1. The following tools are required:
- Tape measure 10m
- Pipe cutter for aluminium tube Ø 13mm
- Cordless screwdriver
- Percussion drilling machine with:
  - HSS drill bit, Ø 6mm, for mounting on metallic glass rails
  - Masonry drill bit, Ø 8mm, for mounting on brickwork
  - HSS drill bit, Ø 13mm, for mounting with aluminium distance brackets
- Ratchet (catrake) with SW 13mm socket
- Fork wrench or ring spanner SW 13mm
- Allen key SW 4mm and SW 6mm
- Slotted screwdriver
- Cross-tip screwdriver

2. Scope of delivery
- Fully mounted housing with cloth cover, motor, drop profile and wound-up puller strap with mounted end caps.
- Guide rails
- Distance brackets and/or soffit angle with fastening materials
- Cloth support tube (if extended length exceeds 4000 mm) - (Optional item)
3. Mounting of the distance brackets, resp. soffit angles

Define positions of the distance brackets on the glass rails, respectively positions of the soffit angles on the brickwork, according to the drawing.

Transfer hole distances of the brackets or soffit angles for the defined fitting positions. Choose the correct drill bit for the base material.

4. Mounting of the guide rails and housing

Slide lower groove of the guide rails into the clamping rails of the brackets (angles) and fasten on the lowest brackets.

At the top, keep a distance of min. 300mm between the upper edge of the guide rail and any protrusions in the building structure so that the housing can be inserted.

Lift housing simultaneously on both sides and insert the spigots on each side into the openings in the guide rails.

Caution! Lay puller strap according to Fig. 04, ensuring that it does not get caught.
Ensure rails are parallel and check rectangularity of the system by measuring the diagonal lengths. If the difference of the diagonal measurements exceeds 5mm, the function of the system will be affected. The height of the guide rails can be changed to fine-tune the diagonal measurements.

Lastly, tighten the clamping rails on all distance brackets and/or tighten soffit angles.

RAILS MUST BE PARALLEL WITHIN 4-5mm OF EACH OTHER. DIAGONAL MEASUREMENTS MUST NOT EXCEED 5mm DIFFERENCE

5. Laying the puller strap

Unwind puller strap, untangle and remove the four retainers (two for each guide rail).

Pull out drop profile with pulling aid to approximately 100mm and put screwdriver between drop profile and housing. This prevents a retraction of the drop profile.

Hook up end caps in the guide rails (observe length of the puller strap) and secure by tightening the threaded pins slightly with Allen key SW 4mm. Let drop profile return to its home position (remove screwdriver).
Check again that the puller straps are not twisted or caught. Remove pulling aid for the drop profile.

6. Mounting the cloth support pipe
(if extended length exceeds 4000mm)

Hook up both shaft bearings (1) at the centre of the rail into the lower chamber of the guide rails and tighten the cylinder head studs (2) with Allen key SW 6mm.

Working as a pair, hold the cloth support tube between the fastened shaft bearings and push the shaft (6) on both sides through the bearing and the distance socket (5) into the end cap (4) as shown in Fig. 10, until the shaft is flush, on the outside, with the shaft bearing.

Caution! Only tightening both threaded pins (7) secures the shaft and thus the cloth support tube.

7. Mounting of a coupled system

7.1 Mounting of the distance brackets, reps. soffit angles
The installation of the coupled system is the identical to that for a single system (please refer to Item 3).

7.2 Mounting of the guide rails and housing
The installation of the guide rails of a coupled system is identical to that for a single system (see Fig. 03, Item 4).

Insert motor system into the guide rails as if you were mounting a single system (see Fig. 04). Before mounting the coupling system, remove the coupling holder on the coupling side (1) (there is one holder for each coupling).
Insert coupling shaft (2) with pressure spring (3) into the coupling driver (4). Push housing of the coupling system into the guide rails while pressing in the coupling shaft.

To lock the coupling, it is necessary to remove the roof profile of the coupled system. To do this, remove both screws from the roof profile with a cross-tip screwdriver.

Slightly lift roof profile at the front and pull off towards the front.

Make markings on the strap pulleys (see Fig. 17) coincide so that the coupling shaft snaps into place. With slotted screwdriver, additionally move the coupling shaft (2) towards the motor system until it is fully in (Fig. 14).

Ensure rails are parallel and check rectangularity of both systems by measuring the diagonal lengths. If the difference of the diagonal measurements exceeds 5mm, the function of the system will be affected. The height of the guide rails can be changed to fine-tune the diagonal measurements.
Then tighten clamping rails on all distance brackets and/or soffit angles.

7.3 Laying the Tape XL
Unwind tape and untangle. Prevent retraction of the drop profile as described in Item 5 (Fig. 07). Hook up the puller tape on the coupling system as follows into the end cap of the centre guide rail:

Loosen countersunk screw (1) with Allen key SW 6mm and remove including inner socket (2). Take out deflection pulley (3) and place puller strap on it.

When assembling, please ensure that the deflection pulley and the socket are installed correctly (chamfer of the bores pointing towards screw head).

To install the end caps and place the puller straps in the guide rails, please proceed according to Item 5.

7.4 Removing the holders
Remove transport fastening (3) from the coupling system. To do this, push the drop profile by hand slightly in out-direction and at the same time pull out the transport fastening.

The transport fastening must be removed, otherwise the system will be destroyed in trial operation.

Insert the coupling holder (1) (Fig. 11). Remove both anti-rotation elements on the strap pulleys (plastic wedges on both sides; see Fig. 17).

Refit roof profile and screw together.

7.5 Mounting the cloth support tube of a coupled system
For the first system, proceed as if you were working on a single system (see Item 6).

The only difference is the shaft holder for the centre guide rail. Here, a longer shaft (2) (184mm long) is used, which is fitted in the exact middle.
8. Mounting a series system

The procedure differs from that for the coupled system as follows:

- The coupling shaft with pressure spring (see Fig. 11) and the anti-rotation wedges (see Fig. 17) are not required.
- The coupling holder must be mounted (see Fig. 11).

9. Function check and commissioning

- Connections of electrical devices must be made exclusively by skilled electricians.
- The trajectory of the drop profile must be free of obstacles (e.g. window sashes, branches, etc.).

The installation is now concluded. Normally, the system can now be operated as the motor end positions and drop profile parallelism are already factory-set.

Fully extend and retract the awning and check switch-off positions. Check motor end positions (extended: the drop profile must not touch the end caps on the outside; retracted: the puller straps must not be slackened to such an extent that they are sagging). If applicable, reset the motor end positions (see Annex A) or align drop profile so that it is parallel (see Annex B).

10. Information to the customer

Dear customer, congratulations for having purchased the Varioscreen Conservatory Awning. With regard to operation and maintenance, please observe the enclosed operating instructions.

Caution! Ensure during the test run that there are no moving parts that could damage the motor cable.

A. Adjustment of the motor end position

Motor adjustment: see “Motor Adjustment” leaflet.

Caution! Both end positions must be set because otherwise the system will be destroyed when it is first operated.

B. Alignment of the drop profile

The drop profile is set up in extended condition.

Remove countersunk screw (1) with Allen key SW 4mm and remove plastic cover (2). Loosen counternut (3) with ring spanner SW 13mm. Grip end of the puller strap (5) by hand or with a tool and tighten puller strap. Loosen threaded pin (4) with Allen key SW 4mm.

Now the drop profile can be brought in position.
Wind up puller strap and stow away in cover. Mount cover and fasten with countersunk screw.

FRONT AND BACK MOTOR LIMITS MUST ALWAYS BE CHECKED AT TIME OF INSTALLATION. INSTALLER MUST ENSURE THE LIMITS ARE SET IN SUCH A WAY TO PROVIDE MIN 15mm CLEARANCE TO ALL MOVING PARTS. FAILURE TO DO SO MAY RESULT IN DAMAGE TO THE SYSTEM.