

Sonesse 28 WF RTS Li-ion

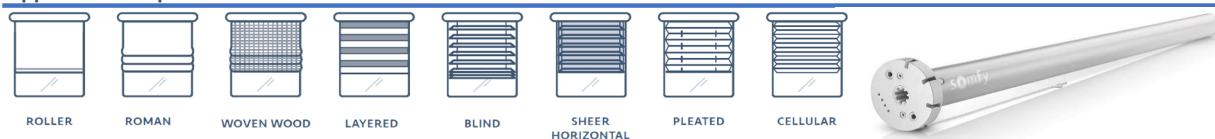
TECHNICAL DATA MOTOR

DOC 144132

TDST Sonesse 28 WF RTS Li-ion

Date	Index	Page
10/07/2020	004	1/1

Application scope



Main functionalities

- For medium size blinds (up to 11m²)
- Designed for silence
- Soft start and soft stop
- Built in Li-ion battery
- Thin head
- Information feedback (LED)
- Adjustable speed
- Compatible with modulus functions
- Compatible with solar panel
- Slats tilting

Technical features

Nominal voltage	12 VDC	Temperature working range	0°C - 60°C
Protection against polarity reversal	Yes	Temperature charging range	0°C - 45°C
Protection from axis stall	Yes	Temperature storage range	-20°C - 60°C
Cable	No cable. Connector on the motor head.	Insulation class	Class III
Index protection rating	IP 20 - For indoor use only	Antenna	17,5cm wire length, must not be cut or lengthened. For greatest RF range, antenna must be out the rail/tube/cassette
Type of limit switch unit (LSU)	Electronic, encoder based		
Capacity of the LSU	200 turns		
Minimum distance between limits	1 turn		
Capacity of memory	12 transmitters, no sensors		
Related interface drawings	Motor: GEO151606 Crown: GEO153856 Drive wheel: GEO138467 Motor plate: GEO138616		

Specifications

Key specifications

Nominal torque	1,1 Nm
Nominal speed	20±2 rpm *
Adjustable speed	10 to 28 rpm
Typical Sound Level	<49 dB(A) **

Electrical

Battery capacity	2600 mAh
Nominal power	<37,5 W
Up Current	<750 mA *
Down current	<150 mA *
Max start current	4500 mA *
Current at stall torque	2200 mA
Current at no load	<150 mA
Current without radioreception	100 µA

Performance

Charging time	<4,5 hours for full charge
ESD reinforced immunity	Air: up to 17kV - Contact: up to 17kV
Repeatability	± 5°

Autonomy
1 recharge per year
10 months in Somfy reference blind:

Life time
7 000 cycles on a test bench, 2m high with a 38mm tube diameter
79% at room temperature with dynamic load (from 0,2Nm up to nominal torque)
20% at 50°C with static load (nominal torque)
1% at 0°C with static load (nominal torque)

* At nominal torque & room temperature (25°C)

** Power Level:
- measurements according to standards ISO 3741 in dB(A) ref 1pW, at nominal torque and nominal speed, between 20°C and 35°C
- value: highest typical value between Up direction and Down direction, based on 10 samples.

Certifications



Radio

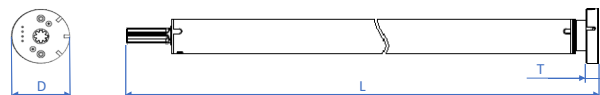
Radio frequency	433,42 MHz
Radio protocol	RTS U80
Radio range for European remotes	200m free field 20m through 2 concrete walls
Radio range for FCC remotes	50m free field 6m through 2 concrete walls

Miscellaneous

Weight	0,55 kg
Battery weight	0,15 kg
Stall torque	3 Nm

Dimensions

Motor overall length	L	546 mm
Head thickness	T	9 mm
Head diameter	D	44 mm



Limitations

For interior use only.
Warning: end cap friction above 20% will impact the expected autonomy.
Maximum distance between motor and charger: 5m
Do not let the charger plugged in permanently to the motor. Somfy recommends to unplug after recharge.
Minimum tube diameter (int.): 26,6mm
Maximum tube diameter (ext.): 50mm. For greater values please contact us.
Maximum static load to be applied on the motor head: 7kg