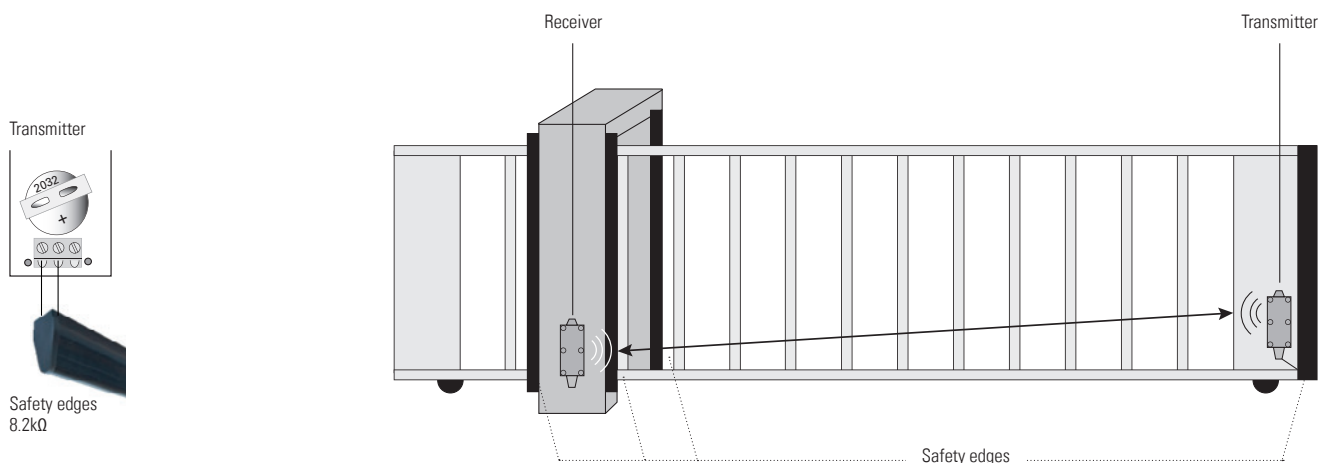
1 Safety instructions

- Warning:** Switch off the operating voltage before working on the system. Only trained, qualified personnel may perform installation and startup. The unit may only be repaired by Bircher Reglomat employees. The switching unit may only be used to protect against dangers on crushing and shearing points and on automatic industrial doors and gates (intended use). National and international regulations on industrial door and gate safety must be complied with. Always consider the safety functions of your application as a whole, never just in relation to one individual section of the system. The installer is responsible for carrying out a risk assessment and installing the industrial door system correctly.
- i** It is recommended to change the batteries every year.

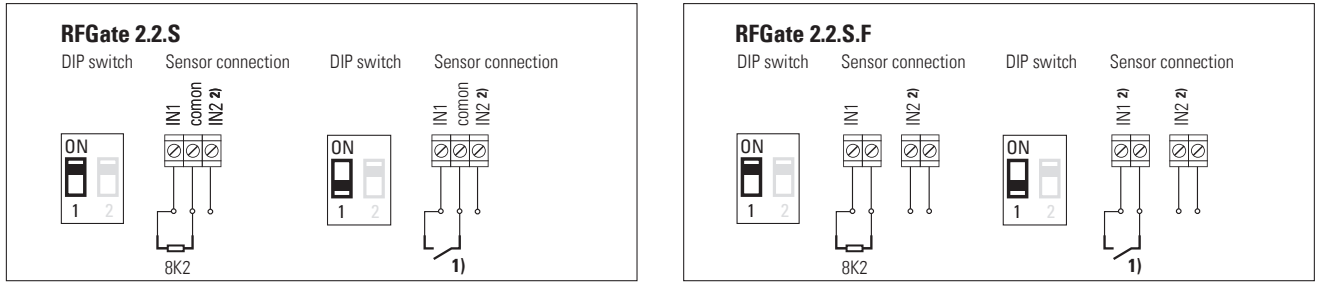
2 Common application

2.1 Site entrance gate

- i** Up to 10 transmitters can be linked with the same receiver



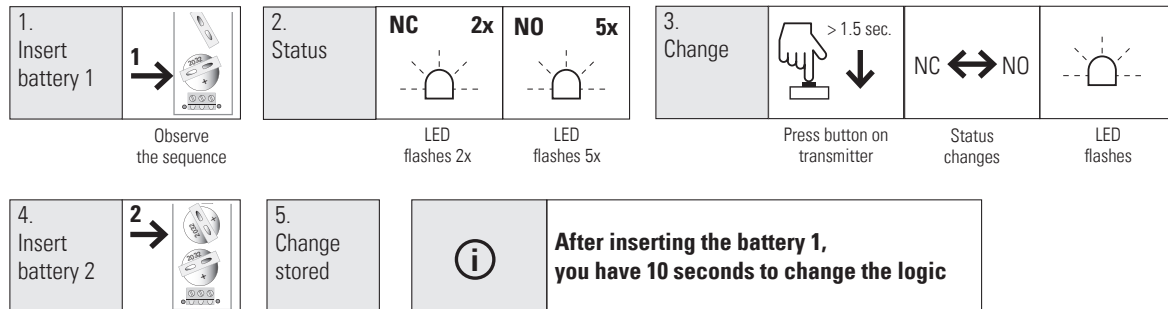
3.1 DIP switch setting according to sensor (safety edge, switch contact)



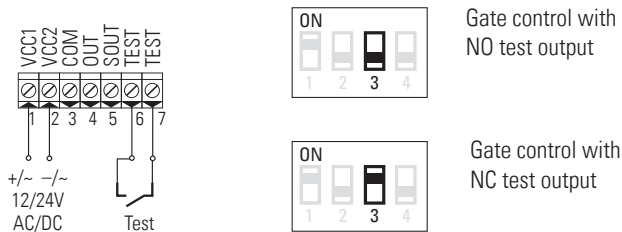
¹⁾ Change from NC to NO, see chapter 3.2

²⁾ ① IN2 has no function

3.2 Change input from NC to NO (factory setting = NC)

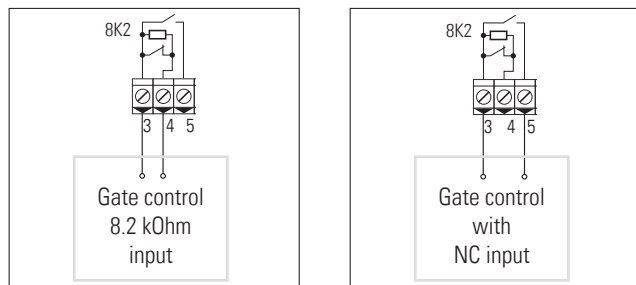


4.1 Wiring: Power supply and test inputs











4.2 Wiring: Outputs and control

Relay contacts are shown unpowered



4.3 DIP switches

	<p>* Safety application</p> <p>standard according to EN ISO 13849-1</p>
	<p>inactive → no safety function! (Radio connection is not monitored)</p>
	<p>Transmission frequency</p> <p>869.85 MHz: Set DIP-switch before pairing transmitter – receiver</p>
	<p>* 868.95 MHz: Set DIP-switch before pairing transmitter – receiver</p>
	<p>Test input type</p> <p>NC activated = contact open</p>
	<p>* NO activated = contact closed</p>
	<p>Automatic frequency adjustment</p> <p>active used only in case of radio disturbances</p>
	<p>* inactive</p>

* = factory setting

5 Start-up

1. Check DIP switch settings		2. Install and wire receiver		3. Turn on power supply	
4. Transmitter: insert batteries		5. Programming (Chapter 6.1): pair transmitter with receiver		The distance between transmitter and receiver and further transmitters must be at least 1 m	
Observe order		6. Transmitter: install		7. Transmitter: wire	
		Please observe the torque when fastening the cover: Max. 45 N cm			
8. System test of safety edge on gate					

6 Programming

6.1. RFGate 2.1, pairing transmitter with receiver

1. On the receiver					
	Press button	Beep	Release button	LED lights up	
2. On the transmitter			On the receiver		
	Press and release button			Beep	Wait
				2 beeps	Code saved LED goes out

6.2 Transmitter reset

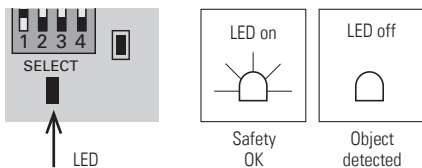
On the receiver								Memory cleared on all transmitters
	Press button and hold	Beep	Keep pressed the button	Short beeps	Release button	Wait	2 beeps	

6.3 Memory full

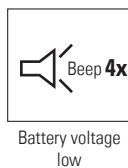
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7 Standard operation

7.1 Receiver LED indicators



7.2 Warning indicator for low battery voltage



Receiver: Signal sounds at each activation

8 Technical data

Receiver	
Supply voltage	12/24 V ACDC
Transmitter memory	10
Output	1 relay 24 V, 0.5 A; micro switch-off 1B
Power consumption	0.5 W @ 12 V; 1.2 W @ 24 V
Test signal input	12/24 VACDC

Transmitter	
Battery power	2 x Lithium 3 V Type CR2032
Power consumption	Transmitting: 17 mA standby: 16 µA

System	
Frequency bands	868.95 MHz & 869.85 MHz
Range	under optimum conditions up to 100 m
Protection class IEC 60529	IP55
Pollution degree	2
Working temperature	-20 °C to +55 °C

9 EC-Declaration of Conformity

Manufacturer:
Following directives have been observed:
EC type-examination certificate:
Notified inspection centre:
Product variant:

Bircher Reglomat AG, Wiesengasse 20, CH-8222 Beringen
MD 2006/42/EC, RoHS 2011/65/EU, RED 2014/53/EU
E6945
Suva, technology division, SCESp 0008, ID no. 1246
RFGate 2.1.x, RFGate 2.2.x

10 Contact

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