SWISSDOOR
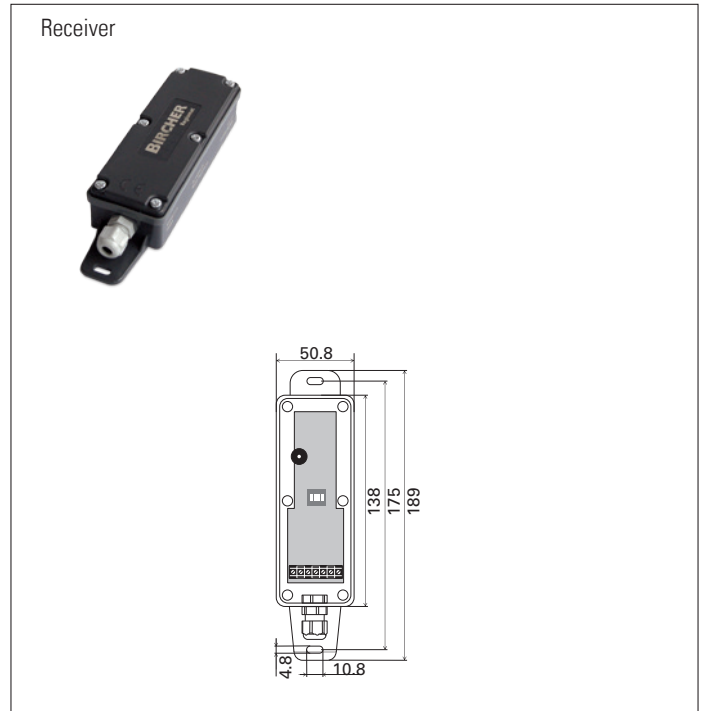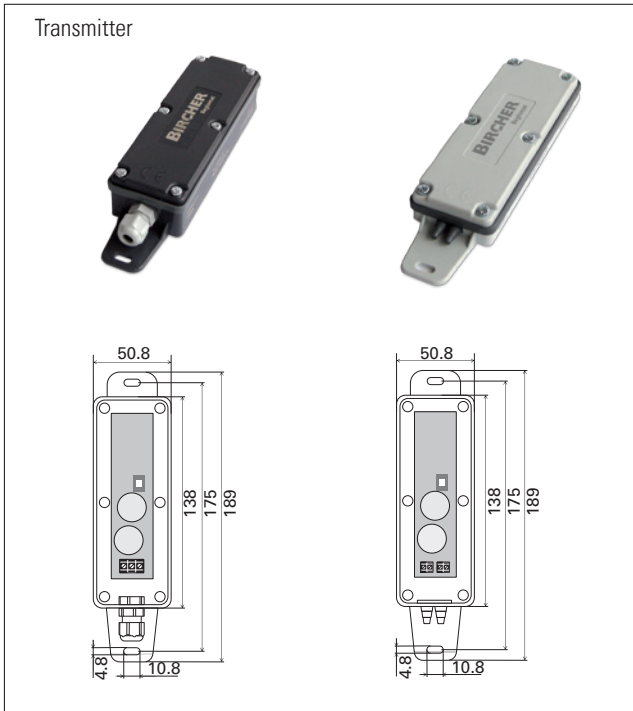## DØRTEKNIK FOR PROFESSIONELLE

BIRCHER
Reglomat

ENGLISH

RFGate 2.1

Wireless signal transmission system for safety edges

Translation of original operating instructions

General

Transmitter

Receiver

| **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 o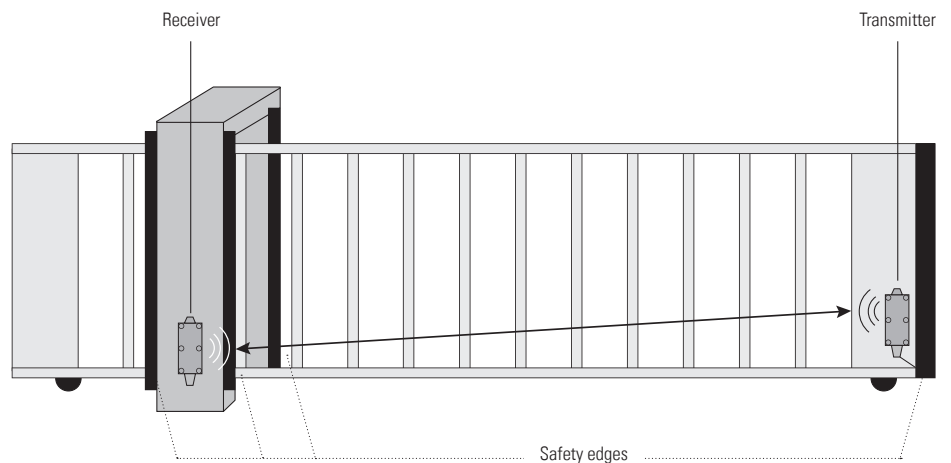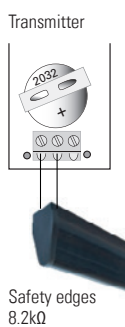n industrial door and gate safety must be complied with. Always consider the safety functions of your application as a whole, never just in relation to one individual section of the system. The installer is responsible for carrying out a risk assessment and installing the industrial door system correctly.

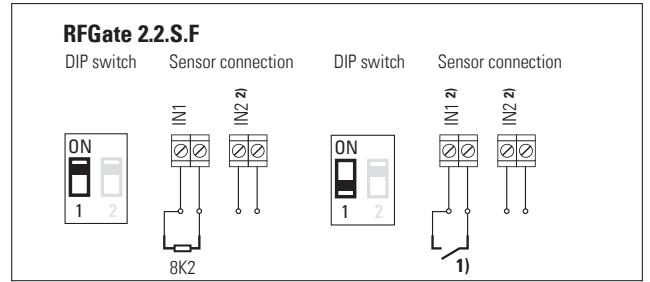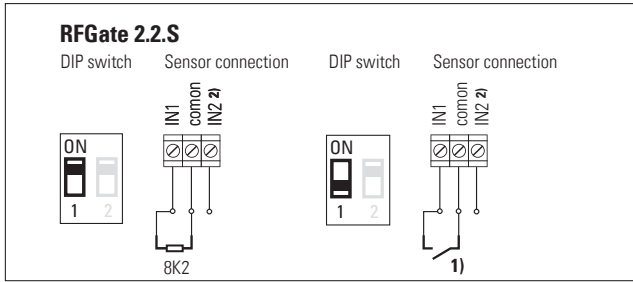ⓘ **It is recommended to change the batteries every year.**

| **2** | **Common application** |

2.1   Site entrance gate

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

Transmitter

Safety edges
8.2kΩ

Receiver

Transmitter

Safety edges

3 Transmitter

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

RFGate 2.2.S

DIP switch | Sensor connection | DIP switch | Sensor connection

ON
1 2

IN1 comon IN2 **2)**

8K2

ON
1 2

IN1 comon IN2 **2)**

1)

RFGate 2.2.S.F

DIP switch | Sensor connection | DIP switch | Sensor connection

ON
1 2

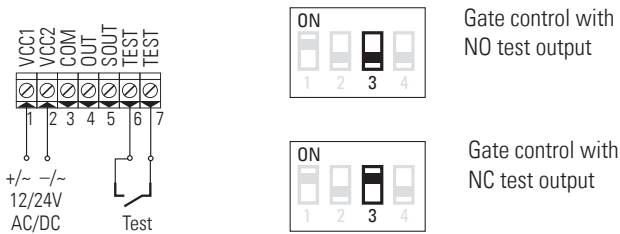IN1 IN2 **2)**

8K2

ON
1 2

IN1 **2)** IN2 **2)**

1)

1) Change from NC to NO, see chapter 3.2
2) ⓘ IN2 has no function

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

1. Insert battery 1	**1** →	2. Status	**NC** 2x	**NO** 5x	3. Change	👆 > 1.5 sec. ↓	NC ⬌ NO	💡
	Observe the sequence		LED flashes 2x	LED flashes 5x		Press button on transmitter	Status changes	LED flashes

4. Insert battery 2	**2** →	5. Change stored		ⓘ	**After inserting the battery 1, you have 10 seconds to change the logic**

4 Receiver
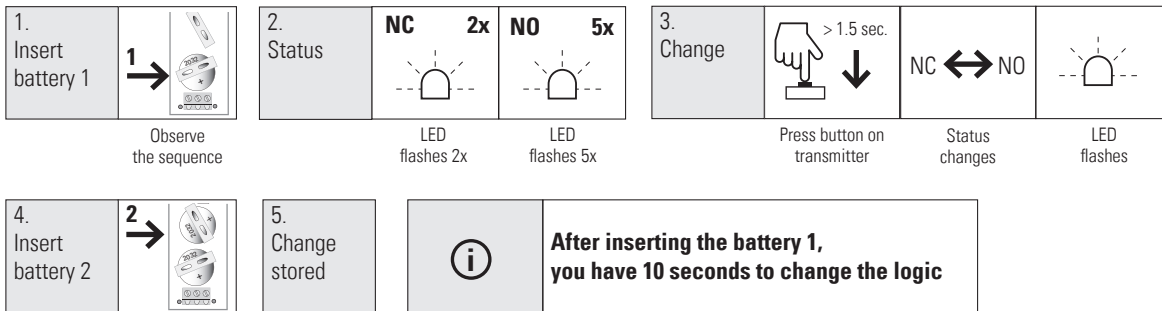
4.1 Wiring: Power supply and test inputs

VCC1 VCC2 COM OUT SOUT TEST TEST
1 2 3 4 5 6 7

+/~ –/~
12/24V
AC/DC   Test

ON
1 2 **3** 4

Gate control with NO test output

ON
1 2 **3** 4

Gate control with NC test output

4.2 Wiring: Outputs and control

Relay contacts are shown unpowered

8K2
3 4 5

Gate control
8.2 kOhm
input

8K2
3 4 5

Gate control
with
NC input
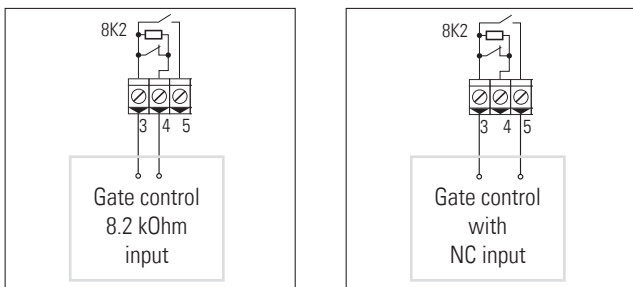
4.3 DIP switches

ON **1** 2 3 4	✱	**Safety application** standard according to EN ISO 13849-1
ON **1** 2 3 4		inactive ➔ no safety function! (Radio connection is not monitored)
ON 1 **2** 3 4		**Transmission frequency** 869.85 MHz: Set DIP-switch before pairing transmitter – receiver
ON 1 **2** 3 4	✱	868.95 MHz: Set DIP-switch before pairing transmitter – receiver
ON 1 2 **3** 4		**Test input type** NC activated = contact open
ON 1 2 **3** 4	✱	NO activated = contact closed
ON 1 2 3 **4**		**Automatic frequency adjustment** active used only in case of radio disturbances
ON 1 2 3 **4**	✱	inactive

✱ = factory setting

5 Start-up

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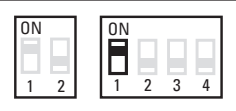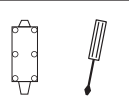
4. Transmitter: insert batteries	**1** → **2**
	Observe order
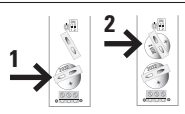
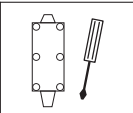|	
5. Programming (Chapter 6.1): pair transmitter with receiver	The distance between transmitter and receiver and further transmitters must be at least 1 m
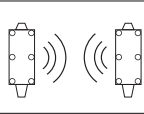
6. Transmitter: install		7. Transmitter: wire	
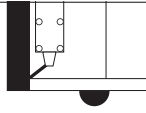
(i) Please observe the torque when fastening the cover: **Max. 45 N cm**

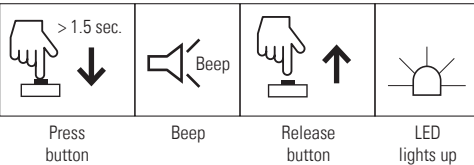|	
8. System test of safety edge on gate	**OK?**

6 Programming

6.1. RFGate 2.1, pairing transmitter with receiver
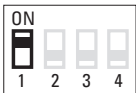
ON
1 2 3 4

1. On the receiver	> 1.5 sec.	Beep		
	Press button	Beep	Release button	LED lights up

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

6.2 Transmitter reset

On the receiver	> 1.5 sec.	Beep	> 3 sec.	Beep Beep Beep		10 sec.	Beep **2x**	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

Beep **10 sec.**
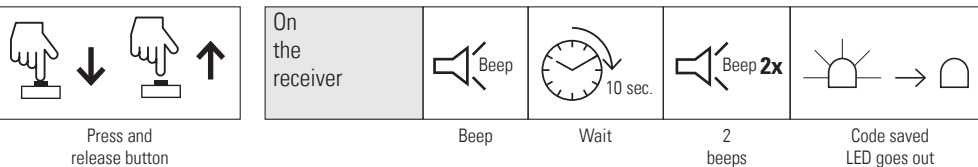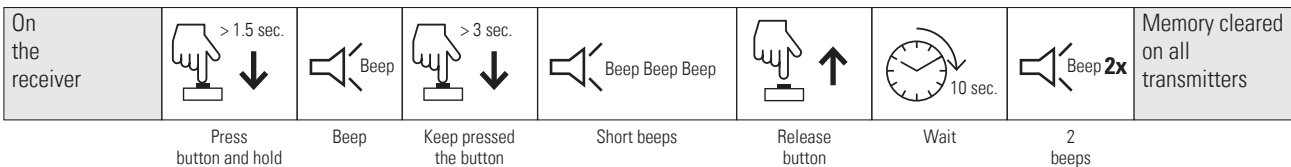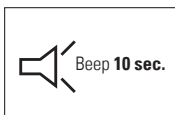
7   Standard operation

7.1   Receiver LED indicators

LED on	LED off
Safety OK	Object detected

LED

SELECT
1 2 3 4
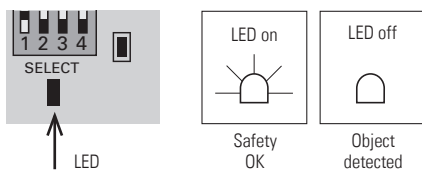
7.2   Warning indicator for low battery voltage
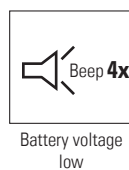
Beep **4x**   Receiver: Signal sounds at each activation

Battery voltage low

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:	Bircher Reglomat AG, Wiesengasse 20, CH-8222 Beringen
Following directives have been observed:	MD 2006/42/EC, RoHS 2011/65/EU, RED 2014/53/EU
EC type-examination certificate:	E6945
Notified inspection centre:	Suva, technology division, SCESp 0008, ID no. 1246
Product variant:	RFGate 2.1.x, RFGate 2.2.x

10   Contact   Danish seller

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