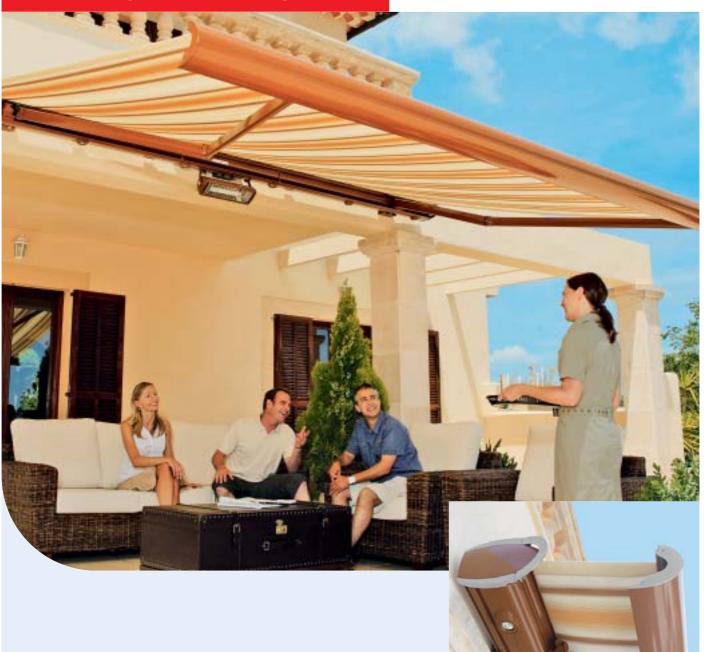
### **Opal Design/Opal Design Lux**



Optimum awnings Opal Design/ Opal Design Lux

# A jewel for your house

The Opal Design and Opal Design Lux cassette awnings stand out for their exceptional aesthetics and superior technology



www.weinor.com

We reserve the right to make technical alterations. April 2009



Opal Design Lux with Tempura Heating System



Opal Design Lux

## The high quality cassette awning

The Opal Design/Opal Design Lux is a top awning of exquisite design, combined with the very best awning technology. Both models are technically almost identical. The Opal Design Lux has the added advantage of not only providing high-quality sun protection during the day, but also of providing a pleasant lighting atmosphere on your patio in the evening.

#### **Technical details**

Optimum
awnings
Opal
Design/
Opal
Design Lux

## Max. size **Opal Design/ Opal Design Lux**

- 1200 cm wide x 400 cm max. projection (2 section unit)
- Coupled units with jockey cover
- Safety checked by German TÜV:
  650 cm wide by
  400 cm projection

#### **Technical equipment**

- Gutter incorporated into the front rail with controlled drainage
- Sealing lip in the top section prevents water from entering
- Crescent-shaped cap prevents water getting in from the side and shows when the awning is closed
- Enforced closure of the front rail by the stop cam
- Optimum fabric positioning with integrated fabric supporting section
- Anti-wear fabric protection through sliding film in support section

- Low installation height Powder coating
- In 47 standard colours
- Different colours available for colour-contrasting box and front rail end caps
- Surface permanently resistant to scratching and weather

#### Dattorn

 Large selection of fabrics from the current weinor collection

#### Folding arm

- Tilting arm member with patented wind lock safety device and round steel linking chain
- Drop forged arm partsDrive

#### Motor as standard

#### **Lighting on Opal Design Lux**

- Integrated halogen lamps and transformer
- Power output matched to number of lamps
- Adjustable halogen lamps

#### **Options**

- Extruded wall/roof brackets, powder coated in the same colour as the awning
- Wall bracket with sealing lip for unbroken connection to wall
- Removable valance

#### Valance Plus with motor

- Up to 500 cm width, max. projection angle 350 cm
- From 501 cm to 600 cm width, max. projection angle 300 cm
   Drive

#### Crank operation for Opal Design

- Remote controlled motor Accessoires
- Sun and rain monitors
- Automatic rain sensor
- Heating system Tempura
- Remote control with dimmer for Opal Design Lux and Tempura

#### The technical product highlights of the weinor Opal Design/Opal Design Lux



Opal Design

## Casing is not high The Opal Design/Opal Design Lux casing is only 16 cm high.

#### The top bracket

It is fitted to units 450 cm wide and above as additional security for the top.

#### The roof bracket

Hollow sections in the front rail and the top of the casing ensure a high level of stability and optimum roof bracket.

#### The support section

It provides additional stability where the forces from the tilting arm member are placed. This makes assembly easier.

#### The fabric support section

This section aids keeping the fabric taut and makes sure that the fabric rolls up evenly. In addition the fabric is protected from any residual water in the bottom of the casing.

## The tilting arm member with chain

The open-link chain in the arm joint is made of special high-grade round steel and constantly undergoes continuous testing.



Open-link chain in the titling arm member

Even after many thousand movements no appreciable wear and tear can be detected. For this reason, we offer a 10-year guarantee on the open-link chain in the centre joint of the awning arm.



Tilting part with wind lock safety device

#### The wind lock safety device

The patented wind lock safety device prevents the awning from being uplifted by surging winds, even if the awning has only been opened by a third.

## The angle adjustment mechanism

The pitch can be easily adjusted at the open tilting part slider. The cassette itself stays firmly locked in place.

10° to 20° deviation on Valance Plus motor from standard angles.



Arm joint with casing

#### The arm link

The specially designed arm link to the casing of the **Opal Design/Opal Design Lux** combines weinor innovation with safe and proven technology.

#### The arm geometry

Ensures that the awning retracts and opens smoothly and prevents the fabric from resting on the tilting arm members.

#### The stop cam

The stop cam on the tilting part ensures that the front rail retracts exactly.

## The front rail holder with movable bearing

The front rail holder with movable bearing adds more leeway, for example in the case of one-sided loads or the angle adjustment mechanism.

#### The gutter

It takes the residual water which can collect if the awning is retracted when wet.

#### The sealing lip

The sealing lip ensures that the inside of the casing remains dry and that the front rail closes quietly.

#### The technical product highlights of the weinor Opal Design/Opal Design Lux



The crescent-shaped cap on the Opal Design/Opal Design Lux casing

#### The crescent-shaped cap It prevents water penetrating from the side and indicates when the awning is closed.

#### Resistance to rain

TÜV tested security for resistance to rain

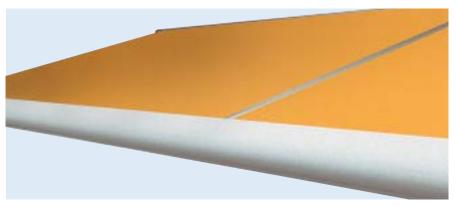


When at an angle of at least 14° the **Opal Design/Opal Design Lux** is resistant to rain, which is defined by DIN standard EN 1933 as follows 56 <u>cm</u>

m²·h.

This means that the **Opal Design/Opal Design Lux** can withstand rainfall of 56 mm (2.25") per hour.

This German TÜV seal confirms that the unit will not tear, break or suffer other damage under the given conditions. However, it is not possible to guarantee that there will be no folds or creases in the awning fabric.

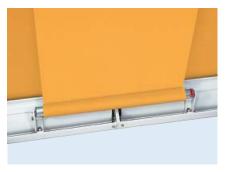


Coupled **Opal Design** unit. The view from above shows the joint in the fabric which is covered from below.

#### The jockey cover

Multi-section units between 651 and 1200 cm wide are coupled. The jockey cover separates the fabric of the two sections. The joint is hidden by an undercover and spring-tensioned. Both sections are checked in the factory and joined after delivery. The proven top plate design and the unbroken assembly channel from conservatory technology make this possible.

The jockey cover is to be particularly recommended for commercial use and where the shape of the building requires separate, and consequently smaller, areas of fabric.



Jockey cover for 2-section unit



The joint section links the front rails and holds the jockey cover fabric.



The relatively narrow gap is closed by the jockey cover. (pattern matching possible)

Description	Patent no
Awning with infrared radiator	
and/or loudspeaker	000001403442
Awning	000001310609
Awning	000000874104
Awning	000000745742
Florentine blind with articulated arms	000000665346
Tipping hinge for awnings	000000620334
Coupling arrangement for the	
rollers of awnings and similar	000000572820
Shading device	000000959195

#### The technical product highlights of the Opal Design Lux



In the evening, the **Opal Design Lux** transforms itself into stylish patio lighting

# Perfect sun protection and stylish lighting in one The Opal Design Lux transforms the night into day. Even if the awning is retracted, it can provide a pleasant light which may optionally be dimmed.

#### **Halogen lamps**

The **Opal Design Lux** comes as standard with a number of lamps to match the total width of the awning. The distance between the lamps is set at between 60 and 80 cm with 3 to 8 lamps.

Low voltage technology
The Opal Design Lux is fitted as standard with an electronic transformer designed for outdoor use. It sits securely and inconspicuously in the back wall of the awning and so, if the worst comes to the worst, it can be replaced easily.

The power adjusts itself to the number of lamps. This means that if a lamp should fail the current through the transformer is regulated or reduced so as not to shorten the lives of the other lamps.









Electronic transformer (top) and wiring are hidden in the back wall of the casing



The halogen lamps incorporated in the **Opal Design Lux** are swivel-mounted

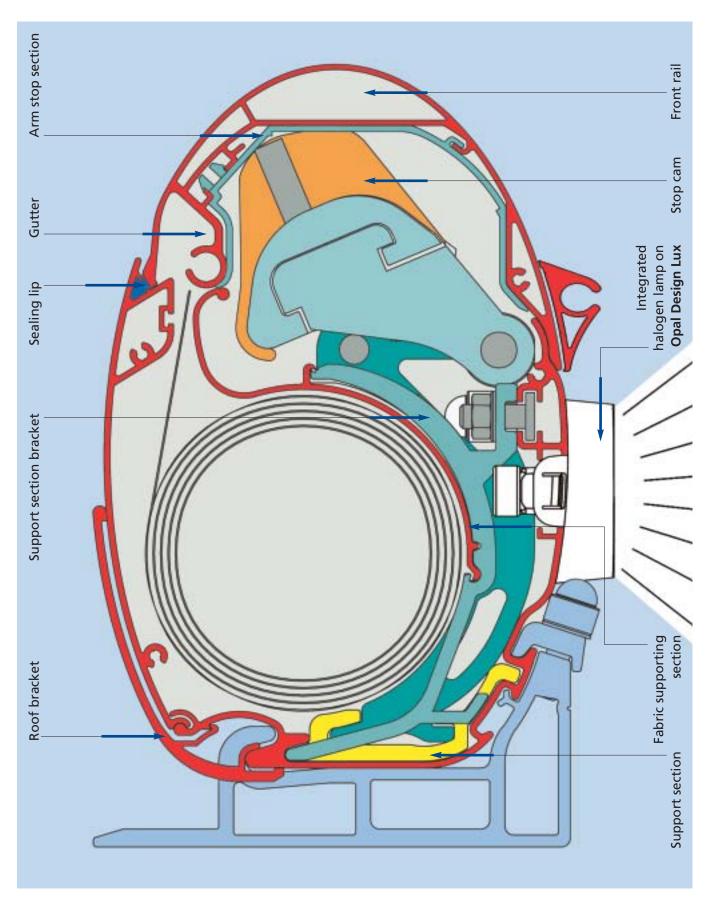
#### **Swivel-mounted lamps**

The lamps are built into the bottom of the casing of the **Opal Design Lux**. They can be swivelled forwards (e.g. patio) or backwards (e.g. window). The lamp housings can be optionally in the same colour as the casing or, in the case of two-coloured units, in the same colour as the plastic parts.



i Halogen lamps and transformer are not covered by the 5 year guarantee.

#### Cross section of the Opal Design/Opal Design Lux



#### **Opal Design/Opal Design Lux** product benefits at a glance

Designation	Material	Surface treatment	Qualities	Your advantages
Tilting part Upper arm insert Centre joint Lower arm insert with front rail holder	Aluminium, drop-forged	Chrome-free pre-treated, powder coated	Highly resistant to breakage, surface permanently resistant to scratch- ing and weather	The weinor tilting arm member is a masterpiece of modern awning technology. The advantages: special arm geometry and thus the fabric does not rest on it. Stability and durability thanks to the high-grade materials.
Rotating parts in the arm	Stainless steel bolts with Teflon- coated sleeves on bearings		Maintenance-free, rust-free, reliable	High-grade building components mean permanent free movement when opening and retracting.
Arm section Front rail Top section Sliding support Bottom section of casing	Aluminium, extruded	Chrome-free pre-treated, powder coated or technically anodised	Surface permanently resistant to scratching and weather	You choose the powder coating colour for your awning sections to suit your personal taste. Pre-treating the profile prevents corrosion altogether, even on damaged surfaces.
Open-link chain in the arm	Round steel, special high grade		Extremely high resistance to wear and tear	Virtually non-wearing in continuous test- ing – therefore 10-year guarantee on the open-link chain in the centre arm joint.
Fabric roller bearing Top bracket	Aluminium, extruded	Machine-edged, chrome-free pre-treated, powder coated	Surface permanently scratch and weather resistant	Sophisticated quality, precise and weather resistant down to the very last detail.
Drop arm lock	Aluminium slider, extruded		Maintenance-free, rust-free, reliable	Innovative weinor technology.  Prevents the awning from lifting up and crashing down in surging winds.
Faceplates, crescent-shaped caps and front rail end caps	Plastic	In same colour as the casing or different colours	Surface permanently weather-resistant	Choose the colours for the plastic parts to match the fabric, façade or tone-intone.
Screws	Stainless steel		Non-corrosive	No rust, no appreciable wear and tear
Awnings material	Acrylic		Spin-jet dyed, impregnated	The weinor fabric collection offers a wide variety of sophisticated designs.
Drive motor				The awning is opened and retracted by an electric tubular motor which can be operated, for example, by a wall switch.

#### **Opal Design/Opal Design Lux** product benefits at a glance

Designation	Material	Surface treatment	Qualities	Your advantages
Low voltage lamp set for the bright Opal Design Lux	Transformer, po Lamp housing in	•	d to the number of lamps.	The <b>Opal Design Lux</b> awning with integrated lighting can often replace separate patio lighting.

## Opal Design/Opal Design Lux

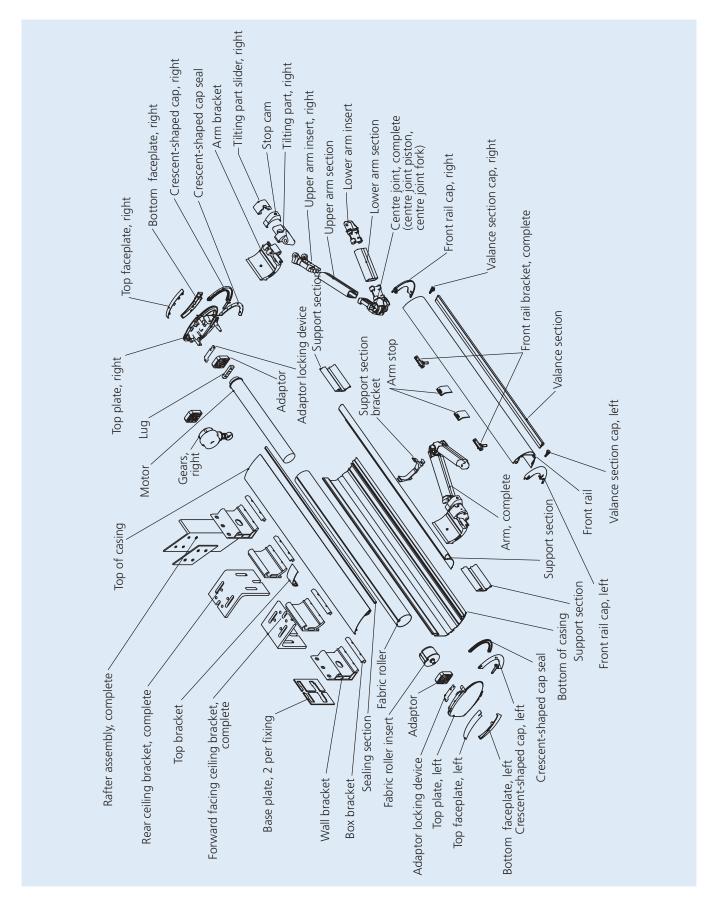
#### Product options at a glance

Designation	Material	Surface treatment	Qualities	Your advantages
Awning fabric from external suppliers	Acrylic	Spin-jet dyed, impregnated	Warp printed, watertight	Even greater selection of unicolour and striped fabrics.
Removable valance	Acrylic	Spin-jet dyed, impregnated	Light and weather proof	The piped border makes fitting and removing the valance simple.
Valance Plus with motor	Soltis <sup>®</sup>	Specially coated polyester fibre	Microvented, air-permeable	The Valance Plus can be opened up to a length of 210 cm
	Seamless uni- colour acrylic fabrics	Spin-jet dyed, impregnated	Dirt- and water- repellent due to use of nanotechnology	weinor's fabric collection includes a wide variety of sophisticated patterns (9 in total)
Drive Crank mechanism with limit stop, only available on Opal Design	Gearing 7,8:1	Gear casing powder coated in black (similar to RAL 9005), white (similar to RAL 9016) or grey (simi- lar to weinor 7319)	Gears with limit stop, easy to operate	Completely free from operating error. The limit stop prevents the fabric from rolling up incorrectly.
Remote-controlled drive				Upon request, an integrated tubular motor with WeiTronic receiver can be fitted. The WeiTronic Remoto handheld remote control makes for easy operation of the awning. See the Accessories section for more details.
Remote controlled dimmer				With a WeiTronic remote control unit and a WeiTronic Combio receiver the light and awning can be operated separately and the light can be dimmed infinitely.
Safe, convenient remote control for motorised Valance Plus				The WeiTronic Combio MVL allows you to control the motor, the Valance Plus valance and the lighting using one single receiver. The WeiTronic Agido 868 provides added safety in blustery conditions. It reacts to rocking and shaking and retracts the awning automatically.

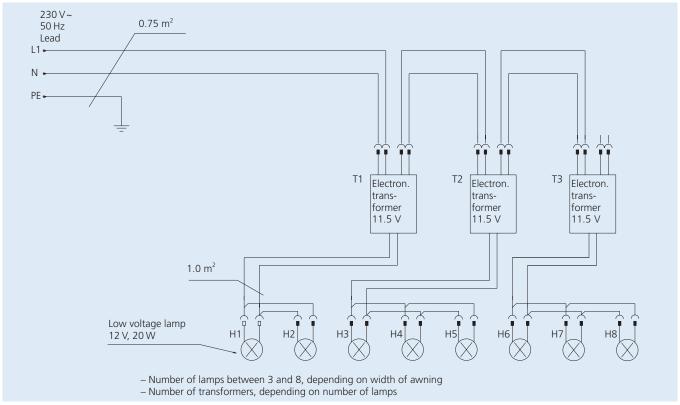
#### Product options at a glance

Designation	Material	Surface treatment	Qualities	Your advantages
Heating system Tempura	Corrosion-free materials	Chrome-free pre-treated, powder coated	Splash-proof, IP24, for use indoors and outdoors	The Tempura heating systems can be easily and directly mounted onto the Opal Design using a special bracket and can be moved infinitely. Operating the Tempura is child's play with the WeiTronic remote control system, and it can also be dimmed.
Wall and ceiling brackets	Aluminium, extruded, sections cut and machined	Machine-edged, chrome-free pre-treated, powder coated	Surface permanently scratch and weather resistant	Sophisticated quality, precise and weather resistant down to the very last detail. Easier service due to use of same components.

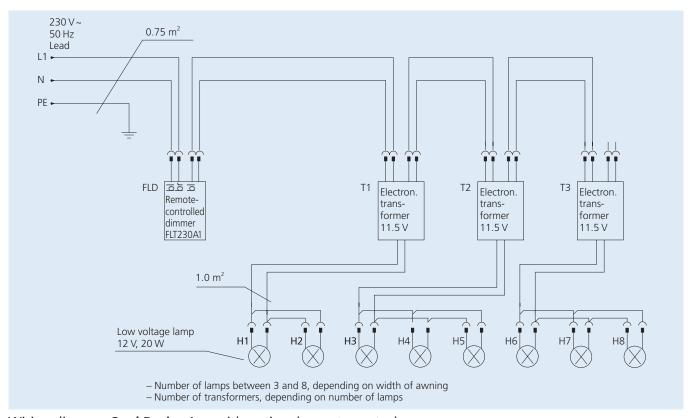
#### **Exploded drawing of the Opal Design**



#### Wiring diagrams



#### Wiring diagram Opal Design Lux



Wiring diagram Opal Design Lux with optional remote control

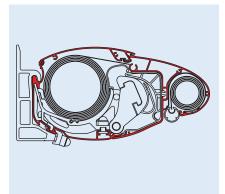
#### **Product options Valance Plus and motor**



Opal Design with Valance Plus

#### weinor Valance Plus with motor

- Protection from low sun or inquisitive looks.
- Infinitely extendable.



Cross section Opal Design with Valance Plus

- On awnings up to 500 cm wide the maximum projection angle is 350 cm.
- On awnings from 501 to 600 cm wide the maximum projection angle is 300 cm.
- The maximum length of Valance Plus fabric is 210 cm.



WeiTronic Agido-868

for several years.

**Exclusive product protection WeiTronic Agido-868** Exclusive to the **Opal Design** Valance Plus/Lux with WeiTronic remote control, the new batteryoperated sensor provides extended protection. It recognises vibrations and other forms of movement and sees to it that the awning is retracted automatically - in the face of very blustery conditions, for example. With no wiring to worry about, it simply inserts into the front rail of the awning. The sensor is capable of running on two standard batteries

## Triple protection: sun protection, retraction protection and product protection in one complete package

The Opal Design/Lux is now available together with the Valance Plus as a complete package when ordered with the WeiTronic remote control, which includes the WeiTronic Agido-868. The energy-saving remote control system has been designed especially for awnings with extendible

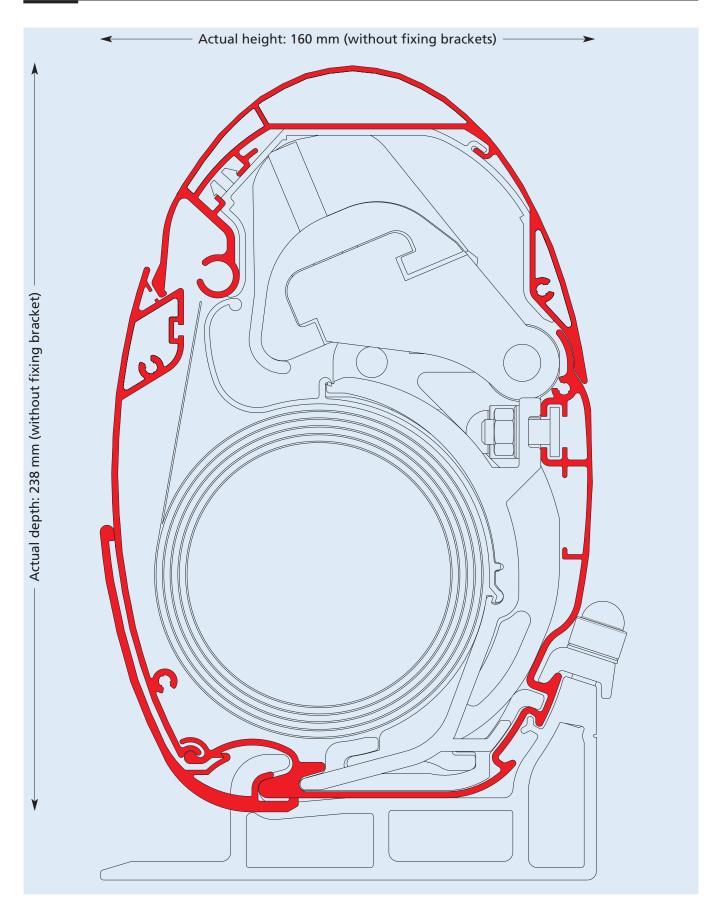
valance. This model not only comes with sun protection but with a special retraction protection feature which prevents things getting swept away – because the main awning is only retracted once the Valance Plus has been retracted. With an exclusive WeiTronic Agido, which protects the product in the face of very blustery conditions, this is a top-of-the-range product that satisfies the highest of demands.



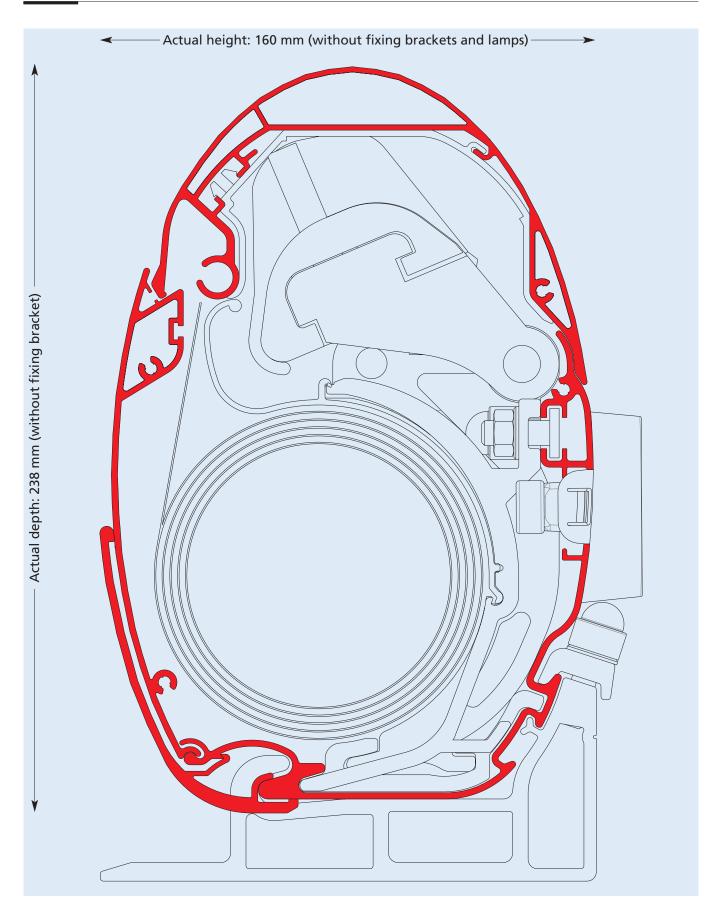
The beautifully-shaped, intelligent

WeiTronic Combio-868 MVL receiver combines the motorised controls, Valance Plus and lighting in one single device. The combination receiver can be operated using weinor's tried-and-tested Remoto handheld remote control.

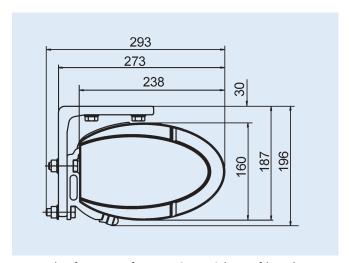
#### Cross sectional drawing of the **Opal Design** – not to scale



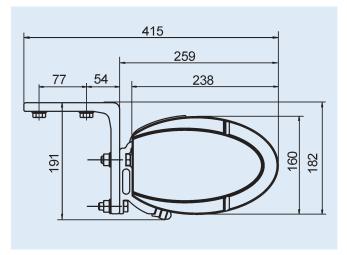
#### Cross sectional drawing of the **Opal Design Lux** – not to scale



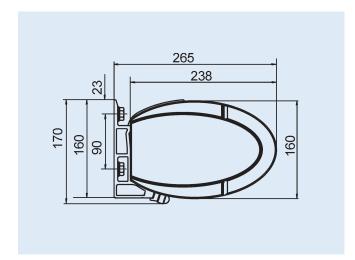
#### **Cross sections and dimensions**



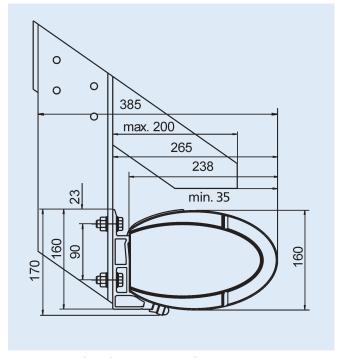
Example: front roof mounting with roof bracket and retaining section



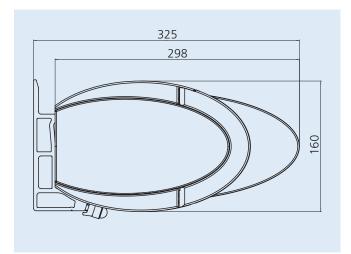
Example: rear roof mounting with roof bracket and retaining section



Example: wall mounting with wall bracket



Example: rafter fixing with rafter bracket and wall bracket 150 mm wide



Cross section **Opal Design** Valance Plus and motor