



SEA®
Sistemi Elettronici
di Apertura Porte e Cancelli
Interruttori magnetici e telecomandi n. 80888

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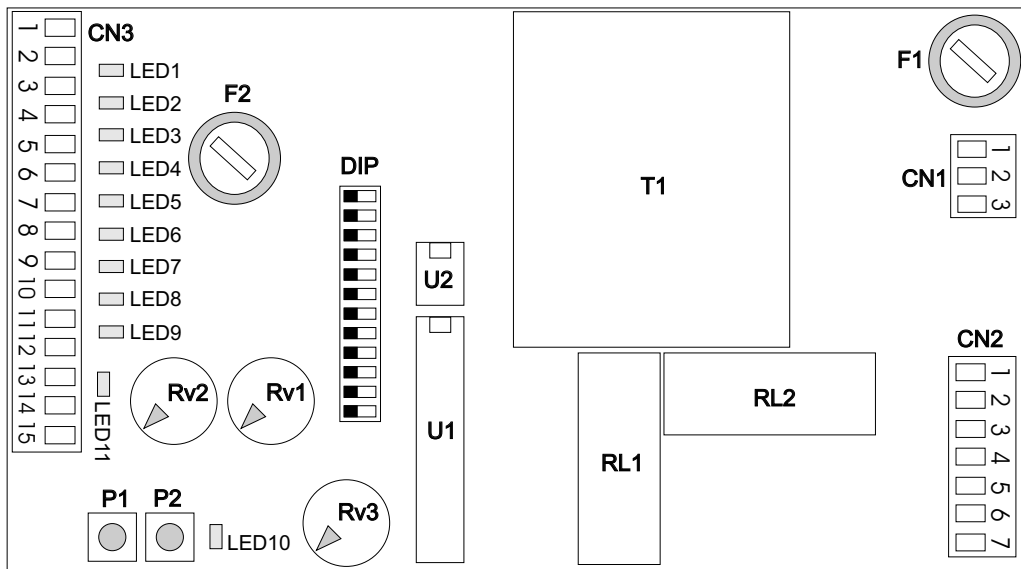
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seatec@seateam.com (Uff. Tecnico)



||| **Español** |||

APARATO ELECTRÓNICO

GATE 1



LED1 = Bombilla piloto	Rv1 = Regulación par motor
LED2 = Alimentación Tx Fotocélula	Rv2 = Regulación duración ralentización
LED3 = Alimentación 24V Aux	Rv3 = Regulación tiempo de pausa
LED4 = Fotocélula	P1 = Botón memorización tiempo de funcionamiento
LED5 = Fin de carrera apertura	P2 = Botón memorización mandos distancia
LED6 = Fin de carrera cierre	DIP = Interruptor DIP programación funciones
LED7 = Start	F1 = Fusible alimentación y motor (10 AT)
LED8 = Entrada Aux	F2 = Fusible accesorios (1 A)
LED9 = Encoder	T1 = Transformador
LED10 = Programación	RL1 = Relé alimentación Motor
LED11 = Stop	RL2 = Relé dirección Motor
CN1 = Conector alimentación 115V	U1 = Microcontrolador
CN2 = Conector Motor e Intermitente	U2 = Memoria EEPROM
CN3 = Conector Entradas / Salidas 24V	



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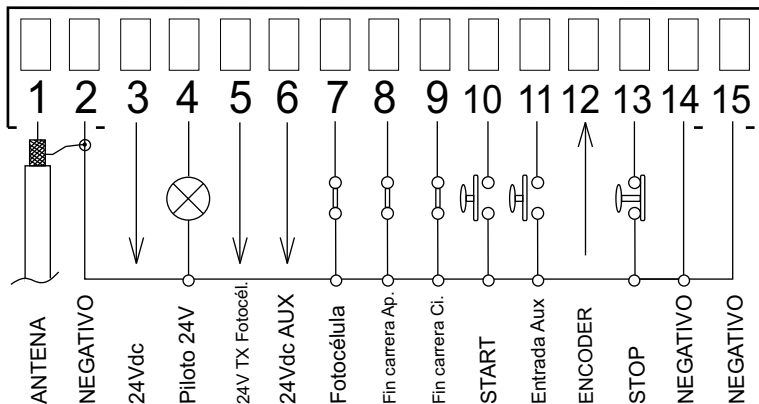
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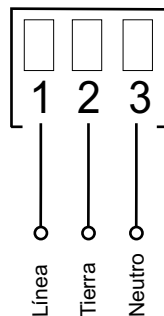


CONEXIONES

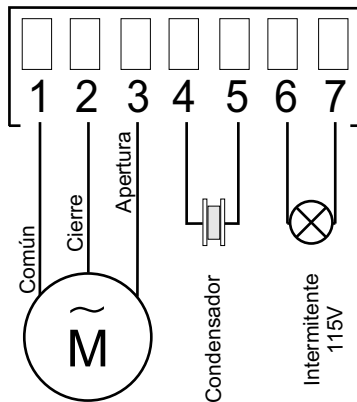
CN3



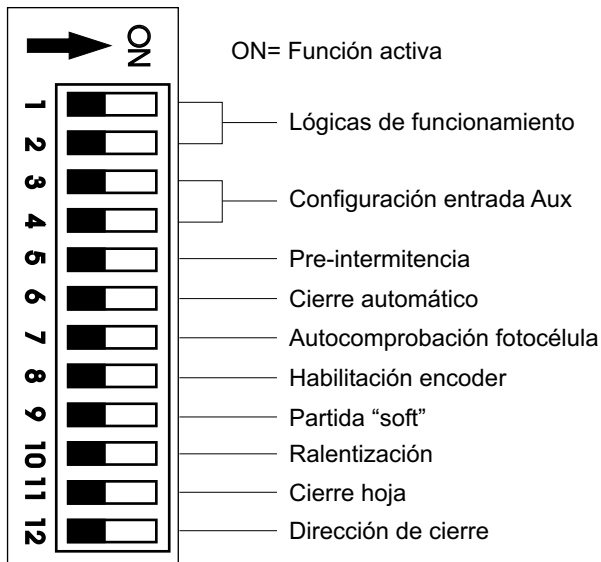
CN1



CN2

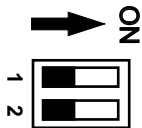


DIP





PROGRAMACIÓN LÓGICAS DE FUNCIONAMIENTO



LÓGICA MANUAL

Un comando de start abre la puerta. Un segundo impulso durante la apertura detiene el movimiento.

Un comando de start durante el cierre detiene el movimiento.



LÓGICA DE SEGURIDAD

Un comando de start abre la puerta. Un segundo impulso durante la apertura invierte el movimiento.

Un comando de start durante el cierre Invierte el movimiento.

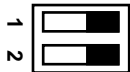


LÓGICA AUTOMÁTICA 1

Un comando de start abre la puerta. Un segundo impulso durante la apertura no se acepta.

Un comando durante la pausa no se acepta. Un comando durante el cierre invierte el movimiento.

NOTA: para obtener el cierre automático, llevar el DIP 6 a la posición ON.



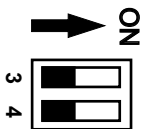
LÓGICA AUTOMÁTICA 2

Un comando de start abre la puerta. Un segundo impulso durante la apertura no se acepta.

Un comando durante la pausa cierra de inmediato. Un comando durante el cierre invierte el movimiento.

NOTA: para obtener el cierre automático, llevar el DIP 6 a la posición ON.

CONFIGURACIÓN ENTRADA AUX



BANDA DE SEGURIDAD (contacto de tipo N.C.)

En el momento en que se abre el contacto conectado a la banda de seguridad, la puerta invierte el movimiento para detenerse después de aproximadamente 1 seg. Es necesario un comando de start para reanudar el movimiento.



TEMPORIZADOR (contacto de tipo N.A.)

Conectando un reloj a esta entrada es posible abrir y mantener abierta la puerta durante todo el tiempo en que el contacto permanece cerrado. Utilizando temporizadores diarios o semanales es posible optimizar a su voluntad la gestión de las aperturas. Cuando el contacto del temporizador está abierto, la automatización funciona como con las lógicas programadas.



FOTOCÉLULA AUXILIAR (contacto de tipo N.C.)

La intervención de este contacto de fotocélula provoca la detención del movimiento hasta que el obstáculo se retire. En caso de que intervenga en fase de apertura, el movimiento se reanuda en la misma dirección, durante el cierre, se invierte la dirección.



APERTURA PEATONAL (contacto de tipo N.A.)

Enviando un comando, la puerta realiza una apertura parcial de unos 10 seg.



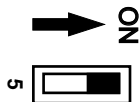
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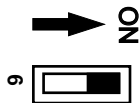


OTRAS FUNCIONES



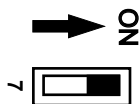
PRE-INTERMITENCIA

Activando esta función, el intermitente y la bombilla piloto empiezan a parpadear unos 3 segundos antes de la activación del motor. Tanto en el cierre como en la apertura.



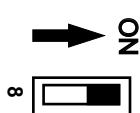
CIERRE AUTOMÁTICO

Activando esta función, la automatización, transcurrido el tiempo programado por el trimmer Rv3, realiza el cierre automático. La función se puede activar independientemente de la lógica de funcionamiento programada (DIP 1 y 2).



AUTOCOMPROBACIÓN FOTOCÉLULA

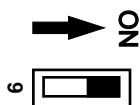
Activando esta función, se realiza una comprobación de las fotocélulas antes de que la puerta realice movimiento alguno. Para poder utilizar esta función, los transmisores de las fotocélulas deben estar conectados a los bornes 5 (24V) y 2 (Negativo) del conector CN3. En caso de anomalías, el intermitente y la bombilla piloto parpadearán lentamente.



GESTIÓN ENCODER

Activando esta función, se gestionan los impulsos procedentes de un encoder situado en el motor o en la puerta. De este modo, es posible detectar un obstáculo en la carrera de la puerta y realizar una inversión del movimiento.

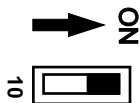
En caso de anomalías, el intermitente y la bombilla piloto parpadearán lentamente.
NOTA: si no hay ningún encoder instalado, poner el DIP en posición OFF.



PARTIDA DEL MOTOR "SOFT"

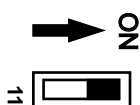
Activando esta función, el motor partirá con un par más bajo para evitar tirones y tensiones en los componentes mecánicos de la puerta. El par de partida es un porcentaje del de marcha.

NOTA: en caso de que la puerta tenga poco deslizamiento o sea muy pesada, es recomendable no activar esta función.



RALENTIZACIÓN EN FIN DE CARRERA

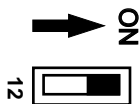
Activando esta función, se obtiene una ralentización de la velocidad del motor antes de llegar al fin de carrera o antes de que el tiempo de trabajo finalice. Esta función tiene el objetivo de aproximar suavemente la hoja al tope, evitando golpes ruidosos. La velocidad de aproximación es fija, mientras que el tiempo se puede regular mediante el trimmer Rv2.



CIERRE HOJA

Activando esta función, al final de la fase de ralentización, y cuando la hoja está apoyada en el tope mecánico, el motor se alimenta durante aprox. 1 seg. con la potencia máxima. Esta solución permite aumentar la presión interna del aceite del motor y, por tanto, aumenta la eficacia del bloqueo hidráulico.

NOTA IMPORTANTE: no activar esta función en caso de uso en puertas correderas, ya que provocaría el salto de los fines de carrera, con el consiguiente bloqueo de la automatización.



DIRECCIÓN DE CIERRE

Esta función permite definir la dirección de cierre de la puerta sin necesidad de invertir las conexiones de las fases del motor y los contactos de fin de carrera.



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REGULACIONES TRIMMER



REGULACIÓN PAR DE MARCHA

Este trimmer permite regular la fuerza de empuje del motorreductor. Dicha regulación es indispensable para actuadores desprovistos de dispositivo mecánico / hidráulico de limitación de las fuerzas. La regulación se debe llevar a cabo sin crear peligro de aplastamiento a personas o cosas y, en cualquier caso, teniendo en cuenta la normativa vigente al respecto.



REGULACIÓN DURACIÓN DEL TIEMPO DE RALENTIZACIÓN

Este trimmer permite regular la duración del tiempo de ralentización.



REGULACIÓN TIEMPO DE PAUSA

Este trimmer permite la regulación lineal del tiempo de pausa entre 0 y 120 seg.
Para habilitar el cierre automático, poner el DIP 6 en la posición ON.

NOTA: GIRANDO EL TRIMMER EN SENTIDO HORARIO, LOS TIEMPOS / VALORES AUMENTAN

AUTOAPRENDIZAJE TIEMPOS DE TRABAJO EN PUERTA CORREDIZA (CON FIN DE CARRERA)

1 FASE 1

Realizar todas las conexiones eléctricas y puentear los posibles contactos N.C. no utilizados.

Si se está utilizando un motorreductor dotado de dispositivo anti-aplastamiento mecánico / hidráulico, programar el par de marcha (trimmer Rv1) en el valor máximo y realizar la regulación del par motor utilizando las correspondientes válvulas by-pass o tornillos de regulación de fricción presentes en los actuadores. Si se utiliza un motorreductor desprovisto de sistema mecánico / hidráulico de limitación de la fuerza, programar el par de marcha en el valor máximo SÓLO para la fase de autoaprendizaje. Inmediatamente después, programar un valor de par que garantice la seguridad anti-aplastamiento, respetando la normativa vigente.

¡ATENCIÓN!

ESTE PROCEDIMIENTO, AL SER POTENCIALMENTE PELIGROSO, DEBE LLEVARLO A CABO ÚNICAMENTE PERSONAL ESPECIALIZADO Y EN CONDICIONES DE SEGURIDAD.

2 FASE 2

Tras haber quitado la alimentación de la instalación, desbloquear la puerta y colocarla a mitad de carrera. Restablecer el bloqueo.

Mantener pulsado el botón P1, el piloto 10 se encenderá. Seguir pulsando P1 hasta la partida del motor en cierre. Soltar P1.

Si el motor partiese en apertura, retirar de nuevo la alimentación, desplazar el DIP 12 y repetir el procedimiento (fase 2).

3 FASE 3

La puerta se cierra hasta alcanzar el fin de carrera de cierre. El motor detiene el movimiento e inmediatamente después inicia un ciclo de apertura. Al alcanzar el fin de carrera de apertura, el motor se detiene y vuelve a cerrar otra vez, hasta alcanzar el fin de carrera de cierre.

En este punto, la puerta permanece cerrada, los tiempos han sido memorizados y la automatización está lista para funcionar.

Comprobar la correcta memorización de los tiempos dando un comando de start o pulsando el botón P1. Si es necesario, repetir el procedimiento de aprendizaje desde la fase 2.

4 FASE 4

En caso de uso con motorreductor desprovisto de dispositivo mecánico / hidráulico de la limitación del par motor, regular el trimmer Rv1 con valores que garanticen la seguridad anti-aplastamiento respetando la normativa vigente.

Regular el tiempo de ralentización (si está habilitado), mediante el trimmer Rv2.



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AUTOAPRENDIZAJE TIEMPOS DE TRABAJO EN PUERTAS CON HOJAS (SIN FIN DE CARRERA)

1 FASE 1

Realizar todas las conexiones eléctricas y puentear los posibles contactos N.C. no utilizados.

Si se está utilizando un motorreductor dotado de dispositivo anti-aplastamiento mecánico / hidráulico, programar el par de marcha (trimmer Rv1) con el valor máximo y realizar la regulación del par motor utilizando las pertinentes válvulas by-pass o tornillos de regulación de la fricción presentes en los actuadores. Si se utiliza un motorreductor desprovisto de sistema mecánico / hidráulico de limitación de la fuerza, programar el par de marcha con el valor máximo SÓLO para la fase de autoaprendizaje. Inmediatamente después, programar un valor de par que garantice la seguridad anti-aplastamiento, respetando la normativa vigente.

¡ATENCIÓN!

ESTE PROCEDIMIENTO, AL SER POTENCIALMENTE PELIGROSO, DEBE LLEVARLO A CABO ÚNICAMENTE PERSONAL ESPECIALIZADO Y EN CONDICIONES DE SEGURIDAD.

2 FASE 2

Tras haber retirado la alimentación de la instalación, desbloquear la puerta y colocarla a media carrera. Restablecer el bloqueo. Mantener pulsado el botón P1, el piloto 10 se encenderá. Seguir pulsando P1 hasta la partida del motor en cierre. Soltar P1.

Si el motor partiera en apertura, retirar de nuevo la alimentación, desplazar el DIP 12 y repetir el procedimiento (fase 2).

3 FASE 3

La puerta se cierra, al alcanzar el tope mecánico de cierre, pulsar el botón P1.

La puerta iniciará un ciclo de apertura. Al alcanzar el tope mecánico de apertura, pulsar de nuevo start o P1. La puerta se detiene y comienza de nuevo un ciclo de cierre. Al alcanzar el tope mecánico de cierre, pulsar de nuevo P1.

En este punto, la puerta permanece cerrada, los tiempos han sido memorizados y al automatización está lista para funcionar.

Comprobar la correcta memorización de los tiempos dando un comando de start o pulsando el botón P1. Si es necesario, repetir el procedimiento de aprendizaje desde la fase 2.

4 FASE 4

En caso de uso con motorreductor desprovisto de dispositivo mecánico / hidráulico de la limitación del par motor, regular el trimmer Rv1 con valores que garanticen la seguridad anti-aplastamiento respetando la normativa vigente. Si, después de haber regulado el par de marcha, el tiempo de trabajo resultase insuficiente (la hoja no se abre / cierra completamente), repetir la FASE2 con el valor de par programado para el uso normal de la automatización.

Regular el tiempo de ralentización (si está habilitado) mediante el trimmer Rv2.

MEMORIZACIÓN DE UN MANDO A DISTANCIA

Pulsar el botón P2 hasta que el piloto LD10 no se encienda.

Enviar un impulso con el mando a distancia, utilizando el botón al que se desea asociar el comando de start.

El piloto realizará parpadeos para confirmar la memorización del código Tx y, a continuación, permanecerá encendido a la espera de nuevos transmisores. Si no se memoriza ningún código nuevo antes de 10 seg., el piloto se apagará automáticamente, saliendo del procedimiento de memorización.

ATENCIÓN: Si se introduce un código ya existente en la memoria, será eliminado.



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TABLA DE INDICACION DE ALARMA EN LAS TARJETAS GATE

La secuencia de relampagueos, con intervalos de una pausa, es mostrada ya sea en la lampara (por alrededor de 20 segundos), como en la lampara espia (hasta un nuevo START).

Numero de relampagueos	Tipos de alarmas
1	Fotocélula
2	Banda de seguridad
3	Encoder

Numero de relampagueos	Tipos de alarmas
4	Stop
5	Autotest fotocélula
6	Triac test

ADVERTENCIA

La instalación eléctrica y la lógica de funcionamiento deben estar de acuerdo con la normativa vigente. Preveer en cada caso un interruptor diferencial puesto al inicio de la instalación eléctrica de la automatización de 16A y umbral de intervención de 0,030A. Tener separados los cables de potencia (motor, alimentaciones etc.) de los de mando (pulsadores, fotocélulas, receptores radio etc.). Para evitar interferencias es preferible preveer y utilizar al menos dos vainas separadas.

REPUESTOS

Los pedidos de repuestos tienen que ser enviados a:

SEA S.r.l. Zona Ind.le S.ATTO, 64020 Teramo Italia

UTILIZACION

El aparato electrónico GATE 1 ha sido proyectado para ser utilizado exclusivamente como tarjeta de mando para automatizar cancelas corredizas, cancelas a batiente, puertas basculantes, puertas de libro, barreras.

SEGURIDAD Y COMPATIBILIDAD DEL AMBIENTE

Es importante no dispersar en el ambiente los materiales de embalaje del producto y/o los circuitos.



ELIMINACIÓN CORRECTA DE ESTE PRODUCTO (material electrónico de descarte) - Europa solamente

(Aplicable en la Unión Europea y en países europeos con sistemas de recogida selectiva de residuos)

La presencia de esta marca en el producto o en el material informativo que lo acompaña, indica que al finalizar su vida útil no deberá eliminarse junto con otros residuos domésticos. Para evitar los posibles daños al medio ambiente o a la salud humana que representa la eliminación incontrolada de residuos, separe este producto de otros tipos de residuos y reciclelo correctamente para promover la reutilización sostenible de recursos materiales. Los usuarios particulares pueden contactar con el establecimiento donde adquirieron el producto, o con las autoridades locales pertinentes, para informarse sobre cómo y dónde pueden llevarlo para que sea sometido a un reciclaje ecológico y seguro. Los usuarios comerciales pueden contactar con su proveedor y consultar las condiciones del contrato de compra. Este producto no debe eliminarse mezclado con otros residuos comerciales.

ALMACENAMIENTO

TEMPERATURAS DE ALMACENAMIENTO			
T _{min}	T _{Max}	Humedad _{min}	Humedad _{Max}
- 40°C	+ 85°C	5% <i>no condensable</i>	90% <i>no condensable</i>

El manejo del producto tiene que ser efectuado con medios idóneos.

PUESTA FUERA DE SERVICIO Y MANUTENCION

La desinstalación y/o puesta fuera de servicio y/o manutención de la maniobra electrónica GATE 1 tiene que ser efectuada solo y exclusivamente por personal autorizado y experto.

LIMITE DE GARANTIA

La garantía del módulo de la maniobra electrónica GATE 1 es de 24 meses de la fecha estampada sobre el producto. Este último será reconocido en garantía si no presenta daños debidos al uso impropio o a cualquiera modificación o adulteración. La garantía es válida solo para el comprador original.

N.B. EL FABRICANTE NO PUEDE SER CONSIDERADO RESPONSABLE POR EVENTUALES DAÑOS ACARREADOS POR USO IMPROPIO, ERRORNEO E IRRAZONABLE.

La SEA se reserva el derecho de aportar modificaciones o variaciones que fueran oportunas a sus productos y/o al presente manual sin obligación alguna de aviso previo.



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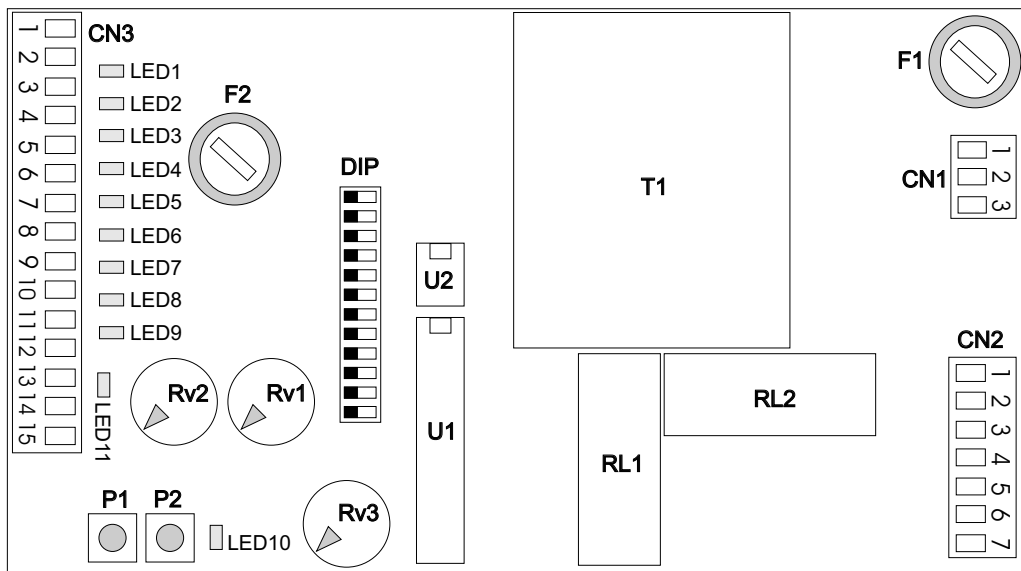
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English

ELECTRONIC CONTROL UNIT

GATE 1

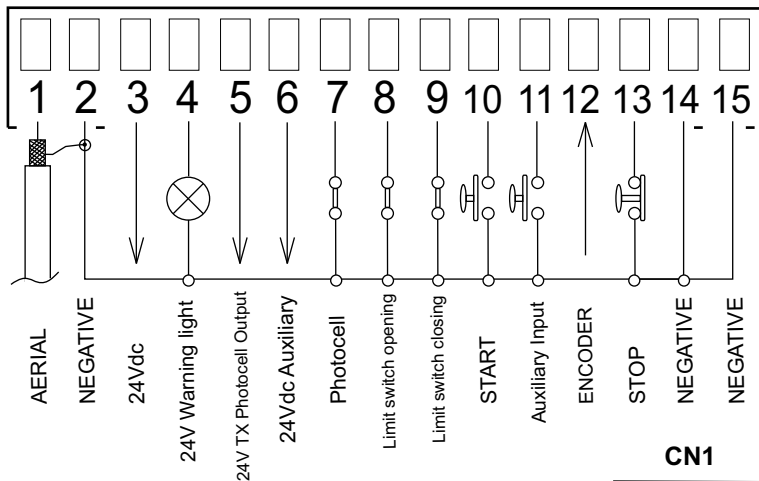


LED1 = Warning light	Rv1 = Motor torque adjustment
LED2 = TX Photocell output	Rv2 = Brake length adjustment (slow down length)
LED3 = 24V Auxiliary output	Rv3 = Pause time adjustment
LED4 = Photocell	P1 = Operating time memory button
LED5 = Limit switch in opening	P2 = Remote control memory button
LED6 = Limit switch in closing	DIP = Dip-switch Function Setting
LED7 = Start	F1 = Output and motor fuse (10AT)
LED8 = Auxiliary input	F2 = Accessories fuse (1 A)
LED9 = Encoder	T1 = Transformer
LED10 = Programming	RL1 = Motor Power Supply Relay
LED11 = Stop	RL2 = Motor Operating Direction Relay
CN1 = 115V power supply connector	U1 = Micro-controller
CN2 = Motor and Flashing lamp connector	U2 = EEPROM memory
CN3 = 24V input / output connector	

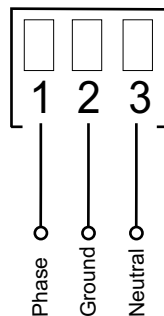


CONNECTIONS

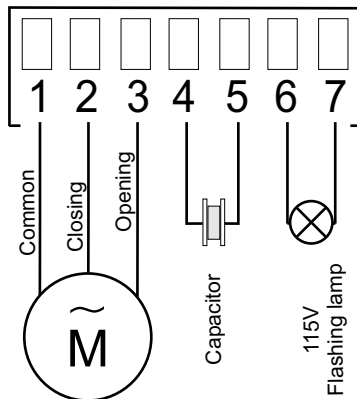
CN3



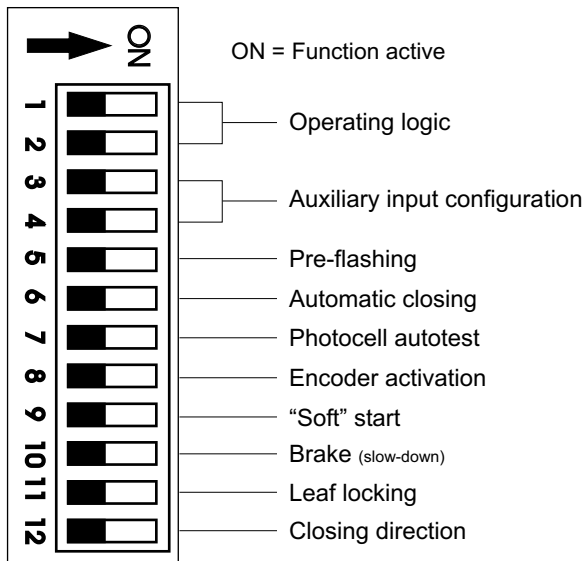
CN1



CN2



DIP





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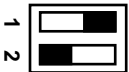


SETTING OPERATING LOGICS



MANUAL LOGIC

A START command opens the gate. A second START while it is opening stops the motor.
A START command while it is closing stops the motor.



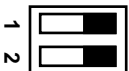
SAFETY LOGIC

A START command opens the gate. A second START while it is opening reverses the motor. A START command while it is closing reverses the motor.



AUTOMATIC LOGIC 1

A START command opens the gate. A second START while it is opening is not accepted. A START while it is closing reverses the direction.
P. N.: for automatic closing, set DIP SWITCH 6 to the ON position.



AUTOMATIC LOGIC 2

A START command opens the gate. A second START while it is opening is not accepted. A START during the pause time closes the gate immediately. A START while it is closing reverses the direction.
P.N.: for automatic closing, set DIP SWITCH 6 to the ON position.

AUXILIARY INPUT CONFIGURATION



SAFETY EDGE (N.C. contact)

When the safety edge contact becomes Opened, the gate reverses direction and stops after approximately 1 second. A START command is required to start the motion again.



TIMER (N.O. contact)

If a TIMER is connected to this input, it is possible to open the gate and hold it open for as long as the contact remains closed. Using a 24 hour or a 7 day timer, openings time can be scheduled exactly as required. When the TIMER contact is open the motor operates following the operating logics previously set.



AUXILIARY PHOTOCCELL (N.C. contact)

The intervention of this Photocell contact stops the operator until the obstacle is removed. If it's verified while the gate is opening, movement resumes in the same direction; if it's verified while closing, the direction is reversed.



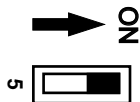
PEDESTRIAN OPENING (N.O. contact)

On this command, the gate opens partially, for about 10 seconds.

Make JUMPERS on all N.C. contacts that are not being used

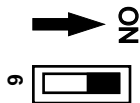


OTHER FUNCTIONS



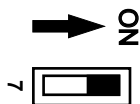
PRE-FLASHING

When this function is activated, the flashing lamp and warning light begin flashing about 3 seconds before the motor starts opening, whether in opening or closing.



AUTOMATIC CLOSING

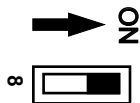
When activated, the motor automatically closes the gate after the PAUSE time set by trimmer Rv3. This function can be activated independently from the operating logic set. (DIP SWITCH 1 & 2).



PHOTOCELL AUTOTEST

When this function is activated, a test on the photocells is carried out prior to any movement of the gate. In order to use this function, the transmitting photocells must be connected to terminals 5 (24V) and 2 (Negative) on the CN3 connector.

In the event of a malfunctioning, the flashing lamp and warning light will both flash slowly.

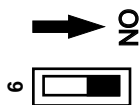


ENCODER MANAGEMENT

The signals sent from the ENCODER, located on the motor or on the gate, can be managed activating this function. If activated, any obstacle in the gate route will be detected and the gate movement reversed.

In the event of a malfunctioning, the flashing lamp and warning light will both flash slowly.

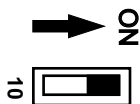
P.N.: if no ENCODER is installed, the DIP Switch should be set to the OFF position.



“SOFT” START

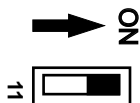
When activated, the motor will start at a lower torque level, to avoid stresses and strains on the mechanical components of the gate. The starting torque is a percentage of the normal operating torque.

P.N.: When the gate is very heavy or does not run smoothly, it is advised NOT TO activate this function.



BRAKING (slow-down) AT LIMIT SWITCH

When activated, the motor speed is reduced before reaching the limit switch or the end of the operating time. The purpose of this function is to bring the leaf gently towards the stop position to avoid a noisy collision. The closing speed is fixed, but the slow-down time is adjustable, using the Rv2 trimmer.

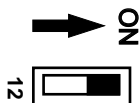


LEAF LOCKING

When activated, after slowing down, and when the leaf has reached the mechanical stop, for about 1 second the motor is supplied at the maximum power. This increases the oil pressure in the motor, making the hydraulic lock more effective.

IMPORTANT NOTE:

this function SHOULD NOT be activated when used on sliding gates, as it can cause the gate over-running of the limit switches and the motor jamming



CLOSING DIRECTION

This function allows to define the gate closing direction without reversing the Motor wiring connections and the Limit Switch contacts.



TRIMMER REGULATION



OPERATING TORQUE ADJUSTMENT

This Trimmer allows to adjust the motor torque. This adjustment is needed for operators without mechanical or hydraulic anti-crush safety devices. Regulation should be carried out to avoid any risks of crushing either people or objects and, in any case, compliant with current legislation on the subject.



BRAKE (slow-down) LENGTH ADJUSTMENT

This Trimmer allows to adjust the length of the slow-down



PAUSE LENGTH ADJUSTMENT

This Trimmer allows the adjustment of the PAUSE time between 0 and 120 seconds.
Set DIP SWITCH 6 to the ON position to enable automatic closing.

P.N.: TIMES AND VALUES ARE INCREASED BY ROTATING THE TRIMMERS CLOCKWISE

SELF-LEARNING OF OPERATING TIME FOR SLIDING GATES (WITH LIMIT SWITCH)

1

STAGE 1

Make all the electrical connections and jumpers on any unused N.C. contact.

If an operator equipped with mechanical or hydraulic anti-crush safety device is being used, set the torque (trimmer Rv1) to the maximum value and adjust the motor torque using the by-pass valves or clutch adjustment screws located on the operator.

If an operator without a mechanical or hydraulic anti-crush safety system is being used, set the torque to the maximum value **ONLY** for the self-learning process.

Immediately afterwards, set a torque value that will ensure anti-crush safety, in accordance with current legislation.

ATTENTION !

THIS PROCEDURE IS POTENTIALLY DANGEROUS AND MUST BE CARRIED OUT ONLY BY SPECIALIZED PERSONNEL USING ALL SAFETY PRECAUTIONS.

2

STAGE 2

Take off the power supply, release the motor and set the gate in the half-open position.

Lock back the motor.

Press and Hold button P1, Led 10 will come on.

Continue to hold P1 until the motor starts to close the gate. Release P1.

If the motor start to open the gate, take off the power supply again. Move DIP Switch 12 and repeat completely the procedure (stage 2).

3

STAGE 3

The gate closes until it reaches the closing limit switch. The motor stops and then immediately begins an opening cycle. On reaching the opening limit switch, the motor stops and begins to close the gate once more until it reaches the closing limit switch.

At this point the gate remains closed, the operating times are memorized and the operator is ready to work.

Double check that the operating times have been memorized correctly giving a Start or pressing button P1. If necessary, repeat the programming procedure from stage 2.

4

STAGE 4

If used with an operator without a mechanical or hydraulic anti-crush safety device, adjust trimmer Rv1 to values that will ensure anti-crush safety, in accordance with current legislation.

Adjust the slow-down length (if enabled), using trimmer Rv2.



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SELF-LEARNING OF OPERATING TIME FOR SWING GATES (WITHOUT LIMIT SWITCH)

1 STAGE 1

Make all the electrical connections and jumpers on any unused N.C. contacts.

If an operator equipped with mechanical or hydraulic anti-crush safety device is being used, set the motor torque (trimmer Rv1) to the maximum value and then adjust the motor torque using the appropriate by-pass valves or clutch adjustment screws located on the motor.

If an operator without a mechanical or hydraulic anti-crush safety system is being used, set the motor torque to the maximum value ONLY for the self-learning process.

Immediately afterwards, set a torque value that will ensure anti-crush safety, in accordance with current legislation.

ATTENTION!

THIS PROCEDURE IS POTENTIALLY DANGEROUS AND MUST BE CARRIED OUT ONLY BY SPECIALIZED PERSONNEL USING ALL SAFETY PRECAUTIONS.

2 STAGE 2

Take off the power supply, release the motor and set the gate in the half-open position.

Lock back the motor.

Press and Hold button P1, Led 10 will come on.

Continue to hold P1 until the motor starts to close the gate. Release P1.

If the motor start to open the gate, take off the power supply again. Move DIP Switch 12 and repeat completely the procedure (stage 2).

3 STAGE 3

The gate closes; when it reaches the mechanical stop, press button P1. The gate will start an opening cycle.

When it reaches the mechanical stop, press Start or P1 again. The motor stops and begins to close the gate once more. When it reaches the mechanical stop, press P1 once more.

At this point the gate remains closed, the operating times are memorized and the operator is ready to work.

Check that the operating times have been memorized correctly by giving a Start command or by pressing button P1. If necessary, repeat the programming procedure from stage 2.

4 STAGE 4

If used with an operator without a mechanical or hydraulic anti-crush safety device, adjust trimmer Rv1 to values that will ensure anti-crush safety, in accordance with current legislation.

Adjust the slow-down length (if enabled), using trimmer Rv2. If after adjusting the motor torque the operating time is insufficient (ex. the leaf fails to open or close completely), repeat STAGE 2 with the motor torque value set for the normal use of the operator.

Adjust the slow down length (if enabled), using trimmer Rv2.

PROGRAMMING A TRANSMITTER

Press button P2 until LED 10 turns ON.

Give a START with the transmitter, using the button chosen for the start command.

The LED will flash to confirm that the Transmitter code has been memorized and will remain ON waiting for further transmitters. If no further code is memorized within 10 seconds, the LED automatically goes off and exits the programming procedure.

ATTENTION: If an existing code is already in the memory, it will be deleted.



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ALARM INDICATION BOARD ON CONTROL UNITS GATE

The sequence of lightning, intervals of pause, are shown on the flashlight (for ca. 20 sec.) and on the control lamp (until a new START).

Number of lightning	Type of alarm
1	Photocell
2	Safety edge
3	Encoder

Number of lightning	Type of alarm
4	Stop
5	Photocell self-testing
6	Triac test

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.

Remember to separate mains (230/115 V) carrying cables from low voltage control cables.

SPARE PARTS

To obtain spare parts contact:

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

INTENDED USE

The electronic control unit GATE 1 has been planned to be used exclusively as a control device for sliding gates, swing gates, garage-doors, folding doors, barriers

SAFETY AND ENVIRONMENTAL COMPATIBILITY

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



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.

STORAGE

STORAGE TEMPERATURES			
T _{min}	T _{max}	Humidity _{min}	Humidity _{max}
-40 °C	+85 °C	5% no condensation	90% no condensation

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

MAINTENANCE AND OUT OF SERVICE

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

LIMIT OF GUARANTEE

The GATE 1 electronic control units are guaranteed for a period of 24 months. The guarantee period starts from the date stamp printed on the unit. The GATE 1 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.

NOTE: THE MANUFACTURER CAN NOT BE DEEMED RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED BY IMPROPER USE OF THIS PRODUCT.

SEA reserves the right to do changes or variations that may be necessary to its products with no obligation to notice.



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TERMS OF SALE

EFFICACY OF THE FOLLOWING TERMS OF SALE: The following general terms of sale shall be applied to all orders sent to SEA srl. All sales made by SEA to all customers are made under the prescription of this terms of sales which are integral part of the sale contract and cancel and substitute all opposed clauses or specific negotiations present in the order or in other documents received from the buyer.

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.

7) SUPPLY The concerning order will be accepted by SEA without any engagement and subordinately to the possibility to get it's supplies of raw material which is necessary for the production. Eventual completely or partially unsuccessful executions cannot be reason for complains or reservations for damage. SEA supply is strictly limited to the goods of its manufacturing, not including assembly, installation and testing. SEA, therefore, disclaims any responsibility for damage deriving, also to third parties, from non-compliance of safety standards and good practice during installation and use of the purchased products.

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.

9) RESERVED DOMAIN A clause of reserved domain applies to the sold goods; SEA shall decide autonomously whether to make use of it or not, whereby the Buyer acquires the property of the goods only after full payment of the invoice.

10) COMPETENT COURT OF LAW In case of disputes arising from the application of the agreement, the competent court of law is the tribunal of Teramo. The official language for the interpretation of the catalogue, the manuals, the terms of sale and any other is the Italian language.

SEA reserves the faculty to make technical changes to improve its own products, which are and are not included in this price list at any moment and without notice.

SEA declines any responsibility due to possible mistakes contained inside the present price list caused by printing and/or copying. The present price list cancels and substitutes the previous ones. The Buyer, according to the law No. 196/2003 (privacy code) consents to put his personal data, deriving from the present contract, in SEA archives and electronic files, and he also gives his consent to their treatment for commercial and administrative purposes.

Industrial ownership rights: with the purchase, the buyer accepts in full the present Terms of Sale and recognizes that SEA has the exclusive legal ownership of the registered SEA International trademark n° 804888 which is attached on each products label, and/or on manuals, packaging and/or in any other documentation, and he will commit himself to use it in its marketing and/or installation activity in a way which does not reduce the value of these rights; he won't also remove, replace or modify the trademark or any other particularity from the products. Any kind of replication or use of SEA brand is forbidden as well as of any change of signs-brands on the products, unless preventive and expressed authorization by SEA.



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