



 **GIESSE**<sup>®</sup> VARIA SLIM  
ACTUATORS





<i>Company</i>	4
<i>Introduction</i>	5
<i>Choose yours...</i>	6
<i>Determine the actuator stroke</i>	7
<i>RWA Systems - Smoke and heat evacuation</i>	8
<i>Varia Slim Plus RWA / Plus RWA Syncro</i>	10
<i>Varia Slim / Syncro / Radio</i>	16
<i>Varia Slim Base</i>	20
<i>Varia Slim Small</i>	22
<i>Remote control device RC</i>	25
<i>Heated rain detector SPR</i>	26

60's



70's



80's



90's



today



Giesse was founded near Bologna, in Italy, in 1965 and from being a small enterprise it has grown, over the years, into a major international Group in the sector of aluminium window hardware.

What initially was an intuition turned into an entrepreneurial vision that has led Giesse to become a key brand, a world leader in the aluminium window sector that has created a range of products that have become the standard for the entire market.

Giesse opens new frontiers and changes the way of conceiving and producing hardware.

The goal of Giesse is to work professionally in accordance with its core values of Quality, Innovation and Design. Our philosophy is based on complete customer satisfaction through the design, manufacture and marketing of cutting-edge solutions in line with market demands, in

Italy and abroad.

The Group today has branches and a sales network able to serve every country in the world, with 550 employees and a turnover exceeding 80 million euro.

It has a catalogue of over 8.000 products and more than 100 registered patents.

Once upon a time there was a dream.

Now, 50 years later, there is a great reality that is called GSG International S.p.a.

We invite you to join our wonderful adventure, which has deep roots, lives in the present and will continue into the future.

A fine story with many pages still to be written.

Write them with us.





#### VARIA SLIM ACTUATORS

The new range of Giesse automations has been developed to complete the offering of conventional hardware.

Over the years, the demand for opening mechanisms for large size windows with greater comfort and safety has been driving development efforts in the automation sector at an ever faster rate.

Today, Giesse extends its range of automated products by presenting the VARIA SLIM line.

In addition to its characteristics of high quality, ease of installation, safety, comfort, and zero maintenance, already present in our other products, VARIA SLIM operators feature minimalist aesthetics that allow seamless integration in residential and contemporary architectural settings.

Thanks to its compact dimensions and clean lines, VARIA SLIM hardware can be incorporated in curtain wall cross-beams, enhancing the effect of an uninterrupted glazed surface, and also offers pleasing and discreet aesthetics when fitted on conventional openings.

Giesse is particularly focused on aesthetics and styling, without detracting from our obsession with high quality and innovation: an operator for the expulsion of smoke and heat, perfectly in line with the latest European regulations.

QUALITY, INNOVATION and DESIGN.

Once again the key points of Giesse philosophy are encapsulated in a high-performance and exclusive product.

Choose yours...

Windows come in various types, sizes and weights. Some are installed where atmospheric agents play an important role in the determination of the forces required to move them.

Sometimes windows must be moved automatically for practicality or security reasons, using electronic control devices. Before installing an actuator on the window, it is necessary to check that the actuator is suited for the work to be carried out and, especially, when smoke and heat protection is required.

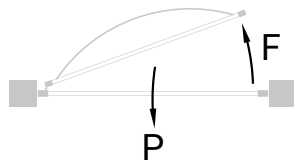
## FORMULAS TO CALCULATE THE PUSH OR PULL FORCE REQUIRED TO OPEN THE WINDOW

In order to determine the correct type of automation to be installed, it is essential to know the force required to move the window.

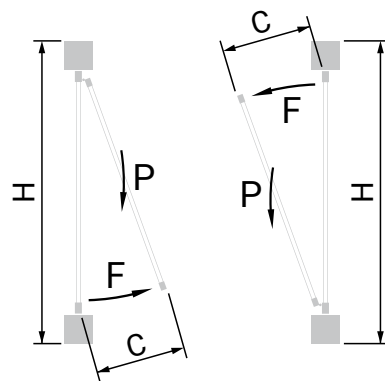
A preliminary check can be made using the formulas provided below which, however, do not take into consideration the action of external agents on the window such as friction, air currents, depressions, snow and wind.

- F = Force required to open and close - kg
- P = Window weight (only movable part) - kg
- C = Window opening truck run (actuator truck run) - cm
- H = Window height - cm

1 N (Newton) = 0,102 kg  
1 kg = 9,81 N



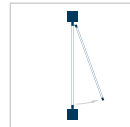
For horizontal domes and dormer windows  
 $F = 0,54 \times P$



For outward opening or transom window  
 $F = (0,54 \times P) \times (C:H)$

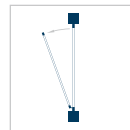
## Determining the actuator stroke

The actuator stroke can be determined by considering the type of application. It is recommended to carry out a technical check before installation. For determining the maximum refer to the chart below which indicates the maximum stroke attainable and/or settable considering the type and dimensions of the window and its opening direction.



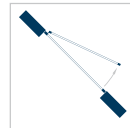
### OUTWARD FRAME

hinges in the top side, outside opening, actuator mounted inside in the bottom.



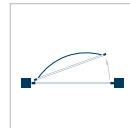
### VASISTAS FRAME

hinges in the bottom side, inside opening, actuator mounted inside in the top.



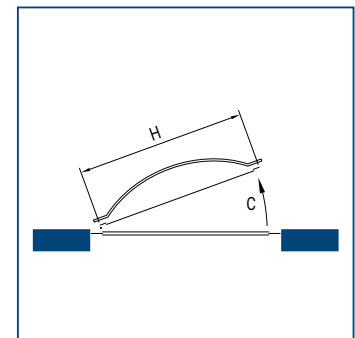
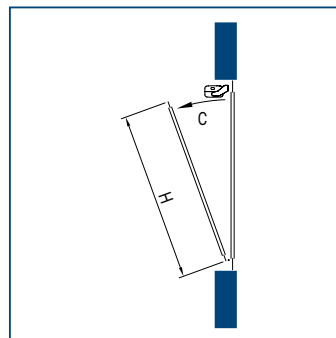
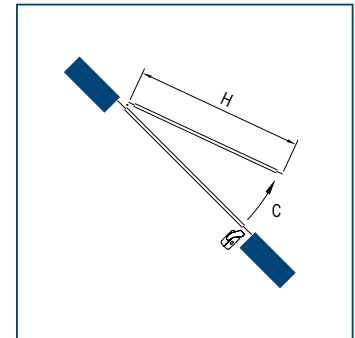
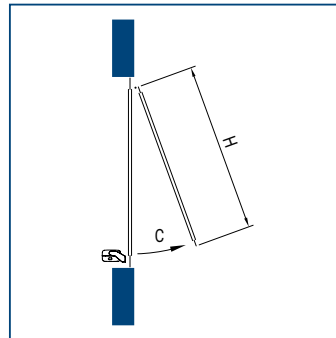
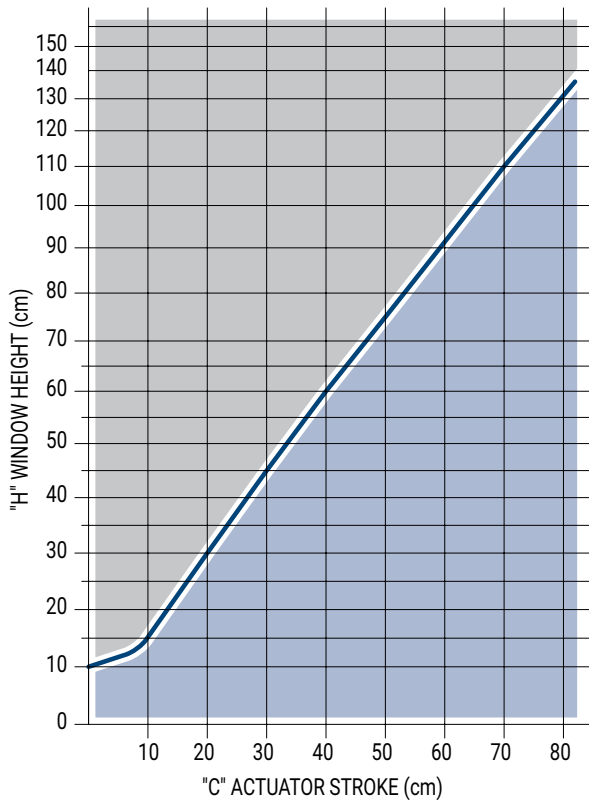
### ROOF FRAME

hinges in a side, opposite outside opening, actuator mounted inside.



### CUPOLAS AND SKYLIGHTS

hinges in a side, opposite outside opening, actuator mounted inside.



# RWA SYSTEMS

## Smoke and heat evacuation

Most of us live every day indoors: it is essential that the air quality is healthy, clean and fresh to ensure our physical well-being and allow us to concentrate on our daily activities. In case of fire in a room it is important to know the escape routes that are critical for survival.

Statistics show that almost all deaths which occur during building fires are caused by poisoning due to the inhalation of smoke and toxic gases rather than the rapid increase in temperature.

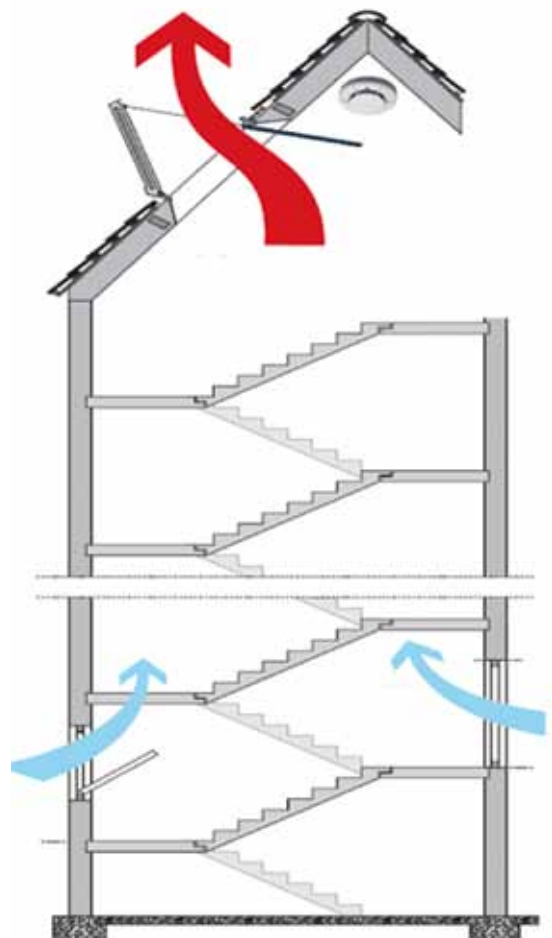
In case of fire the diffusion of smoke inside the rooms causes significant material damage to the structures and equipment. Lowering the temperature or delaying its increase preserves building stability and facilitates the fire fighting process by creating visibility in access areas, reducing temperatures in the upper areas and delaying lateral diffusion of the fire.

All systems used to evacuate smoke and heat are a fundamental part of fire prevention, and the choice of the appropriate system for the particular building structure and construction must provide the best solution for saving human lives and preventing property damage.

The basic operating concept of the fire-fighting system consists in preventing the smoke from remaining in the rooms and penetrating the escape routes and survival areas of the people. The safety system must activate automatically, opening all the openings from which the smoke and heat must be evacuated, freeing the escape routes to areas with fresh, clean air.

The same system, on a day-to-day basis, guarantees a controlled change of air in the rooms in order to improve the quality of life and health of the people in the rooms.

With RWA actuators it is possible to install one only actuator for both smoke evacuation and natural ventilation.





# RWA SYSTEMS

## Smoke and heat evacuation

GIESSE RWA actuators have been designed and tested to be used with integrated systems for smoke and heat evacuation, in compliance with the European Standard EN12101-2.

Indeed smoke and heat evacuation devices must be fabricated according to the standard EN 12101-2.

NRWG certification determines the test procedures to which are submitted the devices that make up the system, such as the window, the automation, detection devices and the central control and monitoring unit.

Even the construction materials are subject to this certification.

The construction and location of evacuation systems should be designed based on the building structure which may provide for outlets on the vertical walls, roof, forced channels, etc.

Once the test has been completed successfully, the automators manufacturers receive the classification report and can place their products on the market.



GIESSE produces remote controllable electric actuators for moving windows and ventilation openings in case of fire.

The use of an integrated smoke and heat evacuation system in combination with the actuators is designed to protect and guarantee the maximum survival of people, facilitating the extraction of smoke and hot air from the rooms.

Creating a smoke-free area in the lower layers at floor level, freeing stairwells and corridors and decreasing the concentration of toxic gases increases the visibility of escape routes for people and facilitates access for emergency rescue services. For this purpose the actuators have been designed and tested for use with integrated systems and frames for extraction of smoke and heat, in compliance with the European Standard EN12101-2.

# ACTUATOR VARIA SLIM PLUS RWA

## VARIA SLIM PLUS RWA

METALLIC CHAIN ACTUATOR 300N ADJUSTABLE STROKE TILL 500MM

Varia Slim Plus and Varia Slim Plus RWA have successfully passed the most demanding heat and fire resistance tests as specified by the standard EN 12101-2:2003-09, obtaining the **B300 classification**.

Varia Slim Plus RWA guarantees safety, quality, efficiency, reliability and constructional simplicity, all with an attractive design for incorporation in state-of-the-art window.

Varia Slim Plus owns a new electronic technology based on the use of a microprocessor to control the position and manage every working phase.

- Body made of die-cast aluminum
- Support brackets made of zamak
- Easy to install with quick-coupling assembly onto the support brackets, without any screws or fastening components (patented system)
- Quick-release from the window even just for easier cleaning (patented system)
- Strokes can be selected by means of dip-switches.



- 500 - RAL9005
- 410 - RAL9010
- 970 - RAL9006

# ACTUATOR VARIA SLIM PLUS RWA SYNCRO

## VARIA SLIM PLUS RWA SYNCRO SYNCHRONIZED ACTUATORS

The Syncro version, based on communication between actuators through a direct connection, allows instantaneous control of the force, speed and resistance of each actuator through an encoder reading of the work of the individual motors.

Syncro actuators open and close with synchronized movement.

Syncro3 software allows connection of up to 8 actuators directly to one another, without the need for external synchronization control units.

The number of actuators synchronized varies according to dimensions, weight and type of the window. For windows with width more than 1200 mm, the use of two actuators is recommended in order to have correct movement and perimeter sealing of the sash when closed to the frame.

An additional actuator is recommended for every additional 1200 mm width.



- 500 - RAL9005
- 410 - RAL9010
- 970 - RAL9006





# ACTUATOR VARIA SLIM PLUS / RWA / SYNCRO

Varia Slim Plus is the electric linear actuator with double-row four-link articulated chain enclosed in an appropriate aluminum casing, suited for moving awning windows, hopper windows, dormer windows and light domes.

The actuator has a push and pull force of 300N and is designed to function both at a voltage of 110/230V AC 50/60Hz and, for RWA systems, at the low voltage of 24V DC in compliance with European Standard EN12101-2.

The device is equipped with universal swing support brackets that are quick-coupling without screws (patented).

Electronic stroke-end when opening with three strokes (200 - 300 - 500 mm), which can be selected at any time using dip-switches; stroke-end at power absorption during closing and as protection against overloading.

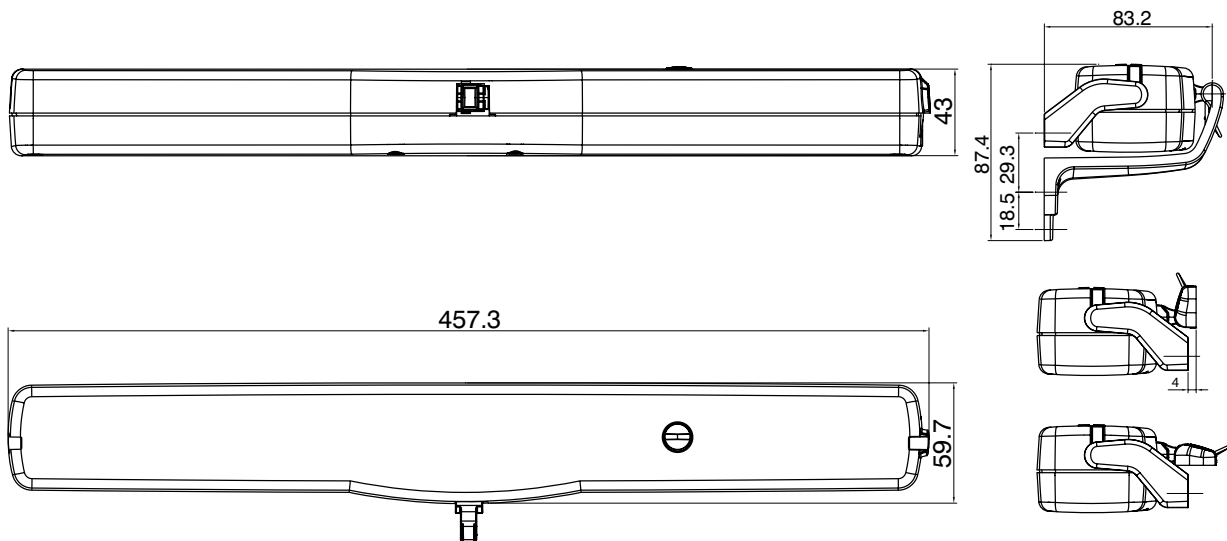
The actuator is equipped with the Soft Stop and Relax function, and it can be connected in parallel.

Complies with the Directives 2004/108 EC (EMC Directive) and 2006/95 EC (Low Voltage Directive).

Standard colors: BLACK (RAL9005) with black cable, WHITE (RAL9010) and GREY (RAL9006) with white cables. The 24V DC versions have a black silicone cable. Additional characteristics are provided in the technical data table.

Code	Model and colour
<b>07880500</b>	VARIA SLIM PLUS RWA 24V <i>black</i>
<b>07880410</b>	VARIA SLIM PLUS RWA 24V <i>white</i>
<b>07880970</b>	VARIA SLIM PLUS RWA 24V <i>grey</i>
<b>07881500</b>	VARIA SLIM PLUS RWA SYNCRO 24V <i>black</i>
<b>07881410</b>	VARIA SLIM PLUS RWA SYNCRO 24V <i>white</i>
<b>07881970</b>	VARIA SLIM PLUS RWA SYNCRO 24V <i>grey</i>
<b>07882500</b>	VARIA SLIM PLUS 230V <i>black</i>
<b>07882410</b>	VARIA SLIM PLUS 230V <i>white</i>
<b>07882970</b>	VARIA SLIM PLUS 230V <i>grey</i>
<b>07883500</b>	VARIA SLIM PLUS SYNCRO 230V <i>black</i>
<b>07883410</b>	VARIA SLIM PLUS SYNCRO 230V <i>white</i>
<b>07883970</b>	VARIA SLIM PLUS SYNCRO 230V <i>grey</i>

# TECHNICAL DATA VARIA SLIM PLUS / RWA / SYNCRO



MODEL	VARIA SLIM PLUS RWA 24V code 07880	VARIA SLIM PLUS RWA SYNCRO 24V code 07881	VARIA SLIM PLUS 230V code 07882	VARIA SLIM PLUS SYNCRO 230V code 07883
Push and pull force	300 N			
Strokes (mm)	200/300/500			
"Syncro3" Synchronization	NO	YES	NO	YES
Power supply voltage	24V DC		110÷ 230V AC 50/60 Hz	
Current absorbed at nominal load	0,910 A		0,160 A	
Power absorbed at nominal load	~ 20W		~ 36W	
No-load speed	8,9 mm/s		7,2 mm/s	
Maximum no-load stroke time	56 s		70 s	
Double electrical insulation	Low voltage		Yes	
Service type	S2 of 3 minutes			
Operating temperature	-5 + 65 °C			
Degree of protection for electrical devices	IP 32			
Soft Stop	YES			
Relax function	YES			
Frame rebated overlap self-learning	Position self-determination			
Connection in parallel	YES (max 30 actuators)			
Power supply cable length	2 m	2,5 m	2 m	2,5 m
Opening stroke-end setting	Electronic dip-switch setting			
Closing stroke-end setting	At absorption of power			
Protection on overload at opening and closure	At absorption of power			
Dimensions mm	456x60x43			
Weight kg	1,63 kg		1,43 kg	
Static holding force	1700 N			
Supplied brackets	Standard support brackets (sash brackets must be ordered separately)			

The data provided in these illustrations is non-binding and subject to change, even without advance notice.



05900  
Vasistas support brackets



05901  
Outward opening support brackets



05902  
Top hung support brackets



05903  
Standard support brackets

## SASH BRACKETS (TO BE ORDERED SEPARATELY)

Code	Model and colour
05900500	VASISTAS BRACKET - VARIA SLIM PLUS <i>black</i>
05900410	VASISTAS BRACKET - VARIA SLIM PLUS <i>white</i>
05900970	VASISTAS BRACKET - VARIA SLIM PLUS <i>grey</i>

Code	Model and colour
05901500	OUTWARD OPENING BRACKET - VARIA SLIM PLUS <i>black</i>
05901410	OUTWARD OPENING BRACKET - VARIA SLIM PLUS <i>white</i>
05901970	OUTWARD OPENING BRACKET - VARIA SLIM PLUS <i>grey</i>

Code	Model and colour
05902500	OUT OPENING BRACKET VARIA SLIM PLUS (TOP HUNG) <i>black</i>
05902410	OUT OPENING BRACKET VARIA SLIM PLUS (TOP HUNG) <i>white</i>
05902970	OUT OPENING BRACKET VARIA SLIM PLUS (TOP HUNG) <i>grey</i>

## SUPPLIED BRACKETS (SPARE PARTS)

Code	Model and colour
05903500	STANDARD SUPPORT BRACKETS - VARIA SLIM PLUS (CP) <i>black</i>
05903410	STANDARD SUPPORT BRACKETS - VARIA SLIM PLUS (CP) <i>white</i>
05903970	STANDARD SUPPORT BRACKETS - VARIA SLIM PLUS (CP) <i>grey</i>



## VARIA SLIM

### 300N CHAIN ACTUATOR

Brackets for quick coupling of the actuator in its working position, variable strokes that can be electronically selected, ease of hooking the chain to the frame, and the relax function are the primary characteristics that distinguish Varia Slim.

The actuator is compact, with a cross-section of only 37x59 cm. The body and brackets are made of high-strength composite material (glass fiber reinforced polyamide).

Code	Model and colour
<b>07884590</b>	VARIA SLIM 230V <i>black</i>
<b>07884560</b>	VARIA SLIM 230V <i>white</i>
<b>07884542</b>	VARIA SLIM 230V <i>grey</i>
<b>07885590</b>	VARIA SLIM 24V <i>black</i>
<b>07885560</b>	VARIA SLIM 24V <i>white</i>
<b>07885542</b>	VARIA SLIM 24V <i>grey</i>



- 590 - black
- 560 - white
- 542 - grey





# ACTUATOR VARIA SLIM SYNCRO

## VARIA SLIM SYNCRO

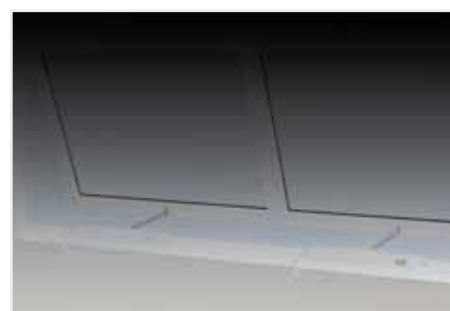
### SYNCHRONIZED ACTUATORS

Varia Slim Syncro allows perfectly coordinated synchronization of up to 8 actuators without the use of external control units.

Code	Model and colour
07886590	VARIA SLIM SYNCRO 230V <i>black</i>
07886560	VARIA SLIM SYNCRO 230V <i>white</i>
07886542	VARIA SLIM SYNCRO 230V <i>grey</i>
07887590	VARIA SLIM SYNCRO 24V <i>black</i>
07887560	VARIA SLIM SYNCRO 24V <i>white</i>
07887542	VARIA SLIM SYNCRO 24V <i>grey</i>



-  590 - black
-  560 - white
-  542 - grey



# ACTUATOR VARIA SLIM RADIO

## VARIA SLIM RADIO

### ACTUATOR WITH REMOTE CONTROL

Varia Slim Radio is the wireless evolution of the Varia Slim family. It has the same body but with a different and evolved intelligence.

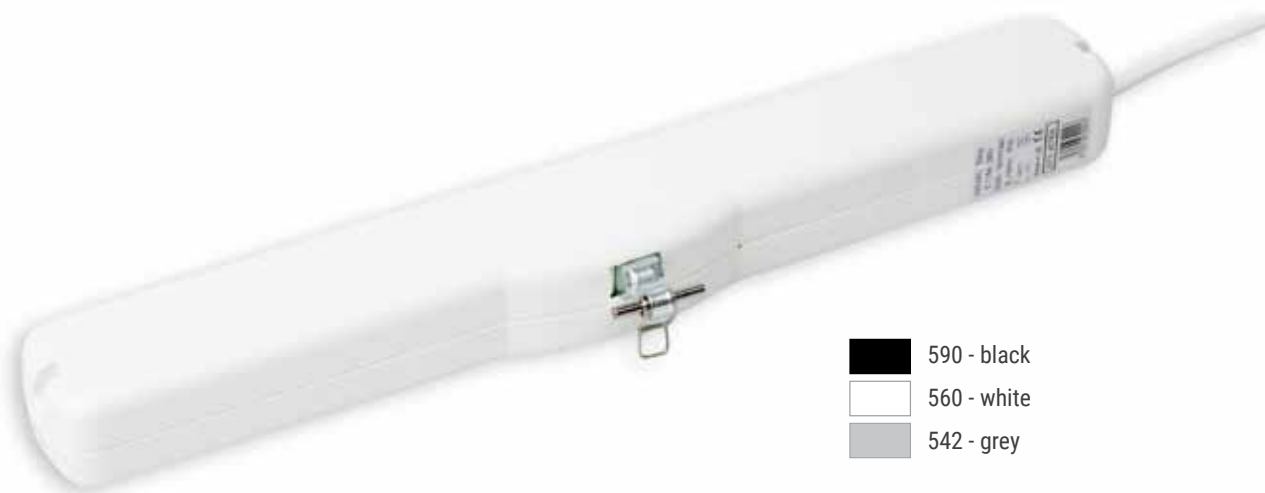
Complete with a radio frequency receiver integrated in the body of the actuator, it is suited for installation wherever there is need for remote control through the Radio Remote Control (pag. 25) with rolling code technology.

In any case it can also be used connected to a wire pulse control located near the window.

Combined with the series of rain detectors item **07893000** and **07894000**, it allows automatic closure of the window by wire or radio signal in case of rain, without using additional control units.

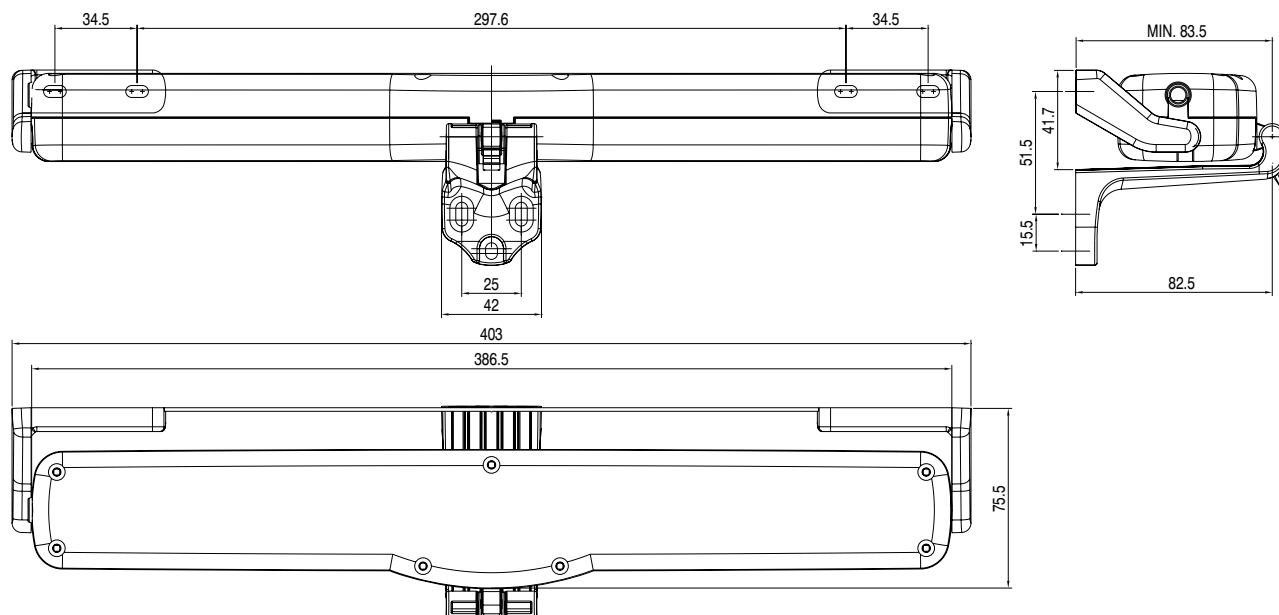
Code	Model and colour
<b>07888590</b>	VARIA SLIM RADIO 230V <i>black</i>
<b>07888560</b>	VARIA SLIM RADIO 230V <i>white</i>
<b>07888542</b>	VARIA SLIM RADIO 230V <i>grey</i>
<b>07893000</b>	HEATED RAIN SENSOR - SPR RADIO
<b>07892000</b>	REMOTE CONTROL - RC

Remote control and rain sensor are provided apart.



- 590 - black
- 560 - white
- 542 - grey

# TECHNICAL DATA VARIA SLIM / SYNCRO / RADIO



Electric linear actuator with double-row four-link articulated chain enclosed in an appropriate high-strength composite casing (glass fiber reinforced polyamide), suited for moving awning windows, hopper windows, dormer windows and light domes. The actuator has a push and pull force of 300 N, and is designed to function both at a voltage of 230V AC 50Hz or at the low voltage of 24V DC.

The actuator is supplied complete with quick coupling screw-less assembly brackets (patented) and awning and vasistas window brackets with quick coupling/uncoupling of the window (patented).

Stroke-end: electronic opening stroke-end with variable strokes that can be selected at any time using dip-switches. Closing stroke-end at power absorption. Can be connected in parallel.

Complies with the Directives 2004/108 EC (EMC Directive) and 2006/95 EC (Low Voltage Directive).

Standard colors: Black with black cable, White and Grey with white cables.

MODEL	VARIA SLIM 230V code 07884	VARIA SLIM 24V code 07885	VARIA SLIM SYNCRO 230V code 07886	VARIA SLIM SYNCRO 24V code 07887	VARIA SLIM RADIO 230V code 07888
Push and pull force	300N				
Strokes (mm)	110/200/300/400		100/200/400		100/200/300/400
Syncro Synchronization	NO	NO	YES	YES	NO
Power supply voltage	230V~ 50Hz	24V =	230V~ 50Hz	24V =	230V~ 50Hz
Current at nominal load	0,115 A	0,950 A	0,115 A	0,950 A	0,160 A
Power absorbed at nominal load	~ 25 W	~ 23 W	~ 25 W	~ 25W	~ 28 W
No-load speed	12,5 mm/s		8,5 mm/s		12 mm/s
Maximum no-load stroke time	32 s	32 s	48 s	48 s	30 s
Double electrical insulation	YES	L.V.	YES	L.V.	YES
Service type	S2 of 3 min				
Operating temperature	-5 °C ÷ +65 °C				
Degree of protection for electrical devices	IP30				
Soft Stop	NO	NO	YES	YES	NO
Relax function	YES	YES	YES	YES	YES
Frame rebated overlap self-learning	Position self-determination				
Connection in parallel	YES	YES	YES	YES	NO
Power supply cable length	2 m	2 m	2,5 m	2,5 m	2 m
Opening stroke-end	Dip-switch setting				
Closing stroke-end	At absorption of power				
Overload protection	At absorption of power				
Dimensions	386,5x59x37 mm				
Weight	0,97 Kg	0,94 Kg	1,18 Kg	1,15 Kg	1,17 Kg
Static holding force	1700 N				
Supplied brackets	Standard support brackets, sash brackets (vasistas, awning)				

The data provided in these illustrations is non-binding and subject to change, even without advance notice.

# ACTUATOR VARIA SLIM BASE

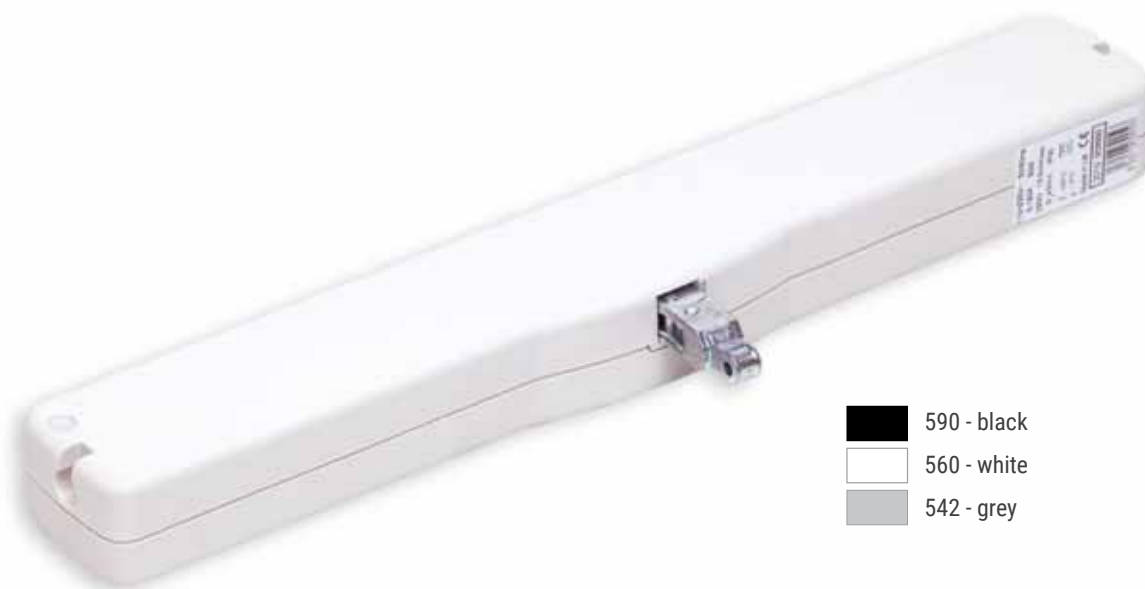
## VARIA SLIM BASE

### CHAIN ACTUATOR 250N

Chain actuator for awning windows, hopper windows, dormer windows and light domes. Simple mechanical selection of the two strokes, 240 mm and 360 mm. Equipped with a microprocessor.

- Progressive starting ramp
- Power control over the entire stroke
- Even simpler and more immediate stroke selection
- Relax function for relaxing mechanical parts after every stroke-end
- Body and brackets are made of highstrength composite material (glass fiber reinforced polyamide).

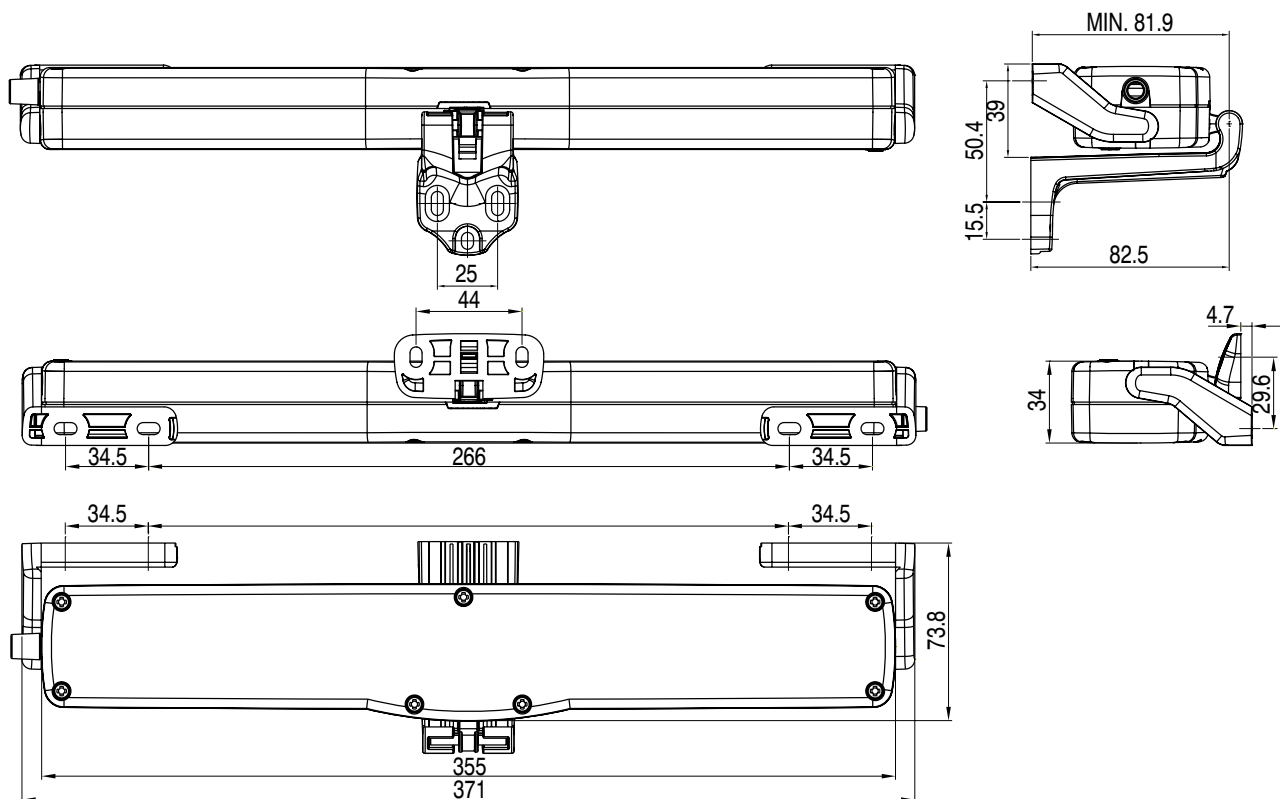
Code	Model and colour
<b>07889590</b>	VARIA SLIM BASE 230V <i>black</i>
<b>07889560</b>	VARIA SLIM BASE 230V <i>white</i>
<b>07889542</b>	VARIA SLIM BASE 230V <i>grey</i>
<b>07890590</b>	VARIA SLIM BASE 24V <i>black</i>
<b>07890560</b>	VARIA SLIM BASE 24V <i>white</i>
<b>07890542</b>	VARIA SLIM BASE 24V <i>grey</i>



- 590 - black
- 560 - white
- 542 - grey



# TECHNICAL DATA VARIA SLIM BASE



MODEL	VARIA SLIM BASE 230V code 07889	VARIA SLIM BASE 24V code 07890
Push and pull force	250 N	
Strokes (mm)	240/360	
Syncro3 Synchronization	NO	
Power supply voltage	110 ÷ 230V~ (AC) 50/60 Hz	24V= (DC)
Current at nominal load	0,180 A	0,800 A
Power absorbed at nominal load	~ 30 W	~ 18 W
No-load speed	13,5 mm/s	12,8 mm/s
Maximum no-load stroke time	18 s / 27 s	19 s / 28 s
Double electrical insulation	YES	Low Voltage
Service type	S2 of 3 min	
Operating temperature	-5 °C ÷ +65 °C	
Degree of protection for electrical devices	IP30	
Soft Stop	NO	
Relax function	YES	
Frame rebated overlap self-learning	At absorption of power	
Connection in parallel	YES	
Power supply cable length	1 m	2 m
Opening stroke-end	At absorption of power	
Closing stroke-end	At absorption of power	
Overload protection	At absorption of power	
Dimensions (mm)	356x56,5x33,5 mm	
Weight	0,84 Kg	0,82 Kg
Static holding force	1700 N	
Supplied brackets	Standard support brackets, sash brackets (vasistas, awning)	

Electric linear actuator with double-row four-link articulated chain enclosed in an appropriate composite casing, suited for moving awning windows, hopper windows, dormer windows and light domes. The actuator has a push and pull force of 250N and is designed to function at 110/230V AC 50/60Hz or 24V DC. It is supplied complete with quick coupling screw-less assembly brackets (patented), awning and vasistas window brackets with quick coupling (patented).

Two opening strokes with mechanical selection. Stroke-end stop during opening and closing at power absorption and as protection against overloading. Can be connected in parallel.

Complies with the Directives 2004/108 EC (EMC Directive) and 2006/95 EC (Low Voltage Directive).

Standard colors: Black with black power cable, White and Grey with white cables.

The data provided in these illustrations is non-binding and subject to change, even without advance notice.

## VARIA SLIM SMALL

### CHAIN ACTUATOR 200N

Electric chain actuator for awning windows, hopper windows, dormer windows and light domes.

- Progressive starting ramp
- Power control over the entire stroke
- Intuitive and immediate stroke selection with a dip-switch
- Relax function, with relaxation of mechanical parts after each stroke-end generated by a mechanical block
- Embedded window brackets that allow the motor to be inspected, even during a power outage or product failure.

Intelligent, compact and robust (made entirely of metal), it's the smallest actuator for windows available on the market. Combined with the b-Lock and perimeter fittings, it constitutes a security window lock. Recessed mounting on any European chamber profile. It fixes onto the frame with two brackets. Remarkably quiet (only 42 db) and sturdy, with compact dimensions of only 28x28x310 mm.

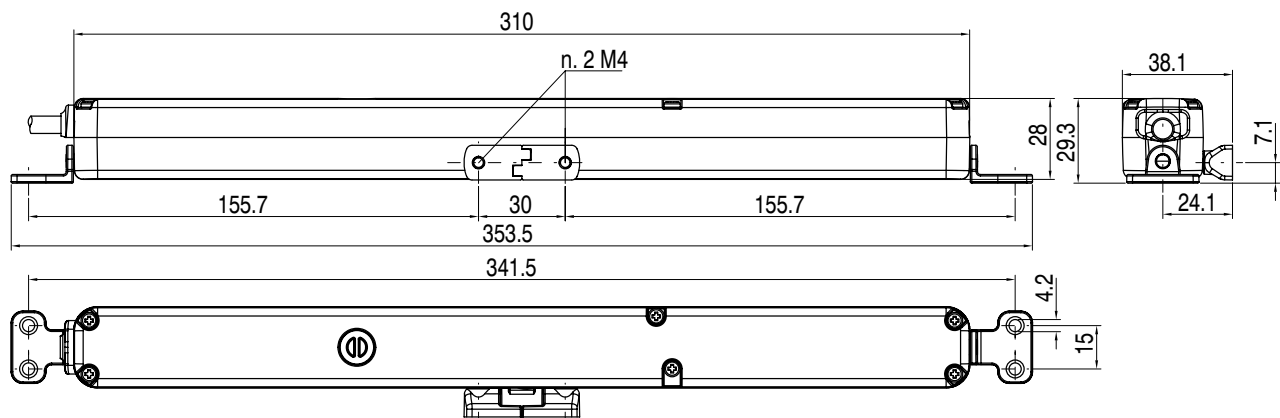
Code	Model and colour
07891970	VARIA SLIM SMALL 24V grey



970 - RAL9006



# TECHNICAL DATA VARIA SLIM SMALL



MODEL	VARIA SLIM SMALL 24V code 07891
Pull force	200 N
Push force	200 N
Strokes (mm)	70/125/170/210
Synchronization	NO
Power supply voltage	24 V= (DC)
Current absorbed at nominal load	0,32 A
Power absorbed at nominal load	7,5 W
No-load speed	6 mm/s
Maximum no-load stroke time	27 s
Double electrical insulation	Low Voltage
Service type	S2 of 3 min
Operating temperature	-5°C ÷ +65°C
Degree of protection for electrical devices	IP32
Soft Stop	NO
Relax function	YES
Frame rebated overlap self-learning	At absorption of power
Connection in parallel	YES
Power supply cable length	2 m
Opening stroke-end	Dip-switch setting
Closing stroke-end	At absorption of power
Overload protection	At absorption of power
Dimensions	28x28x310 mm
Weight	0,72 Kg
Static holding force	1000 N
Supplied brackets	Standard support brackets, sash brackets

Electric linear actuator with three-link articulated chain (patented), enclosed in an appropriate metal casing, suited for moving awning and hopper windows. The actuator has a push and pull force of 200 N and functions only at the low voltage of 24V DC.

Supplied complete with pivoting support brackets, without screws and with universal coupling brackets for awning and hopper windows. Opening stroke-end can be adjusted at any time by selecting the appropriate dip-switches, closing stroke-end at power absorption and as protection against overload.

Can be connected in parallel. Complies with the Directives 2004/108 EC (EMC Directive) and 2006/95 EC (Low Voltage Directive).

Colours available: Grey (RAL9006) with black silicone cable.

The data provided in these illustrations is non-binding and subject to change, even without advance notice.



# VARIA SLIM SPARE PARTS



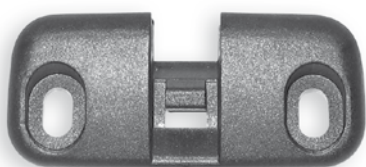
05904  
Standard support brackets

Code	Model and colour	For actuator
05904590	STANDARD SUPPORT BRACKETS (CP) <i>black</i>	VARIA SLIM, VARIA SLIM BASE
05904560	STANDARD SUPPORT BRACKETS (CP) <i>white</i>	
05904542	STANDARD SUPPORT BRACKETS (CP) <i>grey</i>	



05905  
Brackets for vertical mounting

Code	Model and colour	For actuator
05905590	BRACKETS FOR VERTICAL MOUNTING (CP) <i>black</i>	VARIA SLIM, VARIA SLIM BASE
05905560	BRACKETS FOR VERTICAL MOUNTING (CP) <i>white</i>	
05905542	BRACKETS FOR VERTICAL MOUNTING (CP) <i>grey</i>	



05906  
Bracket for outward opening

Code	Model and colour	For actuator
05906590	OUTWARD OPENING BRACKET <i>black</i>	VARIA SLIM, VARIA SLIM BASE
05906560	OUTWARD OPENING BRACKET <i>white</i>	
05906542	OUTWARD OPENING BRACKET <i>grey</i>	



05907  
Vasistas bracket

Code	Model and colour	For actuator
05907590	VASISTAS BRACKET <i>black</i>	VARIA SLIM, VARIA SLIM BASE
05907560	VASISTAS BRACKET <i>white</i>	
05907542	VASISTAS BRACKET <i>grey</i>	



05908 Quick connector

Code	Model and colour	For actuator
05908000	QUICK CONNECTOR	VARIA SLIM PLUS, VARIA SLIM, VARIA SLIM BASE



# VARIA SLIM REMOTE CONTROL DEVICE

## REMOTE CONTROL DEVICE

Code	Model and colour	For actuator
07892000	REMOTE CONTROL - RC	VARIA SLIM RADIO

For radio operated remote control commands. The transmitter is modern, functional, comfortable and ergonomic.

30 direct transmission channels (with the F1 and F2 functions can reach 90 control outputs) through radio waves at the frequency of 433.92 MHz rolling code with a resolution higher than  $18 \times 10^{18}$  possible combinations.



MODEL	REMOTE CONTROL - RC code 07892
Type	Multi-channel radio remote control with microprocessor
Number of transmission channels	30
Transmission frequency	433,92 MHz
Modulation	ASK
Power supply tension	2 x 1,5V batteries – type AAA
Operating voltage	1,8V ÷ 3,3V
Estimated lifetime of the batteries	> 2 years (assuming an average use of 1 minute per day)
Display	LCD (liquid crystal display)
Visualisation	2 digits (selected channel)
	battery charge status indicator
	transmission state
	Specific functions letters
Display dimensions	18,5x13,5 mm
Encoding	HCS301
Independent codes	>18 x $10^{18}$ "rolling code" combinations
Absorption in stand-by	< 1µA
Absorption in transmission	< 20 mA
Keypad	Operational control (UP arrow, DOWN arrow, STOP)
	2 Function buttons (F1, F2)
	1 Memory button (M)
	1 Channel button (CH)
Transmission distance	50 m (with charged batteries)
Regulatory references	Approved according to the R&TtE Directive 1999/5/EC – Directive 1999/5/EC of the European Parliament and Council of 9 March 1999
Dimensions	145x38,5x22,5 mm
Weight	76 g

The data provided in these illustrations is non-binding and subject to change, even without advance notice.



# VARIA SLIM HEATED RAIN DETECTOR

## HEATED RAIN DETECTOR

Code	Model and colour	For actuator
07893000	HEATED RAIN SENSOR SPR RADIO	VARIA SLIM RADIO
07894000	HEATED RAIN SENSOR SPR	VARIA SLIM RADIO

The rain detector device should be placed outside where it can interact with the actuators in the event of continuous rain. The sensor can be connected:

- directly by wire to Varia Slim Radio – SPR;
- directly by radio signal to Varia Slim Radio – SPR RADIO

The sensor is not sensitive to dewdrops or humidity, dries quickly after rainfall and does not allow the formation of ice.

The power supply cable is 5 m long, built to withstand the harsh outdoor environment with a highly weather-resistant PVC sheath which is also non fire-propagating and resistant to UV radiation.



MODEL	HEATED RAIN SENSOR SPR RADIO code 07893	HEATED RAIN SENSOR SPR code 07894
Power supply tension	12V ÷ 24V= (DC)	12V ÷ 24V= (DC)
Maximum absorption power	20 ma – (120 ma with active heater)	20 ma – (120 ma with active heater)
Type of sensor	Capacitive	Capacitive
Heater intervention	< +4 °C	< +4 °C
Contact type	SPDt	SPDt
Rating contact	0,5 A / 125VAC – 1 A / 24VDC	0,5 A / 125VAC – 1 A / 24VDC
Radio transmission frequency	433,92 MHz	-
Working temperature	-20 ÷ +65 °C	-20 ÷ +65 °C
Feeding cable length	5 m	5 m
Feeding cable type - wire number	PVC LiY2Y protected from UV - 5 wires	PVC LiY2Y protected from UV - 5 wires
Protection index	IP65	IP65
Dimensions	45x93 h=19 mm	45x93 h=19 mm
Weight	552 g (cable excluded)	552 g (cable excluded)

The data provided in these illustrations is non-binding and subject to change, even without advance notice.



