

(ITALIANO)

CARATTERISTICHE GENERALI

Descrizione scheda comando

La scheda elettrica ZA3 è adatta al comando di automazioni per cancelli a battente della serie ATI, FERNI e FROG, alimentati a 230V con potenza fino a 600W, frequenza 50÷60 Hz. Progettata e costruita interamente dalla CAME S.p.A., risponde alle vigenti norme UNI 8612. La scheda va inserita e fissata nel contenitore in ABS (S4339 o S4340) con grado di protezione IP54, dotato di

presa per il riciclo d'aria e completo di trasformatore.

La scheda va alimentata con tensione di 230V (a.c.) sui morsetti L1-L2 e protetta in ingresso con due fusibili di linea da 5A. I dispositivi di comando sono a bassa tensione e protetti con fusibile da 3.15A.

La potenza complessiva degli accessori (24V) non deve superare i 20W.

Description of control board

The ZA3 electric board is suitable for controlling the automation of ATI, FERNI and FROG series 230V swing gates with up to 600W power and 50-60Hz frequency.

Wholly designed and built by CAME S.p.A., it meets UNI 8612 regulations in force. The board is inserted and fixed to the ABS case (S4339 or S4340), which has an IP54 protection level, with air recycling inlet and transformer.

The board requires 230V (a.c.) at terminal blocks L1-L2 and the inlet is protected with two 5A fuses. A 3.15A fuse protects the low voltage command devices.

The accessories' total wattage (24V) must not exceed 20W.

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);
- 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.

Accessories which can be connected to this unit

- "Gate open" signal light (10-5);
- Cycle lamp. The lamp which lights the manoeuvring zone: it remains lit from the moment the doors begin to open until they are completely closed (including the time required for the automatic closure). In case automatic closure is not enabled, the lamp remains lit only during movement (E-E3);
- Electric lock (11-S);

Other functions available

- **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 11-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;
- **Enabling** functions of partial stop or re-closure during opening, normally-closed contact (2-CX), select one of the two functions by setting Dip (see page 14);

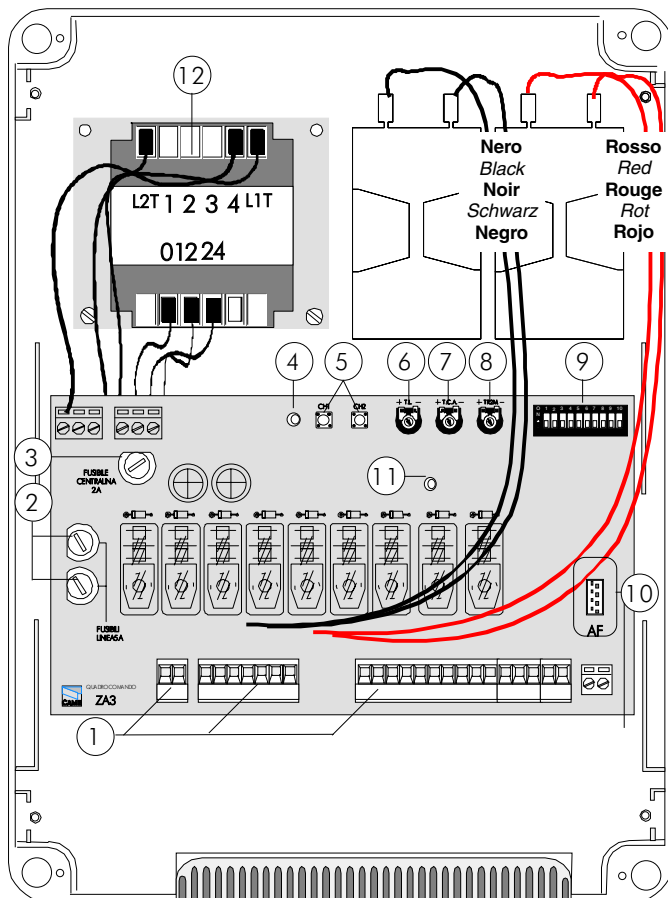
- **"Operator present" function:** Gate operates only when the pushbutton is held down (the radio remote control system is deactivated);
- **Partial opening,** second motor door opening, adjusted with TR2M trimmer; it is activated by collecting to the terminals 2-3P;
- **Pre-flashing** for 5 seconds,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



Nota: serie FROG, collegare i fili neri che fuoriescono dalla scheda sui connettori del condensatore del 1° motore e i fili rossi sul condensatore del 2° motore.

NB: FROG series, connect the black wires coming out of the board to the connectors of the first motor's condenser and the red wires to the second motor's condenser.

Note: série FROG, connecter les fils noirs qui sortent de la carte sur les connecteurs du condensateur du 1^{er} moteur et les fils rouges sur le condensateur du 2^e moteur.

Hinweis: Reihe FROG. Die schwarzen Kabel, die von der Karte wegführen, an die Verbinder am Kondensator vom 1. Motor anschließen, die roten Kabel an den Kondensator vom 2. Motor.

Nota: serie FROG, conectar los hilos negros que salen de la tarjeta en los conectores del condensador del 1° motor y los hilos rojos en el condensador del 2° motor.

ITALIANO COMPONENTI PRINCIPALI

- 1** Morsettiere di collegamento
- 2** Fusibili di linea 5A
- 3** Fusibile centralina 3,15A
- 4** LED di segnalazione tensione presente 24V
- 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 pagina 14)
- 10** Innesto scheda radiofrequenza (vedi tabella)
- 11** LED segnalazione
- 12** Limitatore di coppia (vedi pagina 21)

ENGLISH

MAIN COMPONENTES

- 1 Terminal block for external connections
- 2 5A line fuses
- 3 3.15A central control unit fuse
- 4 24V power-supply signalling 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. 14)
- 10 Radiofrequency board socket (see table)
- 11 Signal LED
- 12 Motor torque limiter (see pag.21)

FRANÇAIS

PRINCIPAUX COMPOSANTS

- 1 Plaque à bornes de connexion
- 2 Fusibles de ligne 5A
- 3 Fusible boîtier 3.15A
- 4 LED de signalisation alimentation à 24V
- 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 2à et ouverture partielle
- 9 Selecteur de fonctions à 10 interrupteurs à positions multiples (voir pag.14)
- 10 Branchement carte radiofréquence (voir tableau)
- 11 LED de signalisation
- 12 Limiteur de couple moteur (voir p.21)

DEUTSCH

HAUPTKOMPONENTEN

- 1 AnschlußKlemmenleiste
- 2 Hauptsicherung 5A
- 3 Schaltkastensicherung 3.15A
- 4 LED Kontrolleuchte für Stromversorgung mit 24V
- 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.14)
- 10 Steckanschluß Funkfrequenz-Platine (sehen Tabelle)
- 11 LED Kontrolleuchte zur Anzeige
- 12 Drehmomentbegrenzer des Motor (sehen S.21)

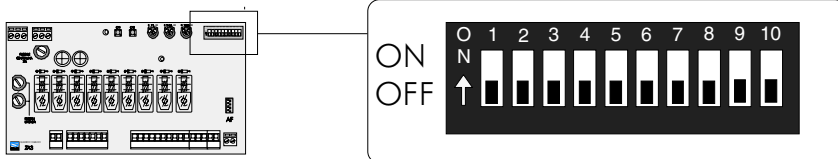
ESPAÑOL

PRINCIPALES COMPONENTES

- 1 Caja de bornes las conexiones
- 2 Fusibles de línea 5A
- 3 Fusible para central 3.15A
- 4 Indicador luminoso de alimentación de 24V
- 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.14)
- 10 Conexión tarjeta radiofrecuencia (ver tabla)
- 11 Indicador luminoso
- 12 Limitador de par motor (ver pag. 21)

SELEZIONI FUNZIONI - SELECTION OF FUNCTIONS - SÉLECTION FONCTIONS
FUNKTIONSWAHL- SELECCIÓN DE LAS FUNCIONES

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 8 in ON)

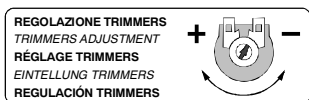
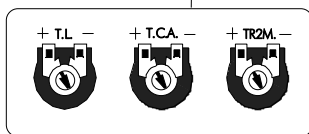
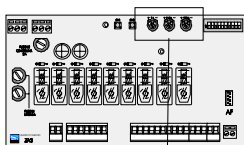
- 9 OFF** Funzione di riapertura in fase di chiusura **attivato**; con dispositivo di sicurezza collegato ai morsetti 2-C1, (se non viene utilizzato il dispositivo, selezionare il dip in ON)

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** "Soulement 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 éte.)**
- 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 0" 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 0" 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").

DEUTSCH

Trimmer T.L. = Laufzeit mit mindestens 0" 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").

FRANÇAIS

Trimmer T.L. = Réglage du temps de fonctionnement d'un minimum de 0" 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".

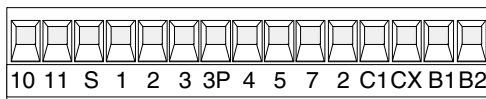
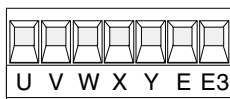
Trimmer TR2M = Réglage retard en fermeture 2° moteur (min. 0", max. 15") et en même temps ouverture partielle (min. 0", max. 30").

ESPAÑOL

Trimmer T.L. = Regulación tiempo de trabajo, desde un mínimo de 0" 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").



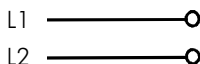
Alimentazione quadro comando - 230V (a.c.)

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.)



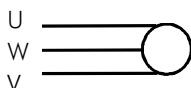
Collegamento 1 Motore (ritardato in apertura)

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)



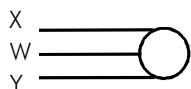
Collegamento 2 Motore (ritardato in chiusura)

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,
collegare
solo il moto-
re n°2 in
uscita X,W,Y.**

*If only one
reduction gear
is used,
connect only
gear n°2 to the
X, W, Y outlet.*

**Si on n'utilise
qu'un seul
moteur, ne
brancher que
le moteur n°2
à la sortie
X,W,Y.**

*Im Fall einer
Inbetriebnahme
mit nur einem
Motor, wird nur
der Motor Nr.2
im Ausgang
X, W, Y.*

**Si se usa un
sólo motor,
conecte sólo
el motor n°2
en la salida
X,W,Y.**

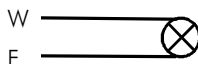
**Uscita 230V (a.c.)-25W max. in movimento (es. lampeggiato-
re)**

230V (a.c.)-25W max. output in motion (e.g. flashing light)

**Sortie 230V(c.a.)-25W max. en mouvement (ex.
branchement clignotant)**

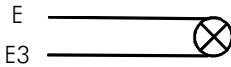
*Ausgang 230V (Wechselstrom) in Bewegung (z.B. Blinker-
Anschluß)*

**Salida de 230V (a.c.) en movimiento (p.ej. conexión lámpara
intermitente)**



Collegamento lampada ciclo (230V-60W)

Connection (230V-60W) cycle lamp



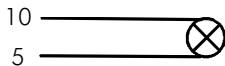
Connection lampe cycle (230V-60W)

Anschluß Betriebszyklus-Anzeigeleuchte (230V60W)

Conexión lámpara ciclo (230V-60W)

Lampada spia (24V-3W max.) "cancello aperto"

(24V-3W max.) "gate-opened" signal lamp



Lampe-témoin (24V-3W max.) "portail ouverture"

Signallampe (24V-3W max.) "Tor Öffnen"

Lampara indicadora (24V-3W max.) "puerta abierta"

Uscita 24V (a.c.) alimentazione accessori (max 20W)

24V (a.c.) output power supply to accessories (max. 20W)



Sortie 24V (c.a.) alimentation accessoires (max 20W)

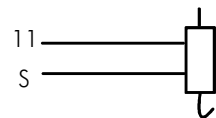


Ausgang 24V (Wechselstrom) stromversorgung Zubehör (max 20W)

Salida 24V (a.c.) alimentación accesorios (max 20W)

Collegamento elettroserratura (12V-15W max.)

Connection for electrically-actuated lock: 12V-15W max.



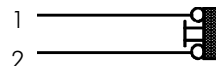
Connexion serrure électrique (12V-15W max.)

Anschluß Elektroschloß (12V-15W max.)

Conexión electrocerradura (12V-15W max.)

Pulsante di stop (N.C.)

Stop button (N.C.)



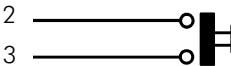
Bouton-poussoir de stop (N.F.)

Stop-Taste (Ruhekontakt)

Tecla de parada (N.C.)

Pulsante apre (N.O.)

Open button (N.O.)



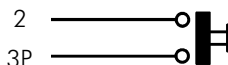
Bouton-poussoir d'ouverture (N.O.)

Taste Öffnen (Arbeitskontakt)

Tecla de apertura (N.O.)

Pulsante (N.O.) per apertura parziale (apertura del 2° motore)

Pushbutton (normally open) partial opening (opens to motor no. 2)



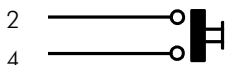
Bouton-poussoir (N.O.) pour ouverture partielle (ouverture du 2° moteur)

Drucktaster (Arbeitskontakt) für Teilweises Öffnen (Öffnung eines einzigen Torflügels über Motor 2)

Tecla (N.O.) para apertura parcial (apertura del 2° motor)

Pulsante chiude (N.O.)

(N.O.) Pushbutton-close



Bouton-poussoir fermeture (N.O.)

Taste Schließen (Arbeitskontakt)

Pulsador de cierre (N.O.)

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

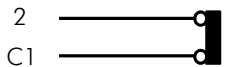
(siehe dip-switch 2-3 Funktionswahl)

Contacto radio y/o pulsador para mando

(vedas dip-switch 2-3 selección función)

Contacto (N.C.) di riapertura in fase di chiusura

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



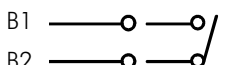
Contact (N.F.) de réouverture pendant la fermeture

Ruhekontakt Wiederöffnen beim Schließen

Contacto (N.C.) para la reapertura en la fase de cierre

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

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

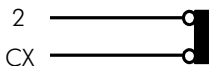


Sortie contact (N.O.) Portée contact: 5A - 24V c.c.

Ausgang Arbeitskontakt Stromfestigkeit: 5A - 24V Gleichstrom

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

Contatto (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



Contatto (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

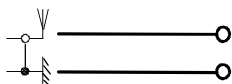
Collegamento antenna

Antenna connection

Connexion antenne

Antennenanschluß

Conexión antena



LIMITATORE DI COPPIA MOTORE - MOTOR TORQUE LIMITER - LIMITEUR DE COUPLE MOTEUR
DREHMOMENTBEGRENZER DES MOTORS - LIMITADOR DE PAR MOTOR

Per variare la coppia motore, spostare il faston indicato su una delle 4 posizioni; 1 min - 4 max.

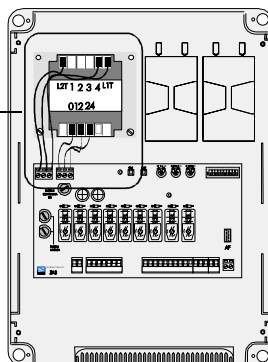
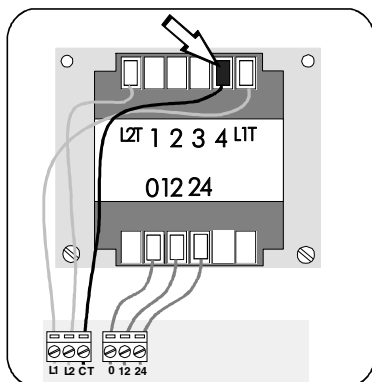
To vary the motor torque, move the indicated faston to one of the four positions:

1=min, 4=max

Pour varier le couple du moteur, déplacer le connecteur indiqué sur l'une des 4 positions; 1 min. - 4 max.

Zur Änderung des Motor-Drehmoments den angegebene Faston auf eine der 4 Stellungen positionieren: 1 min. - 4 max.

Para variar el par motor, desplazar el faston indicado hasta una de las 4 posiciones; 1 mín. - 4 máx.



NOTE - NOTE - NOTE - HINWEIS - NOTA



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