

L8542858

02/2013 rev 4

# BENINCA®

CENTRALE DI COMANDO

**CONTROL UNIT**

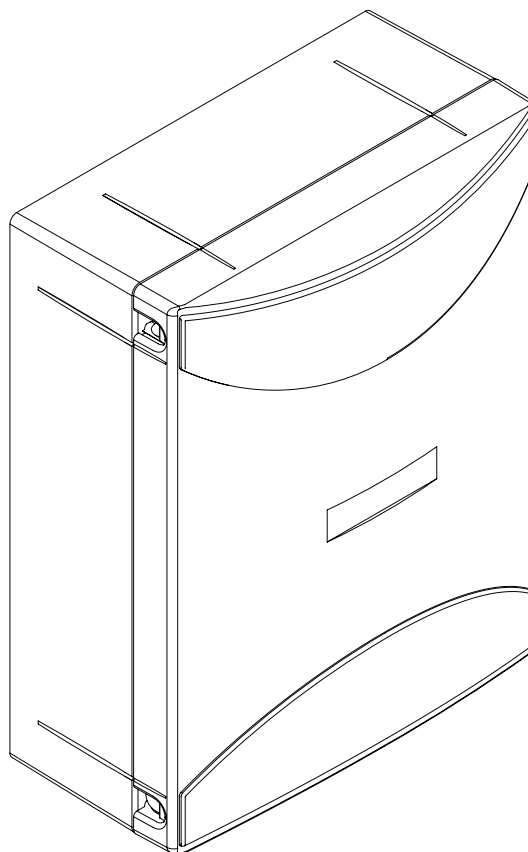
*STEUEREINHEIT*

**CENTRALE DE COMMANDE**

CENTRAL DE MANDO

**CENTRALKA STEROWANIA**

## ***Logica 230*** ***Logica 230 RI***



Libro istruzioni

**Operating instructions**

*Betriebsanleitung*

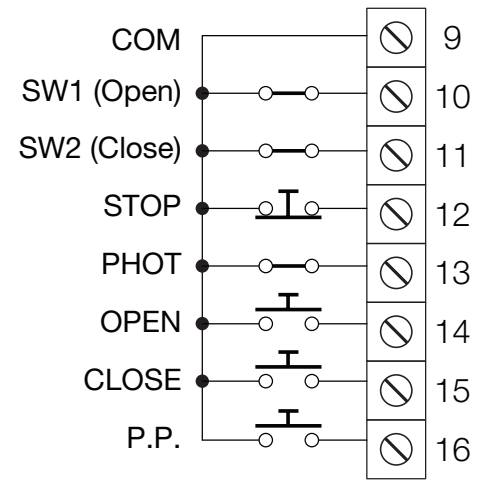
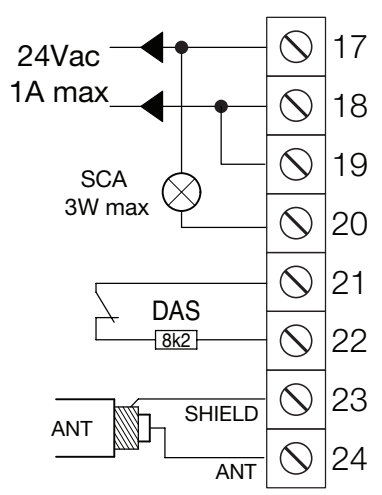
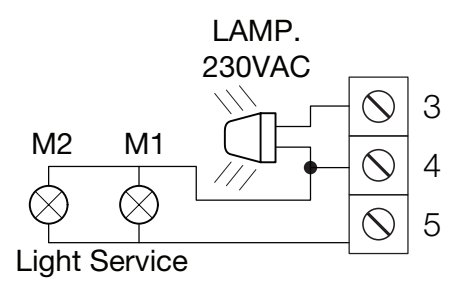
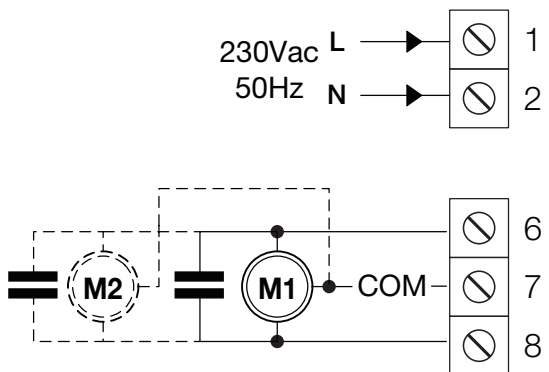
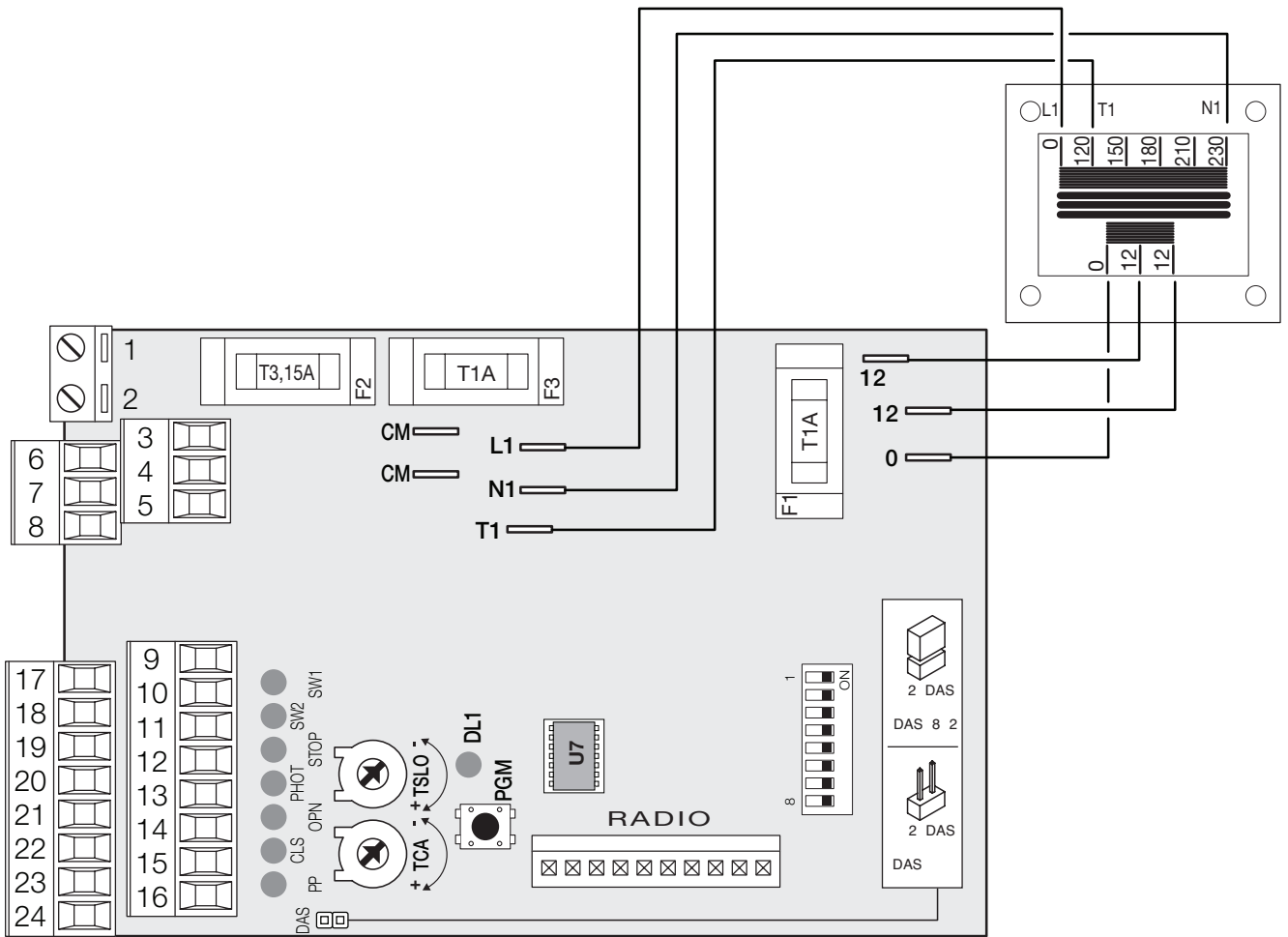
***Livret d'instructions***

Manual de instrucciones

**Książeczka z instrukcjami**



UNIONE NAZIONALE COSTRUTTORI  
AUTOMATISMI PER CANCELLI, PORTE,  
SERRANDE ED AFFINI



## CE Declaration of Conformity

Declaration in accordance with Directives 2004/108/CE (EMC); 2006/95/CE (LVD)

The Manufacturer:

**AUTOMATISMI BENINCÀ SPA**

Address:

**Via Capitello, 45 - 36066 Sandrigo (VI) - Italy**

Declares that the product:

Control box for 1 motor, for **LOGICA** tilt-up doors - **CP.ZED230E**

conforms with the requirements of the following EU Directives:

• **DIRECTIVE 2004/108/CE OF THE EUROPEAN PARLIAMENT AND COUNCIL**, 15 December 2004, in relation to the harmonisation of the legislation of member states regarding electromagnetic compatibility, in abrogation of Directive 89/336/CEE, per the following harmonised standards:  
EN 61000-6-2:2005, EN 61000-6-3:2007.

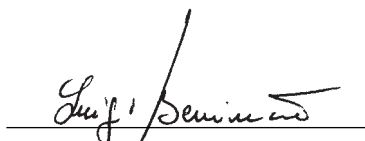
• **DIRECTIVE 2006/95/CE OF THE EUROPEAN PARLIAMENT AND COUNCIL**, 12 December 2006, in relation to the harmonisation of the legislation of member states regarding electrical material intended to be used within certain voltage ranges, per the following harmonised standards:  
EN 60335-1:2002 + A1:2004 + A11:2004 + A12:2006 + A2:2006 + A13:2008; EN 60335-1-103:2003.

as applicable:

• **DIRECTIVE 1999/5/CE OF THE EUROPEAN PARLIAMENT AND COUNCIL**, 9 March 1999 in relation to radio equipment and telecommunications terminals and the mutual recognition of their conformity, per the following harmonised standards:

ETSI EN 301 489-3 V1.4.1 (2002) + ETSI EN 301 489-1 V1.4.1 (2002) + ETSI EN 300 220-3 V1.1.1 (2000) + EN 60950-1 (2001)

Benincà Luigi, Legal representative.  
Sandrigo, 08/07/2008.



### Logica230 Control unit

The electronic control unit Logica230 can be used to control 1 or 2 motors with a power not exceeding 300W+300W.

**IMPORTANT: Should two motors be used, connect the limit switches of one single motor to the control unit.**

#### GENERAL WARNINGS

- The wire connections and the operating logic should be in compliance with regulations in force.
- The cables featuring different voltage should be detached, or adequately insulated by an additional insulation of at least 1 mm.
- The cables should be further fastened in proximity to the terminals.
- Check all connections before powering the unit.
- Check that setting of the Dip-Switches are the required ones.
- Normally Closed inputs which are not in use should be short-circuited 230VAC – keep to phase/neutral).

#### INPUT/OUTPUT FUNCTIONS

| Logica230 Control Unit |                |   |
|------------------------|----------------|---|
| Terminal No.           | Function       | Description   |
| 1-2                    | Power supply   | Input, 230VAC 50Hz (1-Phase/2-Neutral)  |
| 3-4                    | Flashing light | Connection of flashing light, 230Vac 40W max.   |
| 4-5                    | Light, Motor   | Connection to the courtesy light  |
| 6-7-8                  | Motor 1/2      | Connection to motor 1/2 : (6-speed/7-Com/8-speed)<br>Should 2 motors be used, connect the second motor in parallel. |
| 9                      | COM            | Common for limit switch and all control inputs.   |
| 10                     | SWO            | Input, OPEN limit switch (N.C. contact)   |
| 11                     | SWC            | Input, CLOSE limit switch (N.C. contact)  |
| 12                     | STOP           | Input, STOP push button (N.C. contact)  |
| 13                     | PHOT           | Input, connection to safety devices, N.C. contact<br>(e.g. Photocells)  |
| 14                     | OPEN           | Input, OPEN push button (N.O. contact)  |

|         |                |  |
|---------|----------------|--|
| 15      | CLOSE          | Input, CLOSE push button (N.O. contact)  |
| 16      | Step-by-Step   | Input, step-by-step push button (N.O. contact)   |
| 17-18   | 24 Vac         | Output, power supply of accessories, 24Vac/1A max.   |
| 19-20   | SCA            | Free contact, N.O. for open door warning light.  |
| 21-22   | COSTA          | Input, safety edge contact<br>Resistive edge: Closed "DAS" jumper<br>Mechanical edge: Open "DAS" jumper<br>If the safety edge is activated in the opening phase, the gate stops.<br>In the closing phase, the gate stops and the performs a movement reversion (opens) for 3s. |
| 23-24   | Aerial         | Connection to the radio receiver card of the aerial (23-screen/24-signal).   |
| CM-CM   | Capacitor      | Connection, capacitor  |
| 0-12-12 | Secondary      | Connection, winding of secondary transformer   |
| L1-N1-T | Primary        | Connection, winding of primary transformer   |
| J3      | Radio receiver | Connector for radio receiver.<br>The RI versions have a built-in radio receiver  |

#### REMARKS:

The courtesy light stays on for about 90s at each operation.

The safety EDGE should be connected only to the special inputs. Two types of EDGE can be used:

If a safety edge is used with 8K2 resistance, the "DAS" jumper should be closed.

If a mechanical safety edge with N.C. contact is used, the "DAS" Jumper should be opened.

If no edge is used, terminals 21-22 should be short-circuited.

#### TO ADJUST THE LIMIT SWITCHES

- 1) Power the control unit
- 2) Manually release the system and completely open the door.
- 3) Adjust the opening limit switch cam, the SWO LED turns off.  
If braking is required in the opening phase, the limit switch triggering should be anticipated.
- 4) Shut the door completely.
- 5) Adjust the closing limit switch cam, the SWC LED turns off.  
If braking is required in the closing phase, the limit switch triggering should be anticipated.
- 6) Cut off power supply.
- 7) Move the door half-way and lock it again.
- 8) Reset power supply. The STOP, PHOT, SWO and SWC LED's should light up.
- 9) Give a step-by-step control signal by pressing the appropriate button or using the remote control.
- 10) The door should move in the opening phase. In the negative, it is sufficient to invert the speed wires (6<>8) of the motor and the limit switch inputs (SWO<>SWC).
- 11) Adjust Time and Operating and Motor power logic.  
If braking is required, move DIP3 to ON and adjust the braking time of trimmer TSLOW.

#### TO ADJUST THE MOTOR POWER

**WARNING! This adjustment affects the safety level of the automatic system.**

Check that the thrust applied onto the wing complies with regulations in force.

On the power supply transformer, a Faston connector (T1) is provided which allows to adjust motor power to 4 different levels. By positioning the Faston (T1) on 120, the minimum power is obtained, by moving the Faston to 210 the maximum power is obtained.

#### FUNCTIONS OF THE TRIMMERS

**TCA** It allows to adjust the automatic closure time. Check Dip-Switch N°1= On.  
The adjustment varies from 1s minimum to 90s maximum

**TSLOW** With **Dip-Switch 3 On**, it adjusts **the slowdown cycle** time from 1 to 12 secs.

With **Dip-Switch 3 Off**, it adjusts **the work time** from 10 to 120 secs. In this case the slowdown option is disabled.

#### DIP-SWITCH FUNCTIONS

- DIP 1 "TCA"** The automatic closure is enabled or disabled  
Off: disabled automatic closure  
On: enabled automatic closure
- DIP 2 "Prelam."** Forewarning flashing light enabled or disabled  
Off: disabled forewarning flashing light  
On: enabled forewarning flashing light. The flashing light is activated 3 s before the starting of the motor.
- DIP 3 "Rall."** Enables or disables the slowdown cycle.  
Off: Slowdown disabled. The TSLOW trimmer adjusts the motor work time from 10 to 120 secs.  
Set a work time longer than the duration of an operation.  
On: Braking in both opening and closing phases.  
N.B.: the braking phase starts when the limit switches are triggered.

By using trimmer “TSLOW”, preset a braking time slightly higher than the time required to complete the operation.

- DIP 4 “P.P. Mod”** The operating mode of “P.P. Push button” and of the transmitter are selected.  
Off: Operation: OPEN > STOP > CLOSE > STOP >  
On: Operation : OPEN > CLOSE > OPEN >
- DIP 5 “PHOT. AP.”** The photocells in the opening phase are enabled or disabled.  
Off: enabled photocells in the opening phase.  
On: disabled photocells in the opening phase.
- DIP 6 “Cond.”** The multi-flat function is enabled or disabled.  
Off: disabled multi-flat function.  
On: enabled multi-flat function. The P.P. (Step-by-step) impulse or the impulse of the transmitter have no effect in the opening phase.
- DIP 7 “Spunto”** The motor start pickup is enabled or disabled.  
Off: disabled pickup.  
On: enabled pickup. At the beginning of each operation the maximum torque of the motor is for approx. 2s.
- DIP 8 “Radio”** Only for “RI” versions. Enables or disables transmitters with programmable codes  
On: Radio receiver enabled exclusively for rolling-code transmitters.  
Off: Receiver enabled for both rolling-code and programmable transmitters (self-learn and dip-switch) .

### LED DIAGNOSTICS

The control system has a series of self-diagnostics LED's which allow to check all functions:

- SW1 LED** It switches off when the SWO opening limit switch is triggered  
**SW2 LED** It switches off when the SWC closing limit switch is triggered  
**STOP LED** It switches off when the STOP push button is pressed  
**PHOT LED** It switches off when the photocells are not aligned or if obstacles are present  
**OPN LED** It switches on when the OPEN push button is pressed  
**CLS LED** It switches on when the CLOSE push button is pressed  
**PP LED** It switches on when the PP push button is pressed  
**PGM LED** It flashes to show the correct operation of the control unit.

5 quick flashes, followed by a pause, of LED PGM indicate the activation of the safety edge.

### CONFIGURATION WITH BUILT-IN RECEIVER (ONLY “RI” VERSIONS)

The control unit is fitted with a built-in radio module for receiving remote controls both with fixed codes and variable codes (see dip-switch 8 functions), with a frequency of 433.92MHz.

For a transmitter to be used, the module first has to self-learn its code. The memorise procedure is illustrated below, the module can memorise up to 64 different codes.

#### Memorising a new transmitter by activating the P.P. function

- Press the PGM button once for 1sec and the DL1 LED will start blinking at 1 sec intervals.
- Press the transmitter button within 10 sec to memorise with the P.P. (Step-by-step) function

To exit the programming procedure wait 10 sec or press the PGM button for 1 sec, the DL1 LED will return to normal blinking at 3 sec intervals.

#### Cancelling all transmitters from the memory

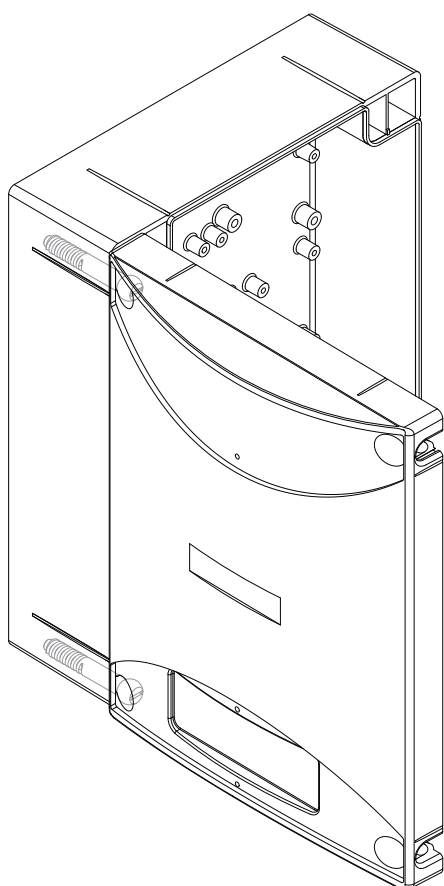
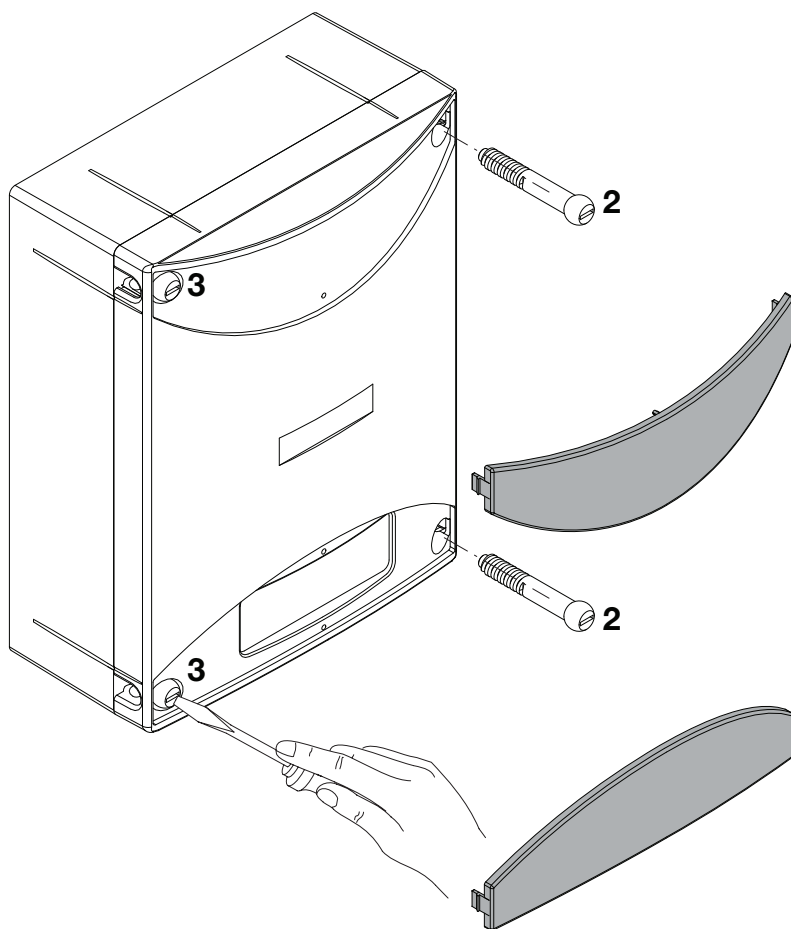
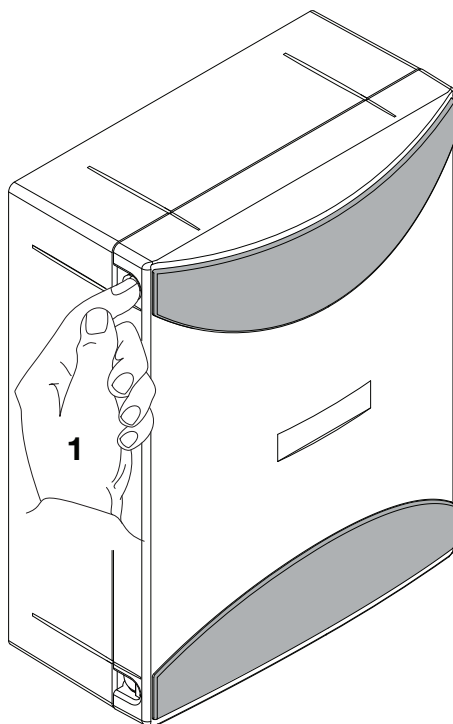
- Keep the PGM button pressed for 15 sec, the DL1 LED will start blinking rapidly and when it goes out the memory has been erased.
- Release the PGM button, the memory has been cancelled and the DL1 LED will return to normal blinking at 3 sec intervals.

#### N.B.:

The transmitters are stored on an EPROM (U7) memory board that can be removed and installed in a new control unit in case of breakdown.

For safety reasons, transmitters cannot be memorised during the open/close cycles of the motor.

When entering the memorise transmitter procedure, if the DL1 LED gives a prolonged blink and then goes out, this signals that the receiver memory is full and no other transmitters can be memorised or that the transmitter is not compatible.



- 1 Premere le alette sui fianchi per sganciare le due maschere copriviti.
- 2 Rimuovere le due viti sul lato di apertura desiderato.
- 3 Allentare le due viti con funzione di cerniera senza rimuoverle, in modo da consentire l'apertura del coperchio.

- 1 Presser les deux ailettes latérales pour décrocher les deux cache-vis.
- 2 Enlever les deux vis sur le côté d'ouverture désiré.
- 3 Desserrer les deux vis faisant fonction de charnière sans les enlever, de manière à permettre l'ouverture du couvercle.

- 1 Press the tabs on the sides to release the two masks that cover the screws.
- 2 Remove the two screws on the desired opening side.
- 3 Slacken the two screws that act as a hinge without removing them, so as to allow opening of the cover.

- 1 Presionar las aletas en los lados para desenganchar las dos tapas cubretornillos.
- 2 Extraer los dos tornillos del lado de apertura deseado.
- 3 Aflojar los dos tornillos con función de bisagra sin extraerlos, a fin de poder abrir la tapa.

- 1 Auf die seitlichen Laschen drücken, so dass die beiden Schraubenblenden befreit werden.
- 2 Die beiden Schrauben an der gewünschten Öffnungsseite ausbauen.
- 3 Zuletzt die beiden als Scharnier dienenden Schrauben lockern, aber nicht ausbauen, damit der Deckel geöffnet werden kann.

- 1 Nacisnąć boczne klapki w celu odhaczenia dwóch masek nakrywających śruby.
- 2 Wyciągnąć dwie śruby po wybranej do otwierania stronie.
- 3 Poluzować dwie śruby blokujące bez wyciągania ich, w sposób umożliwiający otwarcie nakrywki.

# BENINCA®