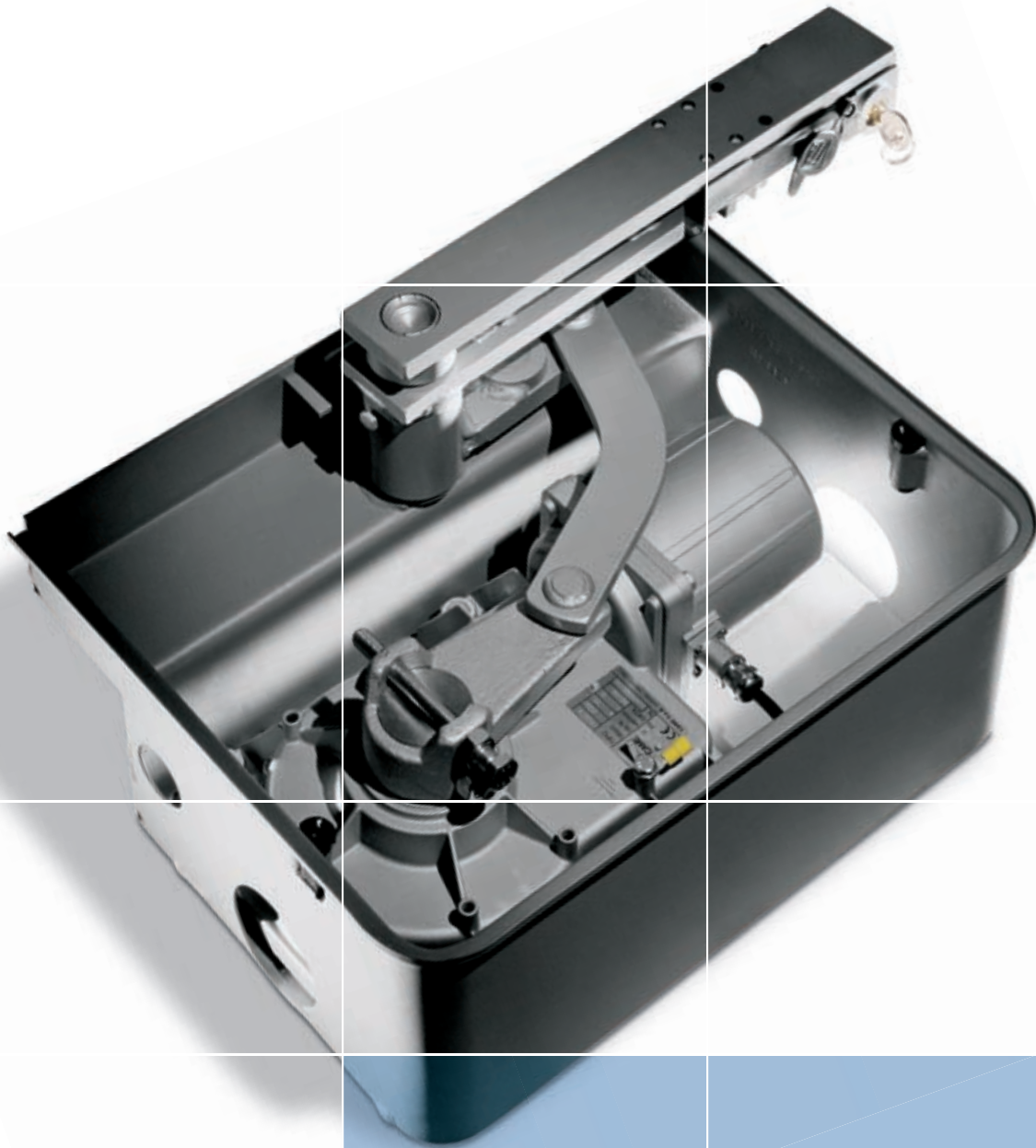


Underground  
automation  
system for swing  
gates up to 3.5 m  
gate leaves




# FROG

**The totally hidden  
automation system that  
emphasises your entrance**

FROG represents the synthesis of CAME's design philosophy and creativity applied to swing gates. An extremely sturdy and "practically invisible" product which in no way detracts from the aesthetics of your entrance way.



  
**CAME**  
AUTOMATIC GATES

# FROG

230V 24V

The automation system that makes the difference

FROG is CAME's highly efficient automation system that defies time thanks to the materials used in the foundation case and the gearmotor. A smooth, safe motion guaranteed in all working conditions, even the harshest, but which, above all needs no periodic maintenance.



**Total water-tightness.** Frog's high quality standards and its IP67 protection standards from external agents keeps it always in perfect working order.



**Better before.** Installing FROG is easy and setting up the foundation case enables the gate to be automated at a later date.



**Easy, PATENTED release.** In the event of a blackout FROG'S release mechanism is immediate. It comes in three versions for each specific need, from the practical lever to the customised key.

**Durability without any compromises.** The solid foundation case is made of rustproof steel. A special stainless steel version is also available, to be installed in severe climates.

**Special apertures.** Special operation levers are available that enable gate-leaf rotations of up to 180° and provide better management of the space available.



**Top comfort.** FROG is also available in the 24V motor version, so that the gate can always be opened in during power outages.

**Designed to withstand anything.** In designing FROG we have chosen the best materials available, carefully studying each detail so as to obtain a no-compromise result.



## The 230V electronics

FROG's new 230V electronics provides specific control and safety functions, which are standard even in the basic version. There are, however, other circuit boards available, for cutting-edge performance features, in terms of service and safety. Here are some examples:

- > **Test of the active safety features**  
activated before each gate operation, whether in opening and closing.
- > **Pedestrian or partial opening**  
to allow opening of one gate leaf or limited opening for pedestrian access.
- > **Total control of the gate from the transmitter**  
including the possibility of immediately stopping movement of the gate leaves.

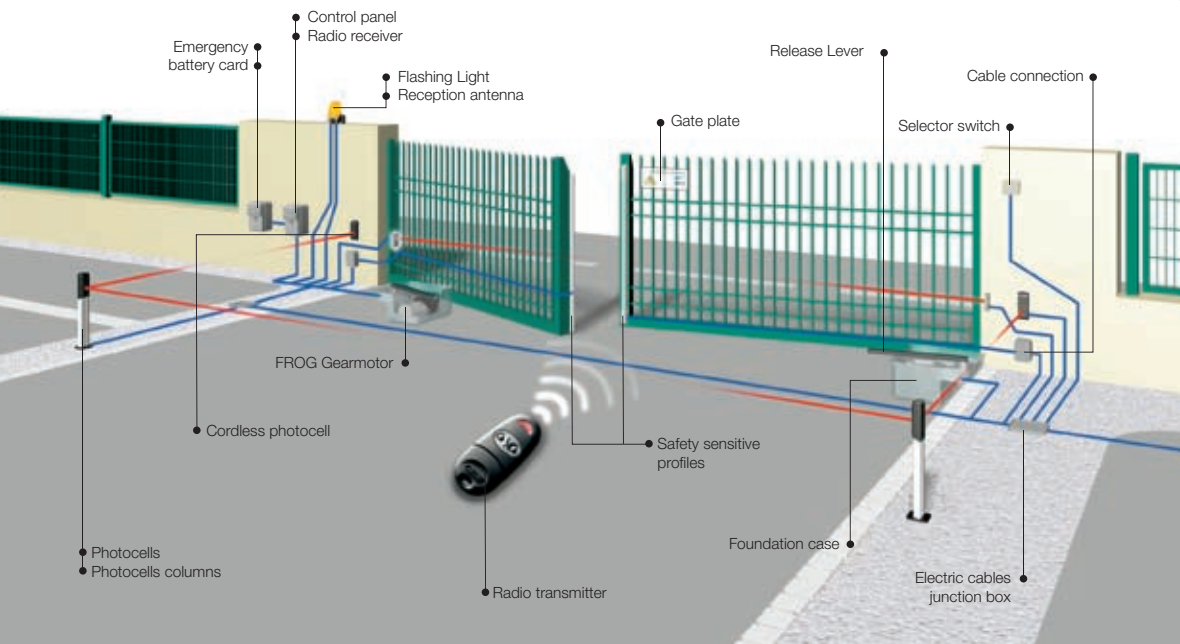
## The advantages of Frog 24V

When top comfort, performance and safety are required, the FROG 24V technology enables the potential of the automation system to reach the highest levels, particularly:

- > **Blackouts no more**  
The FROG 24V electronics immediately act in the event of a power outage by activating the emergency function through the auxiliary batteries, to always open and close the gate (optional).
- > **Frequent passing**  
The low voltage gearmotor guarantees functioning even under the most severe working conditions such as condominium or industrial applications.
- > **Quick openings**  
For service features adaptable to single needs, the 24V electronics enable adjustment of the opening and closing speed while providing for a soft, smooth closing of the gate leaves.
- > **Obstruction detection**  
A special electronic circuit constantly analyses the proper functioning of the gate leaves, allowing for their total stop, or inversion of movement, when coming into contact with any obstructions .



### Standard Installation:



In the event a careful analysis of the automated gate's risks were to require it, the use of sensitive safety infrared or contact profiles becomes indispensable.

# The models

## 230V Gearmotors

- FROG-A** 230V Gearmotor for residential gates leaves each up to 3.5 m in length, and 15s (90°) opening time
- FROG-AV** 230V Gearmotor for residential gate leaves each up to 1.3 m in length, and 9s (90°) opening time

## 230V Circuit boards and casings

- ZA5** BASIC circuit board for swing gates with one leaf featuring built-in radio decoding (excluded using the AF30 radio card)
- ZA3** PLUS circuit board for two-leaves swing gates featuring built-in radio decoding
- ZM2** MULTIFUNCTION circuit board for two-leaves swing gates featuring automatic diagnosis of safety devices and built-in radio decoding
- S4339** ABS casing dimensions L 197 x 290 H mm
- S4340** ABS casing dimensions L 240 x 320 H mm

## 24V Gearmotor

- FROG-A24** 24V D.C. Gearmotor for residential gate leaves each up to 3.5 m in length and adjustable opening

## 24V Control panels

- ZL170** Control panels for one-leaf gates with built-in radio decoding
- ZL19** Control panel for two-leaves swing gates with built-in radio decoding
- LB18** Emergency back-up device featuring housing for 3 12V – 7Ah batteries

## Accessories

- FROG-B** Galvanised steel foundation case
- FROG-BI** AISI 304 Stainless steel foundation case
- A4364** BASIC model with lever-key release
- A4365** PLUS model with triangular key release
- A4366** TOP model with customised key and EURO DIN cylinder
- A4472** Adjustable lever for mechanically stopping the gate leaf during opening
- A4370** Heavy-duty lever for opening arcs of up to 140° (gate leaves up to 2 m wide max.)
- FL-180** Device for 180° opening of the FROG-A and FROG-AV (for gate leaves up to 2 m in width)
- LOCK81** Electric lock with EURO DIN single cylinder
- LOCK82** Electric lock with EURO DIN double cylinder

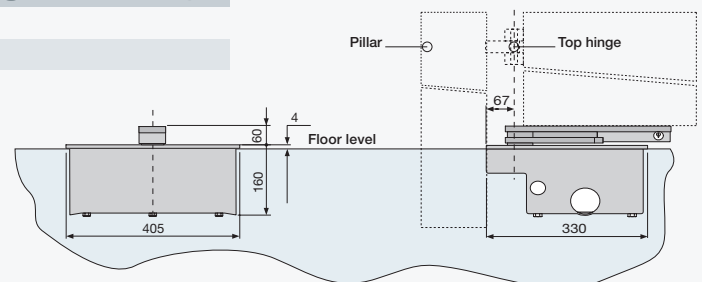
## Technical features:

Type	FROG-A	FROG-AV	FROG-A24
Degree of protection		IP67	
Panel power supply (50/60Hz)		230V A.C.	
Motor power supply	230V A.C. (50/60Hz)	230V A.C. (50/60Hz)	24V D.C.
Absorbed input	1,9A	2,5A	15A max
Max power	200W	300W	180W
Opening time (90°)	18s	9s	16 ÷ 45s
Operation intermittence	30%	30%	servizio intensivo
Max torque	320Nm	240Nm	320Nm
Operating temperature		-20°C ÷ +55°C	

## Limits to use:

Max width of leaf/ves (m)	Max weight of leaf/ves (kg)
2	800
2,5	600
3,5	400

## Dimensions:



PRODUCTS



Made in Italy



For its quality processes management Came Cancelli Automatici is ISO 9001:2000 certified, and for its environmental management it is ISO 14001 certified. Came designs and manufactures entirely in Italy.



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