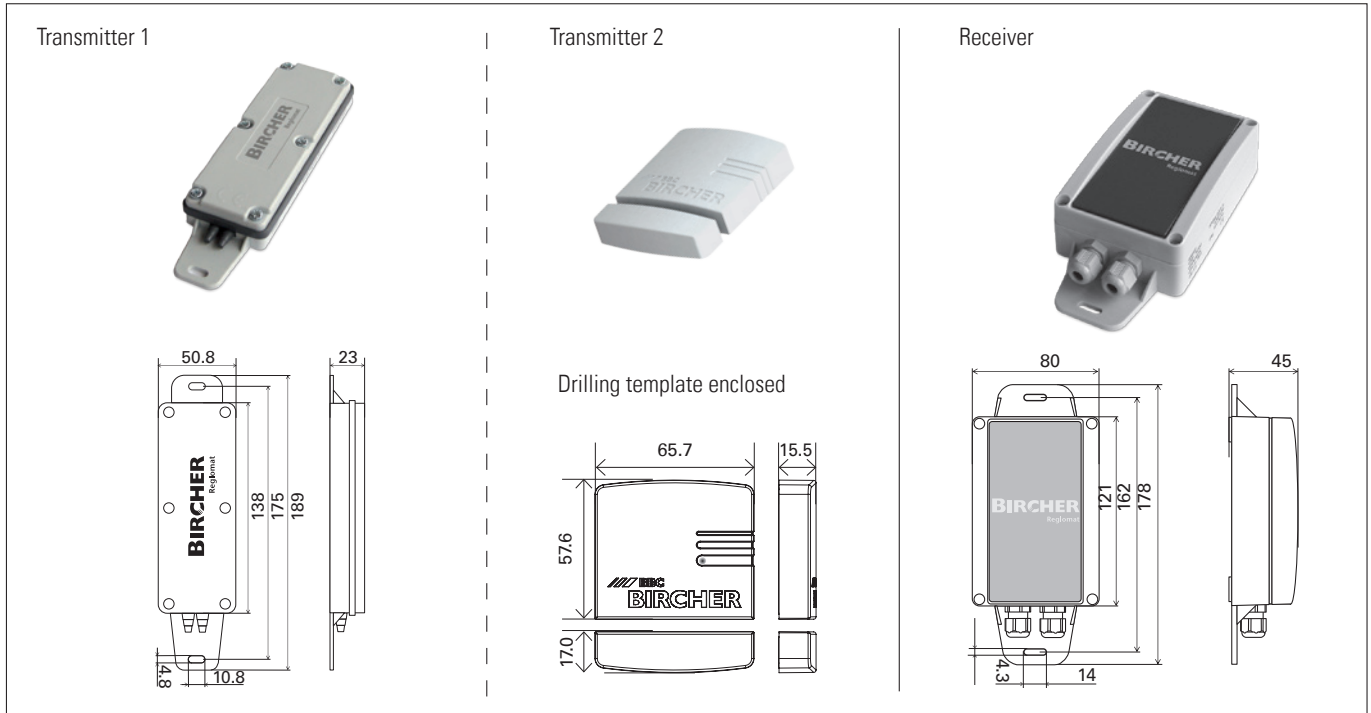


# RFGate 2.2.W2.F.A

Wireless signal transmission system for safety edges, two channels

## Translation of the 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 opened and 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 (intended use). National and international regulations on industrial door 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. A risk assessment in advance is mandatory. The installer is responsible for installing the industrial door system correctly.
- i It is recommended to change the batteries every year.**

## 2 Common application

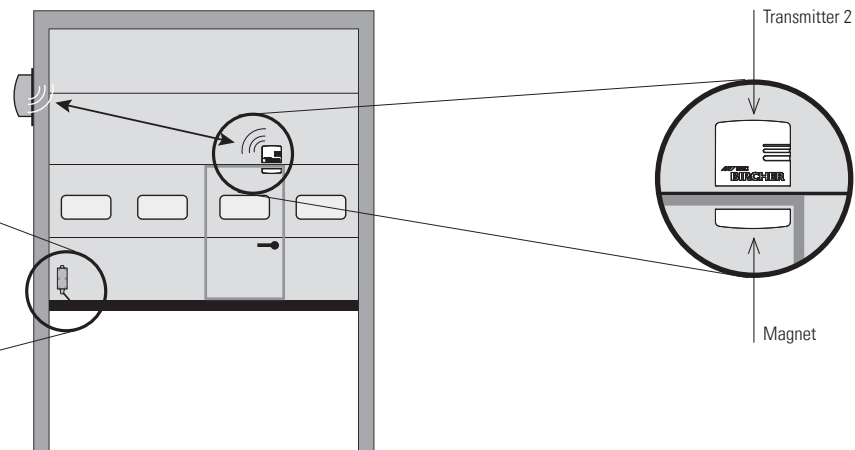
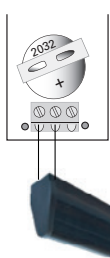
### 2.1 Industrial door with wicket door

Receiver

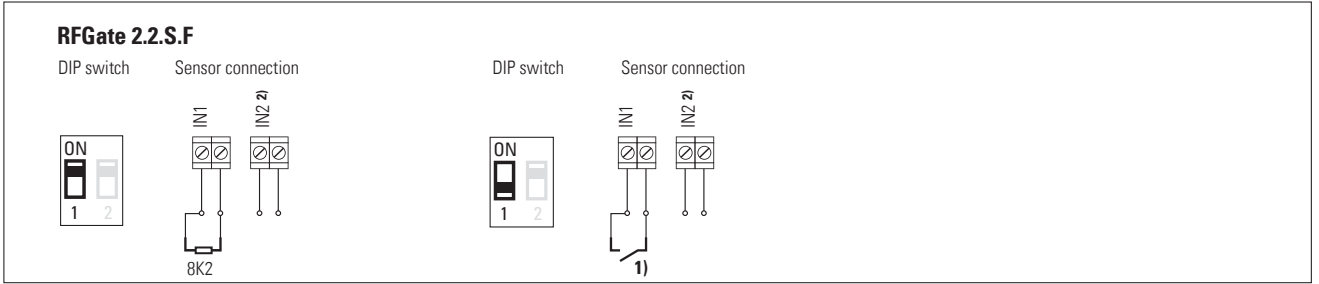


- i** Transmitter 1 input 1 corresponds to receiver output 1  
Transmitter 2 corresponds to receiver output 2

Transmitter 1



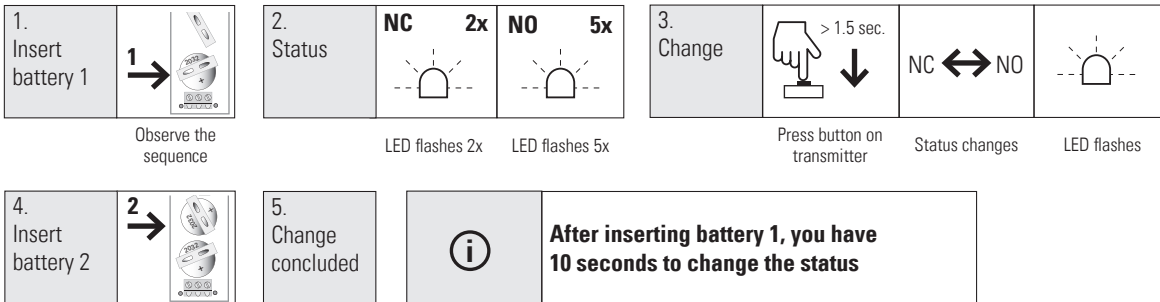
3.1 DIP switch setting according to sensor (safety edge, switching contact)



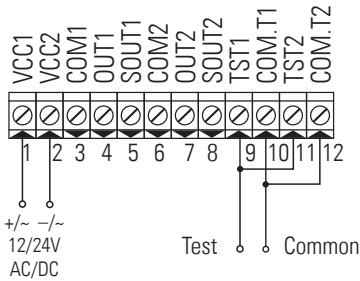
- 1) Change from NC to NO, see chapter 3.2
- 2) ① IN2 without function

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

**i** Transmitter 2 is fixed to NC

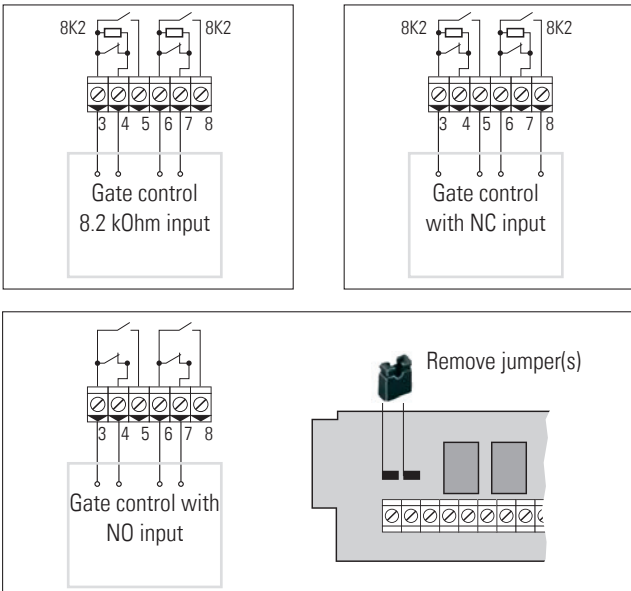


4.1 Wiring: Power supply and test inputs



4.2 Wiring: Outputs and control

Relay contacts are shown unpowered



4.3 DIP switches

	<b>* Safety application</b> Standard according to EN ISO 13849-1
	Inactive → no safety function (Radio connection is not monitored)
	<b>Transmission frequency</b> 869.85 MHz: Set DIP-switch before pairing transmitter – receiver
	<b>* 868.95 MHz:</b> Set DIP-switch before pairing transmitter – receiver
	<b>Test input type</b> NC activated = contact open
	<b>* NO</b> activated = contact closed
	<b>Automatic frequency adjustment</b> Active Used only in case of severe radio disturbance
	<b>* Inactive</b>
	<b>* Programming (2 transmitters)</b> Transmitter 1 corresponds to output 1 Transmitter 2 corresponds to output 2
	<b>Programming (for 2 channel transmitter)</b> Not for this application

\* = factory setting

## 5 Set-up

1. Check DIP switch settings		2. Receiver: Install and wire		3. Receiver: Turn on power supply	
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4. Transmitter 1: insert batteries		5. Transmitter 2: insert batteries	
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Observe order

6. Programming (Chapter 6.1): pair transmitter with receiver			The distance between the transmitter and receiver and additional transmitters must be at least 1 m
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7. Transmitter 1: mount		8. Transmitter 1: wire			<b>Please observe the torque when fastening the cover: Max. 45 N cm</b>
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9. Mount transmitter 2 and the magnet		10. Note: Distance between magnet / transmitter when doors are closed		
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11. System test: safety edge on gate see 7.1		12. System test wicket door: opening and closing see 7.1	
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## 6 Programming

### 6.1 Pairing the transmitter with the receiver



Transmitter 1:

1. On the receiver				
	Press button	Beep	Release button	LED lights up

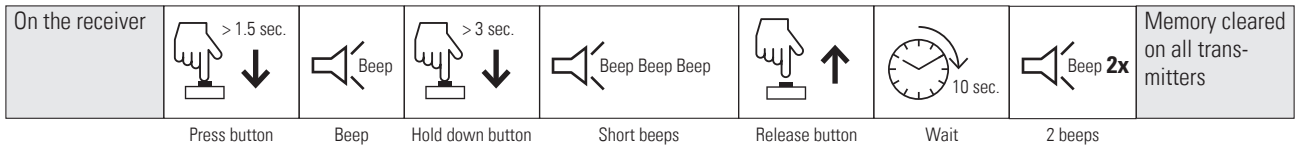
2. On the transmitter 1 for channel 1		On the receiver				
	Press and release button		Beep	Wait 10 sec.	2 beeps	Code saved LED goes out

Transmitter 2:

3. On the receiver								
	Press button	Beep	Release button	LED lights up	Press button	Beep	Release button	LED flashes

4. On the transmitter 2 for channel 2		On the receiver				
	Press and release button		Beep	Wait 10 sec.	2 beeps	Code saved LED goes out

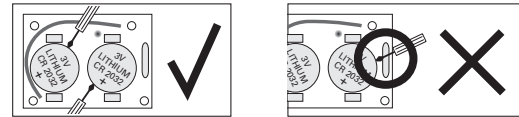
## 6.2 Transmitter reset (Deletion of transmitter-receiver pairing)



## 6.3 Memory full



## 6.4 Battery change

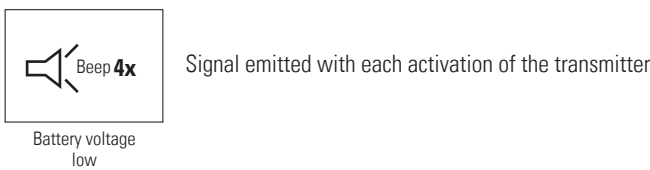


## 7 Standard operation

### 7.1 Receiver LED indicators

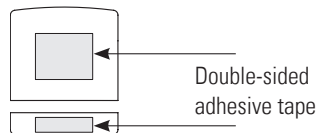


### 7.2 Warning indicator for low battery voltage



## 8 Alternative installation with double sided tape (not supplied)

View of transmitter 2 (bottom)



### Caution!

Ensure surfaces are clean, dry and free of dust and grease.

## 9 Technical data

Receiver	
Supply voltage	12/24 V ACDC
Transmitter memory	7 + 7
Output	2 relays 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
Protection class IEC 60529	IP55

Transmitter 1	
Battery power	2 x Lithium 3 V type CR2032
Power consumption	Transmitting: 17 mA standby: 16 µA
Protection class IEC 60529	IP55

System	
Frequency bands	868.95 MHz & 869.85 MHz
Range	Under optimum conditions up to 100 m
Pollution degree	2
Working temperature	-20 °C to +55 °C

Transmitter 2	
Battery power	2 x Lithium 3 V type CR2032
Power consumption	Transmitting: 17 mA standby: 16 µA
Protection class IEC 60529	IP65

## 10 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

## 11 Contact

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