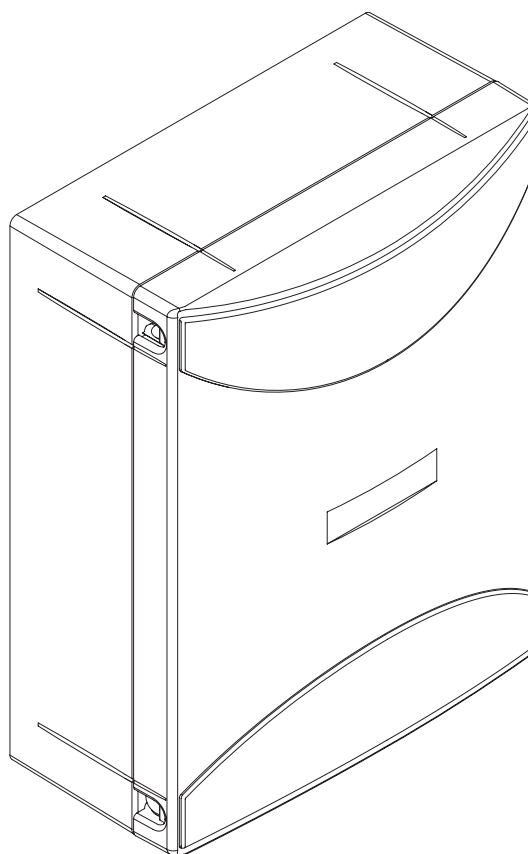


L8542859  
Rev. 12/06/04

# BENINCA®

CENTRALE DI COMANDO  
CONTROL UNIT  
STEUEREINHEIT  
CENTRALE DE COMMANDE  
CENTRAL DE MANDO  
CENTRALKA STEROWANIA

## Logica24



Libro istruzioni  
**Operating instructions**  
*Betriebsanleitung*  
**Livret d'instructions**  
Manual de instrucciones  
**Książeczka z instrukcjami**



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

**Dichiarazione CE di conformità**  
**EC declaration of conformity**  
**EG-Konformitätserklärung**

**Déclaration CE de conformité**  
**Declaracion CE de conformidad**  
**Deklaracja UE o zgodności**

Con la presente dichiariamo che il nostro prodotto  
We hereby declare that our product  
Hiermit erklaren wir, dass unser Produkt  
Nous déclarons par la présente que notre produit  
Por la presente declaramos que nuestro producto  
Niniejszym oświadczamy że nasz produkt

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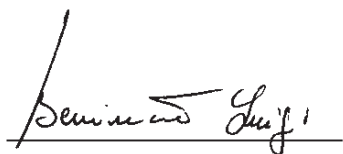
**LOGICA 24**

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è conforme alle seguenti disposizioni pertinenti:  
complies with the following relevant provisions:  
folgenden einschlagigen Bestimmungen entspricht:  
correspond aux dispositions pertinentes suivantes:  
satisface las disposiciones pertinentes siguientes:  
zgodny jest z poniżej wyszczególnionymi rozporządzeniami:

Direttiva sulla compatibilità elettromagnetica  
(89/336/CCE, 93/68/CEE)  
EMC guidelines (89/336/EEC, 93/68/EEC)  
EMV-Richtlinie (89/336/EEG, 93/68/EEG)  
Directive EMV (89/336/CCE, 93/68/CEE)  
(Compatibilité électromagnétique)  
Reglamento de compatibilidad electromagnética  
(89/336/MCE, 93/68/MCE)  
Wytyczna odnośnie zdolności współdziałania elektromagne-  
tycznego (89/336/EEG, 93/68/EEG)

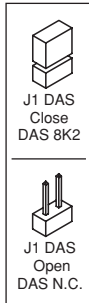
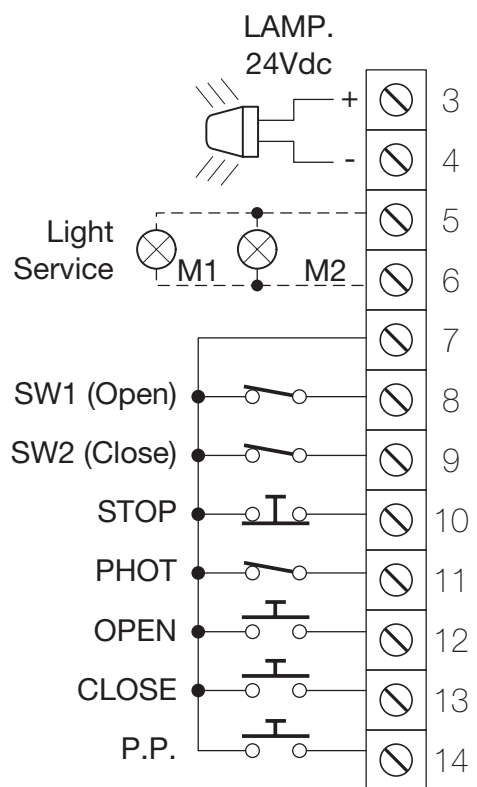
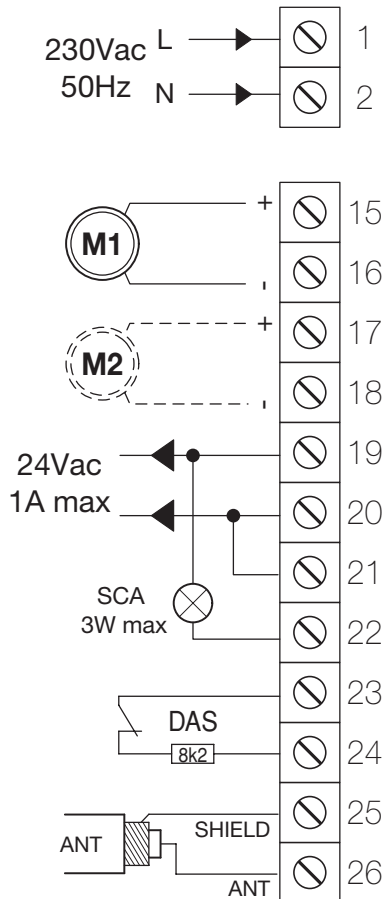
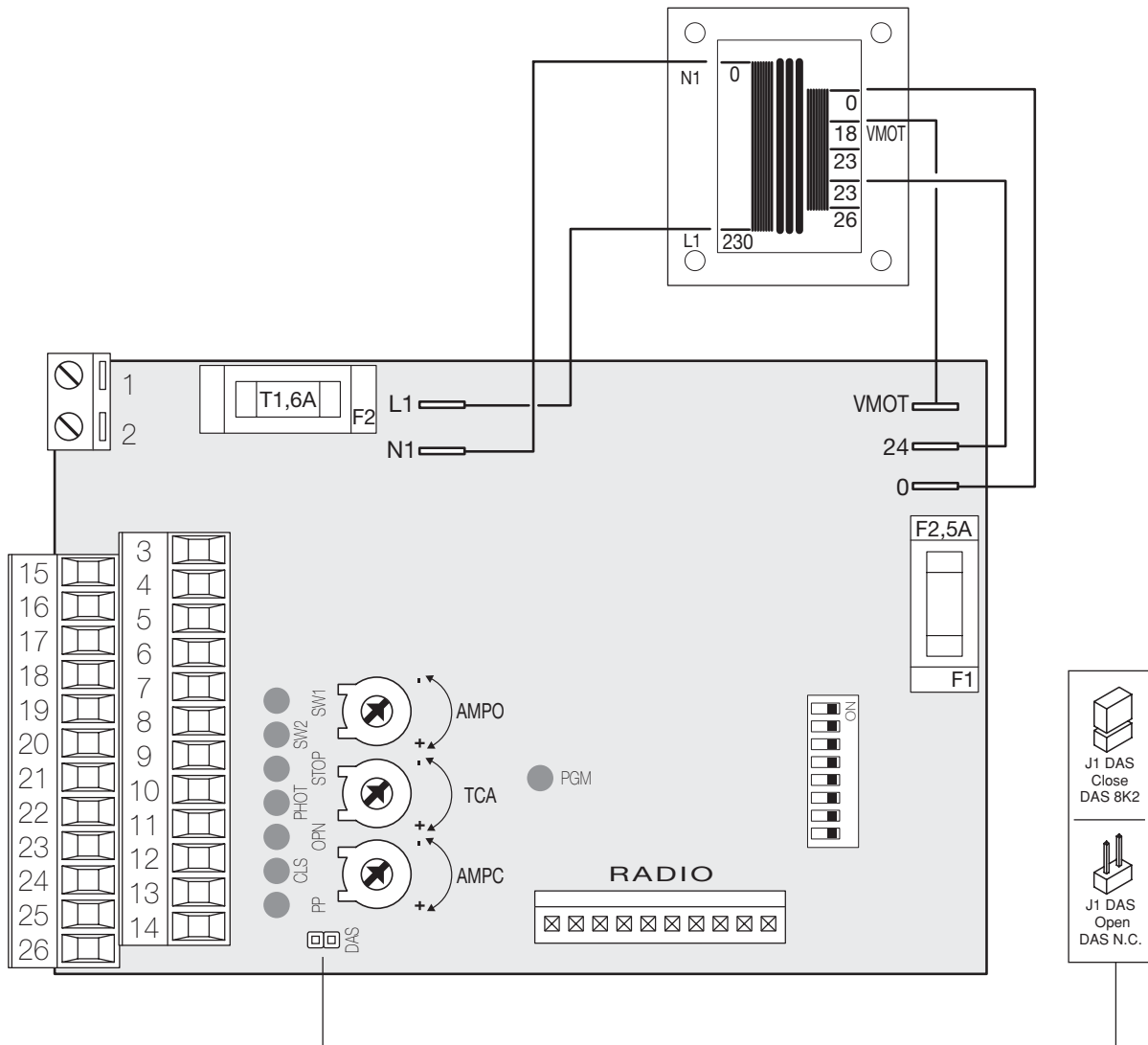
Direttiva sulla bassa tensione (73/23/CEE, 93/68/CEE)  
Low voltage guidelines (73/23/EEC, 93/68/EEC)  
Tiefe Spannung Richtlinie (73/23/EEG, 93/68/EEG)  
Directive bas voltage (73/23/CEE, 93/68/CEE)  
Reglamento de bajo Voltaje (73/23/MCE, 93/68/MCE)  
Wytyczna odnośnie niskiego napięcia (73/23/EEG,  
93/68/EEG)



Benincà Luigi, Responsabile legale.  
Sandrigo, 05/10/2005.

**BENINCA®**

Automatismi Benincà SpA  
Via Capitello, 45  
36066 Sandrigo (VI)  
ITALIA



## Logica24 Control unit

The electronic control unit Logica24 can be used to control 1 or 2 motors with a power not exceeding 120W+120W.

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

### GENERAL WARNINGS

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

### INPUT/OUTPUT FUNCTIONS

Logica24 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, 24Vdc 40W max.
5-6	Light, Motor	Connection to the courtesy light of motor
7	COM	Common for limit switch and all control inputs.
8	SWO	Input, OPEN limit switch (N.C. contact)
9	SWC	Input, CLOSE limit switch (N.C. contact)
10	STOP	Input, STOP push button (N.C. contact)
11	PHOT	Input, connection to safety devices, N.C. contact (e.g. Photocells)
12	OPEN	Input, OPEN push button (N.O. contact)
13	CLOSE	Input, CLOSE push button (N.O. contact)
14	Step-by-Step	Input, step-by-step push button (N.O. contact)
15-16	Motor 1	Connection to motor 1 (15+/16-)
17-18	Motor 2	Connection to motor 2 (15+/16-) To be used only when 2 motors are in use
19-20	24 Vac	Output, power supply of accessories, 24Vac/1A max.
21-22	SCA	Free contact, N.O. for open door warning light.
23-24	COSTA	Input, safety edge contact Resistive edge: Closed "DAS" jumper Mechanical edge: Open "DAS" jumper If the safety edge is activated in the opening phase, the gate stops. In the closing phase, the gate stops and the performs a movement reversion (opens) for 3s.
25-26	Aerial	Connection to the radio receiver card of the aerial (25-screen/26-signal).
0-24-VMOT	Secondary	Connection, winding of secondary transformer
L1-N1	Primary	Connection, winding of primary transformer
J3	Radio receiver	Connector for 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 23-24 should be short-circuited, the "DAS" Jumper should be opened.

### 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.
- 4) Shut the door completely.
- 5) Adjust the closing limit switch cam, the SWC LED turns off.
- 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 (15<>16) of the motor and the limit switch inputs (SWO<>SWC).
- 11) Adjust Time, the Operating Logistics as well as the Motor speed.

### Enabling the Slowdown Feature

To enable the slowdown feature during opening and closing set Dip-Switch 3 to ON.

Preset the braking speed by using Dip-Switch 7.

The braking phase will start when the limit switches are triggered and will last for 4", of which 3" at reduced torque and 1" at maximum torque.

During the slowdown cycle the amperometric sensor is disabled. Make sure that, during the closing slowdown cycle the gate does not travel more than 5 cm of the stroke.

### To adjust Speed

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

**Make sure that the force applied onto the gate wing complies with regulations in force.**

The supply transformer is provided with a Faston (VMOT) connector which permits to adjust the motor speed at three different levels.

When the Faston (VMOT) is on 15, the speed is at minimum. When the Faston is moved to 23, the maximum speed is obtained.

### Function of Trimmers

**AMP-O** This trimmer allows to adjust the activation threshold of the current sensor in the opening phase.

When the sensor is triggered in the opening phase, the motor stops.

**AMP-C** This trimmer allows to adjust the activation threshold of the current sensor in the closing phase.

The sensor activation in the closing phase causes the total re-opening of the door. A new closing operation is then immediately started.

In the event of a new amperometric activation, the operation is carried out again. If none of the three closure operations is completed, the door will stay completely open.

*N.B.: At the beginning of the closing operation, the motor operates at maximum torque for approx. 1.5". In this phase the amperometric sensor is disabled and remains disabled until the SWO opening limit switch is released.*

**TCA** It allows to adjust the automatic closure time. Check Dip-Switch N°1= On.

The adjustment varies from 1s minimum to 90s maximum

### Dip-Switch functions

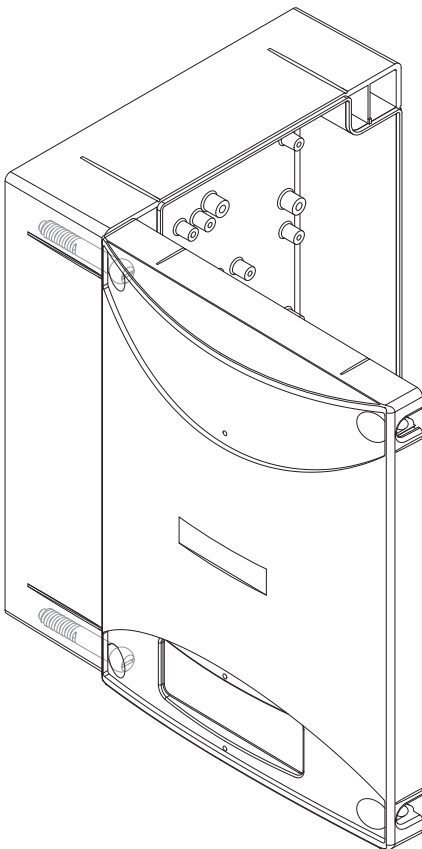
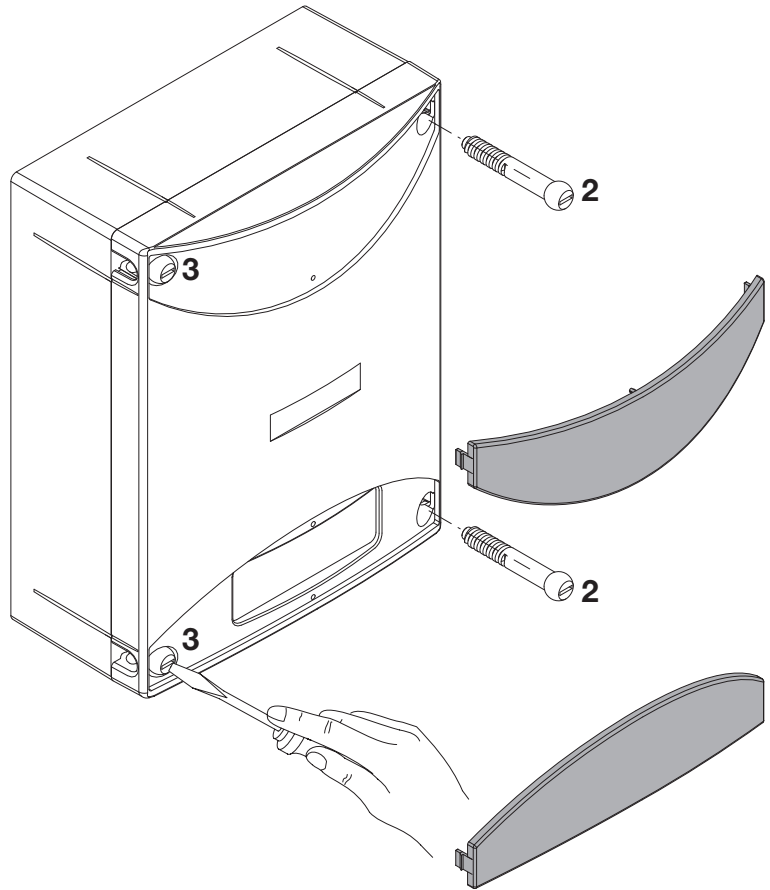
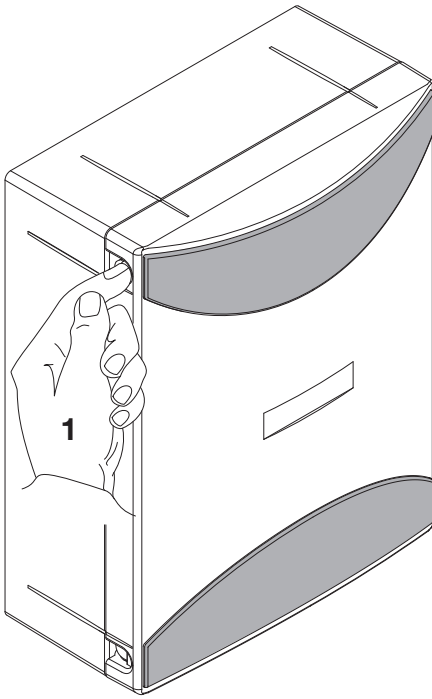
- DIP 1 "TCA"** The automatic closure is enabled or disabled  
Off: disabled automatic closure  
On: enabled automatic closure
- DIP 2 "Prelam."** Forewarning flashing light enabled or disabled  
Off: disabled forewarning flashing light  
On: enabled forewarning flashing light. The flashing light is activated 3 s before the starting of the motor.
- DIP 3 "Braking"** Braking is enabled or disabled.  
Off: disabled braking.  
With the "SWO" opening limit switch, the motor stopping is delayed by 1 sec to allow a better opening.  
With the "SWC" closing limit switch, the motor stopping is delayed by 1 sec to allow a better closing  
On: Braking activated in the opening and closing phase. The motor stopping is delayed by 3 sec with respect to the triggering of the opening and closing limit switches to allow the completion of 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 "TORQUE"** The max torque available is selected with this Dip-Switch.  
Off: Reduced torque in the closing phase.  
This function increases the sensitiveness of the amperometric sensor during closure, thus increasing the safety level of the system. Therefore, this function requires a perfectly balanced door, submitted to periodic checking in order to avert any faulty triggering of the sensor.  
On: Torque at regular operation.

<b>DIP 6 “Cond.”</b>	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.
<b>DIP 7 “VRail”</b>	Motor speed selection in the braking phase Off: Minimum braking speed . On: Maximum braking speed .
<b>DIP 8</b>	<b>N/A</b>

### **LED Diagnostics**

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

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



- 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.

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