

# 119AV17EN

# UNDERGROUND/EXTERNAL AUTOMATION FOR SWING GATES



# INSTALLATION MANUAL



English EN

CE



## WARNING! important safety instructions: READ CAREFULLY!



#### Premise

 $\bullet$  Employ this product only for the use for which it was expressly made. Any other use is dangerous. Came S.p.A. Is not liable for any damage caused by improper, wrongful and unreasonable use  $\bullet$  keep these warnings together with the installation and operation manuals that come with the operator.

#### **B**EFORE INSTALLING

(CHECKING WHAT'S THERE: IF YOUR EVALUATION IS NEGATIVE, DO NOT PROCEED BEFORE HAVING COMPLIED WITH ALL SAFETY REQUIREMENTS)

 CHECK THAT THE AUTOMATED PARTS ARE IN GOOD MECHANICAL ORDER, THAT THE OPERATOR IS LEVEL AND ALIGNED, AND THAT IT OPENS AND CLOSES PROPERLY. MAKE SURE YOU HAVE SUITABLE MECHANICAL STOPS . IF THE OPERATOR IS TO BE INSTALLED AT A HEIGHT OF OVER 2.5 M FROM THE GROUND OR OTHER ACCESS LEVEL, MAKE SURE YOU HAVE ANY NECESSARY PROTECTIONS AND/OR WARNINGS IN PLACE ● IF ANY PEDESTRIAN OPENINGS ARE FITTED INTO THE OPERATOR, THERE MUST ALSO BE A A SYSTEM TO BLOCK THEIR OPENING WHILE THEY ARE MOVING • MAKE SURE THAT THE OPENING AUTOMATED DOOR OR GATE CANNOT ENTRAP PEOPLE AGAINST THE FIXED PARTS OF THE OPERATOR ● DO NOT INSTALL THE OPERATOR UPSIDE DOWN OR ONTO ELEMENTS THAT COULD YIELD AND BEND. IF NECESSARY, ADD SUITABLE REINFORCEMENTS TO THE ANCHORING POINTS ● DO NOT INSTALL DOOR OR GATE LEAVES ON TILTED SURFACES ● MAKE SURE ANY SPRINKLER SYSTEMS CANNOT WET THE OPERATOR FROM THE GROUND UP ● MAKE SURE THE TEMPERATURE RANGE SHOWN ON THE PRODUCT LITERATURE IS SUITABLE TO THE CLIMATE WHERE IT WILL BE INSTALLED ● FOLLOW ALL INSTRUCTIONS AS IMPROPER INSTALLATION MAY RESULT IN SERIOUS BODILY INJURY . IT IS IMPORTANT TO FOLLOW THESE INSTRUCTIONS FOR THE SAFETY OF PEOPLE. KEEP THESE INSTRUCTIONS.

#### NSTALLING

• SUITABLY SECTION OFF AND DEMARCATE THE ENTIRE INSTALLATION SITE TO PREVENT UNAUTHORIZED PERSONS FROM ENTERING THE AREA, ESPECIALLY MINORS AND CHILDREN • BE CAREFUL WHEN HANDLING OPERATORS THAT WEIGH OVER 20 KG. IF NEED BE, USE PROPER SAFETY HOISTING EQUIPMENT ● ALL OPENING COMMANDS (THAT IS, BUTTONS, KEY SWITCHES, MAGNETIC READERS, AND SO ON) MUST BE INSTALLED AT LEAST 1.85 M FROM THE PERIMETER OF THE GATE'S WORKING AREA, OR WHERE THEY CANNOT BE REACHED FROM OUTSIDE THE GATE. ALSO, ANY DIRECT COMMANDS (BUTTONS, TOUCH PANELS, AND SO ON) MUST BE INSTALLED AT LEAST 1.5 M FROM THE GROUND AND MUST NOT BE REACHABLE BY UNAUTHORIZED PERSONS • ALL MAINTAINED ACTION COMMANDS, MUST BE FITTED IN PLACES FROM WHICH THE MOVING GATE LEAVES AND TRANSIT AND DRIVING AREAS ARE VISIBLE • APPLY, IF MISSING, A PERMANENT SIGN SHOWING THE POSITION OF THE RELEASE DEVICE • BEFORE DELIVERING TO THE USERS, MAKE SURE THE SYSTEM IS EN 12453 STANDARD COMPLIANT (REGARDING IMPACT FORCES), AND ALSO MAKE SURE THE SYSTEM HAS BEEN PROPERLY ADJUSTED AND THAT ANY SAFETY, PROTECTION AND MANUAL RELEASE DEVICES ARE WORKING PROPERLY • APPLY WARNING SIGNS (SUCH AS THE GATE'S PLATE) WHERE NECESSARY AND IN A VISIBLE PLACE

#### Special User-Instructions and Recommendations

 KEEP GATE OPERATION AREAS CLEAN AND FREE OF ANY OBSTRUCTIONS. MAKE SURE THAT THE PHOTOCELLS ARE FREE OF ANY OVERGROWN VEGETATION AND THAT THE OPERATOR'S AREA OF OPERATION IS FREE OF ANY OBSTRUCTIONS . DO NOT ALLOW CHILDREN TO PLAY WITH FIXED COMMANDS, OR TO LOITER IN THE GATE'S MANEUVERING AREA. KEEP ANY REMOTE CONTROL TRANSMITTERS OR ANY OTHER COMMAND DEVICE AWAY FROM CHILDREN, TO PREVENT THE OPERATOR FROM BEING ACCIDENTALLY ACTIVATED. • THE APPARATUS MAY BE USED BY CHILDREN OF EIGHT YEARS AND ABOVE AND BY PHYSICALLY, MENTALLY AND SENSORIALLY CHALLENGED PEOPLE, OR EVEN ONES WITHOUT ANY EXPERIENCE, PROVIDED THIS HAPPENS UNDER CLOSE SUPERVISION OR ONCE THEY HAVE BEEN PROPERLY INSTRUCTED TO USE THE APPARATUS SAFELY AND ABOUT THE POTENTIAL HAZARDS INVOLVED. CHILDREN MUST NOT PLAY WITH THE APPARATUS. CLEANING AND MAINTENANCE BY USERS MUST NOT BE DONE BY CHILDREN, UNLESS PROPERLY SUPERVISED . FREQUENTLY CHECK THE SYSTEM FOR ANY MALFUNCTIONS OR SIGNS OF WEAR AND TEAR OR DAMAGE TO THE MOVING STRUCTURES, TO THE COMPONENT PARTS, ALL ANCHORING POINTS, INCLUDING CABLES AND ANY ACCESSIBLE CONNECTIONS. KEEP ANY HINGES, MOVING JOINTS AND SLIDE RAILS PROPERLY LUBRICATED • PERFORM FUNCTIONAL CHECKS ON THE PHOTOCELLS AND SENSITIVE SAFETY EDGES, EVERY SIX MONTHS. TO CHECK WHETHER THE PHOTOCELLS ARE WORKING, WAVE AN OBJECT IN FRONT OF THEM WHILE THE GATE IS CLOSING; IF THE OPERATOR INVERTS ITS DIRECTION OF TRAVEL OR SUDDENLY STOPS, THE PHOTOCELLS ARE WORKING PROPERLY. THIS IS THE ONLY MAINTENANCE OPERATION TO DO WITH THE POWER ON. CONSTANTLY CLEAN THE PHOTOCELLS' GLASS COVERS USING A SLIGHTLY WATER-MOISTENED CLOTH; DO NOT USE ANY SOLVENTS OR OTHER CHEMICAL PRODUCTS THAT MAY RUIN THE DEVICES • IF REPAIRS OR MODIFICATIONS ARE REQUIRED TO THE SYSTEM, RELEASE THE OPERATOR AND DO NOT USE IT UNTIL SAFETY CONDITIONS HAVE BEEN RESTORED . CUT OFF THE POWER SUPPLY BEFORE RELEASING THE OPERATOR FOR MANUAL OPENINGS AND BEFORE ANY OTHER OPERATION, TO

PREVENT POTENTIALLY HAZARDOUS SITUATIONS. READ THE INSTRUCTIONS • IF THE POWER SUPPLY CABLE IS DAMAGED, IT MUST BE REPLACED BY THE MANUFACTURER OR AUTHORIZED TECHNICAL ASSISTANCE SERVICE, OR IN ANY CASE, BY SIMILARLY QUALIFIED PERSONS, TO PREVENT ANY RISK • IT IS FORBIDDEN FOR USERS TO PERFORM ANY OPERATIONS THAT ARE NOT EXPRESSLY REQUIRED OF THEM AND WHICH ARE NOT LISTED IN THE MANUALS. FOR ANY REPAIRS, MODIFICATIONS AND ADJUSTMENTS AND FOR EXTRAORDINARY MAINTENANCE, CALL TECHNICAL ASSISTANCE • LOG THE JOB AND CHECKS INTO THE PERIODIC MAINTENANCE LOG.

#### Additional special recommendations for everyone

• KEEP AWAY FROM HINGES AND MECHANICAL MOVING PARTS • DO NOT ENTER THE OPERATOR'S AREA OF OPERATION WHEN IT IS MOVING • DO NOT COUNTER THE OPERATOR'S MOVEMENT AS THIS COULD RESULT IN DANGEROUS SITUATIONS • ALWAYS PAY SPECIAL ATTENTION TO ANY DANGEROUS POINTS, WHICH HAVE TO BE LABELED WITH SPECIFIC PICTOGRAMS AND/OR BLACK AND YELLOW STRIPES • WHILE USING A SELECTOR SWITCH OR A COMMAND IN MAINTAINED ACTIONS, KEEP CHECKING THAT THERE ARE NO PERSONS WITHIN THE OPERATING RANGE OF ANY MOVING PARTS, UNTIL THE COMMAND IS RELEASED • THE GATE MAY MOVE AT ANY TIME AND WITHOUT WARNING • ALWAYS CUT OFF THE POWER SUPPLY BEFORE PERFORMING ANY MAINTENANCE OR CLEANING.



### Legend of symbols

This symbol tells you to read the section with particular care.

1 This symbol tells you that the sections concern safety issues.

This symbol tells you what to say to the end-users.

THE MEASUREMENTS, UNLESS OTHERWISE STATED, ARE IN MILLIMETERS.

#### Intended use and limits to use

#### Intended use

The MYTO ME automation is designed to power swing gates for residential or apartment block use.

Installation executed in a manner other than as instructed in this technical manual are prohibited.

#### Limits to use

Max. gate weight 200 Kg, max. gate-leaf width 1.80 with a max. gate-leaf opening of 110° (see installations). We suggest you always fit an electrolock onto swing gates for a more reliable closure.

#### Description

This product is engineered and manufactured by CAME S.p.A. and complies with current safety regulations. With swing gates it is always advisable to install and electro-lock. This is to ensure a reliable closing and to protect the gearmotor's inner workings.

#### Technical features



Pag. 3 - Manual code: 119AV17EN ver. 4 03/2016 © CAME S.p.A. - The data and information reported in this installation manual are susceptible to change at any time and without obligation on CAME S.p.A. to notify users.



Pag. 4 - Manual code: 119AV17EN ver. 4 03/2016 @ CAME S, p.A. - The data and information reported in this installation manual are susceptible to change at any time and without obligation on CAME S, p.A. to notify users.







Underground installation



90° external installation



90° underground installation





INWARD opening				
EXTERNAL Gearmotor	(X) Gate-leaf opening	A	C	D
	90°	0	150	420
	100°	50	150	375
	110°	80	75	360
	110°	60	0	385
	120°	110	0	335
BELOW-GROUND gearmotor	90°	0	150	420
	110°	20	75	400
	125°	70	0	375

Installation must be carried out by expert qualified personnel and in full compliance with current regulations.

#### **Preliminary checks**



Before installing, do the following:

• Make sure you have a suitable omni-polar cut-off device with contacts more than 3 mm apart, and independent (sectioned off) power supply.

• Make sure you have suitable tubing and conduits for the electrical cables to pass through and be protected against mechanical damage.

• Fit tubing to drain away any water leaks which may cause oxidation.

• Make sure that any connections inside the case (that provide continuance to the protective circuit) be fitted with extra insulation as compared to the other conductive parts inside;

• Make sure the structure of the gate is sturdy, the hinges work and that the is no friction between moving and non-moving parts.

• Make sure there is a mechanical stop for opening and closing.

#### **Tools and materials**

Make sure you have all the tools and materials you will need for the installation at hand to work in total safety and compliance with the current standards and regulations.









#### Type and section of cables

Connection	Type of cable	Length of cable $1 < 10 \text{ m}$	L. of cable 10 < 20 m	L. of cable 20 < 30 m
Control panel power supply 230	EBOB CEI	3G x 1,5 mm <sup>2</sup>	3G x 2,5 mm <sup>2</sup>	3G x 4 mm <sup>2</sup>
Motor power supply 24V		3 x 1 mm <sup>2</sup>	3 x 1,5 mm <sup>2</sup>	3 x 2,5 mm <sup>2</sup>
flashing lamp		2 x 0,5 mm <sup>2</sup>	2 x 1 mm <sup>2</sup>	2 x 1,5 mm <sup>2</sup>
Photocell transmitters	20-22	2 x 0,5 mm <sup>2</sup>	2 x 0.5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>
Photocell receivers	CEI EN	4 x 0,5 mm <sup>2</sup>	4 x 0,5 mm <sup>2</sup>	4 x 0,5 mm <sup>2</sup>
Accessories power supply	50267-2-1	2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>	2 x 1 mm <sup>2</sup>
Control and safety devices		2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>
Antenna connection	RG58		max. 10 m	

N.B.: If the cable length differs from that specified in the table, then you must determine the proper cable diameter in the basis of the actual power draw by the connected devices and depending on the standards specified in CEI EN 60204-1.

For connections that require several, sequential loads, the sizes given on the table must be re-evaluated based on actual power draw and distances. When connecting products that are not specified in this manual, please follow the documentation provided with said products.

- 1) MYTO automation
- 2) Control panel
- 3) Junction box for connecting to the gearmotor
- 4) Antenna
- 5) Flashing light
- 6) Keyswitch selector
- 7) Photocells
- 8) Junction pit
- 9) Drainage ditch
- 10) Mechanical stops
- 11) Photocells post



# Setting up the fixing /foundation casing

<u>/!</u>\ The following illustrations are also shown in the MYTO-C instruction sheet (for underground installation). Some examples are given, in that the space available for anchoring the operator and accessories varies depending on the overall dimensions. It is up to the installer, thus, to choose the most suitable solution.

The following drawings refer to a standard installation of an inward opening gate.

Dig a pit for the box, set up junction boxes and corrugated tubes for connections coming from the junction box as well as a drainage tube.

N.B.: the number of tubes depends on the type of system installed and any accessories.







Level the box with the ground and wait for it to dry for at least 24 hours. Clean the inside of the box of any cement residue.



#### Installation of the automation

Insert the pin into the gearmotor shaft and secure it using nuts and bolts. Insert the gearmotor into the box and secure it using the hexagonal nuts and washers.





Position the slide rail onto the gate leaf and mark the spots where to secure it, making sure the measurements given in the drawing are respected.

Note: the measurements marked with (\*) vary depending on the type of installation (below or above ground) and on the gate-leaf opening angle (see Chapt. on installation examples)



Drill holes at the points you have marked. Thread the holes using an M8 male or use M8 threaded inserts or other suitable materials that guarantee proper hold to the rail.

Note: the illustrations are mere examples, it is up to the installer to choose the most suitable solution depending on gate-leaf type and thickness.



#### Position the rail against the holes and secure it using the cylinder head screws.



Assemble the slide guide with the LEFT transmission arm, so that is in symmetry with the RIGHT-hand one (see drawing).



Remove the closing mechanical stop from the rail. Insert the slide guide and insert back the stop.





Secure the box cover using the countersunk screws. Secure the cap above the pin using a self-threading screw.



Insert the rail end caps onto both ends of the slide rail, as well as the hole caps.





Place the gate leaf in the fully closed position and place the closing mechanical stop against the slide guide and then secure it.



Turn the release cover and insert the lever onto the release pin.





Turn the release lever counter-clockwise until the endstop point.





To lock the motor back up, turn the level to the initial point.





For electrical connection operations, use the pit and junction boxes. For additional instructions on functions and settings, check the control panel's technical literature.

#### **Control panel**



24 V DC gearmotor connection for delayed opening function

24 V DC gearmotor connection for delayed closing function

#### Installing and connections for outer opening

Following, are the only things that change compared to a standard installation:

Position the slide rail onto the gate leaf and mark the spots where to secure it, making sure the measurements given in the drawing are respected.

D



For electrical connection operations, use the pit and junction boxes. For additional instructions on functions and settings, check the control panel's technical literature.

## **Control panel**



24 V DC gearmotor connection for delayed opening function

24 V DC gearmotor connection for delayed closing function

#### Maintenance

#### Periodic maintenance

Perfore doing any maintenance, cut off the power supply, to prevent any hazardous situations caused by accidentally activating the operator.

#### Periodic maintenance log kept by users (every six months)

Date	Notes	Signature

#### Extraordinary maintenance

△ The following table is for logging any extraordinary maintenance jobs, repairs and improvements performed by specialized contractors.

#### Extraordinary maintenance log

Installation technician stamp	Operator name
	Date of intervention
	Technician signature
	Customer signature
Intervention carried out	

Installation technician stamp	Operator name
	Date of intervention
	Technician signature
	Customer signature
Intervention carried out	

Installation technician stamp	Operator name
	Date of intervention
	Technician signature
	Customer signature
Intervention carried out	

Installation technician stamp	Operator name
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	Technician signature
	Customer signature
Intervention carried out	

Installation technician stamp	Operator name
	Date of intervention
	Technician signature
	Customer signature
Intervention carried out	

MALFUNCTIONS	POSSIBLE CAUSES	CHECK AND REMEDIES
The gate will not open nor close	<ul> <li>There is no power</li> <li>The gearmotor is released</li> <li>The remote control's batteries are run down</li> <li>The transmitter is broken</li> <li>The stop button is either stuck or broken</li> <li>The opening/closing button or the key selector are stuck</li> </ul>	<ul> <li>Check that the power is up</li> <li>Call assistance</li> <li>Replace batteries</li> <li>Call assistance</li> <li>Call assistance</li> <li>Call assistance</li> <li>Call assistance</li> </ul>
The gate opens but will not close	• The photocells are engaged	<ul> <li>Check that photocells are clean and in good working order</li> <li>Call assistance</li> </ul>
The flasher does not work	• The bulb is burnt	Call assistance

#### Phasing out and disposal

CAME S.p.A. employs a UNI EN ISO 14001 certified and compliant environmental protection system at its plants, to ensure that environmental safeguarding.

We ask you to keep protecting the environment, as CAME deems it to be one of the fundamental points of its market operations strategies, by simply following these brief guidelines when disposing:

#### DISPOSING THE PACKING MATERIALS

The packing components (cardboard, plastic, etc.) are solid urban waste and may be disposed of without any particular difficulty, by simply separating them so that they can be recycled.

Before actions it is always advisable to check the pertinent legislation where installation will take place.

## DO NOT DISPOSE OF IN NATURE!

#### DISPOSING OF THE PRODUCT

Our products are made using different types of materials. The majority of them (aluminium, plastic, iron, electric cables) can be considered to be solid urban waste. They may be recycled at authorised firms.

Other components (electrical circuit board, remote control batteries etc.) may contain hazardous waste.

They must, thus, be removed and turned in to licensed firms for their disposal.

Before acting always check the local laws on the matter.

#### **DO NOT DISPOSE OF IN NATURE!**

#### **DECLARATION OF CONFORMITY**

Declaration  $c \in -CAME$  S.p.A. declares that this device conforms to the essential, pertinent requirements provided by directives 2006/42/CE and 2014/30/CE.

An original copy is available on request.

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