

AUTOSUN system

A future prospect for roller shutter

A fully autonomous system: AUTOSUN is a system that enables to motorize front (renovation) or skylight roller shutters in an autonomous way.

This system is composed of a solar panel, a battery and a direct current radio motor with electronic limit point system (T3.5 E Hz dc motor, available in 3, 6 and 10 Nm). It is supplied by solar energy and controlled by the SIMU-Hz radio control.

The installation does not require any wiring, neither to the electrical network, nor between the motor and the control points, so there is no need to make hole in the wall. Thus, it is not necessary to call on an electrician or to get an electrical habilitation and in this way, it saves time and money.

An ecologic system: the solar energy is a clean, renewable and free energy. This system is in compliance with the current ecologic trend and it is a technical solution for assemblers, fitters and end-users.

Optimized outputs: AUTOSUN has been designed to run in most of geographic areas. For areas which are not very luminous or that are often cloudy, it is possible to connect 2 solar panels on the battery in order to ensure the roller shutter operating whatever the weather conditions are.

AUTOSUN



Hz
Radio System

SIMU-Hz radio system: safe and open-ended hierarchized radio control system, which is reputed to be one of the most reliable of the market by professionals.

New



Autosun Solar Motor 1

Project:

Date:

Drawing #

AS-1

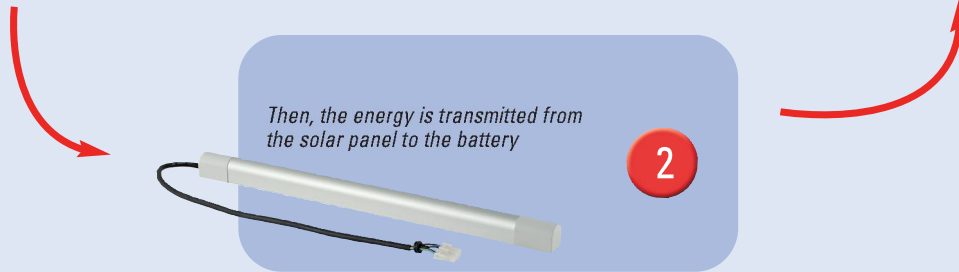
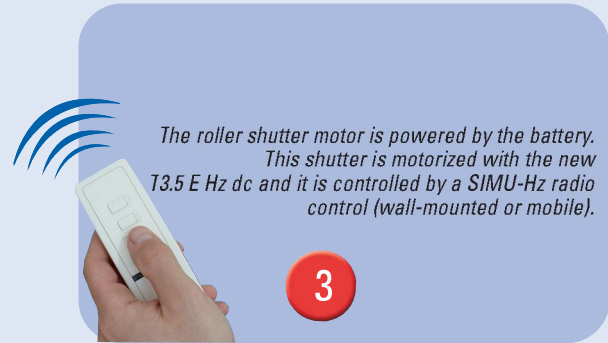
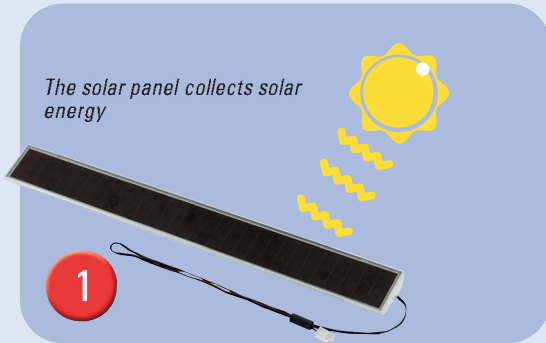
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Operating principle



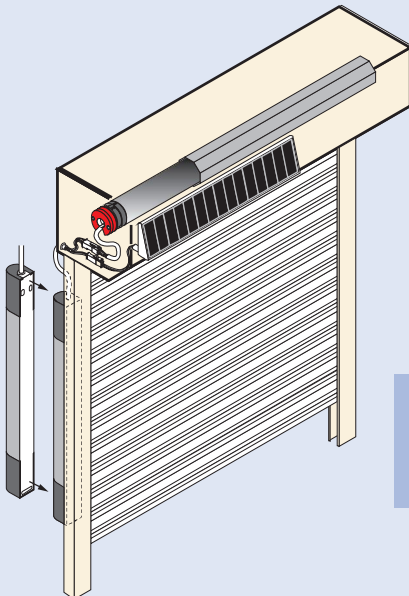
Integration

Battery

- integrated into an aluminium rod (registered design).
- wired to the solar panel and the battery.
- easy and quick fixing onto the guide rail, the roller shutter box or even onto the masonry.
- possibility to connect a backup power supply (230 Vac).

Motor

- wired to the battery
- control orders by radio waves: no wiring to the control points



Solar panel

- integrated into a patented support.
- wired to the battery.
- easy and quick fixing onto the roller shutter box.

Autosun Solar Motor 2

Project:

Date:

Drawing #

AS-2

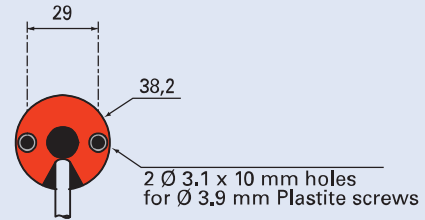
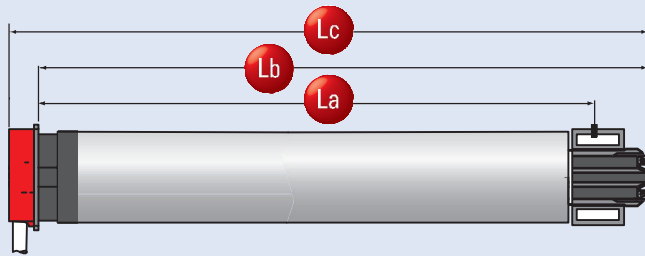
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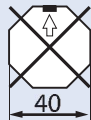
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Technical characteristics



- **La** Length between the end and the drilling point of the tube
- **Lb** Adapted motor size in the tube
- **Lc** Total motor length



Be careful, this motor is not compatible with tubes with internal clamping.

12 Vdc Power supply

Description	Torque (Nm)	Speed (Tr/min - rpm)	Power (W)	Current (A)	●	●	●	Weight (Kg)	Reference	
					La (mm)	Lb (mm)	Lc (mm)		x1	x10
T3.5 E Hz cc - 3/23	3	23	17	1,4	433	453	470	0,77	2006996	2006997
T3.5 E Hz cc - 6/18	6	18	24	2	433	453	470	0,80	2006998	2006999
T3.5 E Hz cc - 10/12	10	12	32	2,6	433	453	470	0,80	2007000	2007001

- Power supply: 12 volts
- Thermal cut-out: 4 min.
- End-limit switch with electronic count: operating limited to 3 min.
- Protection index: IP 44
- Ambient temperature of use: from -10°C to +40°C and exceptionally: from -20°C to +70°C
- Cable: 3 x 0.75 mm² wires
White H05 VVF, 0.7 m length
- Radio frequency: 433.42 MHz
- Range: ~ 200 m in free field
~ 20 m between 2 reinforced concrete walls (it depends on the environment and on the pollution)
- Automatic readjustment of the end-limit position: every 56 cycles
- Base diameter for round tube: Ø 40 x 1.5 mm



<h1>Autosun Solar Motor 3</h1>		
Project:		Date:
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AUTOSUN components

Solar panel

- Delivered voltage: 24.5 V
- Delivered current: 78.6 mA
- Protection index: IP X4
- Dimensions: 500 x 47 x 20 mm
- Specific wiring for assembly with 2 panels

Battery

- Battery: NI-MH
- Nominal voltage: 12 V
- Capacity: 2.2 Ah
- Ambient temperature of use: de -20°C to +70°C
- Protection index: IP X4
- Lifetime: ± 5 years
- Dimensions : 503 x 27 x 30 mm
- Weight: 790 g

Backup power supply

- Dual voltage: 100-240 Vac - 50-60 Hz
- Output voltage: 16 Vdc - 0,8 A
- Use: inside only
- Weight: 130 g



References

Description	/ MOTOR			Number of solar panels	Reference
	Type	Torque	Speed		
T3,5 E Hz - 3N/23T - 12Vcc + kit sol 1P	T3,5 E Hz cc	3	23	1	2007002
T3,5 E Hz - 6N/18T - 12Vcc + kit sol 1P	T3,5 E Hz cc	6	18	1	2007003
T3,5 E Hz - 6N/18T - 12Vcc + kit sol 2P	T3,5 E Hz cc	6	18	2	2007004
T3,5 E Hz - 10N/12T - 12Vcc + kit sol 1P	T3,5 E Hz cc	10	12	1	2007005
T3,5 E Hz - 10N/12T - 12Vcc + kit sol 2P	T3,5 E Hz cc	10	12	2	2007006
Kit solaire 1 batterie 1P	sans moteur / without motor			1	9014731
Kit solaire 1 batterie 2P	sans moteur / without motor			2	9014732



Autosun Solar Motor 4

Project:		Date:
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