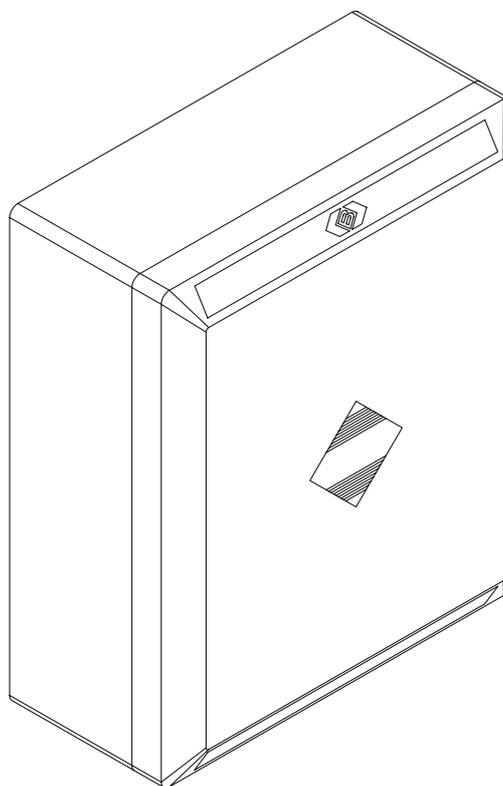


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Rev. 10/04/02

BENINCA®

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

DA.93AM



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

DA.93AM

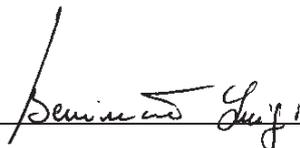
è conforme alle seguenti disposizioni pertinenti:
complies with the following relevant provisions:
folgenden einschlagigen Bestimmungen entspricht:
correspond aux dispositions pertinentes suivantes:
satisface las disposiciones pertinentes siguientes:
zgodny jest z poniżej wyszczególnionymi rozporządzeniami:

Direttiva sulla compatibilità elettromagnetica (89/336/
CCE, 93/68/CEE)
EMC guidelines (89/336/EEC, 93/68/EEC)
EMV-Richtlinie (89/336/EWG, 93/68/EWG)
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/EWG, 93/68/EWG)

Norme armonizzate applicate in particolare:
Applied harmonized standards, in particular:
Angewendete harmonisierte Normen, insbesondere:
Normes harmonisées utilisées, notamment:
Normas armonizadas utilizadas particularmente:
Normy standard najczęściej stosowane:

EN 55022, EN 61000-3-2, EN 61000-3-3, EN 50082-1

Data/Firma

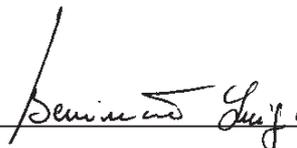


Direttiva sulla bassa tensione (73/23/CEE, 93/68/CEE)
Low voltage guidelines (73/23/EEC, 93/68/EEC)
Tiefe Spannung Richtlinie (73/23/EWG, 93/68/EWG)
Directive bas voltage (73/23/CEE, 93/68/CEE)
Reglamento de bajo Voltaje (73/23/MCE, 93/68/MCE)
Wytyczna odnośnie niskiego napięcia (73/23/EWG, 93/
68/EWG)

Norme armonizzate applicate in particolare:
Applied harmonized standards, in particular:
Angewendete harmonisierte Normen, insbesondere:
Normes harmonisées utilisées, notamment:
Normas armonizadas utilizadas particularmente:
Normy standard najczęściej stosowane:

EN 60204-1, EN 60335-1

Data/Firma



BENINCA®

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

DA.93AM Control unit with microcontroller

The control unit "DA.93AM" can be used with motors having a total power not exceeding 750W.

Installation instructions.

- a) The electric installation and the operating logic must comply with regulations in force.
- b) It is advisable to keep the power cables (motor, power supply) detached from the control cables (push-buttons, photocells, radio). In order to avert any possible interference it is recommended to provide for and use two separate sheaths (see EN 60204-1 15.1.3).
- c) Before powering the unit, check again all connections which have been carried out.
- d) Check that the presettings of the Dip-Switches are correct.
- e) When the unit is powered, the LED "POWER" must be lit; in the negative, check that fuses are in good condition and that 230Vac 50Hz power supply is present between terminals 1 and 2 (INPUT 230VAC - keep to line/ground connection).
- f) The N.C. inputs not used must be connected to the common "+V".

Input/Output functions

Terminal No.	Function	Description
(1,2)	INPUT 230VAC	Control unit 230Vac 50 Hz power supply (respect phase/neutral wire position).
(3,4,5)	COM/APRE/ CHIUDE M1	Connection to the corresponding 230Vac 50 Hz motor terminals (delayed in closing) (the earth wire (green/yellow) must be connected).
(6,7,8)	COM/APRE/ CHIUDE M2	Connection to the corresponding 230Vac 50 Hz motor terminals (delayed in opening) (the earth wire (green/yellow) must be connected).
(9,10)	LAMP230	Connection to the 230Vac blinker.
(11,12)	CORTESIA	Connection to the 230Vac courtesy lamp.
(13,14)	OUT 24VAC	24Vac auxiliary power supply output (1Amax.).
(15,16)	ELS	12Vac output for electric lock.
(17,18)	SCA	24Vdc "Gate open warning light" contact (250mA). Function for the "Gate open warning light" contact. <ul style="list-style-type: none"> •If the gate is closed, the warning light is turned off. •If the gate is opening, the warning light flashes slow (about 1Hz). •If the gate is closing, the warning light flashes fast (about 2Hz). •If the gate is open, or the race is interrupted manually (PP - STOP), the warning light remains turned on. N.B.: The led is driven by a relay, thus the commutation can be normally heard during the normal function of the control board.
(19,20)	+V	Common connection to all the control inputs.
(21)	FTCA	Opening photocell receiver input (n.c. contact) (photocell far from the gate).
(22)	FTCC	Closing photocell receiver input (n.c. contact) (photocell near the gate).
(23)	FCA1	Limit switch input - M1 motor opening (n.c. contact).
(24)	FCA2	Limit switch input - M2 motor opening (n.c. contact) - opening delay.
(25)	FCC	Limit switch input - M1 and M2 motor closing (n.c. contact).
(26)	STOP	STOP button input (n.c. contact).
(27)	PED	PEDESTRIAN button input (n.o. contact).
(28)	P.P.	STEP-by-STEP button input (n.o. contact).
(29)	APRE	OPEN button input (n.o. contact).
(30)	CHIUDE	CLOSE button input (n.o. contact).
(31,32)	ANT.	Input of radio board antenna
(33,34)	RX 2CH.	Radio board 2nd channel contact (n.o. contact).
J1	RTX	Connector for receiver board of the remote control
JP1	SPUNTO	Selection jumper, "PICKUP" of starting motors 1) Closed : enabled pickup 2) Open : inhibited pickup

The power of motors can be controlled through the 5-step commutator "MOTOR POWER".

The courtesy lamp switches off automatically after 150 seconds from the last operation being carried out. The “automatic closure” function is inhibited until the OPEN push-button is pressed (closed contact).

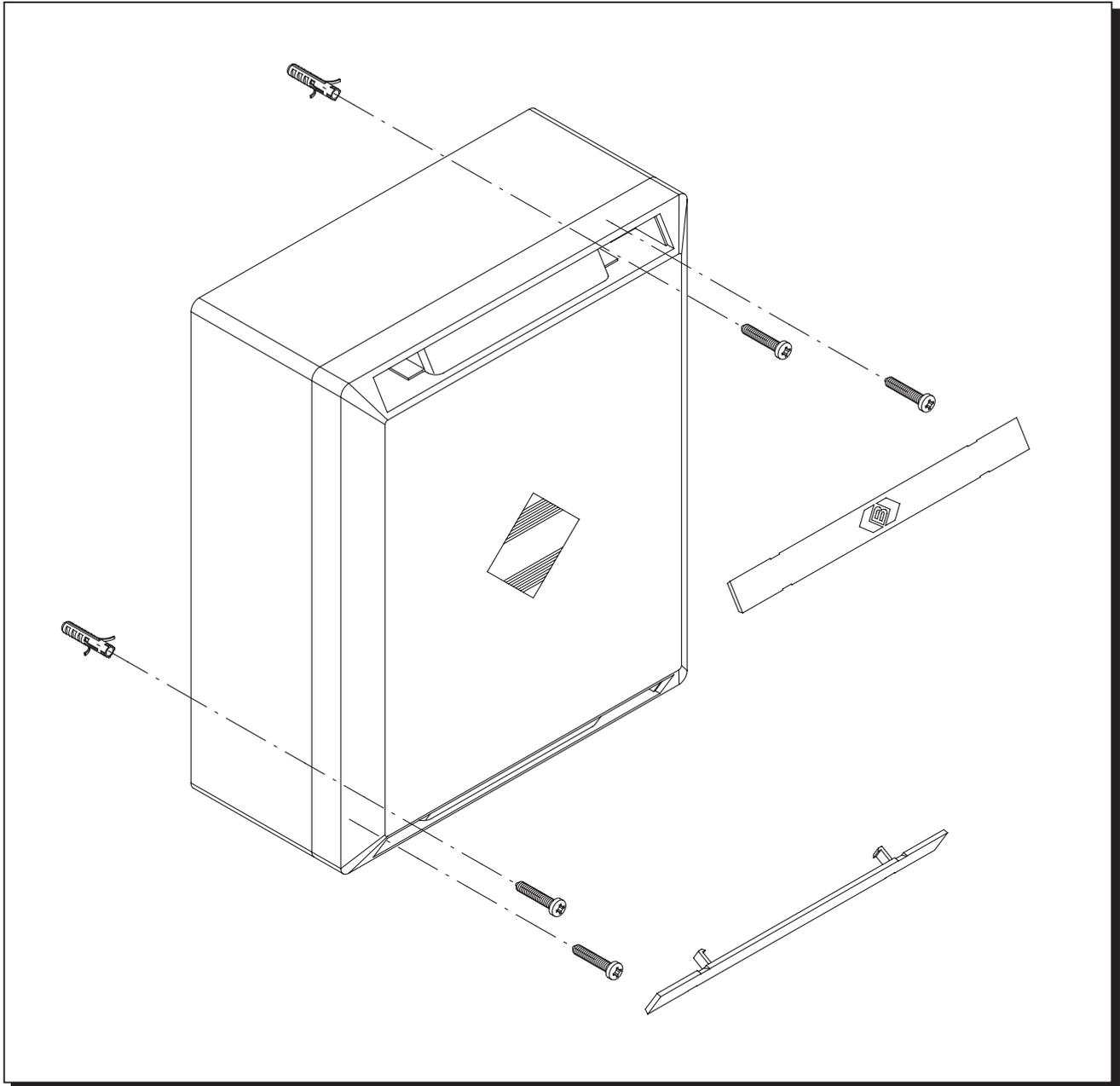
Dip-switch functions

N.B.: Every change of functions have to be done without electricity.

- DSW1=** This selects the type of functioning of the P.P. button and Remote control.
Off= "OPEN" - "STOP" - "CLOSE" - "STOP" functioning
On= "OPEN" - "CLOSE" functioning.
- DSW2=** Selection of delayed motor 2 in the opening phase.
Off= 1 second
On= 3 seconds
- DSW3=** With this Dip-Switch the forewarning flashing is enabled or inhibited 4 seconds before each operation.
Off= Foreflashing is inhibited
On= Foreflashing is enabled
- DSW4=** With this Dip-Switch the electric lock is enabled or inhibited.
Off= Electric lock is inhibited
On= Electric lock is enabled
- DSW5=** It inhibits or enables the “stroke” function for the release of the electric lock. The function can be activated only if the Dip-Switch “DSW4” is in position ON.
Off= Stroke inhibited
On= Stroke enabled
- DSW6=** The simultaneous start of the motors is inhibited or enabled (the times preset by Dip-Switch “DSW2” and by trimmer TRAC are bypassed).
Off= Simultaneous starting inhibited
On= Simultaneous starting enabled
- DSW7=** Multiple-user function for blocks of flats: the “P.P.” and “PED” inputs control only the opening of the system.
Off= multiple-user function inhibited
On= Multiple-user function enabled
- DSW8=** It enables or inhibits the intervention of input “PED” during the closing phase of both motors.
Off= Inhibited
On= Enabled. In this case the “PED” input has the same function of the “P.P.” input, according to the presettings of the Dip-Switch “DSW1”.
- DSW9=** Operating mode for ELS output (if enabled by Dip 4).
Off= ELS output is activated only when the closure is completed and the control unit is on.
On= ELS output is activated at every opening operation.
- DSW10=** It enables or inhibits the automatic closure.
Off= automatic closure is enabled
On= automatic closure is inhibited
For safety reasons this function is always inhibited after a “STOP” control signal is given and the control unit has been switched on.

Trimmer functions

- TCA=** It allows the regulation of the automatic closure when the Dip-switch “DSW10”= Off.
The adjustment varies from 10 sec. minimum to 4 minutes maximum.
The minimum time is obtained by turning the trimmer completely anticlockwise.
- TL=** It allows the adjustment of the operating time of the automatic system. When the time has elapsed the software protection will be activated.
The adjustment varies from 5 sec. minimum to 100 sec. maximum.
The minimum time is obtained by turning the trimmer completely anticlockwise.
- TRAC=** It allows the adjustment of the motor 1 delay in the closing phase.
The adjustment varies according to the position of the “DSW2” Dip-Switch.
Off= from 1 sec. minimum to 12 sec. maximum
On= from 2 sec. minimum to 24 sec. maximum
The minimum time is obtained by turning the trimmer completely anticlockwise.



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