

QUADRO COMANDO
CONTROL PANEL
ARMOIRE DE COMMANDE
SCHALTAFEL
CUADRO DE MANDO

ZL150

CARATTERISTICHE GENERALI

ITALIANO

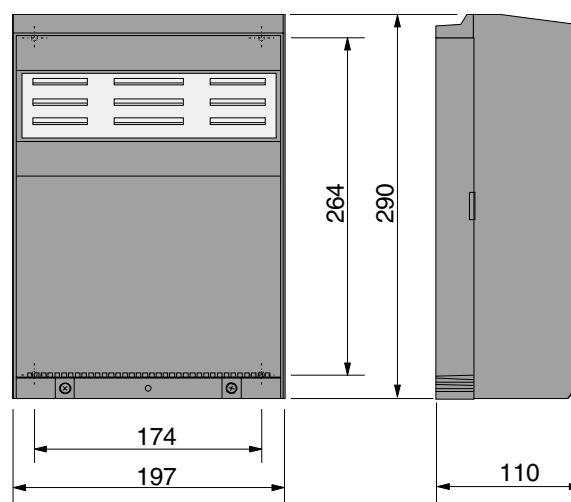
Descrizione

Il quadro comando ZL150 è adatto al comando di automazioni per cancelli a battente della serie FLEX alimentati a (24V d.c.) con potenza fino a 48W, frequenza 50÷60 Hz. Progettato e costruito interamente dalla CAME S.p.A., risponde alle vigenti norme UNI 8612. Contenitore in ABS con grado di protezione IP54, dotato di presa per il riciclo d'aria.

Il circuito va alimentato con tensione di 230V (a.c.) sui morsetti L1-L2 e protetto in ingresso con un fusibile di linea da 1.6A.

I dispositivi di comando sono a bassa tensione e protetti con fusibile da 1.6A, mentre il motoriduttore e l'elettroserratura sono protetti con fusibile da 5A.

La potenza complessiva degli accessori (24V) non deve superare i 40W.



Sicurezza

Le fotocellule possono essere collegate e predisposte per:

- Riapertura in fase di chiusura (2-C1), le fotocellule rilevando un ostacolo durante la fase di chiusura del cancello, provocano l'inversione di marcia fino alla completa apertura;
 - Richiusura in fase di apertura (2-CX, dip 8OFF-10OFF), le fotocellule rilevando un ostacolo durante la fase di apertura del cancello, provocano l'inversione di marcia fino alla completa chiusura;
 - Stop parziale, arresto del cancello se in movimento con conseguente predisposizione alla chiusura automatica (2-CX, dip 8OFF-10ON);
 - Stop totale (1-2), arresto del cancello con l'esclusione del ciclo di chiusura automatica; per riprendere il movimento bisogna agire sulla pulsantiera o sul radiocomando;
- Nota:** Se un contatto di sicurezza normalmente

chiuso (2-C1, 2-CX, 1-2) si apre, viene segnalato dal lampeggio del LED segnalazione.

Accessori opzionali

- Lampada di segnalazione "cancello aperto" (3W). Lampada che segnala la posizione di apertura del cancello a battente, si spegne quando il cancello attiva il finecorsa chiude.(10-5);
- Elettroserratura (2-S);
- Scheda LB54. Alimenta i motoriduttori tramite batterie nel caso di mancanza di energia elettrica. Al ripristino della linea esegue anche la loro ricarica.

Description

The ZL150 control panel is suitable for controlling automatic systems for the FLEX series swing gates powered by 24V d.c. with capacity up to 48 W, frequency 50-60 Hz.

Wholly designed and built by CAME S.p.A., it meets UNI 8612 regulations in force. ABS case, which has an IP54 protection level, with air recycling inlet.

The circuit requires 230V (a.c.) at terminal blocks L1-L2 and the inlet is protected with 1,6A fuse. The command devices are low voltage and protected by a 1.6A fuse, whereas the gearmotor and electric lock are protected by 5A fuses.

The accessories' total wattage (24V) must not exceed 40W.

Safety

Photocells can be connected to obtain:

- *Re-opening* during closure (2-C1), if the photocells identify an obstacle while the gate is closing, they will reverse the direction of movement until the gate is completely open;
- *Re-closing* during opening (2-CX, dip 8OFF-10OFF), if the photocells identify an obstacle while the gate is opening, they will reverse the direction of movement until the gate is completely closed;
- *Partial stop*, shutdown of moving gate, with activation of an automatic closing cycle (2-CX, dip 8OFF-10ON);
- *Total stop* (1-2), shutdown of gate movement without automatic closing; a pushbutton or radio remote control must be actuated to resume movement.

NB: If an NC safety contact (2-C1, 2-CX, 1-2) is opened, the LED will flash to indicate this fact.

Optional accessories

- *Gate open pilot lamp (3W)*. A lamp that signals the gate's open position and that goes out when the gate is in the closed position. Connected to terminals 10-5.
- *Electric lock (2-S)*;
- *LB54 Board*. Powers the reduction gears through batteries in case of a power outage. After the power supply is restored, it also recharges the batteries.

Other functions

- *Automatic closing*. The automatic closing timer is automatically activated at the end of

the opening cycle. The preset, adjustable automatic closing time is automatically interrupted by the activation of any safety system, and is deactivated after a STOP command or in case of power failure;

- *Obstacle presence detection*: When the motor is stopped (gate is closed, open or half-open after an emergency stop command), the transmitter and the control pushbutton will be deactivated if an obstacle is detected by one of the safety devices (for example, the photocells);
- *Hammer movement*. At every opening command, the wings press the closing stop-ledge for a second, thus facilitating the release operation of the electric lock connected to terminals 2-S.

It is only active if the wings are closed and at the end of the work time or at the 1st manoeuvre after the system has been powered;

- *"Operator present" function*: Gate operates only when the pushbutton is held down (the radio remote control system is deactivated);
- *Partial opening*, second motor door opening, adjusted with TR2M trimmer; it is activated by collecting to the terminals 2-3P;
- *Pre-flashing* for 5 seconds, while the door is opening and closing;
- *Type of command*:
 - open-stop-close-stop for pushbutton and radio transmitter;
 - open-close-reverse for pushbutton and radio transmitter;
 - open only for radio transmitter.

Adjustments

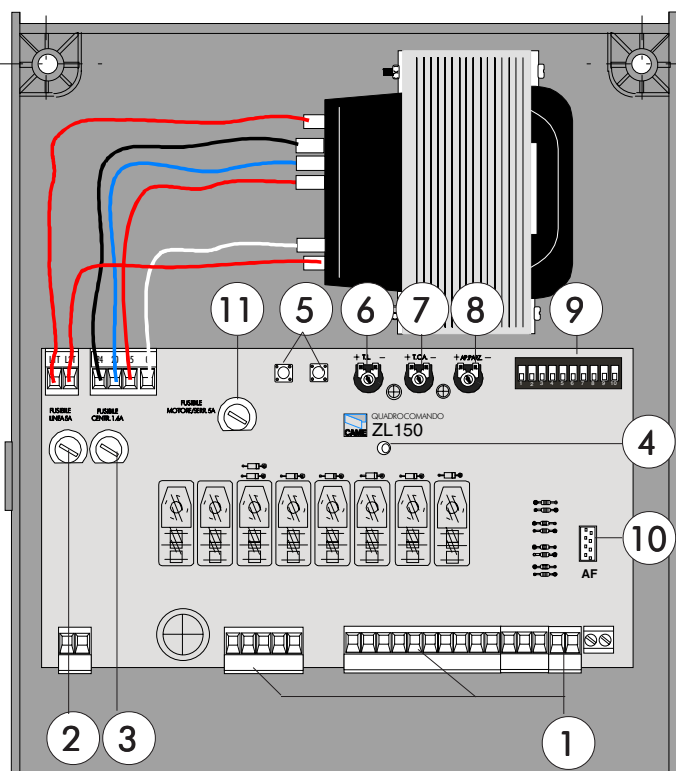
- Automatic closure time;
- Partial opening time and delay in closing of the M2 motor;
- Operating time.



Important! Disconnect the unit from the main power lines before carrying out any operation inside the unit.

COMPONENTI PRINCIPALI (I)

- 1 Morsettiere di collegamento
- 2 Fusibile di linea 1.6A
- 3 Fusibile centralina 1.6A
- 4 LED di segnalazione
- 5 Pulsanti memorizzazione codice radio
- 6 Trimmer di regolazione tempo lavoro
- 7 Trimmer di regolazione tempo in chiusura automatica
- 8 Trimmer di regolazione ritardo in chiusura 2° motore e apertura parziale
- 9 Selettore funzioni a 10 dip (vedi pag. 8)
- 10 Innesto scheda radiofrequenza (vedi tabella)
- 11 Fusibile motore/elettroserratura 5A



MAIN COMPONENTES (GB)

- 1 Terminal block for external connections
- 2 1.6A line fuse
- 3 1.6A central control unit fuse
- 4 Signal LED
- 5 Radio-code save buttons
- 6 Trimmer for adjustment operating time
- 7 Trimmer for adjustment automatic closing
- 8 Trimmer for adjustment delay on closing cycle motor n°2 and partial opening
- 9 10-dip function switch (see p.9)
- 10 Radiofrequency board socket (see table)
- 11 5A motor/electric lock fuse

PRINCIPAUX COMPOSANTS (F)

- 1 Plaque à bornes de connexion
- 2 Fusible de ligne 1.6A
- 3 Fusible boîte 1.6A
- 4 LED de signalisation
- 5 Boutons-poussoir mémorisation code radio
- 6 Trimmer de réglage temps de fonctionnement
- 7 Trimmer de réglage fermeture automatique
- 8 Trimmer de réglage retard fermeture moteur 2^e et ouverture partielle
- 9 Selecteur de fonctions à 10 interrupteurs à positions multiples (voir pag.9)
- 10 Branchement carte radiofréquence (voir tableau)
- 11 Fusible moteur/serrure électrique 5A

HAUPTKOMPONENTEN (D)

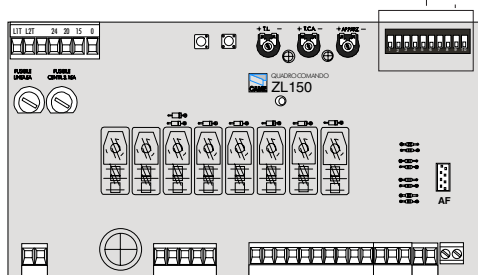
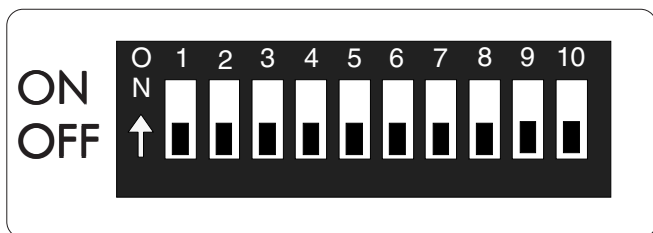
- 1 AnschlußKlemmenleiste
- 2 Hauptsicherung 1.6A
- 3 Schaltkastensicherung 1.6A
- 4 LED Kontrolleuchte zur Anzeige
- 5 Code-Speichertasten
- 6 Trimmer zur Einstellung Laufzeit
- 7 Trimmer zur Einstellung der Schließautomatik
- 8 Trimmer zur Einstellung Schließverzögerung Motor 2 und Teilweises Öffnung
- 9 Wählschalter für Funktionen mit 10 Dip (sehen S.10)
- 10 Steckanschluß Funkfrequenz-Platine (sehen Tabelle)
- 11 Elektroschloß/Motorsicherung 5A

PRINCIPALES COMPONENTES (E)

- 1 Caja de bornes las conexiones
- 2 Fusible de línea 1.6A
- 3 Fusible para central 1.6A
- 4 Indicador luminoso
- 5 Teclas memorización códigos
- 6 Trimmer de regulación tiempo trabajo
- 7 Trimmer de regulación tiempo cierre automático
- 8 Trimmer de regulación retraso cierre 2° motor y apertura parcial
- 9 Selector de funciones con 10 dip (vedas pag.10)
- 10 Conexión tarjeta radiofrecuencia (ver tabla)
- 11 Fusible motor/electrocerradura 5A

DIP-SWITCH 10 VIE
 10-WAY DIP-SWITCH
DIP-SWITCH 10 VOIES
 ZEHNWEG-DIP-SWITCH
DIP-SWITCH 10 VÍAS

ITALIANO



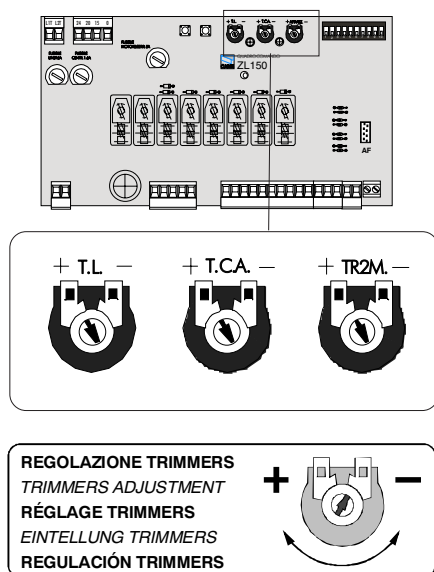
- 1 ON** Chiusura automatica **attivata;**
(1OFF-disattivata)
- 2 ON** "Apre-stop-chiude-stop" con pulsante (2-7) e radiocomando (scheda AF inserita) **attivata;**
- 2 OFF** "Apre-chiude" con pulsante (2-7) e radiocomando (scheda AF inserita) **attivata;**
- 3 ON** "Solo apertura" con radiocomando (scheda AF inserita) **attivata;**
(3OFF-disattivata)
- 4 ON** Prelampeggio in apertura e chiusura **attivato; (4OFF-disat.)**
- 5 ON** Rilevazione presenza ostacolo **attivato; (5OFFdis.)**
- 6 OFF** "Uomo presente" (esclude il funzionamento del radiocomando) **disattivata; (6ON - attivata)**
- 7 ON** Colpo d'ariete **attivato;** (per facilitare lo sgancio della serratura) **7OFF-disattivato**
- 8 OFF - 10OFF** Funzione di richiusura in fase di apertura (collegare il dispositivo di sicurezza sui morsetti 2-CX) **attivato;**
- 8 OFF - 10ON** Funzione di stop parziale (collegare il dispositivo di sicurezza sui morsetti 2-CX) **attivato;**
(se non vengono utilizzati i dispositivi su 2-CX, posizionare il dip in ON)
- 9 OFF** Funzione di riapertura in fase di chiusura **attivato;** con dispositivo di sicurezza collegato ai morsetti 2-C1, (se non viene utilizzato il dispositivo, selezionare il dip in ON)

ENGLISH

- 1 ON** Automatic closure **enabled; (1OFF-disabled)**
- 2 ON** "Open-stop-close-stop" with button (2-7) and radio control (AF board inserted) **enabled;**
- 2 OFF** "Open-close" with button (2-7) and radio control (AF board inserted) **enabled;**
- 3 ON** "Only opening" with radio control (AF board inserted) **enabled; (3OFF-disabled)**
- 4 ON** Pre-flashing (opening and closing) **enabled; (4OFF-disabled)**
- 5 ON** Obstacle detection device **enabled; (5OFF - disabled)**
- 6 OFF** "Operator present" (radio remote control is deactivated when function is selected) **disabled; (6ON-enabled)**
- 7 ON** Hammer movement operation **enabled;** (this function helps unlock the electric lock) **7OFF-disabled**
- 8OFF - 10OFF** Re-closure during opening (connect the safety device on terminals (2-CX) **enabled;**
- 8OFF - 10ON** Partial stop (connect the safety device on terminals (2-CX) **enabled;**
(if the devices on the 2-CX terminals are not used, set Dip 8 in ON)
- 9 OFF** Re-opening in closing phase (connect the safety device on terminals 2-C1) **enabled;** if not used, set the dip-switch to ON.

FRANÇAIS

- 1 ON** Fermeture automatique **activé; (1OFF-éteinte)**
- 2 ON** "Ouvre-stop-ferme-stop" avec bouton (2-7) et commande-radio (carte AF insérée) **activé;**
- 2 OFF** "Ouvre-ferme" avec bouton (2-7) et commande-radio (carte AF insérée) **activé;**
- 3 ON** "S seulement ouverture" avec commande-radio (carte AF insérée) **activé; (3OFF-éteinte)**
- 4 ON** Preclignotement pendant la phase d'ouverture et de fermeture **activé; (4OFF-éteinte.)**
- 5 ON** Dispositif de détection d'obstacle **activé; (5OFF éteinte)**
- 6 OFF** Fonction avec "homme mort" (exclut la fonction radiocommande) **éteinte; (6ON - activé)**
- 7 ON** Fonction coup de bélier **activé;** (pour faciliter le déblocage de la serrure) **7OFF-éteinte**
- 8OFF - 10OFF** Réfermeture en phase d'ouverture (relier le dispositif de sécurité aux bornes 2-CX) **activé;**
- 8OFF - 10ON** Stop partiel (relier le dispositif de sécurité aux bornes 2-CX) **activé;**
(si le dispositif sur 2-CX ne sont pas utilisés, positionner le dip 8 sur ON)
- 9 OFF** Réouverture en phase de fermeture **activé;** relier le dispositif de sécurité aux bornes 2-C1; s'il n'est pas utilisé, positionner l'interrupteur à positions multiples sur ON.



ITALIANO

Trimmer T.L. = Regolazione tempo di lavoro da un minimo di 15" a un massimo di 120".

Trimmer T.C.A. = Regolazione tempo di chiusura automatica da un minimo di 1" a un massimo di 120".

Trimmer TR2M = Regolazione ritardo in chiusura 2° motore (min. 0", max. 15") e contemporaneamente apertura parziale (min. 0", max. 30").

ENGLISH

Trimmer T.L. = Adjusts of operating time from a minimum of 15" to a maximum of 120".

Trimmer T.C.A. = Adjusts automatic closing time from a minimum of 1" to a maximum of 120".

Trimmer TR2M = Adjustment delay during closure of 2nd motor (min. 0", max. 15") and simultaneously partial opening time (min. 0", max. 30").

FRANÇAIS

Trimmer T.L. = Réglage du temps de fonctionnement d'un minimum de 15" à un maximum de 120".

Trimmer T.C.A. = Réglage du temps de fermeture automatique d'un minimum de 1" à un maximum de 120".

Trimmer TR2M = Réglage retard en fermeture 2° moteur (min. 0", max. 15") et en même temps ouverture partielle (min. 0", max. 30").

DEUTSCH

Trimmer T.L. = Laufzeit mit mindestens 15" und höchstens 120 " eingestellt werden kann.

Trimmer T.C.A. = Timer, auf dem die Verzögerung für das automatische Schließen mit mindestens 1" und höchstens 120" eingestellt werden kann.

Trimmer TR2M = Einstellung der Verzögerungszeit vom 2. Motor beim Schließen (min. 0", max. 15") und gleichzeitig vom Teilöffnen (min. 0", max. 30").

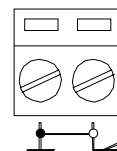
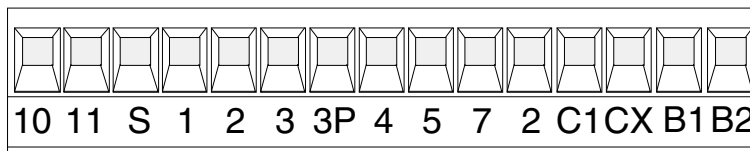
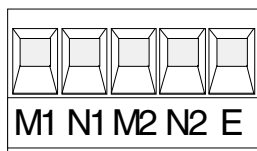
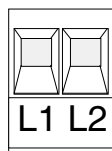
ESPAÑOL

Trimmer T.L. = Regulación tiempo de trabajo, desde un mínimo de 15" hasta un máximo de 120".

Trimmer T.C.A. = Regulación tiempo de cierre automático, desde un mínimo de 1" hasta un máximo de 120".

Trimmer TR2M = Regulación del retardo durante el cierre del 2° motor (min. 0", máx. 15") y contemporáneamente apertura parcial (min. 0", máx. 30").

COLLEGAMENTI ELETTRICI - ELECTRICAL CONNECTIONS - BRANCHEMENTS ÉLECTRIQUES
ELEKRISCHE ANSCHLÜSSE - CONEXIONES ELÉCTRICAS



L1 ————○
L2 ————○

Alimentazione quadro comando - 230V (a.c.)
Power supply for control unit - 230V (a.c.)
Alimentation armoire de commande - 230V (c.a.)
Stromversorgung Steuergerät - 230V (Wechselstrom)
Alimentación cuadro de mando - 230V (a.c.)

M1 ————○
N1 ————○

Collegamento 1 Motore (ritardato in apertura)
Connection for 1 motor (delayed in opening)
Connection du moteur 1 (retardé en ouverture)
Ausluß Motor 1 (verzögertes Ansteuern beim Öffnen)
Conexiónado 1 motor (redardo en apertura)

M2 ————○
N2 ————○

Collegamento 2 Motore (ritardato in chiusura)
Connection for 2 motor (delayed in closing)
Connection du moteur 2 (retardé en fermeture)
Ausluß Motor 2 (verzögertes Ansteuern beim Schließen)
Conexiónado 2 motor (redardo en cierre)

| | | | | |
|---|---|--|---|---|
| Nel caso si utilizzi un solo motore, collegarlo in uscita M2 e N2. | <i>If only one reduction gear is used, connect the motor to output M2 and N2.</i> | Si on n'utilise qu'un seul moteur, brancher le moteur à la sortie M2 et N2. | <i>Wenn nur ein Motor verwendet wird, Den Motor an den Ausgang M2 und N2.</i> | Si se usa un sólo motor, conecte el motor a la salida M2 y N2. |
|---|---|--|---|---|

10 ————○
E ————○

Uscita (24V a.c. - 25W max.) in movimento (es. lampeggiatore)
(24V a.c. - 25W max.) output in motion (e.g. flashing light)
**Sortie (24V c.a. - 25W max.) en mouvement (ex. branchement
clignotant)**
*Ausgang (24V Wechselstrom - 25W max.) in Bewegung (z.B.
Blinker-Anschluß)*
**Salida de (24V a.c. - 25W max.) en movimiento (p.ej. conexión
lámpara intermitente)**

10 ————○
5 ————○

Lampada spia (24V a.c. - 3W max.) "cancello aperto"
(24V a.c. - 3W max.) "gate-opened" signal lamp
Lampe-témoin (24V a.c. - 3W max.) "portail ouverture"
Signallampe (24V a.c. - 3W max.) "Tor Öffnen"
Lampara indicadora (24V a.c. - 3W max.) "puerta abierta"

10 ————○ **Uscita 24V (a.c.) alimentazione accessori (max 40W)**
24V (a.c.) output power supply to accessories (max. 40W)
 11 ————○ **Sortie 24V (c.a.) alimentation accessoires (max 40W)**
Ausgang 24V (Wechselstrom) stromversorgung Zubehör (max 40W)
Salida 24V (a.c.) alimentación accesorios (max 40W)

2 ————○ **Collegamento elettroserratura (12V-15W max.)**
Connection for electrically-actuated lock: 12V-15W max.
 5 ————○ **Connexion serrure électrique (12V-15W max.)**
Anschluß Elektroschloß (12V-15W max.)
Conexión electrocerradura (12V-15W max.)

1 ————○ **Pulsante di stop (N.C.)**
Stop button (N.C.)
 2 ————○ **Bouton-poussoir de stop (N.F.)**
Stop-Taste (Ruhekontakt)
Tecla de parada (N.C.)

| | |
|--|-------------------|
| <p>se non usato if not used si non utilisée falls nicht verwendet si no se usa</p> | <p>1-2</p> |
|--|-------------------|

2 ————○ **Pulsante apre (N.O.)**
Open button (N.O.)
 3 ————○ **Bouton-poussoir d'ouverture (N.O.)**
Taste Öffnen (Arbeitskontakt)
Tecla de apertura (N.O.)

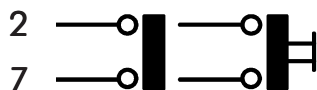
2 ————○ **Pulsante (N.O.) per apertura parziale (apertura del 2° motore)**
Pushbutton (N. O.) partial opening (opens to motor no. 2)
 3P ————○ **Bouton-poussoir (N.O.) pour ouverture partielle (ouverture du 2° moteur)**
Drucktaster (Arbeitskontakt) für Teilweises Öffnen (Öffnung eines einzigen Torflügels über Motor 2)
Tecla (N.O.) para apertura parcial (apertura del 2° motor)

2 ————○ **Pulsante chiude (N.O.)**
(N.O.) Pushbutton-close
 4 ————○ **Bouton-poussoir fermeture (N.O.)**
Taste Schließen (Arbeitskontakt)
Pulsador de cierre (N.O.)

2 ————○ **Contatto (N.C.) di riapertura in fase di chiusura**
Contact (N.C.) for re-opening during closing
 C1 ————○ **Contact (N.F.) de réouverture pendant la fermeture**
Ruhekontakt Wiederöffnen beim Schließen
Contacto (N.C.) para la reapertura en la fase de cierre

**Collegamento radio e/o pulsante (N.O.) per comandi
(vedi dip-switch 2-3 sel.funzioni)**

Contact radio and/or button for control
(see dip-switch 2-3 function selection)



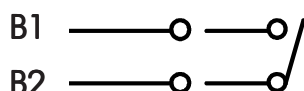
**Contact radio et/ou poussoir pour commande
(voir dip-switch 2-3 sel.fonction)**

Funkkontakt und/oder Taste Steuerung
(siehe dip-switch 2-3 Funktionswahl)

**Contacto radio y/o pulsador para mando
(vedas dip-switch 2-3 selección función)**

Uscita contatto (N.O.) Portata contatto: 5A - 24V d.c.

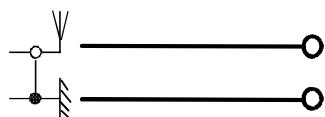
Contact output (N.O.) Resistive load: 5A - 24V d.c.



Sortie contact (N.O.) Portée contact: 5A - 24V c.c.

Ausgang Arbeitskontakt Stromfestigkeit: 5A - 24V
Gleichstrom

Salida contacto (N.O.) Carga resistiva: 5A - 24V d.c.



Collegamento antenna

Antenna connection

Connexion antenne

Antennenanschluß

Conexión antena

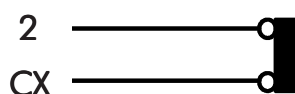
Contacto (N.C.) di richiusura durante l'apertura

Contact (N.C.) for re-closing during opening

Contact (N.F.) de réfermeture pendant l'ouverture

Runekontakt Wiederschließen beim Öffnen

Contacto (N.C.) de recierre en la fase de apertura



8 OFF - 10 OFF



Contacto (N.C.) stop parziale

Contact (N.C.) partial stop

Contact (N.F.) stop partiel

Runekontakt Teilstop

Contacto (N.C.) parada parcial

8 OFF - 10 ON

