

CERTIFICATO DI INSTALLAZIONE

Il sottoscritto, installatore, certifica di aver eseguito personalmente l'installazione del dispositivo di allarme del veicolo descritto qui di seguito, secondo le istruzioni del fabbricante.

INSTALLATION CERTIFICATE

The undersigned, qualified installer, attests to have personally fitted the here described Vehicle Security system following the manufacturer instructions.

CERTIFICAT D'INSTALLATION

Je soussigné, installateur, certifie d'avoir fait personnellement l'installation du dispositif d'alarme du véhicule ci décrit, conforme aux instructions du constructeur.

EINBAUBESCHEINIGUNG

Der Installateur bestätigt mit seiner Unterschrift, dass die Alarmanlage in dem genannten Fahrzeug nach Vorgaben Des Herstellers eingebaut wurde.

CERTIFICADO DE INSTALACION

El que suscribe, instalador certifica el haber personalmente la instalación del dispositivo de alarma del vehículo descrito a continuación, de acuerdo con las instrucciones del fabricante.

CERTIFICADO DE INSTALAÇÃO

O abaixo assinado, instalador, certifica que executou pessoalmente a instalação do dispositivo de alarme do veículo descrito a seguir, conforme as instruções do fabricante.

By :
Da :
Par :
Von :
Por :
De :

Venduto il :
Sold on :
Vendu le :
Verkauft am :
Vendido el :
Vendido em :

Tipo di prodotto :
Type of product :
Type de dispositif :
Produktartikel :
Dispositivo ciclo :
Tipo de dispositivo :

Auto
Car
Véhicule
Fahrzeug
Veículo

Firma, Signature, Unterschrift, Assinatura

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7590

End user manual Manuale utente Manual usuario



For all EU countries

AC 2594 rev. 01-09/05



INTRODUCTION

The 7590 system is a alarm control unit with built-in sensors and can be installed on cars having a 12-volt battery with the negative pole earthed.

GENERAL NOTE FOR INSTALLATION

Dear installer, this manual has been conceived and written keeping in mind the complete system. Therefore some functions, electrical connection and other can be present in one alarm version and lack to another.

In order to avoid useless repetitions in the manual, before installing the available alarm, you are kindly requested to verify its version and then follow the suitable instructions.

Furthermore, in order to carry out correctly the various procedures required, we remind you to make and to verify very carefully all electrical connections, IN PARTICULAR THE BASIC CONNECTIONS:

- ✍ Device power supply (positive and earth)
- ✍ Positive under key (+15/54)
- ✍ Door switch
- ✍ Bonnet or Trunk switch

FUNCTIONS

- ✍ Arming and disarming of the alarm system with transmitters having random rolling code.
- ✍ Electrical engine immobilizer by passive arming.
- ✍ Double engine immobilizer.
- ✍ Blinker.
- ✍ Sirene sound intermittent or continuous (programmable).
- ✍ Perimetric protection.
- ✍ Volumetric protection (combined with an ultrasonic or hyperfrequency module, excludable from arming).
- ✍ Control for CDL, electrical widows and sun roof (vehicles equipped with the system "Pack-comfort").
- ✍ Alarm memory indicated by optic/acoustical signals.
- ✍ "PANIC" or "BOOT OPENING" function (programmable).
- ✍ Current absorption sensor (programmable).
- ✍ Anti distraction function (programmable).
- ✍ Control for self-powered siren or supplementary siren.
- ✍ Emergency disarming by PIN-CODE.
- ✍ Garage function.

TOTAL ALARM ARMING

The alarm can be activated by pressing key 1 on the remote or by inserting the electronic key into the appropriate socket.

The operation is confirmed by an acoustic signal and a visual signal consisting of one flash of the turn indicators lasting approximately one second.

During the flash, the following functions are enabled:

- ✓ -Module output (PINK wire, +A).
- ✓ -Led output.
- ☐ -Engine immobilizer.
- ☐ -Activation of door-locking control (with the timing selected in programming phase).

If the electronic key is used, all the functions described under points a), b) and c) will be activated, whereas d) ACTIVATION OF DOOR-LOCKING CONTROL will not occur (enabling the user to get out of the vehicle).

Moreover, by using the electronic key, a car entry time of approximately 10 seconds will be generated to allow the user to get into the car and deactivate the alarm system with the electronic key without creating a false alarm.

While the user gets into the car, entry time is indicated by the continuous light of the LED.

NEUTRAL TIME, SENSOR EXCLUSION , STOPPING WINDOW UPWARD TRAVEL AND COMFORT FUNCTION

Neutral activation time lasts approx. 35" and it is indicated by the continuous light of the LED. This time interval allows the user to get out of the vehicle without causing false alarm conditions. During the first 25" of the neutral time, it is possible to cut out the external sensors and stop the windows' upward travel by pressing key no. 2 on the remote (Note: the stop window function requires the installation of a special module see art. 2344 or the existence of the COMFORT function in the car).

The activation of said functions (Cutting out the external sensors / stopping window upward travel / comfort) is indicated by a brief flash of the turn indicators.

NOTE: sensor cutout is limited to a single alarm activation cycle.

ARMING WITH SIREN SOUND EXCLUSION

This function allows the user to arm the alarm system, excluding the siren sound in case of a theft attempt.

To exclude the siren, proceed as follows:

- ✍ Turn the ignition key to "ON" position
- ✍ The status will stay on for 0,5 seconds. During this time, push the button N°2 of the transmitter.
- ✍ Go away from the vehicle and push the button N°1 of the transmitter.
- ✍ The alarm will be armed with the optical and acoustic signals, which, as previously described, will be not activated in case of a theft attempt.

NOTE: the siren sound exclusion is bound to the single arming cycle.

NEUTRAL TIME

At the end of each alarm cycle there is a neutral time period, lasting up to approx. 5", during which there will be no reaction to the causes of alarm. During the neutral time between successive alarms, the LED will emit a continuous light. Normal flashing will be resumed at the end of the neutral time.

SYSTEM ARMED AFTER NEUTRAL TIME

At the end of the neutral time (approx. 45"), the security system is completely armed and ready to intervene in cases of attempted theft or sabotage. Completely armed status is indicated by the flashing of the LED, which will work according to the following timing scheme in order to minimise power consumption:

LED ON : 200mS
LED OFF : 2"

EVENTS THAT CAN GENERATE AN ALARM CONDITION

- ✍ System wire cutting by means of the self-powered siren
- ✍ Attempt to start the engine.
- ✍ Power drained. This function is active only if enabled in the accessory function programming phase and can be used only in countries where the law does not prohibit the use of this sensor.
- ✍ Attempt to open the doors.
- ✍ Attempt to open boot.
- ✍ Attempt to open engine bonnet.
- ✍ Intrusion detected by internal ultrasound volume sensor.
- ✍ Intrusion detected by external sensors (option, also by radio).
- ✍ Panic alarm by pressing key no. 2 on the remote (this function is active only if enabled in the accessory function programming phase and it can be used only in countries where the law permits this type of alarm activation not available in product version for the dutch market).

NOTE: In order to filter noise and/or undesired signals, the POSITIVE UNDER KEY, DOORS and BOOT PUSH-BUTTON inputs have a DEBOUNCE time of 200mS. Therefore these inputs will cause the generation of an alarm cycle only if the signals coming in last longer than 200mS.

For every input and every arming cycle, the alarm causes are limited to 10 cycles of 30 seconds each. The only alarm causes having no limits, is starting attempt (positive under key +15/54).

ALARM DISARMING

The alarm system can be deactivated by pressing key 1 on the remote, by inserting the electronic key into the appropriate receptacle or by means of the emergency PIN CODE procedure.

Disarming is indicated by three turn signal flashes and three acoustic signals. If an alarm condition has occurred, it will be signalled by five turn signal flashes and five acoustic signals (if these functions have not been excluded in programming stage).

See next paragraph for all signalling.

ALARM MEMORY

When disarming the alarm, if five turn signal flashes and five beep signals occur, it is possible to identify the cause generating the alarm condition.

To do this, turn the ignition key to "ON" position and look at the vehicle installed LED.

The LED will be blink, shown the last alarm condition.

The cause of the alarm will indicate for 5 times, and this indication can be interrupted by turning the ignition key to "OFF" position.

The possible alarm signalling are indicated in the table below.

LED SIGNAL	CAUSE OF THE ALARM	NUMBERS OF ALARM CYCLES
★●★	Volumetric sensor	5
★●★	Doors/boot switches	5
★●★	Positive under key (+15/54)	Infinite
★●★	Bonnet switch and volumetric sensors	5
★●★	Absorption sensor	5
★●★	External magnetic contact	5
● LED OFF (2 seconds)	★ LED ON (400mS)	

NOTE: the cause of alar of CUT WIRE does not enabled the alarm memory because it is managed by the external self-powered siren.

SUPPLEMENTARY SIREN OPERATION

Continuous audible signal for the entire duration of the alarm signal cycle.

ORIGINAL HORN OPERATION

Intermittent sound 2" ON 2" OFF for the entire duration of the alarm signal cycle.

If the user has cut out the siren, the alarm condition will be indicated solely by the flashing of the turn indicators for a maximum time period of 30".

NOTE: While the alarm signal is given out, the LED will emit a continuous light. You can cut off the alarm cycle without deactivating the system, by pressing key no. 2 on the remote. As you do so, the audible/visible alarm signals will be immediately cut off, and the system will switch to the condition of NEUTRAL TIME BETWEEN SUCCESSIVE ALARMS.

To minimise acoustic pollution, the DOORS PUSHBUTTON, BOOT PUSHBUTTON, BONNET PUSHBUTTON, ELECTRICAL INPUT SENSOR, INTERNAL VOLUME SENSOR and EXTERNAL SENSORS inputs are subject to a limitation of up to five alarm cycles per system activation period. The count is reset upon the next deactivation of the alarm system or if an alarm for POSITIVE POLE UNDER KEY intervenes during the same activation cycle.

ELECTRICAL CONNECTIONS

- ✂ Implement the engine engine blocks by working on the fuel pump and the starter motor.
- ✂ Connect the supply power positive of the 7590T alarm system to the vehicle battery or to one of its derivations.
- ✂ Connect the supply power negative of the 7590T alarm system to the vehicle's metallic frame (all 2 BLACK wires marked M).
- ✂ Connect ALWAYS one of the GREEN/BROWN wires of the alarm wiring harness to the doors switch.
- ✂ Connect (if necessary) the other GREEN/BROWN wire of the alarm wiring harness to the doors switch.
- ✂ Connect ALWAYS the BLACK wire marked V of the alarm wiring harness to the bonnet switch.
- ✂ Before programming the system, **make all the electrical connection.**
- ✂ For the CDL connections see at the diagram in the next pages.

NOTE: (available) diagrams for every specific car, must be required to the zone dealer.

The index reported below refers to the electrical scheme of alarm cable in the next page.

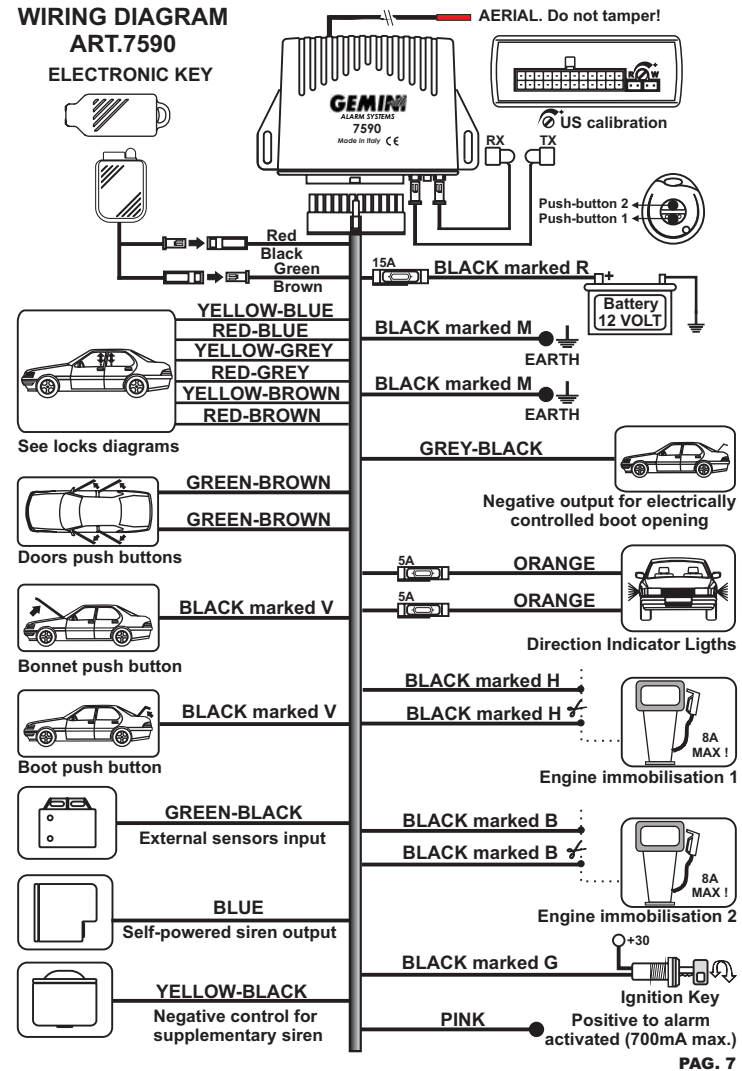
Before effecting all electrical connections, disconnect the NEGATIVE BATTERY POLE and connect again when mounting as terminated.

FUNCTION	WIRE COLOUR
Negative	N°2 BLACK marked M
Positive	BLACK marked R
Engine immobilization 1	N°2 BLACK marked H
Engine immobilization 1	N°2 BLACK marked B
Positive under key	BLACK marked G
Door pin switches	N°2 GREEN/BROWN
Bonnet/boot switches	N°2 BLACK marked V
Positive alarm ON	PINK
External sensor input	GREEN/BLACK
Negative control for supplementary siren	YELLOW/BLACK
Self powered siren	BLUE
Turn signals	N°2 ORANGES
Negative output for electrically controlled boot opening	GREY-BLACK
CDL (see diagram)	YELLOW/BLUE RED/BLUE YELLOW/BROWN RED/BROWN YELLOW/GREY RED/GREY

NOTE: The BLACK two pin connectors of the alarm wiring harness are for the electronic key and led connections.

PAG. 6

WIRING DIAGRAM ART.7590 ELECTRONIC KEY



PROGRAMMING THE ALARM SYSTEM

Has been previously programmed with standard configuration during manufacturing procedure by Gemini, and can be modified in any moment. During the programming phases, press the radio control (rough) push-button n.1, for function activation and the (smooth) push-button n.2, for function deactivation.

For the programming modification proceed as follows:

- ✍ With alarm being disarmed, open and keep it open the driver side door.
- ✍ Turn the ignition key to "ON" position.
- ✍ The status led stay on for 0,5 seconds; during this time, push together the two buttons of the remote control.
- ✍ Starting of programming procedure is indicated by two flash of the turn signals and of the led.
- ✍ To able and disable the functions, follow the below table, take into consideration that every time the push button of transmitter is pressed, the system goes to the following function.

FUNCTION	STATE	BUTTON
Coninuous or intermittent siren sound	Continuous	Button N°1- Intermittent Button N°2- Continuous
Setting of centralized lock times (0,5 - 6 sec)	0,5" selected	Button N°1- Enable panic Button N°2- Enable car-finder
25 seconds comfort closure command	Disabled	Button N°1- Enable Button N°2- Disable
Panic alarm or "car finder"	Enabled panic Disabled	Button N°1- Enable Button N°2- Disable
Current absorption sensor	Disabled	Button N°1- Enable Button N°2- Disable
Anti-distraction, automatic door locking function	Disabled	Button N°1- Enable 6" Button N°2- Enable 0,5"
Panic/boot opening function	Disabled	Button N°1- Enable Button N°2- Disable
Function/boot opening function	Panic function enabled	Button N°1- Abilita Button N°2- Disable

NOTE: by turning the ignition key to "OFF", in any moment of the programming procedure, the latter will stop and successive functions will remain unchanged.

- ✍ Once the last function has been programmed, the alarm will confirm that the programming has been disabled with two flashes of the turn signals, and two flashes of the LED.
- ✍ Turn the ignition key to "OFF" position.

NOTE: automatic activation of engine immobilisation is enabled at the factory and cannot be changed in the version for the UK market.

PROGRAMMABLE FUNCTIONS

ACOUSTIC SIGNALS

This function allows the user to permanently exclude all acoustic signals. See the relative paragraph for programming.

PANIC ALARM OR CAR-FINDER

If enabled, the PANIC ALARM function allows the user to activate the visual and audio alarm signals deliberately by pressing key 2 on the remote.

This function works regardless of whether the alarm system is "ON" or "OFF".

The alarm signal lasts up to approx. 30". However, you can silence it at any time by pressing key 2 on the remote again

While the alarm signal is emitted the LED emits a continuous light.

If during the programming phase, the PANIC function has been disabled, the CAR FINDER function will be activated.

When the alarm is activated, the CAR FINDER function allows you to obtain a short optic/acoustic signal by pressing button N°2 on the remote.

This function can be useful to look for the car in a parking lot or parking silo without creating useless alarm condition.

The brief optic/acoustic signal consists of a low beep and the simultaneous flashing of the turn indicators.

NOTE: the emission of the audio signals is subordinate to their being enabled when programming the accessory functions.

CURRENT ABSORPTION SENSOR

ATTENTION: before activating of the absorption sensor, it is suggested to consult the specific rules being in force in your country (noise pollution).

When the absorption sensor is activated, a signal will be sent out at any minimal tension variation in the vehicle's electrical circuit (for example lamp switching on).

ANTI-DISTRACTION FUNCTION AND DOOR LOCKING

This function determines the automatic activation of the system if this has been disarmed and no voluntary actions are performed by the user (e.g. Door opening).

The function prevents the vehicle from being left unprotected in cases where, after the arming of the system, this is turned OFF accidentally by pressing the button N°1 of the remote control.

The self rearming is confirmed by the alarm with visual/acoustic signalling (one flash by the turn signals and one acoustic signal).

The anti-distraction function activates the CDL control.

Therefore, in order to prevent involuntary activations of the system, it's MANDATORY to connect the door pin switch to the system input (BROWN/GREN wire of the alarm wiring harness).

NOTE: after disarming, a door opening will stop the function.

Together with the previously described function, the automatic door locking of the vehicle is done when running.

Being closed all the doors of the vehicle, turn the ignition key to "ON"; after 20", all doors will be locked.

By turning the ignition key to "OFF", all doors of the vehicle will be automatically unlocked.

To prevent this function from being activated accidentally, the system continuously monitors the status of the ignition key and the input line of the DOOR AND BOOT PUSHBUTTONS and therefore does not allow operation of the locks if the DOORS and BOOT are opened manually while starting the engine or during the 20" after starting it.

PASSIVE ARMING

Automatic arming allows to have the alarm system active, 45 seconds after the engine switching "OFF".

After programming, this function is obtained simply by turning the ignition key to "OFF".

The alarm will indicate the passive arming activation by a long flash of the turn signals, two flash of the status led and two acoustic signals.

When opening a vehicle's door during passive arming, the arming time count will be set to zero and the led will be permanently illuminated; when the door is closed the 45" counting will restart.

LOCKING TIME

The standard locking time of the alarm is set to 0,5".

In case the vehicle needs a locking time of 6", you can vary this parameter during the programming phase.

NOTE: When the comfort function has been activated, let the locking time set to 0,5".

In fact, if the locking time is set to 6", when the alarm is disarmed, the windows of the vehicle will open.

COMFORT CONTROL

The comfort control allows the automatic regulation of window closing, when the alarm is armed.

In fact, after this function has been activated, at any alarm arming, the window winder motor/control unit will receive a 25" command, to close the windows.

CDL DOUBLE OPENING PULSE

By enabling this function you will obtain, upon deactivation of the system, a double control pulse on the door-unlocking line (about 0,5 second each).

This allows the opening of the centralized door locks on vehicles having the diversified door opening (first pulse driver side door opening, second pulse other doors opening).

This function is active only if the opening/closing time of 0,5" is selected, while setting the opening/closing time of 6" will automatically disabled the double pulse.

LEARNING OF NEW CONTROL DEVICES

ATTENTION: in order to carry out successfully the operation, it is necessary to make the required electrical connections (door switch, bonnet switch and positive under key).

The alarm can save to memory a maximum number of 12 control devices, either radio controlled, or electronic keys, TAG cards or magnetic contact (the later as a protection device).

Proceed as follows:

- ✍ With the alarm being disarmed, open and keep open the bonnet and the driver side door.
- ✍ Turn the ignition key to "ON".

ATTENTION: the following operations must be carried out within four seconds, otherwise the new device memorizing procedure will be invalidated.

- ✍ Turn the ignition key to "OFF".
- Re-turn the ignition key to "ON" for three consecutive times (ignition key to "ON" and "OFF"), within the maximum time of four seconds, as mentioned before.
- After the third commutation, let the ignition key to "ON".
- ✍ The alarm will indicate the procedure starting of new control device or magnetic contact learning, by two long turn signal flashes and two acoustic signals, one acute tone and the other loud tone.

ATTENTION: do not modify the bonnet position, otherwise instead of saving to memory new devices, deletion of existing ones in the alarm's memory will take place.

- ✍ Now the alarm is waiting for receiving the device code.
- ✍ Press the radio control push-button 1, introduce the electronic key in the specific receptacle, press the TAG card button or make the magnetic contact to transmit (bring near and then take away contact and magnet), according to the device to be saved to memory.
- In all four cases, the alarm will indicate the new device learning, by one turn signal flashing and one acute tone signal.
- ✍ Repeat the procedure to save to memory other devices.
- ✍ Turn the ignition key to "OFF".
- ✍ The procedure completion will be indicated by one long turn signal flashing and one loud tone signal.

DELETION OF PROGRAMMED CONTROL DEVICES

ATTENTION: in order to carry out successfully the operation, it is necessary to make the required electrical connections (door switch, bonnet switch and positive under key).

The alarm is equipped with a deletion procedure of new control devices, either radio controlled, or electronic keys, TAG cards or magnetic contact (the later as a protection device).

Proceed as follows:

- ✍ With the alarm being disarmed, open and keep open the bonnet and the driver side door.
- ✍ Turn the ignition key to "ON".

ATTENTION: the following operations must be carried out within four seconds, otherwise the new device deletion procedure will be invalidated.

- ✍ Turn the ignition key to "OFF".
- ✍ Re-turn the ignition key to "ON" for three consecutive times (ignition key to "ON" and "OFF"), within the maximum time of four seconds, as mentioned before.
- After the third commutation, let the ignition key to "ON".
- ✍ The alarm will indicate the procedure starting of new control device or magnetic or magnetic contact deletion, by two long turn signal flashes and two acoustic signals, one acute tone and the other loud tone.
- ✍ Close the bonnet.
- ✍ The led will be illuminated constantly.
- ✍ Keep the bonnet close till the moment, the complete deletion of devices via radio, will take place (after about four seconds).

NOTE: keeping the bonnet close for less than four seconds, the device deletion via radio will be unsuccessful.

- ✍ The procedure completion will be indicated by led's turning off, by one long turn signal flashing and one loud tone signal.
- ✍ Turn the ignition key to "OFF".

NOTE: the control device deletion does not imply any modification of

TECHNICAL DATA	
Nominal tension	12 Vdc
Nominal supply voltage range	9÷15Vdc
Current absorption @ 12Vdc	< 2mA with systme armed and flashing led
Turn signal contact rating	10A a 20°C
Engine block contact rating	8A a 20°C
Alarm triggering	30 sec.
Max positive current with system armed (+A)	700 mA
Sirene output current capacity	3A

I

CARATTERISTICHE TECNICHE	
Tensione nominale	12 Vdc
Range tensione di alimentazione abilitato	9÷15Vdc
Assorbimento di corrente @ 12Vdc	< 2mA con allarme inserito e led lampeggiante
Portata contatto indicatori di direzione	10A a 20°C
Portata contatti relè blocco motore	8A a 20°C
Durata di un ciclo d'allarme	30 sec.
Corrente massima positivo ad allarme inserito (+A)	700 mA
Portata in corrente uscita sirena	3A

UK

CARATTERISTICHE TECNICHE	
Nominal tension	12 Vdc
Nominal supply voltage range	9÷15Vdc
Current absorption @ 12Vdc	< 2mA with systme armed and flashing led
Turn signal contact rating	10A a 20°C
Engine block contact rating	8A a 20°C
Alarm triggering	30 sec.
Max positive current with system armed (+A)	700 mA
Sirene output current capacity	3A

F

CARACTÉRISTIQUES TECHNIQUES	
Tension nominale	12 Vdc
Plage tension d'alimentation nominale	10,5÷15Vdc
Absorption maximale de courant	10mA
Portée contact feux de direction	8A a 20°C
Portée contacts relais verrouillage moteur	8A a 20°C
Durée d'un cycle d'alerte	30 sec.
Courant maxi positif alarme activée (+A)	700 mA
Courant maxi commande confort Positif	500 mA
Courant maxi commande confort Négatif	500 mA

D

TECHNISCHE EIGENSCHAFTEN	
Nennspannung	12 Vdc
Bereich der Nenn-Versorgungsspannung	10,5÷15Vdc
Max. Stromverbrauch	10mA
Kapazität Kontakt Blinker	8A bei 20°C
Kapazität Kontakte Relais Motorsperre	8A bei 20°C
Dauer eines Alarmzyklus	30 Sekunden
Max. Strom positiv bei eingeschaltetem Alarm (+A)	700 mA
Max. Strom Komfort-Schaltung positiv	500 mA
Max. Strom Komfort-Schaltung negativ	500 mA

E

CARACTERISTICAS TECNICAS	
Tensión nominal	12 Vdc
Rango tensión de alimentación nominal	10,5÷15Vdc
Absorbimiento máximo de corriente	10mA
Portada contacto indicadores de dirección	8A a 20°C
Portada contactos relè bloqueo motor	8A a 20°C
Duración de un ciclo de alarma	30 sec.
Corriente max positivo de alarma activada (+A)	700 mA
Corriente max mando confort Positivo	500 mA
Corriente max mando confort Negativo	500 mA

P

CARACTERÍSTICAS TÉCNICAS	
Tensão nominal	12 Vdc
Range tensão de alimentação nominal	10,5÷15Vdc
Absorção máxima de corrente	10mA
Capacidade de contacto dos indicadores de direcção	8A a 20°C
Capacidade de contacto do relé de travamento do motor	8A a 20°C
Duração de um ciclo de alarme	30 sec.
Corrente máxima - positivo com alarme activado (+A)	700 mA
Corrente máxima de comando conforto Positivo	500 mA
Corrente máxima de comando conforto Negativo	500 mA

