

**SONESSE® 50**  
**FOR INTERIOR ROLLER BLINDS**

# Product Introduction

## WHY CHOOSE SOMFY SOMFY'S SONESSE® RANGE?

### Quiet and Strong:

- Stronger torque for larger applications including multi blinds/coupled window coverings
- \*Uniform quiet operation in both the up and down directions under 40 dBA

### Wide Range of Solutions:

- Interior and exterior applications
- Residential and commercial markets
- RTS, wired and RS 485 integrated network options

### Simplified Fabrication and Installation:

- Utilizes existing fabrication methods on the market today
- Compatible with leading industry hardware solutions

### Streamlined Programming:

- RTS limits set via radio transmitter
- Wired simple push button limit setting
- Improved RS 485 commissioning process:
  - Motor auto discovery
  - Motor position feedback
  - Compatible with Somfy's animeo® system
  - Backward compatibility provides seamless integration with existing Somfy Digital Network projects
  - Multiple intermediate positions

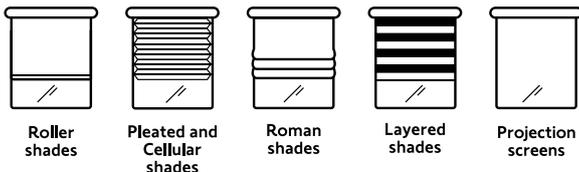
### Superior Quality:

- Motors undergo rigorous endurance, acoustic, radio, mechanical, electrical and safety tests in our 65,000 sq. ft. quality control and testing facility
- More than 600 approved standards worldwide
- Manufactured and sold over 150 million motors

### Simple Electrical Connection:

- Available with CE approved
- Motor cable length is available in 1 and 3 meters to meet your installation requirements

## Total Applications



## Main Functionalities



**Designed for silence**



**Rapid adjustment buttons**

Right or left mounting version identify by the colour of the up and down limit buttons.



**Progressive limit setting**

Thanks to the progressive adjusting knob on the motor head.



**Star head**

6 possibilities to orientate the motor head.



**Round head**

## Somfy Technologies



**Wired Technology** is the most basic method of control, using a direct connection from a control point



**Dry Contact Technology** is a wired method of control, using a direct connection from a control point to a motor via a DC low voltage wire.



**Radio Technology Somfy** is an exclusive remote control protocol used to operate and control wirelessly.

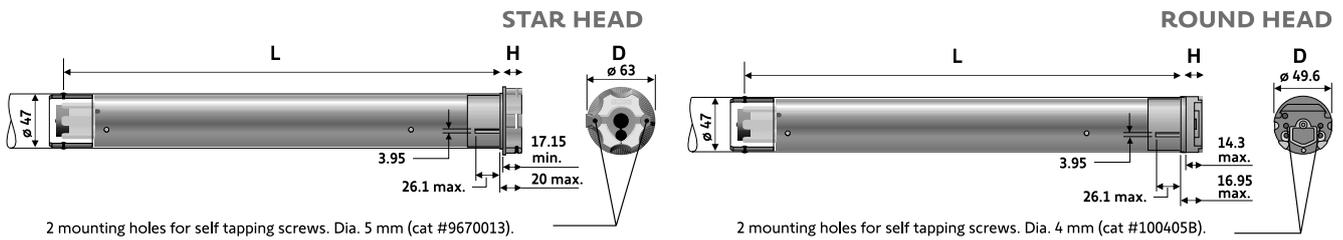


**Digital Technology Somfy (SDN)** is a control method using a two-wired bus. Many building management systems (BMS) use RS485 protocol



**The ZigBee®** protocol is a low-powered RF mesh networking technology that uses the reliable 2.4Ghz standard

# Product Dimensions



## Performances

Nominal voltage	230 V / 50 Hz				120 V / 60 Hz		220 V / 60 Hz	
Torque (Nm)	6	6	10	15	6	10	5	10
Speed (rpm)	17	28	28	17	32	32	32	32
Sound level (dBA)*	41	45	45	48	45	47	46	47
End-limit unit versions available	RA	RA, PA	RA, PA	RA	RA, RARH, PA, PS	RA, RARH, PA, PS	RA, PA	RA, PA

## Dimensions

L (mm)	553	603	603	603	603	602	603	603
Head thickness (H)	16.95 mm - 20 mm							
Head diameter Ø (D)	63 mm - 49.6 mm							
Tubu min Ø (int)	47 mm							

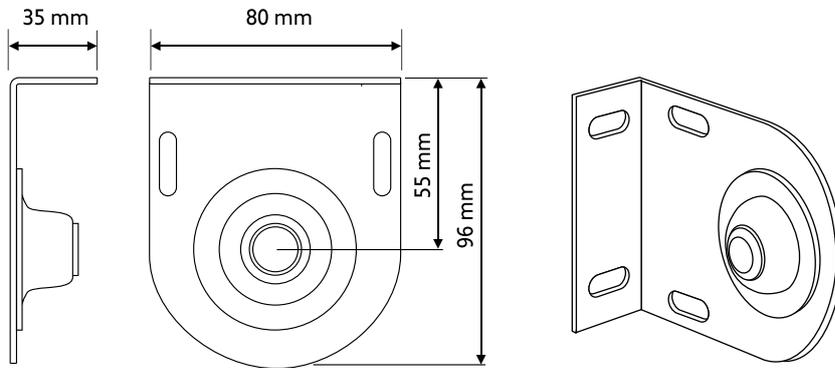
## Technical data

			
Voltage Supply	AC	AC	AC
Index Protecting rating	IP 44	IP 44	IP 44
Limit Switch unit	Rapid & Progressive	Rapid & Progressive	Electronic
Limit Switch capacity	46 turns for Rapid Adjustment 29 turns for Progressive Adjustment	250 turns	300 turns
Temperature working range	-20° C to 60° C	-20° C to 60° C	-20° C to 60° C
Insulation class	Class I	Class I	Class I



# Standard Accessories

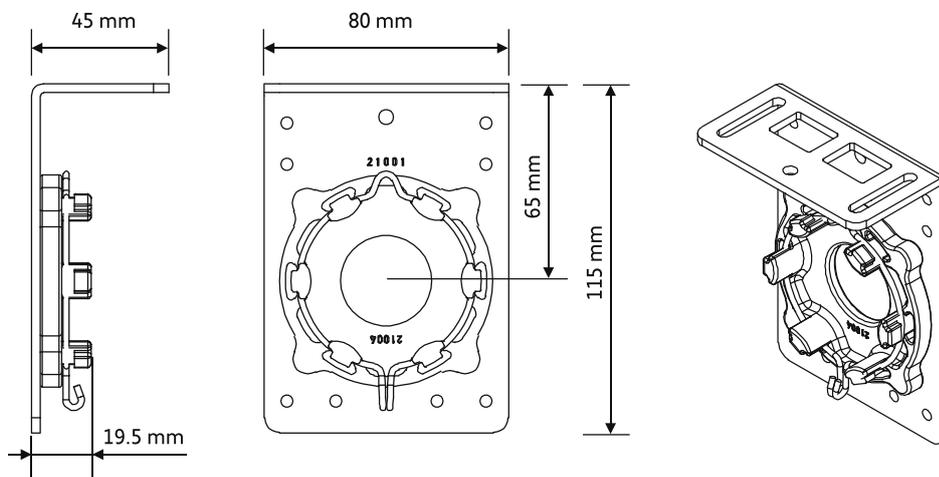
## LT Idler End Bracket (inside diameter 10 mm)



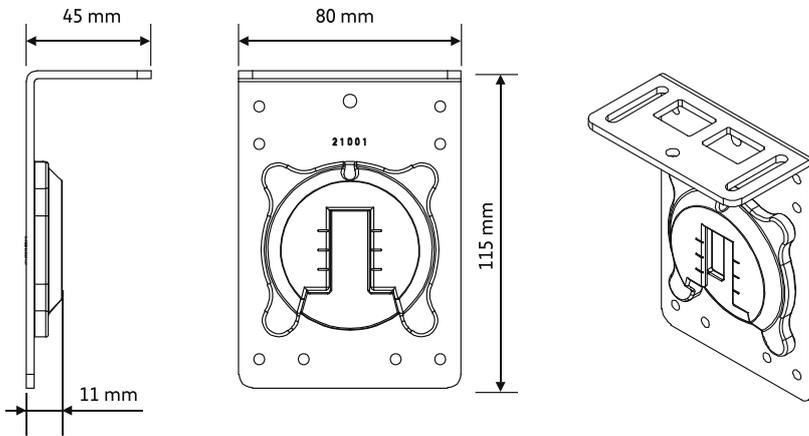
- Zinc plated steel
- 10 mm ID Nylon ball bearing
- Compatible with motor brackets #9410665 and #9410651
- Maximum motor torque 50 Nm
- Maximum system load 287 Lbs. ( 130 Kg.)

# Silent Accessories

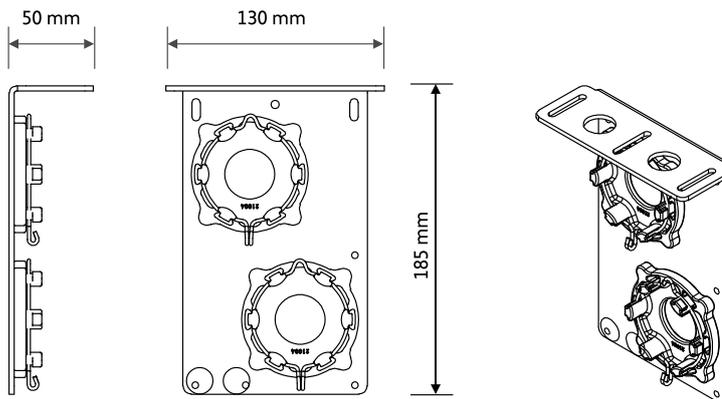
## Motor bracket



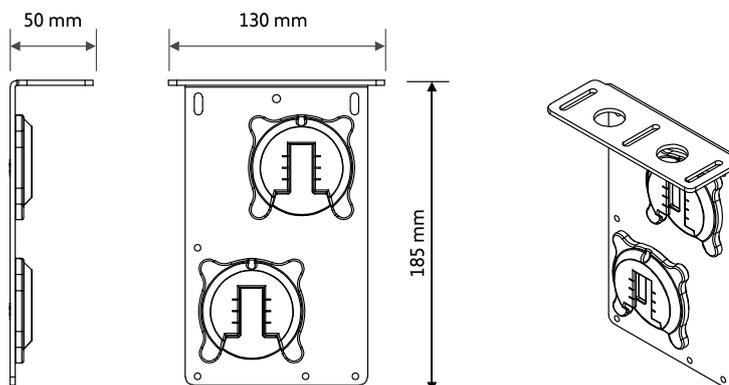
## End plug bracket



## Double Layer motor bracket

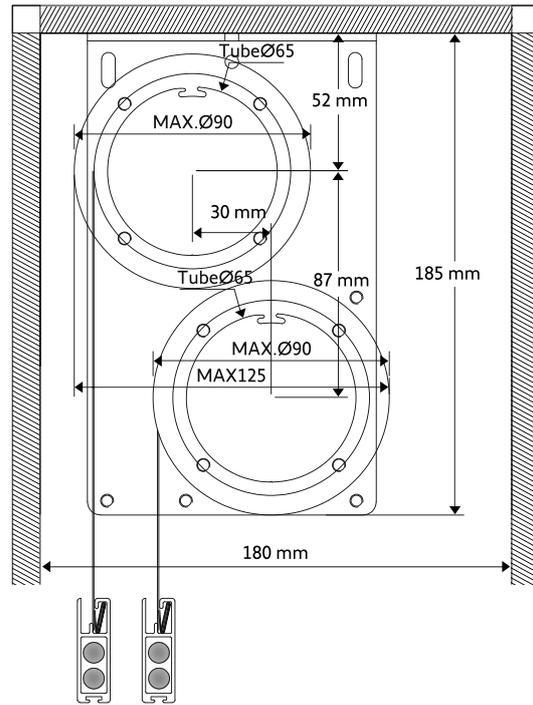
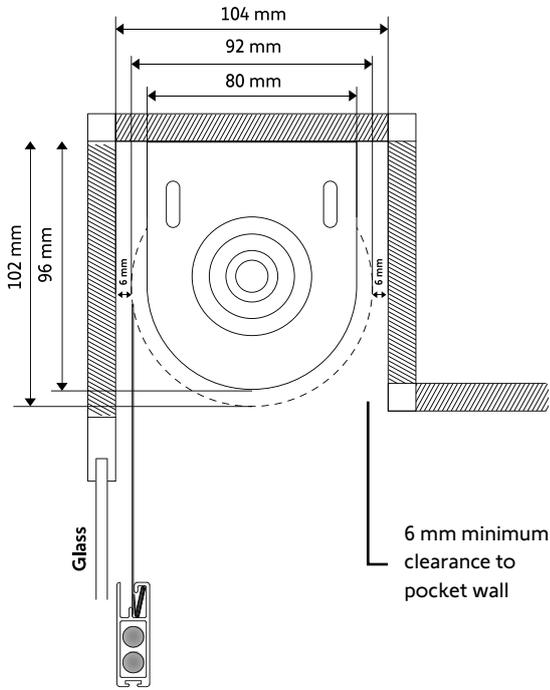


## Double layer end plug bracket

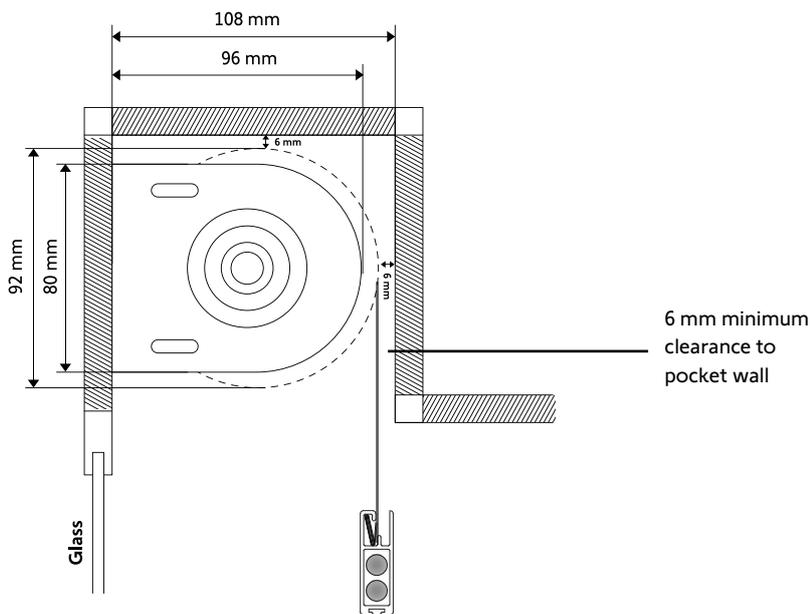


# Mounting Options

## Ceiling Mount

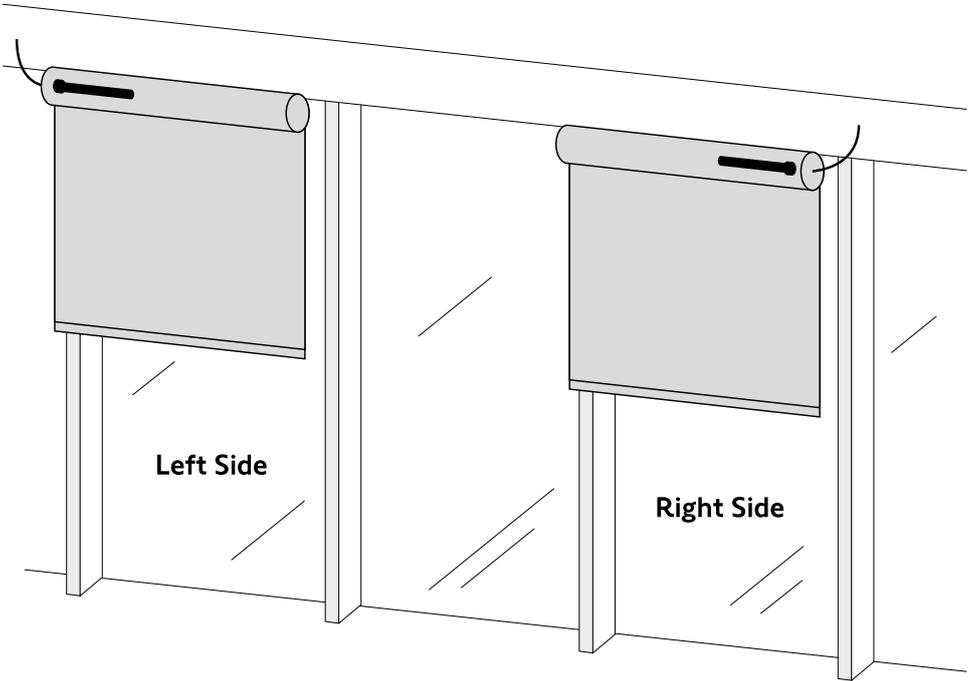


## Wall Mount



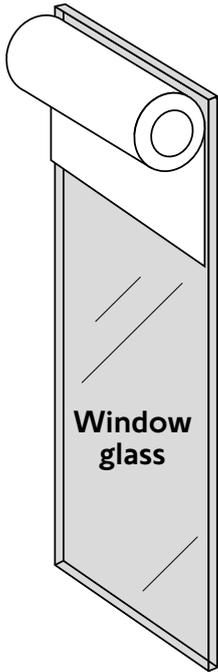
# Motor Drive side options

- Left Side
- Right Side

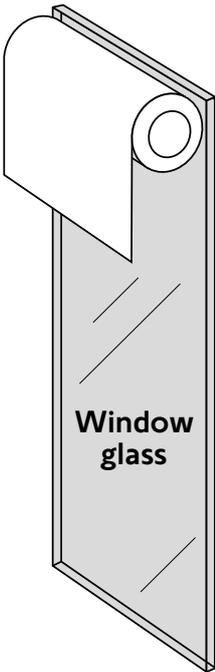


## Fabric Drop Options

- Near to window
- Far from window



Near to window



Far from window

# Fabrication Recommendations/Best Practices

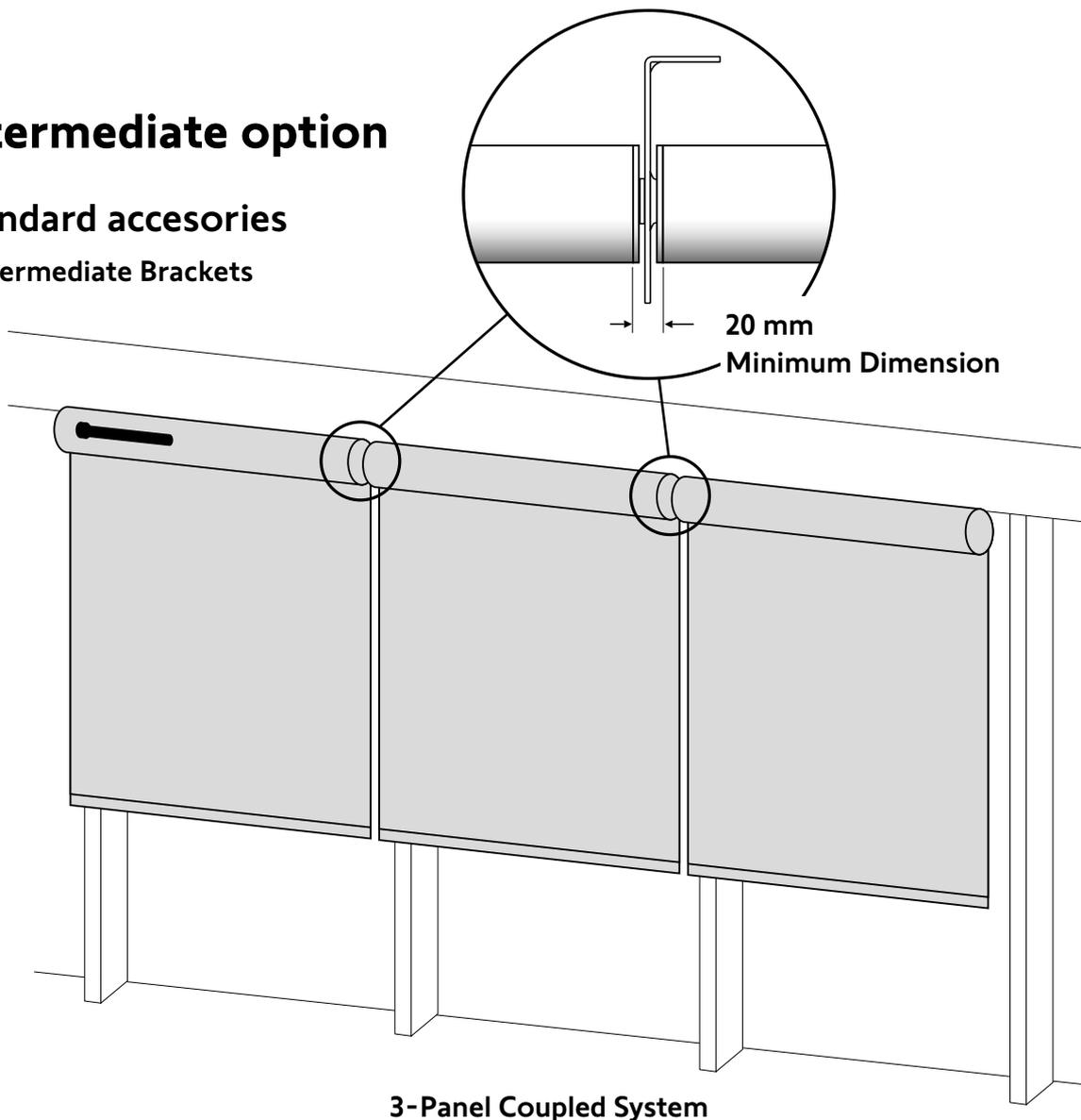
## Fabrication Recommendations

- Operational noise level is reduced when the motor, tube, and mechanical accessories are properly adapted to motorized applications.
- Free play must be minimized between the accessories and the end product tube to ensure quiet performance of the motor.
- Due to the variances of standard aluminum extrusion tolerances, it is recommended to screw the drive wheel & pin end to immobilize them and ensure quiet performance throughout the life of the product.
- Interior Tube Diameter (ID) > 47 mm must be respected.
- A motor crown adaptor between motor and end product tube is required to ensure concentric operation of the motor.

## Intermediate option

### Standard accessories

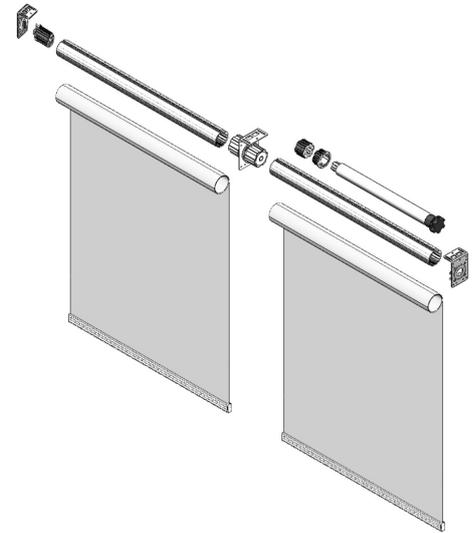
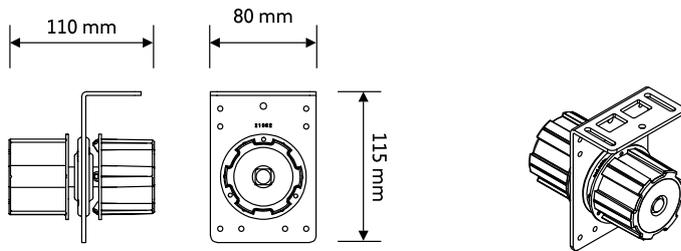
- Intermediate Brackets



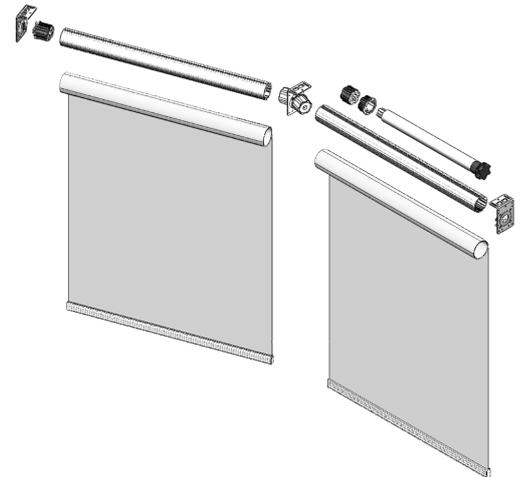
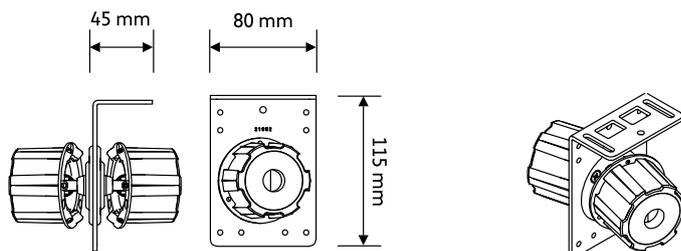
# Intermediate option

## Silent accessories

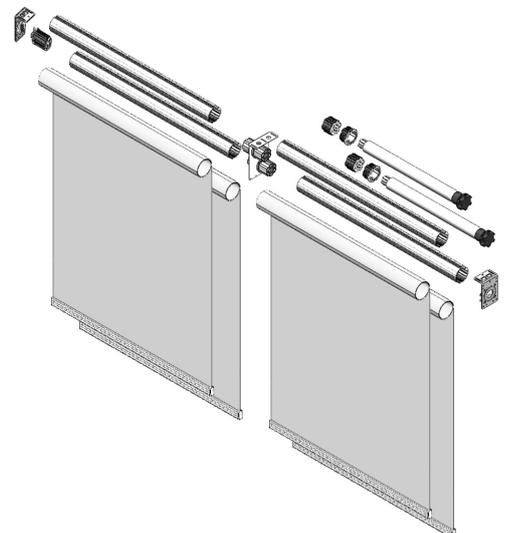
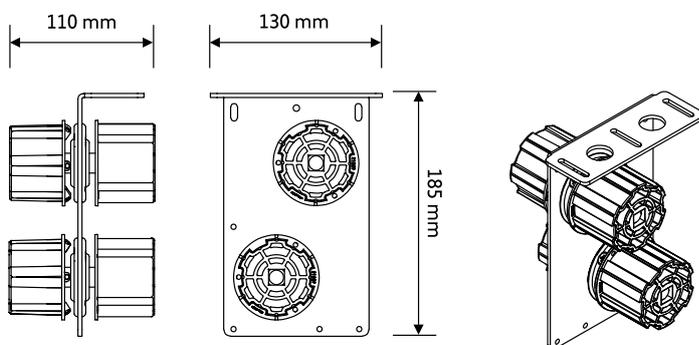
- Intermediate Brackets



- Universal brackets



- Double layer intermediate brackets



# Obstacle Detection Wheel

## Ø50mm ABS Wheel (Left/Right)



**Smart obstacle detection**  
Accurate and reliable  
obstacle detection

Integrating a left or right hand Ø50mm ABS wheel enables obstacle detection function to a Ø50mm motor. When an obstacle is detected on the downward motion, the motor will stop. This is because the ABS wheel backs off the electronic limit switch and cuts out the motor. But there are a few careful considerations and requirements to ensure the operation works.

### The Ø50mm ABS Wheel Works:

1. ONLY if the Ø50MM motor has electronic limit switches (refer to the below table with compatible motors)
2. ONLY if the installer correctly selects the LH or the RH ABS wheel. Only 1 wheel is required per installation. (If you select the wrong wheel (LH/RH), when the motor is coming up, it will not detect obstacle & disengage at up movement.)
3. PREFERABLY for ZipScreenwith side channels (and preferably with a head box). This is because the side channels guide the fabric back into the head box on the back of the ABS wheel momentarily.
4. Extra length to be added to the tube: 35mm for ABS wheel Ø50



**ALERT:** Once an obstacle has been detected, the motor will just stop. It will not retract automatically. Need to perform up movement to disengage the blind.

### ABS Wheels References

DiameterØ	Ref	Description	Min Torque	Max Torque
50mm	9705414	Right ABS wheel Ø50mm	0.2 Nm	30Nm
50mm	9705415	Left ABS wheel Ø50mm	0.2 Nm	30Nm

### Ø50mm ABS Wheel Selection Chart

	Motor on the left	Motor on the right
<b>Fabric Rolling in Front</b>	Right ABS Wheel	Left ABS Wheel
<b>Fabric Rolling in Back</b>	Left ABS Wheel	Right ABS Wheel
<b>Motor Compatibility</b>	<b>Ø50MM</b> LT50 RS485, SonesseUltra 50RTS AC/DC, SonesseUltra 50 RS485 AC/DC, Sonesse50 RTS, Sonesse50 RS485, Altus 50 RTS  	

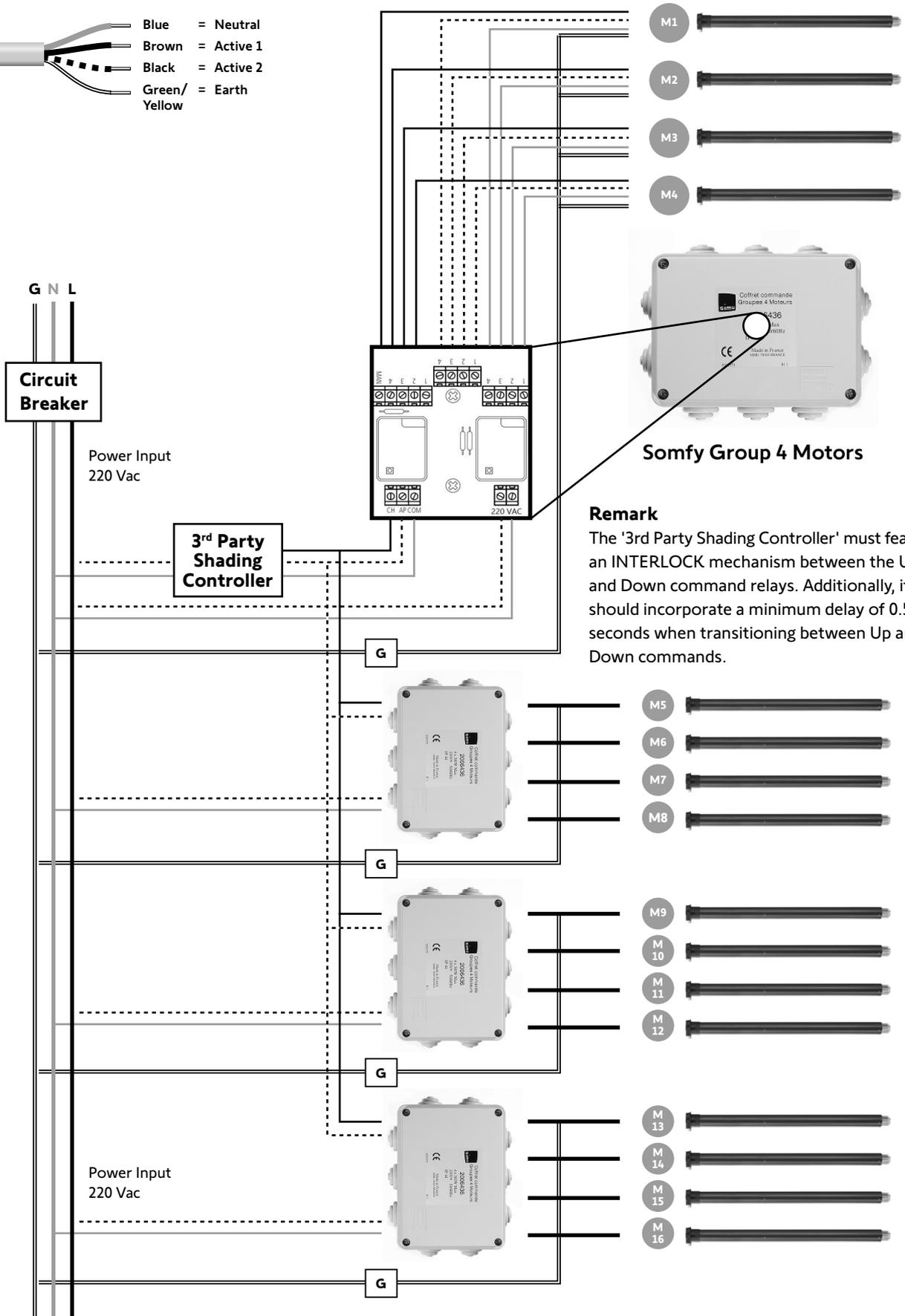
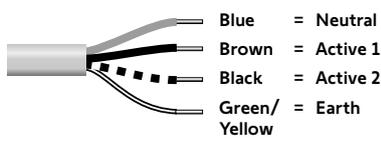


Ø50MM Left Hand ABS Wheel -9705415



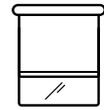
Ø50MM Right Hand ABS Wheel –9705414

# Group control wiring for WT motors



# Product Selection Guide

## ROLLER BLIND



### Assumptions:

#### 50 mm ROLLER BLIND

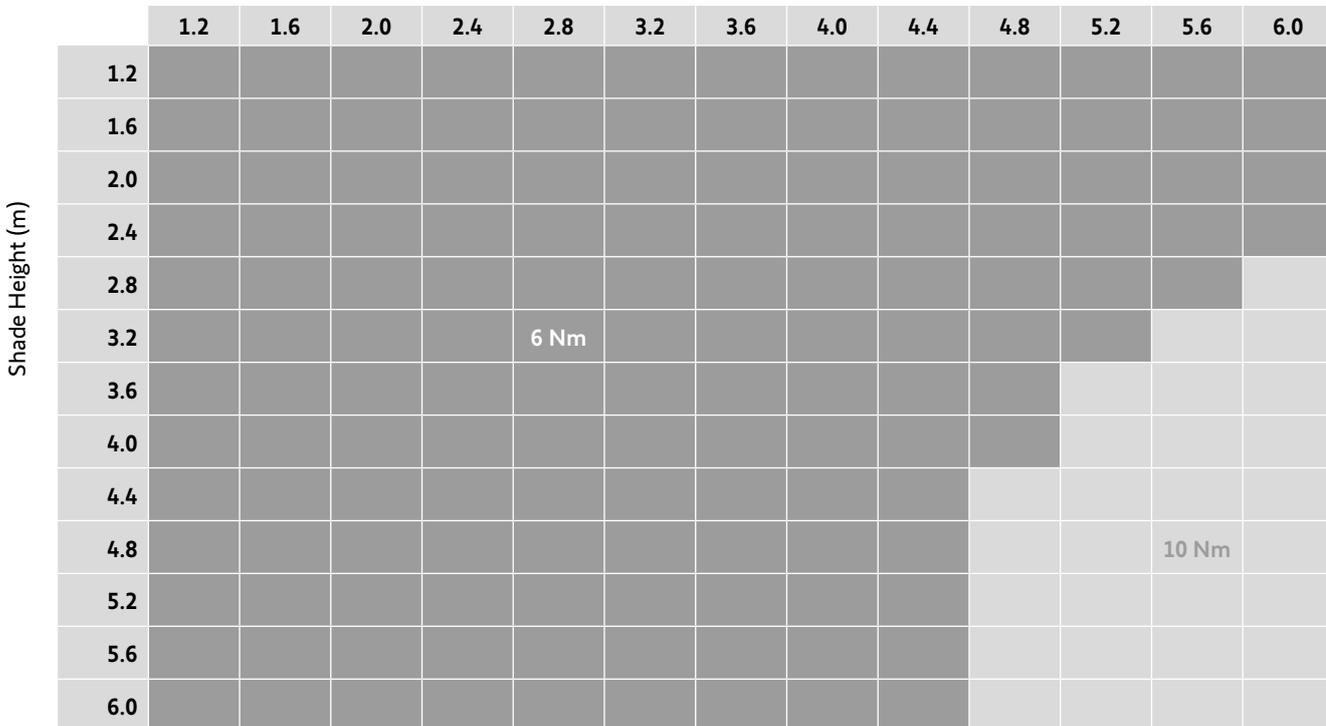
- Fabric weight: 0.55 kg/m<sup>2</sup>
- Bottom bar weight: 0.525 kg/m
- Tube external diameter: 53 mm
- Fabric thickness: 0.9 mm
- Rolling friction coefficient: 20

**NOTE:** These are the factors used within the selection chart.

### HOW TO USE THIS SELECTION CHART

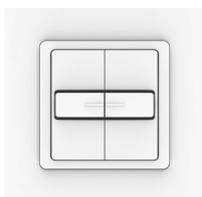
- Select the drop of the application (y-axis).
- Select the width of the application (x-axis).
- Follow both sizes until they intersect, the required motor will fall on the intersection.
- If the sizes fall outside the chart then the application type is not possible under those conditions.

Shade Width (m)



Motor Diameter	Torque= 6 Nm	Torque = 10 Nm
Ø 50 motor	Sonesse 50 WT 6/17 RA Sonesse 50 WT 6/28RA	Sonesse 50 WT 10/28RA
	Sonesse 50 RTS 6/17 Sonesse 50 RTS 6/28	Sonesse 50 RTS 10/28
	Sonesse 50 RS485 6/17 Sonesse 50 RS485 6/28	Sonesse 50 RS485 10/28

# Control options



 **Smoove UNO**

 **Smoove DUO**

 **Smoove**

 **DecoFlex**



 **Telis 16**

 **Situo**

 **Situo Variation**

**TaHoma**



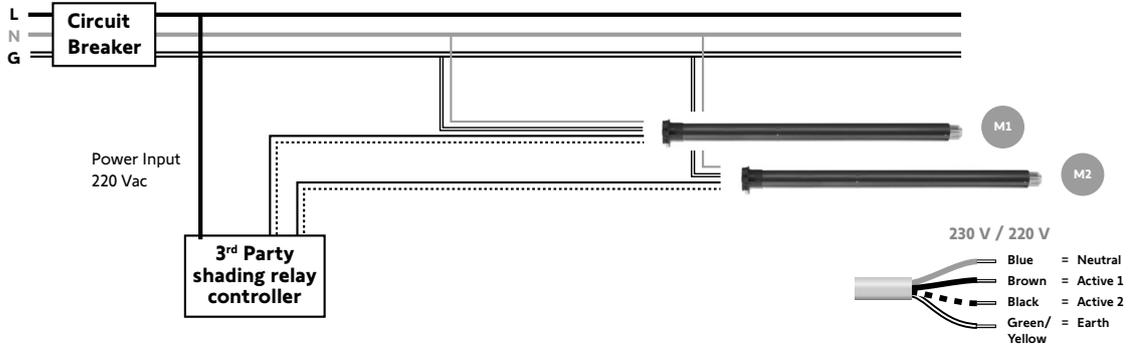
**AnimeoTouch Buco**  
animeo® IB+ 

**TaHomaLiving App**

# Integration with 3<sup>rd</sup> party Automation systems



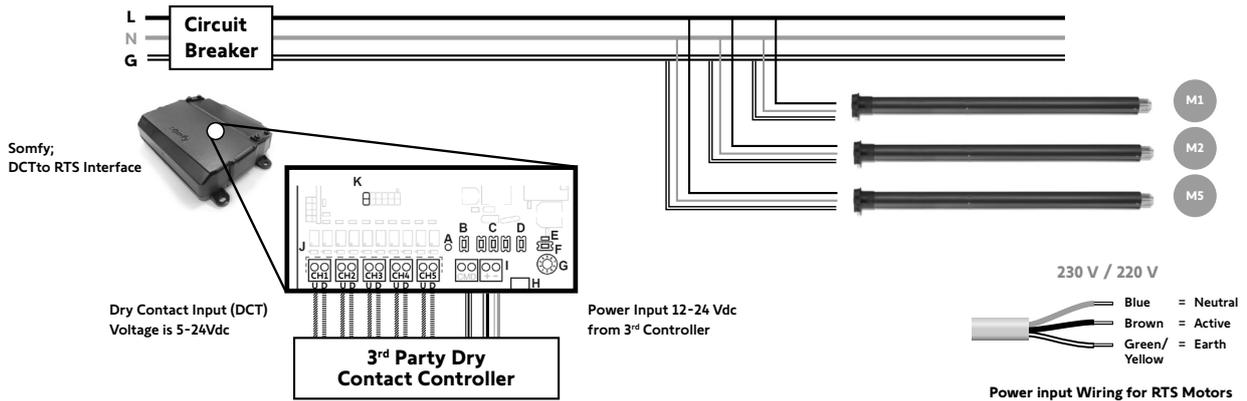
## Interfacing SOMFY WT motor with 3<sup>rd</sup> Party Shading Relay Controller



Remark: The '3<sup>rd</sup> Party Shading Controller' must feature an INTERLOCK mechanism between the Up and Down command relays. Additionally, it should incorporate a minimum delay of 0.5 seconds when transitioning between Up and Down commands.



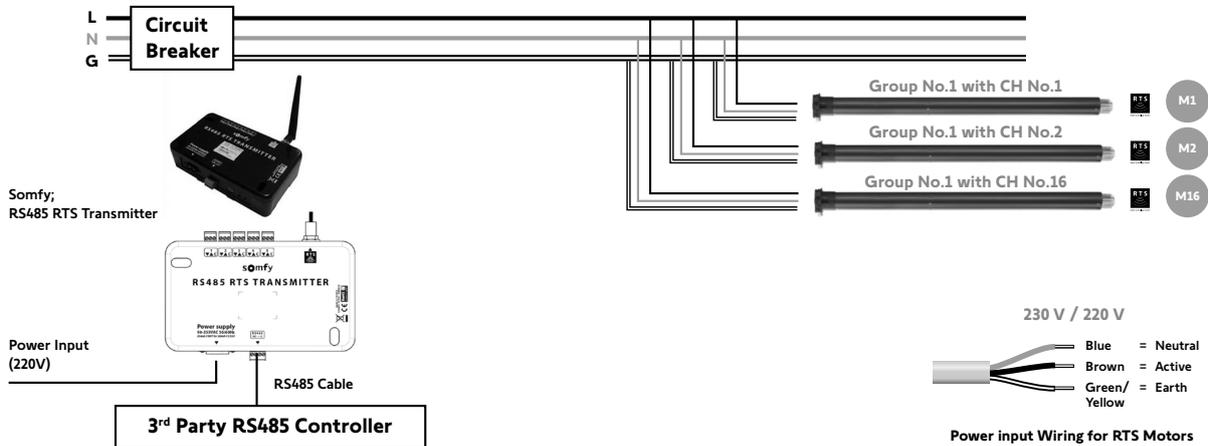
## Interfacing SOMFY RTS Motor with 3<sup>rd</sup> Party Via DCT Module



Remark: This integration module empowers users to exercise control over 5 distinct groups of RTS motors. Each of these groups has the flexibility to control one or multiple RTS motors that fall within the integration module's operational range.



## Interfacing SOMFY RTS Motor with 3<sup>rd</sup> Party Via RS485 interface



Remark: This integration interface provides the capability to command and manage up to 16 motor groups. Each group may comprise one or multiple motors, as long as they fall within the RTS radio range.

# Somfy Interfaces



2006436  
Group Control  
Box 4 Motors



1860049  
animeo IB+ 4 AC Motor  
Controller WM



1860105  
RTS Radio Module  
433 MHz



1811244  
SHUTTER IN WALL  
RECEIVER RTS



1810803  
RS 485 RTS  
TRANSMITTER



1811549  
DCT 2 RTS  
Dry Contact to RTS  
Interface



# somfy®

## Make the move

### About Somfy

For more than 50 years, Somfy has been driving durable positive motion as a pioneer in window and door automation. Developed with comfort, ease of use, security and sustainability in mind, our seamless and connective solutions are designed to help people make the move to living spaces impactful for humans and with a reduced impact on nature.

A BRAND OF **SOMFY** GROUP

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