

CAME.COM

### Sliding gate operator BK series



FA01161-EN







## BK-800 / 1200 / 1800 / 2200 1210 / 1810 / 2210

INSTALLATION OPERATION AND MAINTENANCE MANUAL



Fabbricante / Manufacturer / Hersteller / Fabricant / Fabricante / Fabricante / Wytwórca / Fabrikant

#### Came S.p.a.

| ERKLÄRUNG FÜR DEN | N anexo / DECLARAÇÃO à bijlage IIB - 2006/42/CE

INCORPORAZIONE allegato /DECLARATIONOF INCORPORATION annex / ERKLÄRU ATION D'INCORPORATION annexe / DECLARACIÓN DE INCORPORACIÓN anexo / I 1 anexo / DFKI ARACJA WBUDOWANIA załaczniku / INBOUWVERKLARING bijlage IIF

10N annexe / DECLARAUUU WBUDOWANIA załączniku /

DÉCLARATION ORAÇÃO anexo

EINBAU anhang / DE INCORP

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DICHIARAZIONE

indirizzo / address / adresse / adresse / dirección / endereco / adres / adres Via Martiri della Libertà 15 - 31030 Dosson di Casier, Treviso - Italy



DICHIARA CHE LE AUTOMAZIONI PER CANCELLI SCORREVOLI / DECLARES THAT THE DRIVES FOR SLIDING GATES / ERKLÄRT DASS DIE AUTOMATISIERUNGEN FÜR SCHIEBETORE / DECLARE QUE LES AUTOMATISATIONS POUR PORTAILS COULISSANTS / DECLARA QUE LAS AUTOMATIZACIONES PARA PUERTAS CORREDERAS / DECLARA QUE AS AUTOMATIZAÇÕES PARA PORTÕES DE CORRER / OSWIADCZA ZE AUTOMATYKA DO BRAM PRZESUWNYCH / VERKLAART DAT DE AUTOMATISERING VOOR SCHUIFHEKKEN

BK-1200; BK-1200-ELTRON BK-1201; BK-1800; BK-1801 BK-2200 ; BK-2200A ; BK-800

SONO CONFORMI ALLE DISPOSIZIONI DELLE SEGUENTI DIRETTIVE / THEY COMPLY WITH THE PROVISIONS OF THE FOLLOW-ING DIRECTIVES / DEN VORGABEN DER FOLGENDEN RICHTLINIEN ENTSPRECHEN / SONT CONFORMES AUX DISPOSITIONS DES DIRECTIVES SUIVANTES / CUMPLEN CON LAS DISPOSICIONES DE LAS SIGUIENTES DIRECTIVAS / ESTÃO DE ACORDO COM AS DISPOSIÇÕES DAS SEGUINTES DIRECTIVAS / SA ZGODNE Z POSTANOWIENIAMI NASTEPUJACYCH DYREKTYW EUROPEJSKICH / VOLDOEN AAN DE VOORSCHRIFTEN VAN DE VOLGENDE RICHTLIJNEN:

- COMPATIBILITA' ELETTROMAGNETICA / ELECTROMAGNETIC COMPATIBILITY / ELEKTROMAGNETISCHE VERTRÄGLICHKEIT / COMPATIBILITÉ ÉLECTROMAGNÉTIQUE / COMPATIBILIDAD ELECTROMAGNÉTICA / COMPATIBILI-DADE ELETROMAGNÉTICA / KOMPATYBILNOŚCI ELEKTROMAGNETYCZNEJ / ELEKTROMAGNETISCHE COMPATIBI-LITEIT : 2014/30/UE.

Riferimento norme armonizzate ed altre norme tecniche / Refer to European regulations and other technical regulations / Harmonisierte Bezugsnormen und andere technische Vorgaben / Référence aux normes harmonisées et aux autres normes techniques / Referencia normas armonizadas y otras normas técnicas / Referência de normas harmoniza-das e outras normas técnicas / Odnosne normy ujednolicone i inne normy techniczne / Geharmoniseerde en andere technische normen waarnaar is verwezen

EN 61000-6-2:2005 EN 61000-6-3:2007+A1:2011
EN 62233:2008
EN 60335-1:2012+A11:2014 EN 60335-2-103:2015

RISPETTANO I REQUISITI ESSENZIALI APPLICATI: / MEET THE APPLICABLE ESSENTIAL REQUIREMENTS: / DEN WESENTLICHEN ANGEWANDTEN ANFORDERUNGEN ENTSPRECHEN: / RESPECTENT LES CONDITIONS REQUISES NECESSAIRES APPLIQUEES: / CUMPLEN CON LOS REQUISITOS ESENCIALES APLICADOS: / RESPEITAM O REQUISITOS ESSENCIAIS APLICADOS: / SPEŁNIAJA PODSTAWOWE WYMAGANE WYRUNKI: / VOLDOEN AAN DE TOEPASBARE MINIMUM EISEN:

#### 1.1.3; 1.1.5; 1.2.1; 1.2.2; 1.3.2; 1.3.7; 1.3.8.1; 1.4.1; 1.4.2; 1.5.1; 1.5.6; 1.5.8; 1.5.9; 1.5.9; 1.5.13; 1.6.1; 1.6.3; 1.6.4; 1.7.1; 1.7.2; 1.7.4

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La documentazione tecnica pertinente è stata compilata in conformità all'allegato VIIB. / The pertinent technical documentation has been drawn up in compliance with attached document VIIB. / Die relevante technische Dokumentation wurde entsprechend der Anlage VIIB ausgestellt. / La documentation technique spécifique a été remplie conformément à l'annexe IIB / La documentación técnica pertinente ha sido relienada en cumplimiento con el anexo VIIB. / A documentação técnica pertinente foi preenchida de acordo com o anexo VIIB. / Odnosna dokumentacja techniczna zostala zredagowana zgodnie z zalacznikiem VIIB, / De technische documentatie terzake is opgesteld in overeenstemming met de bijlage VIIB.

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la messa in servizio finchè la macchina finale in cui deve essere incorporata non è stata dichiarata conforme, se del caso alla 2006/42/CE. / commissioning of the above mentioned until suc moment when the final machine into which they must be incorporated, has been declared compliant, if pertinent, to 2006/42/CE / die inbetriebnahme bevor die "Endmaschine" in die die unvollständige Maschine eingebaut wird, als konform erklärt wurde, gegebenenfalls gemäß der Richtlinie 2006/42/EU. / la mise en service tant que la machine finale dans laquelle elle doit être incorporée n'a pas été déclarée conforme, le cas échéant, à la norme 2006/42/CE. / la puesta en servicio hasta que la máquina final en la que será incorporada no haya sido declarada de conformidad de acuerdo a la 2006/42/CE / a colocação em funcionamento, até que a máquina final, onde devem ser incorporadas, não for declarada em conformidade, se de acordo com a 2006/42/CE. / Uruchomienia urzadzenia do czasu, kiedy maszyna, do której ma byc wbudowany, nie zostanie oceniona jako zgodna z wymogami dyrektywy 2006/42/WE, jesli taka procedura byla konieczna. / deze in werking te stellen zolang de eindmachine waarin de niet voltooide machine moet worden ingebouwd in overeenstemming is verklaard, indien toepasselijk met de richtlijn 2006/42/EG.

Dosson di Casier (TV)

29 Novembre / November / November / Novembre / Noviembre / Novembro / Listopad / November 2017

Legale Rappresentante / Legal Representative /Gesetzlicher Vertreter / Representant Legal / Representante Legal / Representante Legal / Prawny Przedstawiciel / Juridische Vertegenwoordiger

Paolo Menuzzo

Fascicolo tecnico a supporto / Supporting technical dossier / Unterstützung technische Dossier / soutenir dossier technique / apoyo expediente técnico / apoiar dossier técnico / wspieranie dokumentacji technicznej / ondersteunende technische dossier: 001BK-1200

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Cap. Soc. 1.610.000,00 € - C.F. e P.I. 03481280265 - VAT IT 03481280265 - REA TV 275359 - Reg Imp. TV 03481280265

#### **ELECTRICAL CONNECTIONS**

▲ Warning! Before doing any work on the control board, cut off the mains power supply, and disconnect any batteries. The functions on the input and output contacts, the time settings and user management, are set and viewed on the graphic display. All wiring connections are quick-fuse protected.

Fuses	ZBKN - ZBKEN
LINE - Line	8 A-F (230 V AC) 15 A-F (120 V AC)
C.BOARD - Card	630 mA-F
ACCESSORIES - Accessories	1 A-F

#### **DESCRIPTION OF PARTS**

- 1. Power supply terminals
- 2. Terminal for gearmotors
- 3. Terminals for signaling devices
- 4. Transformer terminals
- 5. Control-board fuse
- 6. Accessories fuse
- 7. Terminals for control and safety devices
- 8. Antenna terminal
- 9. Terminals for limit-switch micro-switches
- 10. AF card connector
- 11. Terminals for transponder selector
- 12. Keypad selector terminal
- 13. RSE board connector

- 14. Connector for the R700/R800/900 cards
- 15. Programming buttons
- 16. Memory roll board connector
- 17. Display
- 18. Power supply on warning LED
- 19. Terminals for paired of CRP connection
- 20. Terminals for the RGP1 module
- 21. Connector for the RIO-CONN card
- 22. Line fuse



#### **FACTORY WIRING**



#### SIGNALING DEVICES

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111d



24V

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Manual FA01161-EN - 08/2018 - CAME S.p.A. - The contents of this manual may change, at any time, and without notice. - Original instructions



WARNING! For the system to work properly, before fitting any snap-in card (e.g. the AF R800), you MUST CUT OFF THE MAIN POWER SUPPLY and remove any batteries.

#### Photocells

Configure contact CX or CY (NC), safety input for photocells.

- See F2 (CXinput) or F3 (CY input) set to:
- C1 reopening during closing. When the gate is closing, opening the contact triggers the inversion of movement until the gate is fully open again;
- C2 closing during opening. When the gate is opening, opening the contact triggers the inversion of movement until the gate is completely closed.
- C3 partial stop. Stopping of the gate, if it is moving, with consequent automatic closing (if the automatic closing function has been entered);
- C4 obstruction wait. Stopping of the gate, if it is moving, which resumes movement once the obstruction is removed.

If contacts CX and CY are not used they should be deactivated during programming.



#### Photocells (safety test)

At each opening and closing command, the control board checks the efficacy of the safety devices (such as, photocells). Any malfunction inhibits any command and the display will show the Er4 wording. Enable function F5 **in** programming.



#### Sensitive Safety Edges

Configure contact CX or CY (NC), safety input for sensitive safety-edges.

See  $\ensuremath{\text{F2}}$  (CXinput) or F3 (CY input) set to:

- C7 (sensitive safety edges with clean contact) or r7 (sensitive safety edges with 8K2 resistance), reopening during closing. When the gate is closing, opening the contact triggers the inversion of movement until the gate is fully open again;

- edges with clean contact) or r8 (sensitive safety-edges with (8K2 resistive inputs), reclosing during opening. When the gate is opening, opening the contact triggers the inversion of movement until the gate is completely closed.

If unused, contacts CX and CY should be deactivated during programming.



#### **RIO WIRELESS DEVICES**

Fit the RIO-CONN card into the corresponding connector on the control board.

Set the function to associate to the wireless device (F65, F66, F67 and F68).

Configure the RIO-EDGE, RIO-CELL and RIO-LUX wireless devices by following the indications shown in the folder enclosed with each accessory.

▲ If there are any radio-frequency disturbances to the system, the wireless system will inhibit the normal operation of the operator, and this error will show up on the display as E17.



#### PAIRED OPERATION OR CRP (CAME REMOTE PROTOCOL)



#### PROGRAMMING

#### **DESCRIPTION OF THE COMMANDS**



 $\square$  To enter the menu, keep the ENTER button pressed for at least one second.

 $\square$  To exit the menu, wait 10 seconds or press ESC.



#### FUNCTIONS MENU

Warning! When programming, the gate must not be operating.

F1	Total stop (1-2)	OFF (default) / ON	
NC ir	nput – Gate stop that excludes any auto	matic closing; to resume movement, use the control device. The safety device is inserted into (1-2).	
F2	Input (2-CX)	<b>OFF</b> (default) / $1 = C1 / 2 = C2 / 3 = C3 / 4 = C4 / 7 = C7 / 8 = C8 / r7 = r7 / r8 = r8$	
NC in obstr edge sens	nput – Can associate: $C1 =$ reopening ruction wait, $C7 =$ reopening during clo is (with clean contact), $r7 =$ reopening itive safety edges (8K2 resistive input). The C3 Partial stop function only appea	during closing by photocells, $C2 =$ reclosing during opening by photocells, $C3 =$ partial stop, $C4 =$ sing by sensitive safety-edges (with clean contact), $C8 =$ reclosing during opening by sensitive safety- during closing for sensitive safety edges (8K2 resistive input), - r8 = reclosing during opening for rs if the F 19 Automatic closing time function is activated.	
F3	Input (2-CY)	<b>OFF</b> (default) / $1 = C1 / 2 = C2 / 3 = C3 / 4 = C4 / 7 = C7 / 8 = C8 / r7 = r7 / r8 = r8$	
NC in obstr edge sens	NC input – Can associate: C1 = reopening during closing by photocells, C2 = reclosing during opening by photocells, C3 = partial stop, C4 = obstruction wait, C7 = reopening during closing by sensitive safety-edges (with clean contact), C8 = reclosing during opening by sensitive safety-edges (with clean contact), C8 = reclosing during opening by sensitive safety-edges (with clean contact), c8 = reclosing during opening by sensitive safety-edges (with clean contact), c8 = reclosing during opening by sensitive safety-edges (with clean contact), c8 = reclosing during opening by sensitive safety-edges (with clean contact), c8 = reclosing during opening by sensitive safety-edges (with clean contact), c8 = reclosing during opening by sensitive safety-edges (with clean contact), c8 = reclosing during opening for sensitive safety edges (8K2 resistive input), - r8 = reclosing during opening for sensitive safety edges (8K2 resistive input)).		
F5	Safety test	<b>OFF</b> (default) / $1 = CX / 2 = CY / 4 = CX + CY$	
After	every opening or closing command, th The safety test is always active for wire	e board will check whether the photocells are working properly. ess devices.	

F6 Maintained action	OFF (default) / ON
The gate opens and closes by keeping the devices, even radio-based ones, are excluded the exclusion of the devices of the exclusion of the devices of the de	e button pressed. Opening button on contact 2-3 and closing button on contact 2-4. All other control ded.
F7 Command (2-7)	0 = Step-step (default) / 1 = Sequential
From the control device connected to 2-7 i	t performs the step-step (open-close-invert) or sequential (open-stop-close-stop) command.
F9 Obstruction detection with motor idle	OFF (default) / ON
With the gate closed, opened or totally sto an obstruction.	pped, the gearmotor stays idle if the safety devices, that is, photocells or sensitive safety-edges detect
F10 Gate-open signal output	<ul> <li>0 = On when the barrier is open and moving (default) /</li> <li>1 = during openings it flashes intermittently each half second</li> <li>, and during closings it flashes intermittently each</li> <li>second. It stays on steadily</li> <li>when the barrier is open, off or when it s closed.</li> </ul>
It signals the gate status. The signal device	e is connected to contact 10-5.
F14 Sensor type selection	<ul> <li>0 = control with transponder sensor or magnetic card reader.</li> <li>1 = command with keypad selector (default).</li> </ul>
Setting the type of accessory for controlling	g the operator.
F18 Additional light	OFF (default) / 1 = Cycle / 2 = Courtesy
Extra light connection input on EX-W. Outdoor light for additional visibility in the or Cycle: it stays lit from the moment the gate Courtesy: it stays on for an adjustable time	drive way. e starts opening until it completely closes, including the automatic closing waiting time. e of between 60 and 180 seconds. For adjusting the time, see function [ <b>F25</b> ].
F19 Automatic closing time	<b>OFF</b> (default) / 1 = 1 second / / 180 = 180 seconds
The automatic-closing wait starts when th closing does not activate if any of the safet	e opening limit switch point is reached and can be set to between 1 and 180 seconds. The automatic y devices trigger when an obstruction is detected, or after a total stop, or during a power outage.
F20 Automatic closing time after a partial opening	<b>OFF / 1</b> = 1 second // <b>10</b> = 10 seconds ( <b>default</b> ) // <b>180</b> = 180 seconds
The wait before the automatic closing start The automatic closing does not activate if a outage.	s after a partial opening command for an adjustable time of between 1 s and 180 s. any of the safety devices trigger when an obstruction is detected, or after a total stop, or during a power
F21 Preflashing time	<b>OFF</b> ( <b>default</b> ) / <b>1</b> = 1 second / / <b>10</b> = 10 seconds
Adjusting the pre-flashing time for the flas seconds.	shing light connected to E1-W, before each maneuver. The flashing time is adjustable from one to ten
F25 Courtesy light time	60 = 60 seconds (default)/ $180 = 180$ seconds
Additional light that stays on for the require EX-W contact output. It is adjustable between	ed time during the when the gate is opening or closing. een 60 seconds and 180 seconds.
F49 Managing serial connection	<b>OFF</b> ( <b>default</b> ) / <b>1</b> = Paired / 3 = CRP
To enable the paired operating mode or the	e CRP (Came Remote Protocol).
F50 Save data	OFF (default) / ON
Saving users and saved settings in memor	y roll. $\gamma$ roll has been fitted into the control board.
F51 Read data	OFF (default) / ON
Uploading data saved in memory roll.	roll has been fitted into the control board.
F52 Passing parameter in paired mode	OFF (default) / ON
Uploading settings from Master to Slave. It appears only if function [F49] is set t	o Paired.
F54 Opening direction	<b>OFF</b> = Opening left ( <b>default</b> ) / <b>ON</b> = Opening right
For setting the gate opening direction.	
F56 Peripheral number	1> 255
To set the peripheral's number from 1 to 2	55 for each control board when you have a system with several operators.

F63 Change COM speed	<b>0</b> = 1200 Baud / <b>1</b> = 2400 Baud / <b>2</b> = 4800 Baud / <b>3</b> = 9600 Baud / <b>4</b> = 14400 Baud / <b>5</b> = 19200
	Baud / 6 = 38400 Baud (default) / 7 = 57600 Baud / 8 = 115200 Baud
For setting the communication speed used	in the CRP (Came Remote Protocol) connection system.
F65 Wireless input RIO-EDGE [T1]	<b>OFF</b> (default) / <b>P0</b> = P0 / <b>P7</b> = P7 / <b>P8</b> = P8
RIO-EDGE wireless safety device associated resume movement, use the control device, For programming, see the instructions that This function only appears is the control	d to a function of choice among those available: P0= stop gate and exclude any automatic closing; to P7 = reopening during closing, P8 = reclosing during opening. come with the accessory. I board has been fitted with a RIO-CONN card.
F66 Wireless input RIO-EDGE [T2]	<b>OFF</b> (default) / <b>P0</b> = P0 / <b>P7</b> = P7 / <b>P8</b> = P8
RIO-EDGE wireless safety device associated resume movement, use the control device, For programming, see the instructions that I This function only appears is the control	d to a function of choice among those available: P0= stop gate and exclude any automatic closing; to P7 = reopening during closing, P8 = reclosing during opening. come with the accessory. I board has been fitted with a RIO-CONN card.
F67 Wireless input RIO-CELL [T1]	OFF (default) / P1 = P1 / P2 marked areas = P2 / P3 = P3 / P4 = P4
RIO-CELL is associated to any function choststop; P4 = obstruction wait. For programming, see the instructions that This function only appears is the control	sen among those available: P1 = reopening during closing; P2 = reclosing during opening; P3 = partial come with the accessory. I board has been fitted with a RIO-CONN card.
F68 Wireless input RIO-CELL [T2]	<b>OFF</b> (default) / $P1 = P1 / P2$ marked areas = $P2 / P3 = P3 / P4 = P4$
RIO-CELL is associated to any function choses stop; $P4 = obstruction$ wait. For programming, see the instructions that This function only appears is the control	sen among those available: P1 = reopening during closing; P2 = reclosing during opening; P3 = partial come with the accessory. I board has been fitted with a RIO-CONN card.
F71 Partial opening time	5 = 5 seconds (default) / / 40 = 40 seconds
F71Partial opening timeAfter an opening command from the button	<ul><li>5 = 5 seconds (default) / / 40 = 40 seconds</li><li>connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds.</li></ul>
<ul><li>F71 Partial opening time</li><li>After an opening command from the button</li><li>U 1 Entering a user</li></ul>	<ul> <li>5 = 5 seconds (default) / / 40 = 40 seconds</li> <li>connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds.</li> <li>1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command</li> </ul>
F71       Partial opening time         After an opening command from the buttom         U 1 Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO	<ul> <li>5 = 5 seconds (default) / / 40 = 40 seconds</li> <li>connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds.</li> <li>1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command</li> <li>each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph).</li> </ul>
F71       Partial opening time         After an opening command from the button         U 1 Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO         U 2 Deleting a user	<ul> <li>5 = 5 seconds (default) / / 40 = 40 seconds</li> <li>connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds.</li> <li>1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command</li> <li>each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph).</li> </ul>
F71       Partial opening time         After an opening command from the buttom         U 1       Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO         U 2       Deleting a user         Deleting a single user	<ul> <li>5 = 5 seconds (default) / / 40 = 40 seconds</li> <li>connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds.</li> <li>1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command</li> <li>each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph).</li> </ul>
F71       Partial opening time         After an opening command from the buttom         U 1       Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO         U 2       Deleting a user         Deleting a single user         U 3       Deleting users	5 = 5 seconds (default) / / 40 = 40 seconds         connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds.         1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command         each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph).         OFF (default) / ON = Delete all users
F71       Partial opening time         After an opening command from the buttom         U 1       Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO         U 2       Deleting a user         Deleting a single user         U 3       Deleting users         Deleting all users.	5 = 5 seconds (default) / / 40 = 40 seconds connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds. 1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph). OFF (default) / ON = Delete all users
F71 Partial opening time         After an opening command from the buttom         U 1 Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO         U 2 Deleting a user         Deleting a single user         U 3 Deleting users         Deleting all users.         U4 Code decoding	5 = 5 seconds (default) / / 40 = 40 seconds connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds. 1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph). OFF (default) / ON = Delete all users 1 (default) / 2 / 3
F71       Partial opening time         After an opening command from the buttom         U 1 Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO         U 2 Deleting a user         Deleting a single user         Deleting all users.         U4       Code decoding         For choosing the type of receiving control of $\Delta$ When you select a radio code, all saved in The TWIN code lets you save multiple of the type of type of the type of the type of	5 = 5 seconds (default) / / 40 = 40 seconds connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds. 1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph). OFF (default) / ON = Delete all users 1 (default) / 2 / 3 ode: 1 = all series / 2 = only Rolling Code series / 3 = only TWIN series transmitters will automatically be deleted. sers with the same key, that is, key block.
F71       Partial opening time         After an opening command from the buttom         U 1       Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO         U 2       Deleting a user         Deleting a single user         U 3       Deleting users         U4       Code decoding         For choosing the type of receiving control of when you select a radio code, all saved when you select a radio code al	5 = 5 seconds (default) / / 40 = 40 seconds connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds. 1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command each one a function of choice among those included. This must be done via transmitter or other control CLATED COMMAND paragraph). OFF (default) / ON = Delete all users 1 (default) / 2 / 3 ode: 1 = all series / 2 = only Rolling Code series / 3 = only TWIN series transmitters will automatically be deleted. Issers with the same key, that is, key block. OFF (default) / ON
F71 Partial opening time   After an opening command from the buttom   U 1 Entering a user   Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO   U 2 Deleting a user   Deleting a single user   Deleting all users.   U4 Code decoding   For choosing the type of receiving control of a When you select a radio code, all saved a The TWIN code lets you save multiple of the type of receiving control of a When you select a radio code, all saved a The TWIN code lets you save multiple of the type of receiving control of a When you select a radio code, all saved a The TWIN code lets you save multiple of the type of receiving control of a When you select a radio code, all saved a The TWIN code lets you save multiple of the type of the ty	5 = 5 seconds (default) / / 40 = 40 seconds connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds. 1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph). 0 FF (default) / 0N = Delete all users 1 (default) / 2 / 3 ode: 1 = all series / 2 = only Rolling Code series / 3 = only TWIN series transmitters will automatically be deleted. sers with the same key, that is, key block. 0 FF (default) / 0N
F71 Partial opening time   After an opening command from the buttom   U 1 Entering a user   Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO   U 2 Deleting a user   Deleting a single user   U 3 Deleting users   Deleting all users.   U4 Code decoding   For choosing the type of receiving control of $\Delta$ When you select a radio code, all saved $\Box$ A 4 Resetting parameters   Attention! The default settings will be restored   A 5   Counting maneuvers	5 = 5 seconds (default) / / 40 = 40 seconds connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds. 1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph). OFF (default) / ON = Delete all users 1 (default) / 2 / 3 ode: 1 = all series / 2 = only Rolling Code series / 3 = only TWIN series transmitters will automatically be deleted. users with the same key, that is, key block. OFF (default) / ON ed. Number of maneuvers done
F71 Partial opening time         After an opening command from the buttom         U 1 Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO         U 2 Deleting a user         Deleting a user         U 3 Deleting users         Deleting all users         U 4 Code decoding         For choosing the type of receiving control of A When you select a radio code, all saved         Image: The TWIN code lets you save multiple of the TWIN code lets you save	5 = 5 seconds (default) / / 40 = 40 seconds connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds. 1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph). OFF (default) / ON = Delete all users 1 (default) / 2 / 3 ode: 1 = all series / 2 = only Rolling Code series / 3 = only TWIN series transmitters will automatically be deleted. Isers with the same key, that is, key block. OFF (default) / ON ed. Number of maneuvers done leted or for deleting them (001 = 100 maneuvers; 010 = 1,000 maneuvers; 100 = 10,000 maneuvers; nce job)
F71       Partial opening time         After an opening command from the buttom         U 1       Entering a user         Entering up to 250 users and associating to device (see "ENTERING USERS WITH ASSO         U 2       Deleting a user         Deleting a single user         U 3       Deleting users         Deleting all users.         U4       Code decoding         For choosing the type of receiving control of Δ When you select a radio code, all saved IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5 = 5 seconds (default) / / 40 = 40 seconds connected to 2-3P, the gate opens for an adjustable time of between five seconds and 40 seconds. 1 = Step-step command (open-close) / 2 = Sequential command (open-stop-close-stop) / 3 = Open only command / 4 = Partial opening command each one a function of choice among those included. This must be done via transmitter or other control CIATED COMMAND paragraph). OFF (default) / ON = Delete all users 1 (default) / 2 / 3 ode: 1 = all series / 2 = only Rolling Code series / 3 = only TWIN series transmitters will automatically be deleted. isers with the same key, that is, key block. OFF (default) / ON ed. Number of maneuvers done leted or for deleting them (001 = 100 maneuvers; 010 = 1,000 maneuvers; 100 = 10,000 maneuvers; nce job)

#### COMMISSIONING

Once the electrical connections are done, have only skilled, qualified staff commission the operator into service.

Before continuing, make sure the area is free of any obstructions, and that there are mechanical, opening and closing gate stops in place. Power up and begin configuring the system. **Important!**Start programming by first doing the following functions: OPENING DIRECTIONS (F54) and TOTAL STOP (F1). Once the programming is done, verify that the operator and all the accessories are working properly.Use the < > keys to open and close the gate and ESC to stop it.

▲ After powering up the system, the first maneuver is always the opening. In this phase, the gate cannot be closed. You will need to wait for the gate to completely open.

▲ Immediately press the STOP button if any suspicious malfunctions, noises or vibrations occur in the system.

#### MANAGING USERS

When adding and deleting users, the flashing numbers appearing are those numbers that are available and usable to assign to a new user (max. 250 users).

Before registering the users, make sure the AF radio card is plugged into the connector (see the paragraph called CONTROL DEVICES).

#### ENTERING USERS WITH AN ASSOCIATED COMMAND

- **1** Select **U1**. Press ENTER to confirm.
- 2 Select a command to associate to the user: The commands are:
- **1** = step-step (open-close);
- **2** = sequential (open-stop-close-stop);
- -3 =only open;
- $\mathbf{4} = \text{partial opening/pedestrian}$ .
- Press ENTER to confirm...

3 ... a number between 1 and 250 will start flashing for a few seconds. Send the code from the transmitter or other control device, such as, a keypad selector or a transponder.

It flags the entered user associated to the number in the table LIST OF REGISTERED USERS.



#### **DELETING SINGLE USERS**

- 1 Select U2. Press ENTER to confirm.
- 2 Use the arrow keys select the number of the user you wish to delete. Press ENTER to confirm...
- 3 ... CLr will appear on the screen to confirm deletion.



#### SAVING AND UPLOADING ALL DATA (USERS AND CONFIGURATION) WITH THE MEMORY ROLL

Procedure for memorizing all of the system's user and configuration data by using the Memory Roll, so they can be used with another control board, even on another system.

- Warning! Fitting and extracting the Memory Roll must be done with the mains power disconnected.
- Fit the Memory Roll into the its corresponding connector on the control board.
- 2 Select **F50** and press ENTER to confirm the saving of data in the Memory Roll.
- S Extract the Memory roll and fit it into the connector of another control board.
- **4** Select **F51** and press ENTER to confirm the uploading of data into the Memory Roll.

After memorizing the data, it is best to remove the Memory roll.



#### LIST OF REGISTERED USERS

1	27	
2	28	
3	29	
4	30	
5	31	
6	32	
7	33	
8	34	
9	35	
10	36	
11	37	
12	38	
13	39	
14	40	
15	41	
16	42	
17	43	
18	44	
19	45	
20	46	
21	47	
22	48	
23	49	
24	50	
25	51	
26	52	

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141	185	
142	186	
143	187	
144	188	
145	189	
146	190	
147	191	
148	192	
149	193	
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152	196	
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229	240	
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235	246	
236	247	
237	248	
238	249	
239	250	

#### ERROR MESSAGES

 $\square$  The error messages are shown on the display.

E 4	Safety test error.
Ε7	Insufficient working time.
E 8	Release hatch open.
E 9	Closing obstruction.
E 10	Opening obstruction.
E 11	Maximum number of obstructions detected.
E 14	Serial communication error
E 17	Wireless system error.
E 18	Missing wireless system configuration

#### FINAL OPERATIONS

Once the operator is up and running and the users are registered, refit the covers without pinching any wires. Fasten them with screws.



#### Electrical wiring

Fit the RSE card (with the DIP-switches set to OFF) to the connector on the control panels of both operators.

Connect the two panels by using a CAT 5 (max 1,000 m type cable to terminals A-A / B-B / GND-GND, see paragraph called PAIRED OPERATION.

Connect all of the control and safety devices on the MASTER operator's control panel.

#### <u>Programming</u>

Continue making the settings and adjustments only on the MASTER panel.

Start programming by first running the following functions:

- managing serial connection (F49);
- opening direction (F54);
- parameter exchange in paired mode (F52).

#### <u>Saving</u>

Execute the procedure, to add a user with an associated command, on the MASTER panel.

#### **Operating modes**

• Either STEP-STEP or ONLY OPEN command. Both leaves open.

PARTIAL/PEDESTRIAN OPENING command. Only the MASTER operator's leaf opens.

For the types of command that can be selected and paired to users, see the ENTERING USERS WITH ASSOCIATED COMMANDS.



#### DISMANTLING AND DISPOSAL

CAME S.p.A. applies a certified Environmental Management System at its premises, which is compliant with the UNI EN ISO 14001 standard to ensure the environment is safeguarded.

Please continue safeguarding the environment. At CAME we consider it one of the fundamentals of our operating and market strategies. Simply follow these brief disposal guidelines:

#### DISPOSING OF THE PACKAGING

The packaging materials (cardboard, plastic, and so on) should be disposed of as solid household waste, and simply separated from other waste for recycling.

Always make sure you comply with local laws before dismantling and disposing of the product.

#### DISPOSE OF RESPONSIBLY!

DISMANTLING AND DISPOSAL

Our products are made of various materials. Most of these (aluminum, plastic, iron, electrical cables) are classified as solid household waste. They can be recycled by separating them before dumping at authorized city plants.

Whereas other components (control boards, batteries, transmitters, and so on) may contain hazardous pollutants.

These must therefore be disposed of by authorized, certified professional services.

Before disposing, it is always advisable to check with the specific laws that apply in your area.

DISPOSE OF RESPONSIBLY!

# CAME T

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