

## 6.1 MOTORISATION

# MOTORS

for Retractable Roof Polycarbonate (RRP)

The driving force behind the Libart Retractable Roof SolaGlide system is sophisticated motorisation. The automated motor system must measure up to rigorous engineering and electrical standards, provide technology for the installer, comfort for the user and simplicity to use.



Somfy motors manufactured in France recently celebrated production and testing of 100 million motors.

The SOMFY ALTUS range of RTS tubular motors are **CE** certified and carry a 5 year warranty. The motor has a build in radio receiver with Somfy's controlling code for RTS control. The Altus RTS allows the user to operate the retractable roof with the convenience of a remote control.

Once installed in the Libart retractable roof, the motors, connection and wiring are neatly hidden to preserve the aesthetics of the Libart retractable roof. A functional single connector for power supply provides a simple and reliable electrical solution.



Motor	Diameter	Torque (Nm)	Speed (Rpm)	Load Capacity(Kg)
<b>ALTUS RTS 25/17</b>	50mm	25	17	53
<b>ALTUS RTS 30/17</b>	50mm	30	17	63
<b>ALTUS RTS 40/17</b>	50mm	40	17	84
<b>ALTUS RTS 55/17</b>	60mm	55	17	116
<b>ALTUS RTS 85/17</b>	60mm	85	17	179

The load calculations are based on the motors "housed" in a 70mm octagonal casing. Refer to SECTION 07 for wiring diagram.

Selecting the SOMFY motor for a particular Retractable Roof is easily achieved using the following table.

Width (m)	Span (m)	Bay (qty)	Angle	Load (kg)	Altus 25/17	Altus 30/17	Altus 40/17	Altus 55/17	Altus 85/17
1.00	4	2	5	7	X				
1.10	4	3	6	13	X				
1.20	5	3	6	18	X				
1.30	5	4	7	31	X				
1.30	6	5	8	53		X			
1.30	6	8	8	84			X		
1.30	6	7	10	92				X	
1.30	6	8	10	106				X	
1.30	7	6	10	92				X	
1.30	7	7	11	119					X
1.30	7	8	11	136					X
1.35	7.5	6	12	124					X
1.35	10	6	10	137					X
1.35	8	7	12	154					X
1.35	9	7	12	174					X
1.35	10	6	11	151					X

For a Libart Retractable Roof with 16mm SUNLITE® X-Lite polycarbonate glazing, a span of 7m, 6 bays of width 1.30m and a roof angle of 10 degrees requires a 92Nm motor. The SOMFY Altus RTS 55/17 would be a good choice.

- Notes:
- In certain situations, multiple motors may be utilised. Eg. A project with a large number of bays or a retractable roof with a requirement for different groups of bays to be opening and closing.
  - Motors can run continuously for 4 minutes before an automatic overheating cut off switch temporarily shuts down the motor. A typical retractable roof driven by a SOMFY motor will full open and close in less than 2 minutes.