

ELEKTRONISCHES GERAET METEX
 Fuer KIPPTORE SCHIEBETORE UND SCHRANKEN

METEX ELECTRONIC CONTROL UNIT
 For COUNTER BALANCED DOORS / SLIDING GATES / BARRIERS

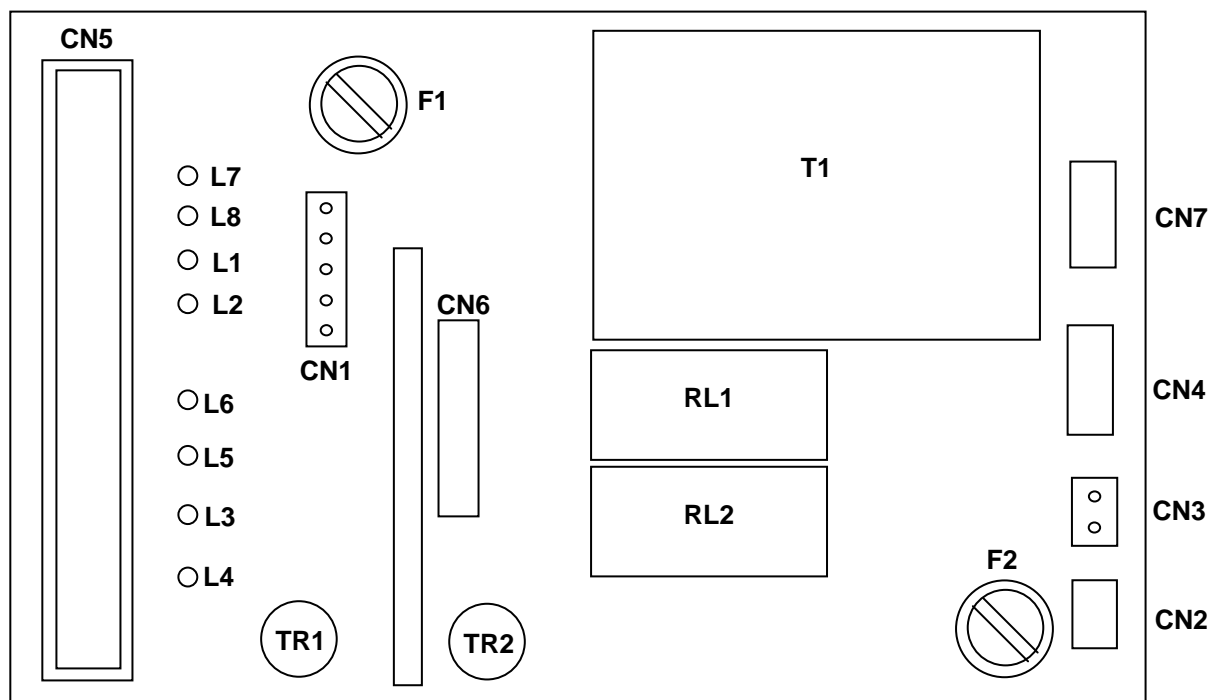


Abb. 1

L1	Led stopp	Stop led
L2	Led Lichtschränke	Photocell led
L3	Endschalter Schliessung	Closing limit stop
L4	Endschalter Oeffnung	Opening limit stop
L5	Kontrolleuchte	Warning lamp
L6	Led Sicherheit	Safety led
L7	Led start	Start led
L8	Led start Fussgaenger	Pedestrian start led
F1	Sicherung Speisung Zubehoer 2 A	Accessory fuse 2A
F2	Sicherung Motoren 5 A	Motor fuse 5 A
T1	Transformator	Transformer
CN1	Verbinder Funkmodul	Radio plug-in connector
CN2	Verbinder Speisung 220 Vac	Voltage connector 220 Vac
CN3	Verbinder Motorkondensator	Motor condenser connector
CN4	Klemmleiste Motor	Motor connector
CN5	Hauptklemmleiste	Main terminal board
CN6	Verbinder Modul Betriebsart	Logic connector
CN7	Klemmleiste Blinklampe und Gartenlichter	Flashing lamp and courtesy light connector
RL1	Relais Motor	Motor relay
RL2	Relais Bewegungsrichtung	Direction relay
TR1	Trimmer Zeiteinstellung Gartenlichter	Courtesy light time adjusting Trimmer
TR2	Trimmer Zeiteinstellung Betrieb/Einstellung Bremse mit Steuerrung der Endschalter	Working time adjusting Trimmer – limit switches brake adjusting Trimmer

BETRIEBSART MODUL – LOGIC DEVICE

TR1	Trimmer Krafteinstellung (Sicherheit gegen Quetschungen)	Torque adjusting Trimmer (anticrushing safety)
TR2	Trimmer Einstellung Pause	Pause time adjusting Trimmer
Dip J1	Dip switch Auswahl Automatisierung (Betriebszeit/Endschalter)	Automation mode selection Dip Switch (working time/limit stop)
Dip J2	Dip Switch Auswahl Betriebsart	Logic selection Dip Switch
Dip J3	Dip Switch Einstellung Schliessrichtung mit Nutzung der Endschalter	Closing direction selection Dip Switch using the limit switches
CN1	Kammfoermiger Verbinder zur Zwischenverbindung	Interconnection comb connector
U1	Mikroprozessor	Micro-processor

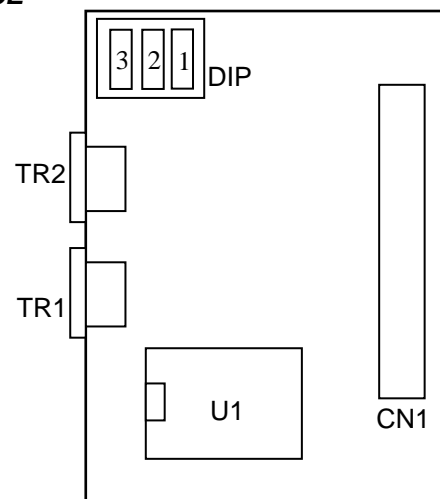
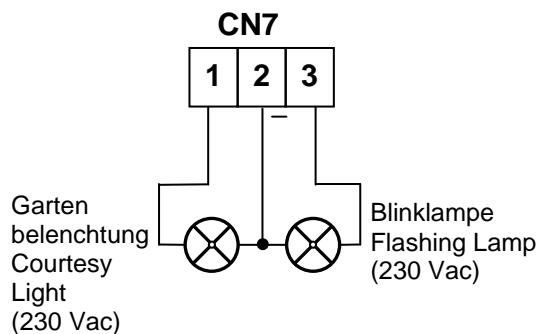
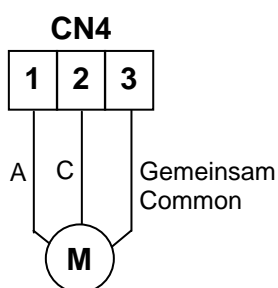
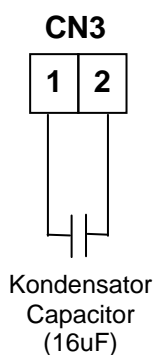
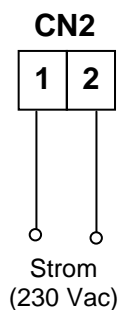
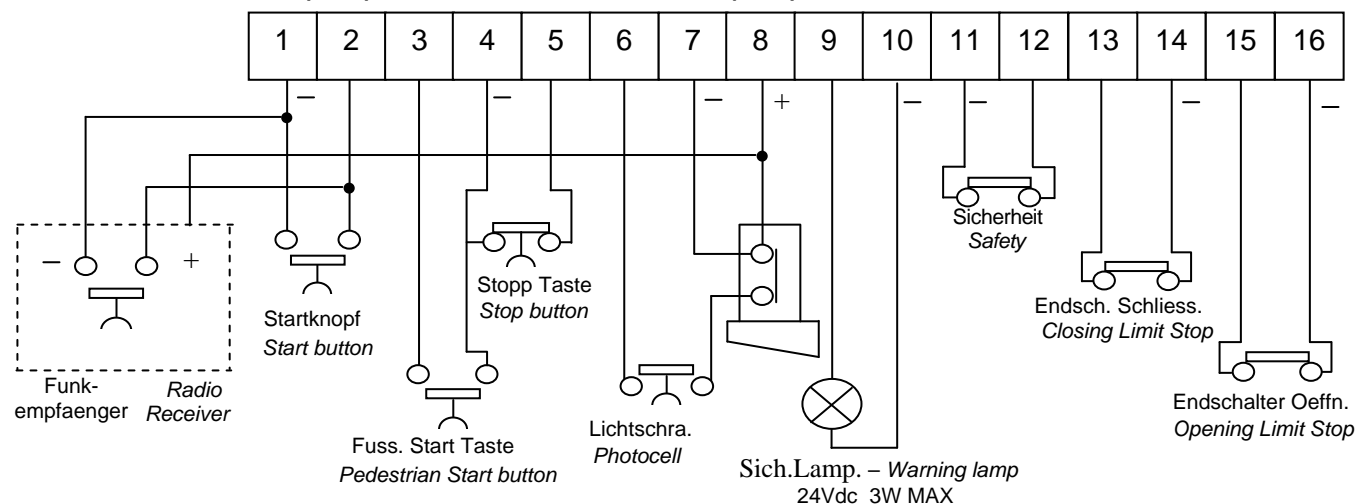


Abb. 2

ELEKTRISCHE VERBINDUNGEN – ELECTRICAL CONNECTIONS

HAUPTKLEMMLEISTE (CN5) – MAIN TERMINAL BOARD (CN5)



Achtung Sollten **STOP**, **SICHERHEIT** und **LICHTSCHRANKE** nicht angeschlossen werden, muessen die entsprechenden Klemmen ueberbrueckt werden (4 mit 5 , 6 mit 7 und 11 mit 12). Wenn das Geraet auf Betriebszeit steht , die Klemmen der Endschalter nicht ueberbruecken auch wenn es N.C. Kontakte sind.

1 - FASTON FUER DIE ERDUNG

Dieses Faston muss an das Erdungskabel der Installation angeschlossen werden: dadurch werden die BeschaeDIGungsmoeglichkeiten, die durch unvorgesehene Entladungen zwischen der Nieder- und Hochspannungs Sektion auf der Karte entstehen koennten.

FUNKTIONSBESCHREIBUNG

Das Geraet METEX ist eine elektronische Mikroprozessorkarte die die Installation auf zwei verschiedene Arten steuert:

1. Betriebszeit
2. Steuerung Enschalter

BETRIEBZEIT FUNKTION

Damit das Geraet in Betriebszeit arbeitet, den dip J1 auf ON stellen. Die Merkmale sind:

1 – Rgulierung der Motorkraft

Das Geraet besitzt einen Trimmer (TR1 auf dem Betriebsartmodul), der es ermoeeglicht die Kraft einzustellen , sodass eine ausreichende Sicherheit gegen Quetschungen gewaehrleistet ist.

2 - Funktionsart

Es ist moeglich zwei Funktionsarten mit Hilfe des DIP J2 zu programmieren.

*BETRIEBSART HALBAUTOMATIK

[DIP J" auf OFF stellen]

Der erste Startimpuls oeffnet das Kipptor, ein zweiter Impuls, der waehrend der Oeffnungsphase erhalten wurde, befiehlt das Anhalten und ein dritter Impuls schliesst das Tor (oder Befehl wurde erhalten waehrend das Tor offensteht)..

*BETRIEBSART AUTOMATIK

[DIP J2 auf ON stellen]

Der erste Impuls oeffnet das Kipptor, das automatisch eine Pause einlegt bevor es sich wieder schliesst. Ein zweiter Impuls, waehrend der Ruhezeit, stellt die Ruhezeit auf Null, waehrend des Schliessvorgangs hingegen, befiehlt er die Wiederoeffnung des Kipptors. Die Ruehzeit, die zwischen 5 und 120 Sekunden variieren kann, wird durch das Drehen des Trimmer TR2 programmiert. Im Uhrzeigersinn verlaengert sich die Ruhezeit , gegen den Uhrzeigersinn verkuerzt sie sich.

3 – Zeiteinstellung Gartenbeleuchtung

Mit Hilfe des trimmer TR1 auf der Hauptkarte kann die Dauer (von 10 Sek. bis 1 Min.) der Gartenbeleuchtung nach Abschalten des Kipptormotors eingestellt werden.

4 – Einstellung Betriebszeit

Mit Hilfe des trimmer TR2 auf der Hauptkarte kann man die Betriebszeit einstellen.(von 5 Sek. bis 1 Min.)

FUNKTION MIT ENDSCHALTERN

Um die Betriebsart des Geraets mit Endschalter Steuern zu erhalten, muss DIP J1 auf OFF gestellt werden. Die Merkmale sind:

1 – Gemeinschaftliche Einstellung

Die o.g. Einstellungen (Kraft, Ruhezeit,

N.B. In instances where Stop, Safety and Photocell are not connected, their terminals must be wire linked (4 with 5 , 6 with 7 and 11 with 12). When using the working time mode do not wire link the limit stop terminals, even if they are Normally Closed contacts.

1 – EARTH TAG (FST1)

To be connected to the incoming mains earth. This connection reduces the probability of damages due to accidental discharges between the low voltage and the high voltage section on the board.

FUNCTIONING DESCRIPTION

METEX is a microprocessor electronic board. It can control the automation in two different modes:

- 1 - Working time
- 2 - Limit switches control

WORKING TIME FUNCTIONING

Put Dip J1 ON to set the automation on working time mode. Its characteristics are:

1 - Motor torque adjustment

Metex is equipped with a Trimmer (TR1 placed on the logic device) to adjust the force so to have an efficient anti-crushing safety.

2 - Functioning Logic

It is possible to program two different functioning logic by using DIP J2:

* SEMI-AUTOMATIC LOGIC

[DIP J2 = OFF]

The first start impulse opens the door, a second impulse given while opening stops the door and the third impulse (or an impulse given when the door is open) closes the door.

* AUTOMATIC LOGIC

[DIP 2 = ON]

The first impulse opens the door, that automatically waits for a pause cycle before closing. An impulse given during the pause time cancels the pause; an impulse given while the door is closing reopens the door. It is possible to set the pause time (from 5 to 120 s.) by turning Trimmer TR2. Turn TR2 clockwise to increase the pause time, clockwise to decrease.

3 - Courtesy light time adjustment

It is possible to set the time in which the courtesy lights are ON after the motor stops working (from 10 seconds to 1 minute) by using the Trimmer TR1 placed on the mother board.

4 - Working time adjustment

It is possible to set the working time (from 5 s. to 1 min.) by using the trimmer TR2 placed on the mother board.

FUNCTIONING WITH LIMIT SWITCHES

Put DIP J1 on OFF to set the limit switches control mode. Its characteristics are:

1 - Commons adjustments:

The above mentioned adjustments (torque, pause time,

Gartenbeleuchtung) sind auch in der Betriebsart mit Endschaltern aktiviert.

courtesy light time) are available also in the limit switches control mode.

2 – Einstellungen gueltig nur mit Endschalter

2 - Adjustments possible with limit switches only

3 – Einstellung des Bremsvorgangs des Tors

Der trimmer TR2 (mit Kipptor = Betriebszeit) wird zur Regulierung der Bremse benuetzt, weicher oder haelter je nach Torgewicht und Position der Feinbleche der Endschalter (siehe Abb. 3). Bei jedem Arbeitszyklus wird die Position des trimmers gelesen.

3 - Gate slow-down adjustment:

Trimmer TR2 ("working time" for the counter balanced doors) is used to adjust the braking action, softer or harder depending on the weight of the gate and the position of the proximity limit switches (see fig. 3). The trimmer position is detected at each working cycle.

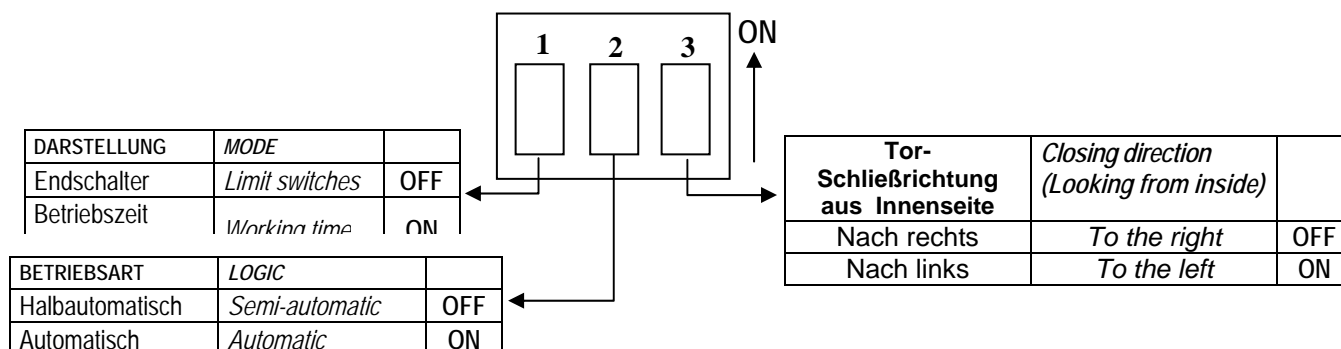
4 – Stratkopf fuer Fussgaenger

Das Geraet ist dazu ausgerichtet, einen Eingang START FUSSGAENGER anzuschliessen, der die Teiloeffnung des Tors zum Durchgang von Fussgaengern ermoeeglicht. Siehe Paragraph "Anschlusse der Verbinder". Bei eventueller Uebereinanderstellungen von START und START/FUSSGAENGER wird der erste Befehl beruecksichtigt.

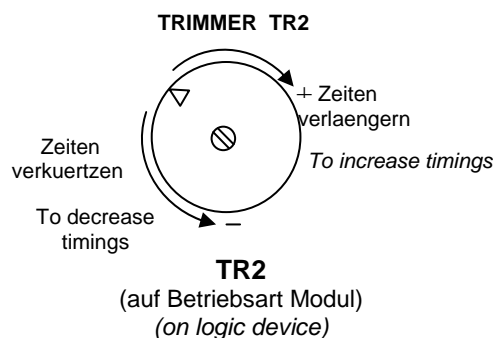
4 - Pedestrian start button:

The device can be connected to a PEDESTRIAN START entry to partially open the gate for pedestrians passing. See paragraph "Electrical connections – Main Terminals Board". In case both START and PEDESTRIAN START inputs are given during the same cycle, the normal start impulse will take place.

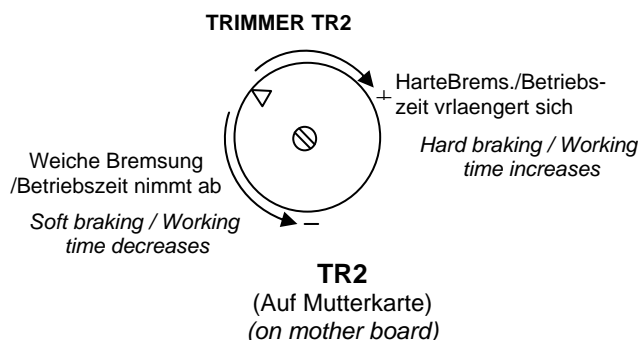
ANWENDUNG DES DIP J3 ZUR AUSWAHL DER SCHLIESSRICHTUNG CLOSING DIRECTION SELECTED BY USING DIP J3



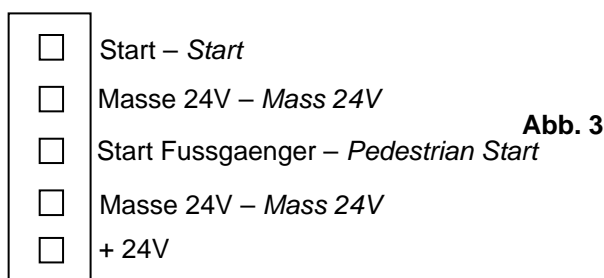
EINSTELLUNG PAUSEZEITEN PAUSE TIME ADJUSTMENTS



EINSTELLUNG BREMSE / BETRIEBSZEIT BRAKE / WORKING TIME ADJUSTMENT



FUNKVERBINDER – RADIO CONNECTOR



EINSTELLUNG

1 – Positionierung der Endschalter:

- Das Tor manuell bis zum mechanischen Stopp Anschlag in Schliessung bringen.
- Den Fluegel um mind. 3 bis max. 5 cm wieder oeffnen und das Schliessungsfleinblech so auf der Zahnstange befestigen, dass sein Anfangsstueck entsprechend der Kerbe auf dem Endschalter Sensor fuer Schliessung positioniert ist.
- Das Feinblech in Oeffnung entsprechend der Kerbe auf dem Endschaltersensor befestigen, sodass man die totale Oeffnung des Fluegels erhaelt.

2 – Verkabelung nach beiliegendem Plan fertigstellen und das Geraet an das Stromnetz anschliessen.

DIAGNOSTIK ANZEIGEN

Das Geraet METEX zeigt automatisch, durch differenziertes Blinken der Sicherheitslampe und des LED L5 Schaeden an.

* Fehlfunktion der Endschalter = die Sicherheitslampe und L5 blinken halb so oft wie normal (1 flash alle 2 Sek.)

SICHERHEITSMASSNAHMEN

Die elektrische Installation und die Auswahl der Betriebsart muessen den geltenden Richtlinien entsprechen. Auf jeden Fall einen Differential-Sicherheitsschalter 16A und Schwellenwert 0,030 A vorsehen. Die Stromkabel (Motor, Stromzufuhr) von Steuerungskabel (Schalter, Lichtschranke, Funk usw.) getrennt halten. Zur Vermeidung von Interferenzen, wird empfohlen, zwei getrennte Isolierhuelsen zu verwenden.

Beachte: Fuer eine korrekte Installation sollten "Kabelhalter" und/oder "Isolierhuelsen/Gehaeuse" in der Naehе des Steuerungsgehaeuses (wo vorgesehen) benuetzt werden, um die Verbindungskabel vor Spannungsbeanspruchungen zu schuetzen.

ERSATZTEILE

Anfragen nach Ersatzteilen bitte an folgende Adresse senden:
SEA s.r.l. – Zona Ind.le, 64020 S.ATTO - Teramo – Italia

EINSATZ

Das elektronische Geraet METEX wurde ausschliesslich zum Gebrauch als Steuerung von Antrieben fuer Schiebetore, Schranken und Kipptore entworfen.

SICHERHEITSBEST. UND UMWELTVERTRAEGL.

Das Verpackungsmaterial des Produkts und/oder Schaltkreise umweltgerecht entsorgen.

KONFORMITAETSERKLAERUNG

Das elektronische Geraet METEX unterliegt den folgenden Richtlinien:

- 89/336/CEE (Richtlinie zur elektromag. Vertraeglichkeit)
- 73/23/CEE (Niederspannungsrichtlinie)

SET UP

1 - Setting up the Limit Switches:

- Manually close the gate to its physical stop .
- Reopen the leaf from 3 to 5 cm, position the limit plate on top of the drive rack in a position that will register and activate the close limit switch.
- Fix the opening limit plate in a position that will register and activate the opening limit switch, so that the leaf is completely open.

2 - Complete the wiring, following the scheme (Fig. 2) and connect the control unit to the power supply.

DIAGNOSTIC FUNCTION

The METEX control unit automatically signals that a fault is detected, by a different flashing of the warning lamp and LD5.

* Limit switches fault = the warning lamp and L5 will flash every 2 seconds.

SAFETY PRECAUTIONS

All electrical installation work should conform to current regulations. A 16A - 0,030A differential switch must be incorporated into the source of the gate main electrical supply and the entire system must be properly earth bonded. Always run separate mains (240 V) carrying cables (supply and motors). Also all low voltage control (push button, photocell, radio etc.) cables should be run in separate ducts to prevent from mains interference.

Note: Use "cable clips" and/or "duct/box pipes" fitting close to the control panel box so to protect the interconnection cables against pulling efforts.

SPARE PARTS

To obtain spare parts contact:

SEA s.r.l. – ZONA Ind.le, 64020 S.ATTO – Teramo – Italia

INTENDED USE

The METEX electronic control unit has been designed to be solely used as a control unit for the automation of sliding gates, barriers and counter balanced doors.

SAFETY AND ENVIRONMENTAL COMPATIBILITY

We recommend not to spoil the environment with product and circuit packing material.

CONFORMITY REQUIREMENTS

METEX electronic control unit conforms to the following:

- 89/336/CEE (Rule on the Electromagnetic Compatibility)
- 73/23/EC (Electric Safety)



LAGERUNG -- STORAGE

LAGERTEMPERATUR – STOCKING TEMPERATURES			
T _{min}	T _{Max}	Feuchtigkeit _{min} -- Humidity _{min}	Feuchtigkeit _{Max} – Humidity _{Max}
- 40°C	+ 85°C	5% nicht kondensierend -- non condensing	90% nicht kondensierend -- non condensing

Fuer den Transport des Produkt ausschliesslich dafuer vorgesehene Transportmittel verwenden

When being transported this product must be properly packaged and handled with care.

AUSSERBETRIEBSETZUNG UND WARTUNG

Die Entfernung und/oder Ausserbetriebsetzung und/oder Wartung des Produkts darf ausschliesslich von dazu berechtigten Fachpersonal ausgefuehrt werden.

MAINTENANCE AND OUT OF SERVICE

The decommission and maintenance of this unit must only be carried out by specialised and authorised personnel.

GARANTIE

Die Garantie des elektr. Geraets METEX betraegt 24 Monate. Massgebend fuer die Garantieansprueche ist das auf dem Produkt aufgedruckte Datum. Die Garantie ist ungultig wenn das Geraet Schaeden aufweist, die auf falsche Anwendung oder jegliche Veraenderungen oder Eingriffe zurueckzufuehren sind. Die Garantie gilt nur fuer den urspruenglichen Kaeufer.

LIMIT OF GUARANTEE

The METEX electronic control unit is guaranteed for a period of 24 months. The guarantee period starts from the date stamp printed on the unit. The METEX guarantee will be void if the unit has been incorrectly installed, not used for the purpose intended, tampered with or modified in any way. The validity of this guarantee only extends to the original purchaser of the unit.

HINWEIS: DER HERSTELLER UEBERNIMMT KEINE HAFTUNG FUER SCHAE DEN, DIE DURCH EINE UNSACHGEMAE SSE, FEHLERHAFTE UND UNGEEIGNETE VERENDUNG VERURACHT WURDEN.

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Korrekte Entsorgung dieses Produkts (Elektromüll) - Nur Europa

(Anzuwenden in den Ländern der Europäischen Union und anderen euroäischen Ländern mit einem separaten Sammelsystem)

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Private Nutzer sollten den Händler, bei dem das Produkt gekauft wurde, oder die zuständigen Behörden kontaktieren, um in Erfahrung zu bringen, wie sie das Gerät auf umweltfreundliche Weise recyceln können.



Correct Disposal of This Product (Waste Electrical & Electronic Equipment) - Europe only

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

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GENERAL NOTICE The gate automation systems must be assembled exclusively with SEA components, unless specific agreements apply. Non-compliance with the applicable safety standards (European Standards EN 12453 EN12445 and others) and with good installation practice releases SEA from any responsibilities. SEA shall not be held responsible for any failure to execute a correct and safe installation under the above mentioned standards.

1) PROPOSED ORDER The proposed order shall be accepted only prior SEA approval of it. By signing the proposed order, the Buyer shall be bound to enter a purchase agreement, according to the specifications stated in the proposed order and always under those Terms of sale. On the other hand, failure to notify the Buyer of said approval must not be construed as automatic acceptance on the part of SEA.

2) PERIOD OF THE OFFER The offer proposed by SEA or by its branch sales department shall be valid for 30 solar days, unless otherwise notified.

3) PRICING The prices in the proposed order are quoted from the Price List which is valid on the date the order was issued. The discounts granted by the branch sales department of SEA shall apply only prior to acceptance on the part of SEA. The prices are for merchandise delivered ex-works from the SEA establishment in Teramo, not including VAT and special packaging. SEA reserves the right to change at any time this price list, providing timely notice to the sales network.

4) PAYMENTS The accepted forms of payment are each time notified or approved by SEA. The interest rate on delay in payment shall be 1.5% every month but anyway shall not be higher than the max. interest rate legally permitted.

5) DELIVERY Delivery shall take place, approximately and not peremptorily, within 30 working days from the date of receipt of the order, unless otherwise notified. Transport of the goods sold shall be at Buyer's cost and risk. SEA shall not bear the costs of delivery giving the goods to the carrier, as chosen either by SEA or by the Buyer. Any loss and/or damage of the goods during transport, are at Buyer's cost.

6) COMPLAINTS Any complaints and/or claims shall be sent to SEA within 8 solar days from receipt of the goods, proved by adequate supporting documents as to their truthfulness.

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8) WARRANTY.

SILVER: The mechanical components of the operators belonging to this line are guaranteed for 24 months from the date of manufacturing written on the operator.

GOLD: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator.

PLATINUM: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator. The base warranty (36 months) will be extended for further 24 months (up to a total of 60 months) when it is acquired the certificate of warranty which will be filled in and sent to SEA s.r.l. within 30 days from the purchase date. The electronic devices and the systems of command are guaranteed for 24 months from the date of manufacturing. In case of defective product, SEA undertakes to replace free of charge or to repair the goods provided that they are returned to SEA repair centre.

The definition of warranty status is by unquestionable assessment of SEA. The replaced parts shall remain propriety of SEA. Binding upon the parties, the material held in warranty by the Buyer, must be sent back to SEA repair centre with fees prepaid, and shall be dispatched by SEA with carriage forward. The warranty shall not cover any required labour activities. The recognized defects, whatever their nature, shall not produce any responsibility and/or damage claim on the part of the Buyer against SEA. The guarantee is in no case recognized if changes are made to the goods, or in the case of improper use, or in the case of tampering or improper installation, or if the product label of the manufacturer with the registered SEA trademark n° 804888 has been removed. Furthermore, the warranty shall not apply if SEA products are partly or completely coupled with non-original mechanical and/or electronic components, and in particular, without a specific relevant authorization, and if the Buyer is not making regular payments. The warranty shall not cover damage caused by transport, expendable material, faults due to non-conformity with performance specifications of the products shown in the price list. No indemnification is granted during repairing and/or replacing of the goods in warranty. SEA disclaims any responsibility for damage to objects and persons deriving from non-compliance with safety standards, installation instructions or use of sold goods. The repairs of products in warranty and out of warranty is accepted only if the procedure of SEA are fully respected by the customer.

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