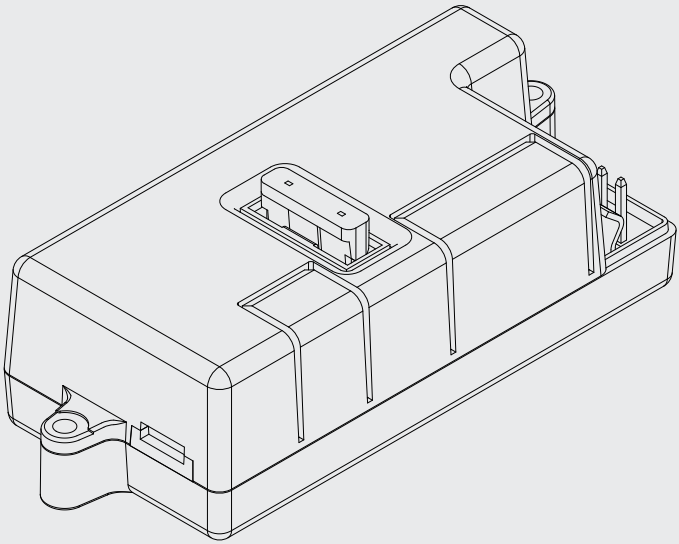
L8542722
11/2013 rev 1

CBY.24V



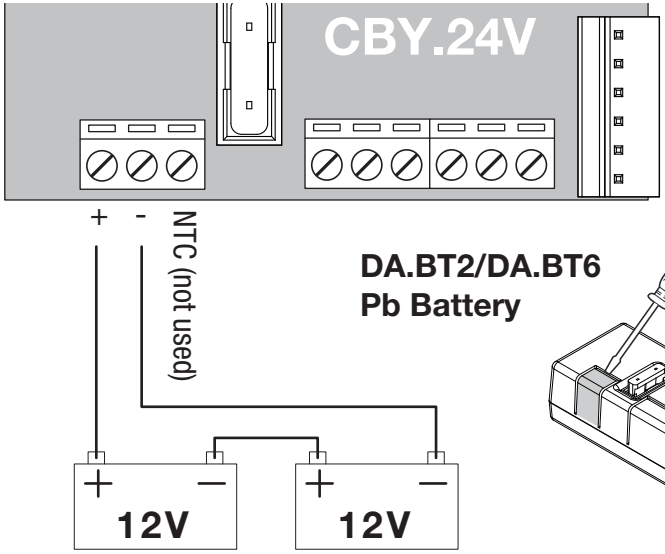
BENINCÀ®
TECHNOLOGY TO OPEN

CE

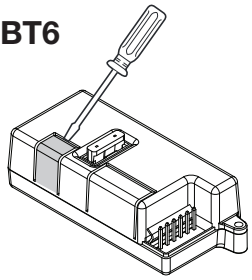
UNIONE NAZIONALE COSTRUTTORI
AUTOMATISMI PER CANCELLI, PORTE
SERRANDE ED AFFINI

UNAC

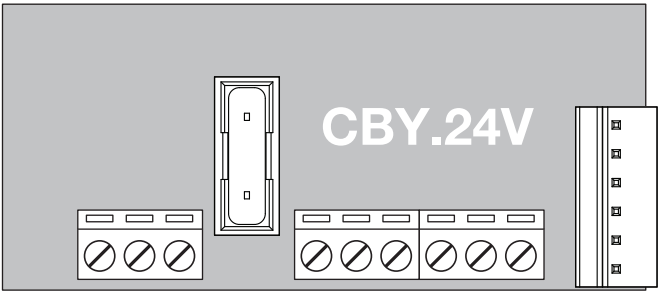
1

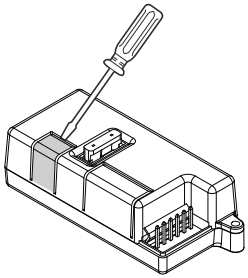


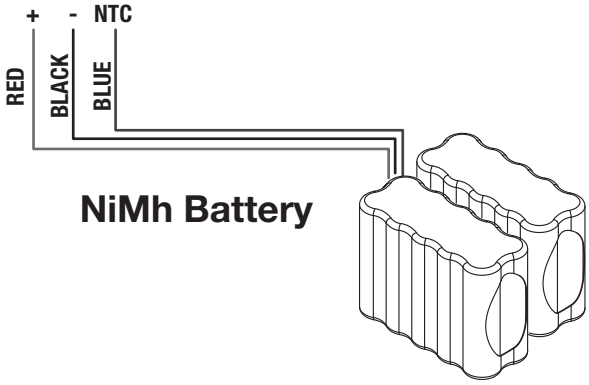
DA.BT2/DA.BT6
Pb Battery



2

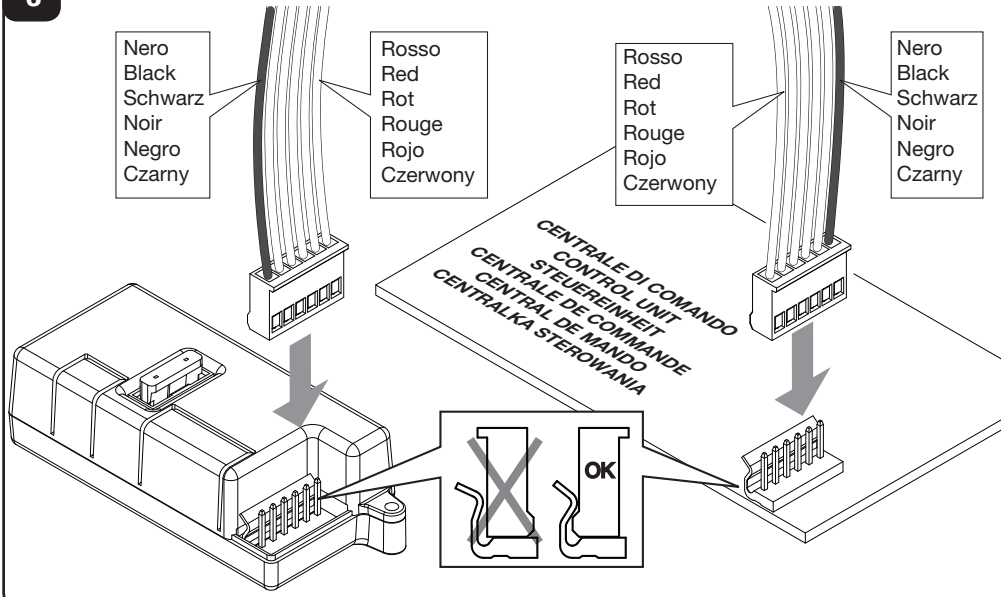




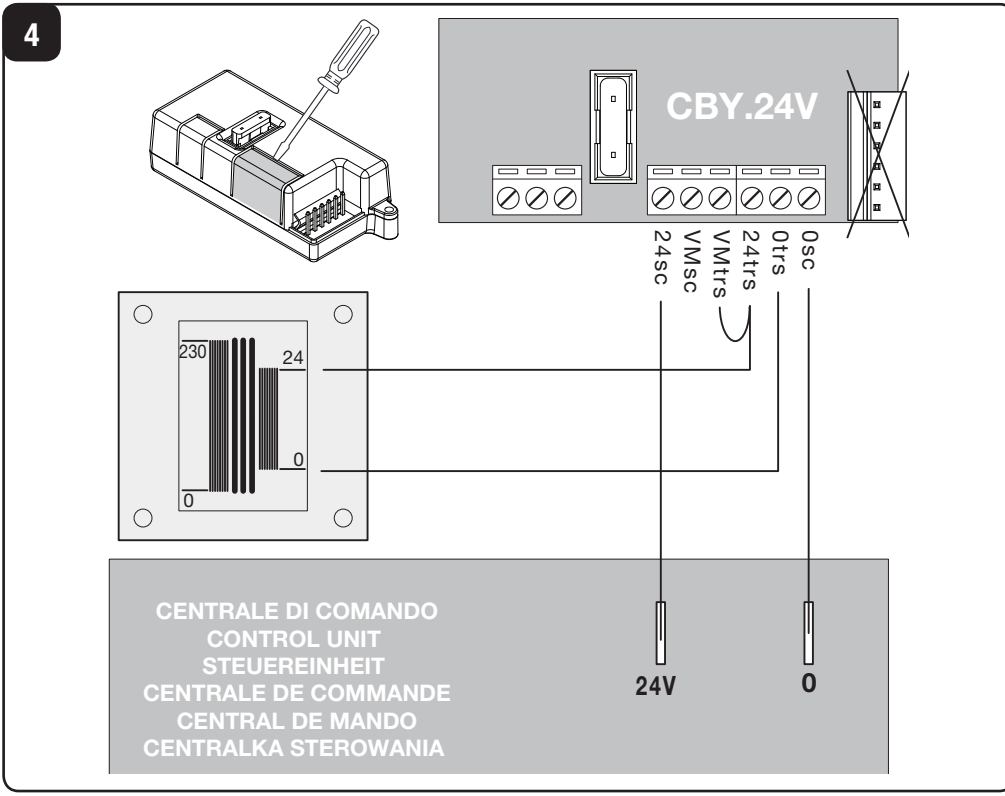


NiMh Battery

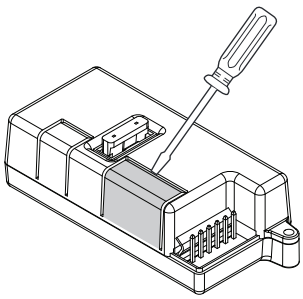
3

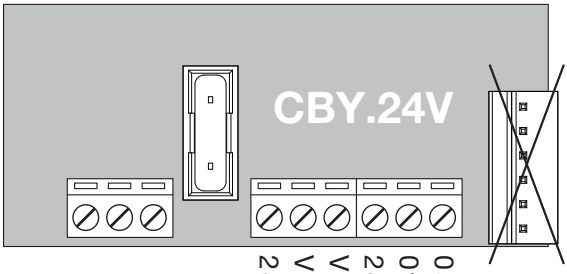

Nero
Black
Schwarz
Noir
Negro
Czarny
Rosso
Red
Rot
Rouge
Rojo
Czerwony
Rosso
Red
Rot
Rouge
Rojo
Czerwony
Nero
Black
Schwarz
Noir
Negro
Czarny
CENTRALE DI COMANDO
CONTROL UNIT
STEUEREINHEIT
CENTRALE DE COMMANDE
CENTRAL DE MANDO
CENTRALKA STEROWANIA
OK

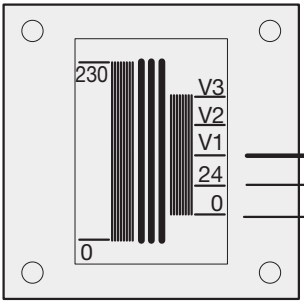
4

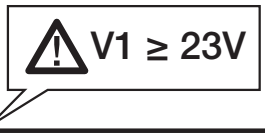

CBY.24V
24sc
VMsc
VMtrs
24trs
0trs
0sc
230
24
0
0
CENTRALE DI COMANDO
CONTROL UNIT
STEUEREINHEIT
CENTRALE DE COMMANDE
CENTRAL DE MANDO
CENTRALKA STEROWANIA
24V
0

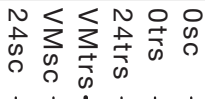
5











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

CBY.24V ENGLISH

Battery charger card for the connection of emergency batteries to control units for 24VDC motors.

Either lead batteries or NiMh batteries can be used:

- Connection to lead batteries model DA.BT2/DA.BT6

Figure 1 shows the connection of lead, 12V batteries. **Terminal NTC must not be connected.**

- Connection of NiMh batteries

Figure 2 shows the connection of NiMh, 24Vbatteries.

IMPORTANT: The rapid connector of NiMh should be cut. Cut one wire at a time to avert any short-circuits.

Connect the three wire while respecting the colours:

Red: +/Black: - /Blue: NTC (thermal sensor).

As regards the connection to the control unit, 3 different ways are available, according to the type of control unit:

- Control unit with rapid connector for battery charger:

If the control unit is provided with a rapid connector for the battery charger, it is sufficient to connect the two connectors with the cable supplied, as shown in Figure 3.

NOTE: Some control units are provided with rapid connectors for other uses, e.g. radio receivers.

Before proceeding to the wire connection, check on the user's manual supplied with the control unit that the rapid connector is actually supplied for battery chargers.

- Control unit with 0V/24V inputs:

If the control unit is connected to the transformer through only two connections (0V/24V), disconnect the transformer and, after removing the terminal cover, carry out the wire connections as shown in Figure 4. Terminals VMTRS and 24 TRS should be short-circuited.

- Control unit with 0V/24V inputs and motor speed input:

Some 24V control units are equipped with an additional wire connection which regulates the motor speed to the various values available in the transformer.

In this case, disconnect the transformer and, after removing the terminal cover, carry out the wiring as shown in Figure 5.

The following table describes the terminal board in detail.

CAUTION!

During operation, should a power failure occur, the 24V accessory output of the control unit is polarised.

It is mandatory to check the correct operation of accessories, as described in the user's manual of the control unit.

Input/Output functions	
+	+ 24VDC from the emergency battery
-	- 24VDC from the emergency battery
NTC	Thermal sensor (for NiMh batteries)
0sc	Connect to 0V connector of the control unit
0trs	Connect to 0V secondary terminal of the transformer
24trs	Connect to the 24V secondary terminal of the transformer (from 23 to 28VAC).
VMtrs	Connect to secondary terminal of the transformer (23V min.). CAUTION!: Select the motor operating speed. To perform a correct connection, make reference to instructions of the control unit.
VMsc	Connect to the Vmot connector of the control unit
24sc	Connect to the VAux of the control unit.

Specification:	
Charge current	27.2 VDC
Charge voltage	27,2 Vdc
Charge time (for 2Ah batteries)	10 ore circa

Diagnostics

The board features two LEDs that indicate the status of the system:

CHARGER STATUS	GREEN LED	RED LED
Normal operation - battery not charging	Continuous flashing	Off
Battery charging	On	On
Battery Operation	Fast blinking	Off
Battery operation (with battery and load disconnected)	1 short blink with pause	1 short blink with pause
Check battery disconnected	Fast blinking	Fast blinking
NiMh battery in thermal protection	On	Fast blinking

Notes.

During the normal network powering, the card maintains the battery charged.

If a power failure occurs, the card powers the system through the batteries. A F10A fuse protects the control unit during operation with the emergency battery.

The buffer battery operates until 18V is reached. The charge is reduced progressively. When this value is reached, the battery is disconnected.