



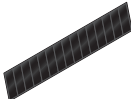
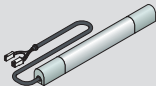
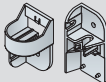
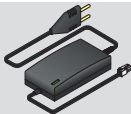
REFERENCES OF THE MOTORS

DESCRIPTION	TORQUE	SPEED	REFERENCE		
			x 1	x 10	x 100
 T3,5 E Hz CC - 12 VCC	3 Nm	23 tr/min.	2006996	2006997	-
T3,5 E Hz CC - 12 VCC	6 Nm	18 tr/min.	2006998	2006999	2007753
T3,5 E Hz CC - 12 VCC	10 Nm	12 tr/min.	2007000	2007001	-

REFERENCES OF THE SOLAR SETS

DESCRIPTION	MOTOR TORQUE	MOTOR SPEED	REFERENCE
	3 Nm	23 tr/min.	2008546
	6 Nm	18 tr/min.	2008547
	10 Nm	12 tr/min.	2008548
	-	-	9019030

REFERENCES OF COMPONENTS AND ACCESSORIES

PRODUCT	DESCRIPTION	REFERENCE
	Solar panel	x 1 x 10 9019032 9019031
	Battery	9014734
	Set of 10 clamps for Autosun battery fixing	9017661 (x10)
	Back up power supply (100/240 VCA - 50/60 Hz) for inside use only	9014738





SOLAR MOTORIZATION



AUTOSUN



A FUTURE PROSPECT FOR ROLLER SHUTTERS

- **Autonomous motorization system** for roof and facade roller shutters, operating with solar energy, which is a free, clean and renewable energy
- **No wiring** : AUTOSUN does not need to be connected neither to the electrical network nor to control points (Simu-Hz radio technology), which means no disturbance of existing walls.
- **Optimized outputs** : AUTOSUN has been designed to run in most geographical area
- **Stop on obstacle function and frost detection system** : the motor stops when opening if it is stuck in the guide rails by frost or if the bottom lath is locked, avoiding equipment damages.

simu-Hz
Radio System



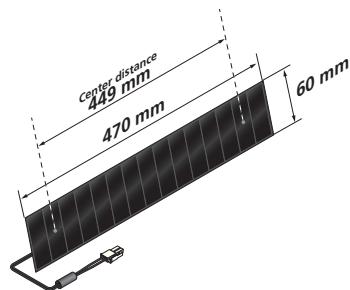
OPERATING PRINCIPLE AND INTEGRATION

AUTOSUN is a complete system made up of a solar panel, a battery and a direct current radio motor with electronic end-limits .

1 THE SOLAR PANEL

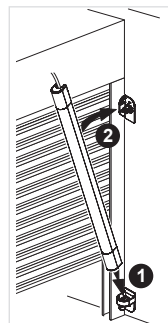


- Converts solar energy into electrical energy.
- Only 1 solar panel, whatever the motor torque, the orientation and the geographical situation of the roller shutter.
- Is fixed by 2 pop rivets directly on the roller shutter's box.



2 THE BATTERY

- Delivers the energy to the motor.
- Stores the energy transmitted by the solar panel.
- Is connected to the solar panel and the motor.
- Is integrated into an aluminium rod.
- Is fixed by bonding (self-adhesive tape) or by using specific clamps on a guide rail, or on the roller shutter box, or on the masonry.
- Can be reloaded by the supply of a backup power supply.

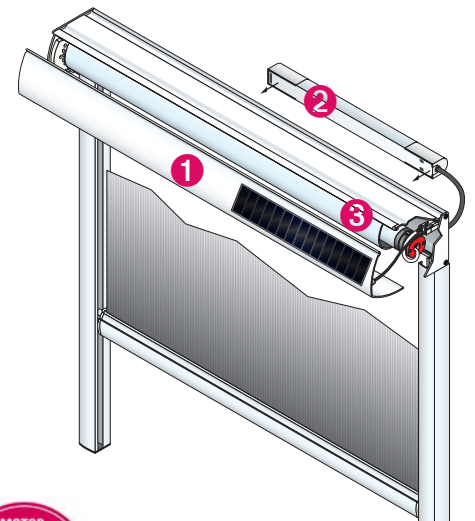


Our system has been developed to run in A, B and C areas :



Area A : average daily solar beam: from 2.4 to 3.4 kWh/m²
 Area B : average daily solar beam: from 3.4 to 4.4 kWh/m²
 Area C : average daily solar beam: from 4.4 to 5.4 kWh/m²

- ⚠ Max one cycle/day for the motor 10 Nm if the solar panel is oriented at the North in the area A.
- ⚠ Loaded battery autonomy (without sun) 15 days, 1 cycle/day for the motor 10 Nm.
- ⚠ Respect solar panel installation instructions (no direct or projected shadows).



3 THE T3.5 E HZ DC MOTOR

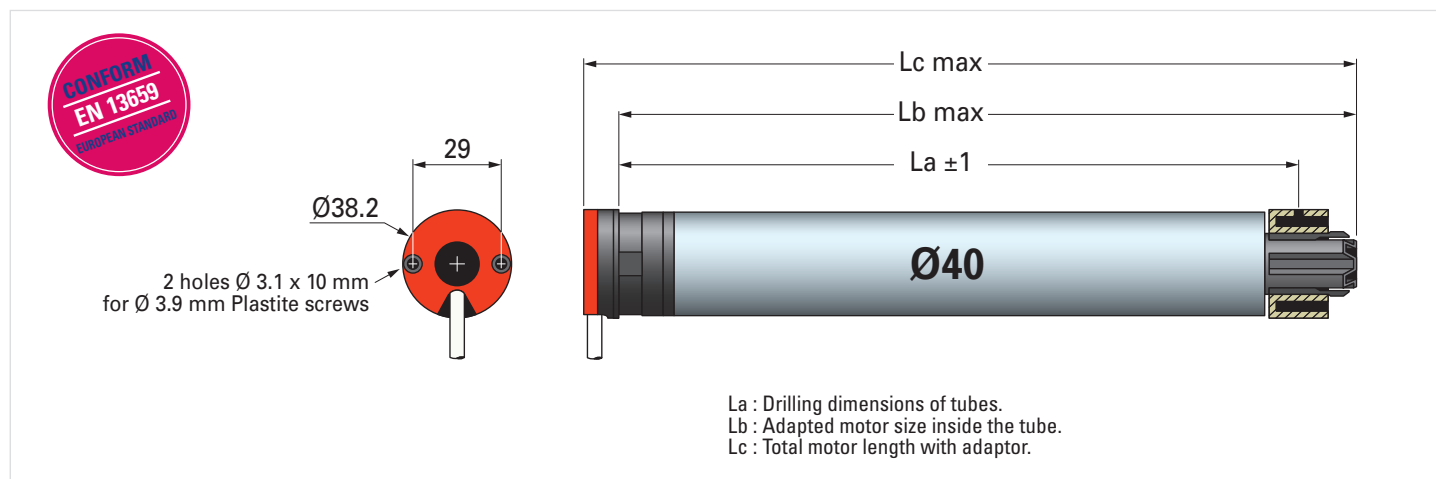


- Is connected to the battery and uses its energy to operate the shutter.
- Is controlled by radio control Simu-Hz, so no wiring required to the control points.
- Is available in 3,6 and 10 Nm.
- Is equipped with a stop on obstacle and frost detection system.
- Can record a user's favorite position by pressing the STOP button, it will automatically go to that position.
- Compatible with Simu Hz automatic devices (when the solar panel is oriented at the South, East and West).
- Is put on standby at the end of cycle.
- Informs when the battery is weakly loaded.

- No wiring required inside the house, so no disturbance to existing walls.
- No need to call an electrician.
- Free, clean and renewable energy.

T3.5 E HZ DC MOTOR

DIMENSIONS



REFERENCES

POWER SUPPLY 12 VDC

DESCRIPTION	TORQUE	SPEED	POWER	CURRENT	La	Lb	Lc	WEIGHT	REFERENCE x1	REFERENCE x10
T3,5 E Hz CC - 3/23	3 Nm	23 tr/min.	17 W	1,4 A	433 mm	457 mm	471 mm	0,77 kg	2006996	2006997
T3,5 E Hz CC - 6/18	6 Nm	18 tr/min.	26 W	2,2 A	433 mm	457 mm	471 mm	0,8 kg	2006998	2006999
T3,5 E Hz CC - 10/12	10 Nm	12 tr/min.	30 W	2,4 A	433 mm	457 mm	471 mm	0,8 kg	2007000	2007001

TECHNICAL CHARACTERISTICS

POWER SUPPLY	12 Volts (Ni-MH) battery
END-LIMIT	Electronic system with operating limited to 3 min.
END-LIMIT READJUSTMENT	every 59 cycles during 3 cycles
PROTECTION INDEX	IP 44
AMBIENT TEMPERATURE OF USE	from -10°C to +40°C and exceptionally from -20°C to +60°C
POWER CABLE	0.4 meters (3x0,75 mm ² wires, white H03 VVF)
RADIO FREQUENCY	433.42 MHz
SECURE COMMUNICATION	Encrypted control orders + Rolling code with 16 million possible combinations
RANGE	~200m in free field and ~20m through 2 reinforced concrete walls (depends on the environment and on the radio pollution)
MOTOR HEAD THICKNESS	14 mm
4 CYCLES PER DAY	non consecutive
STANDARD	CE

SOLAR PANEL

Réf. 9019032 / 9019031

- Material : resin panel
- Type of photovoltaics panel : monocristalin
- Protection index : IP x 4
- Delivered voltage : 195,8 mA max
- Power : 3,2 W
- Type of cable : Cable of 700mm with Molex plug and rubber cable-gland for impermeability
- Dimensions : 470 x 60 x 6 mm
- Weight : 230 g

BATTERY

Réf. 9014734

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

BACK UP POWER SUPPLY

Réf. 9014738

- Power supply: 100-240 VAC - 50-60 Hz
- Utilisation: for inside use only
- Weight: 180 g