

SL27MS

Technical specification

The venetian blind in the ScreenLine® SL27MS internal motorised system is manufactured in accordance with high technical specifications and production standards. The venetian blind operation, tilting, raising and lowering functions, is achieved by way of a low voltage motor inside the head-rail. Amperometric protection, inside the motor, controls the blind limits.

The head rail is mechanically fixed (clipped) to the top spacer bar. A special corner key with integrated electrical connectors, couples the external supply to the internal motor, ensuring the unit's hermetic seal is not compromised. The blind operation is controlled using externally factored equipment.

Technical features

Motor

24 V DC motor with planetary adapter incorporating amperometric protection limits.
Minimum supply voltage: 20V DC. Absorption: 650mA max.
Idle speed: 50 rpm.
Torque: 0.8 Nm – 1 Nm – 1.2 Nm (depending on the motor type).

Head rail

Extruded aluminium, A6063S-T5 alloy.
Dimensions: width 27 mm, height 36 mm with 6 mm pelmet.
Anodised or powder-coated in the same colour as the slats, or RAL paint by request.

Slat

Aluminium, AA 6011-T8 alloy. Dimensions: width 16 mm, thickness 0.2 mm.
High-resistance polyester paint, with Clarion® non-fogging treatment, which has been specially designed to avoid any possible emissions of chemical products inside the double-glazed unit when exposed to ultraviolet and / or heat radiation.
Available colours: thirteen.

Bottom rail

Extruded aluminium A6063S-T5 alloy. Dimensions: width 16 mm, height 10 mm. Anodised or powder-painted in the same colour as the slats' or in RAL paint on request.

Manufactured in two matched profiles.

Ladder

Thermo-fixed 100% polyester. 12 mm step. Excellent dimensional and colour stability to UV rays. Treated to avoid any possible emissions of chemical products inside the double-glazed unit, when exposed to ultraviolet and heat radiation.

Same colours as slats'.

Cords

Thermo-fixed 100% polyester with internal core. Excellent dimensional stability. 1.4 mm diameter, with internal core. Colour - white.

Spacer bar

Extruded aluminium. Sizes: 27 x 8 mm. Three versions available:

Standard profile –L-profile side spacer (optional), 8.2 mm –U-profile spacer for top or bottom, 4.2 mm.

Control accessories

220Vac – 24Vdc feeder, three transformer systems available, for the low voltage motor supply, with the possibility of individual or group control (switch, remote switch group control or remote radio / infrared-control).

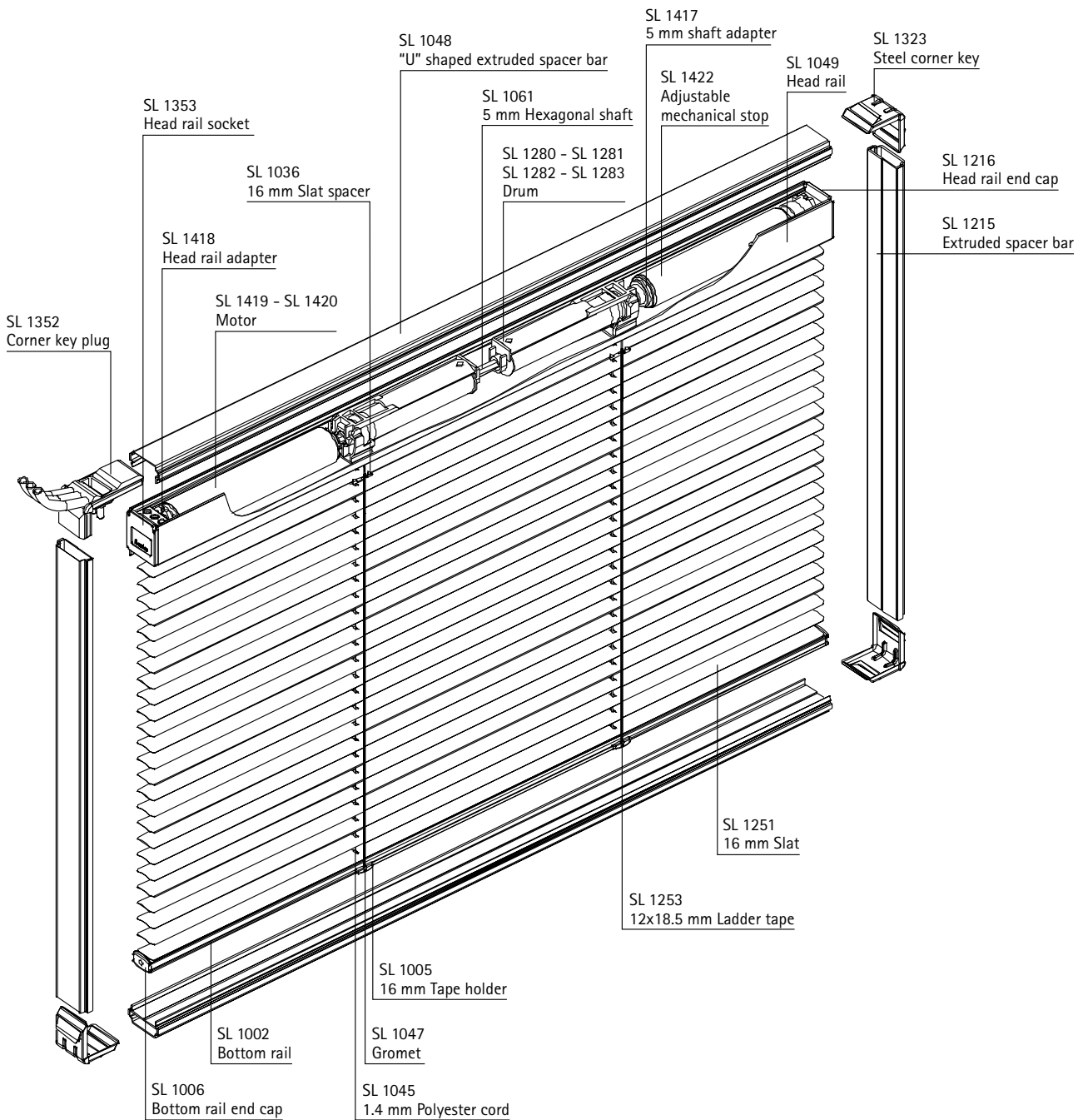
Control system **Manual**: three-position inverter or double button depending on the system design.

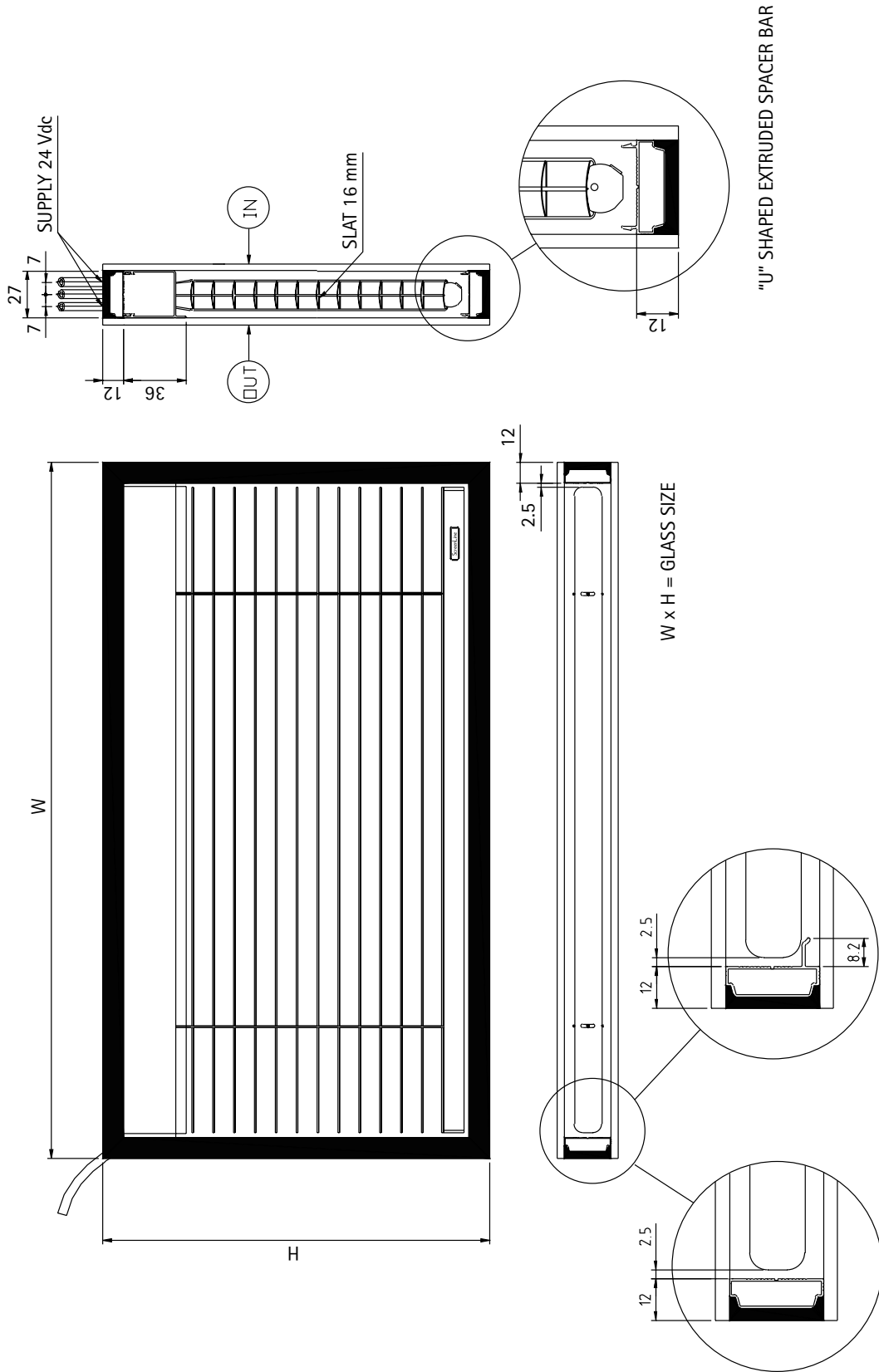
Radio-control: 2 channel model for one blind or one group
32 channel model for 16 blinds or 16 groups.

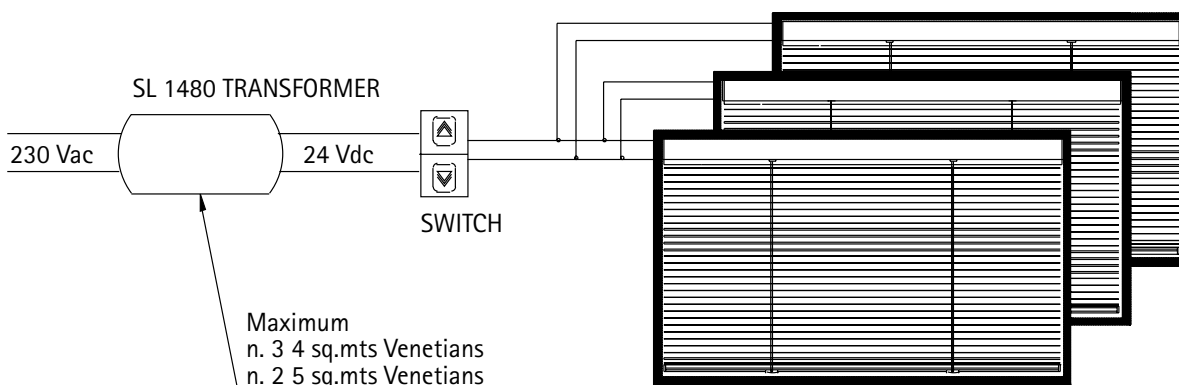
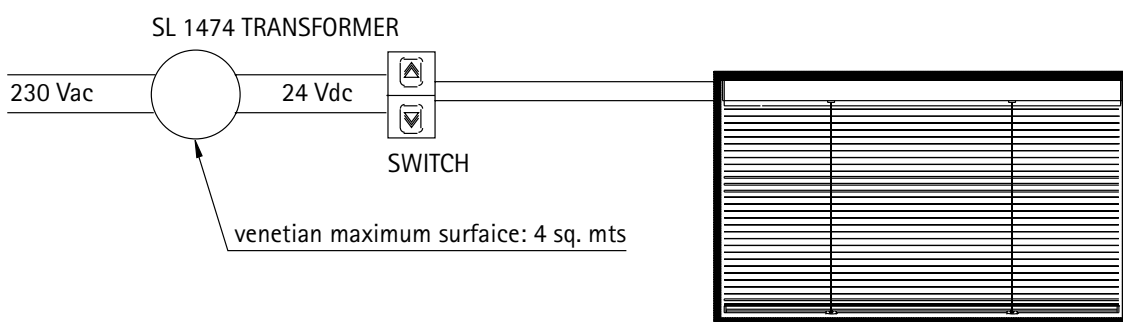
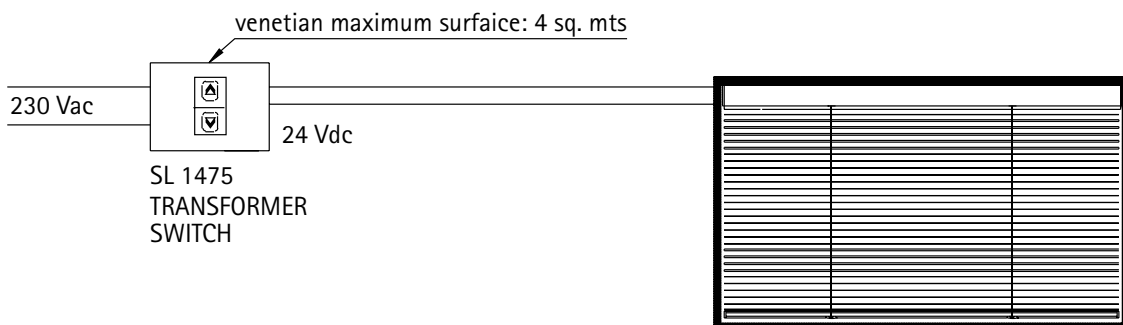
Infrared: 2 channel model for one blind or a group
16 channel model for 8 blinds or 8 groups.

Double-glazed unit sizes

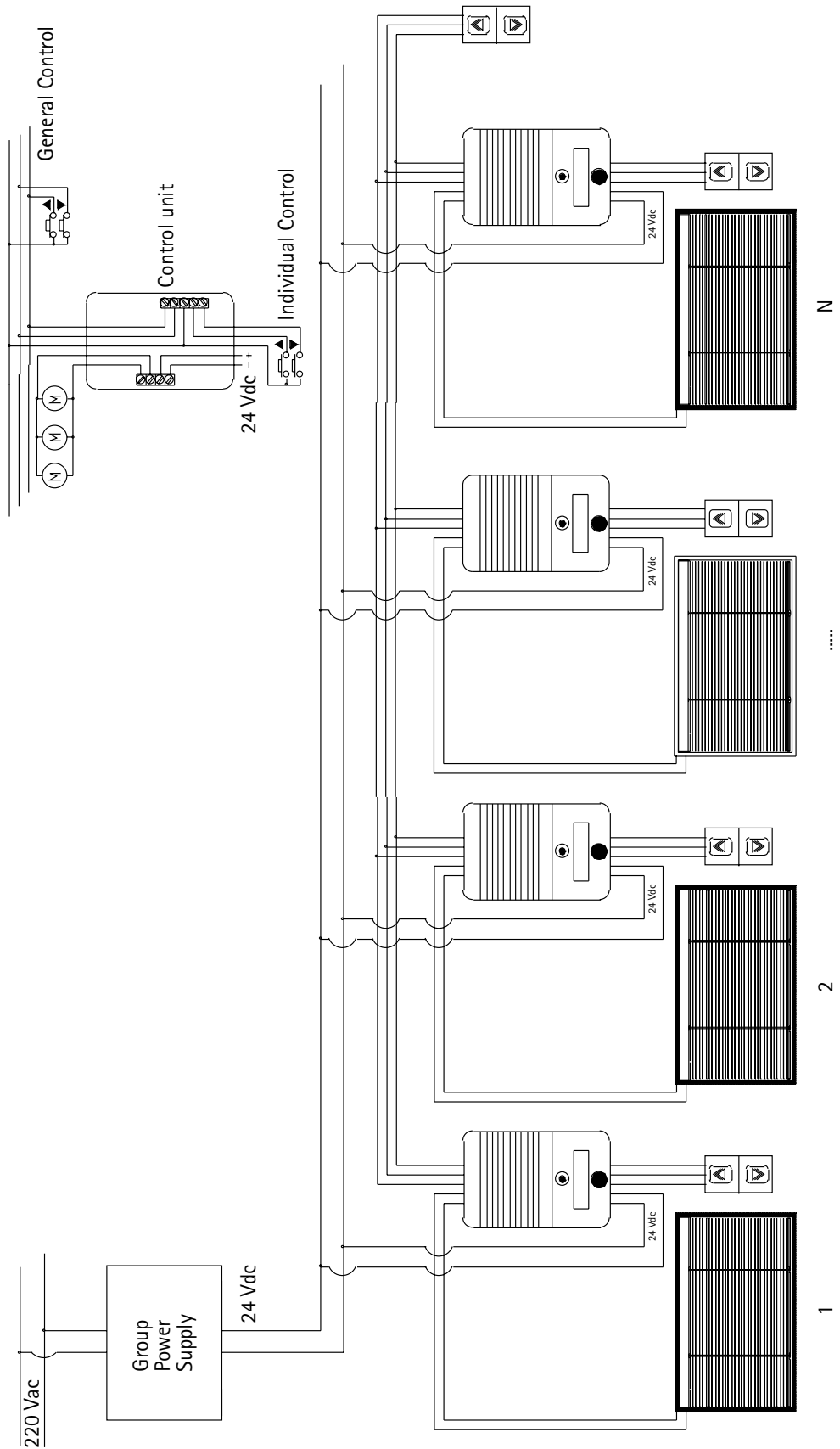
Height	100~3.000 mm
Width	400~3.000 mm
Maximum area	see feasibility tables
Blind stack height	3.4% blind height +45 mm



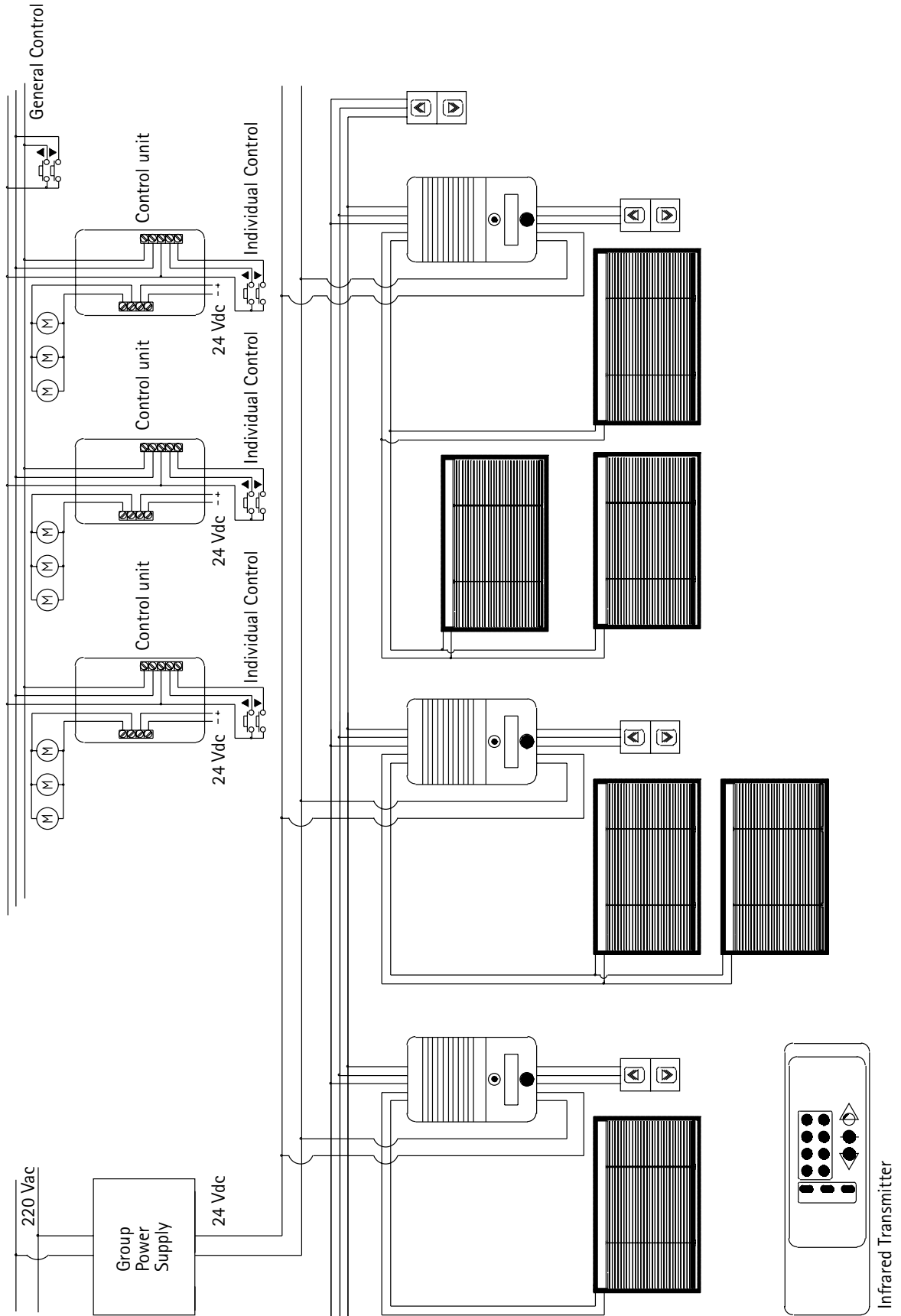




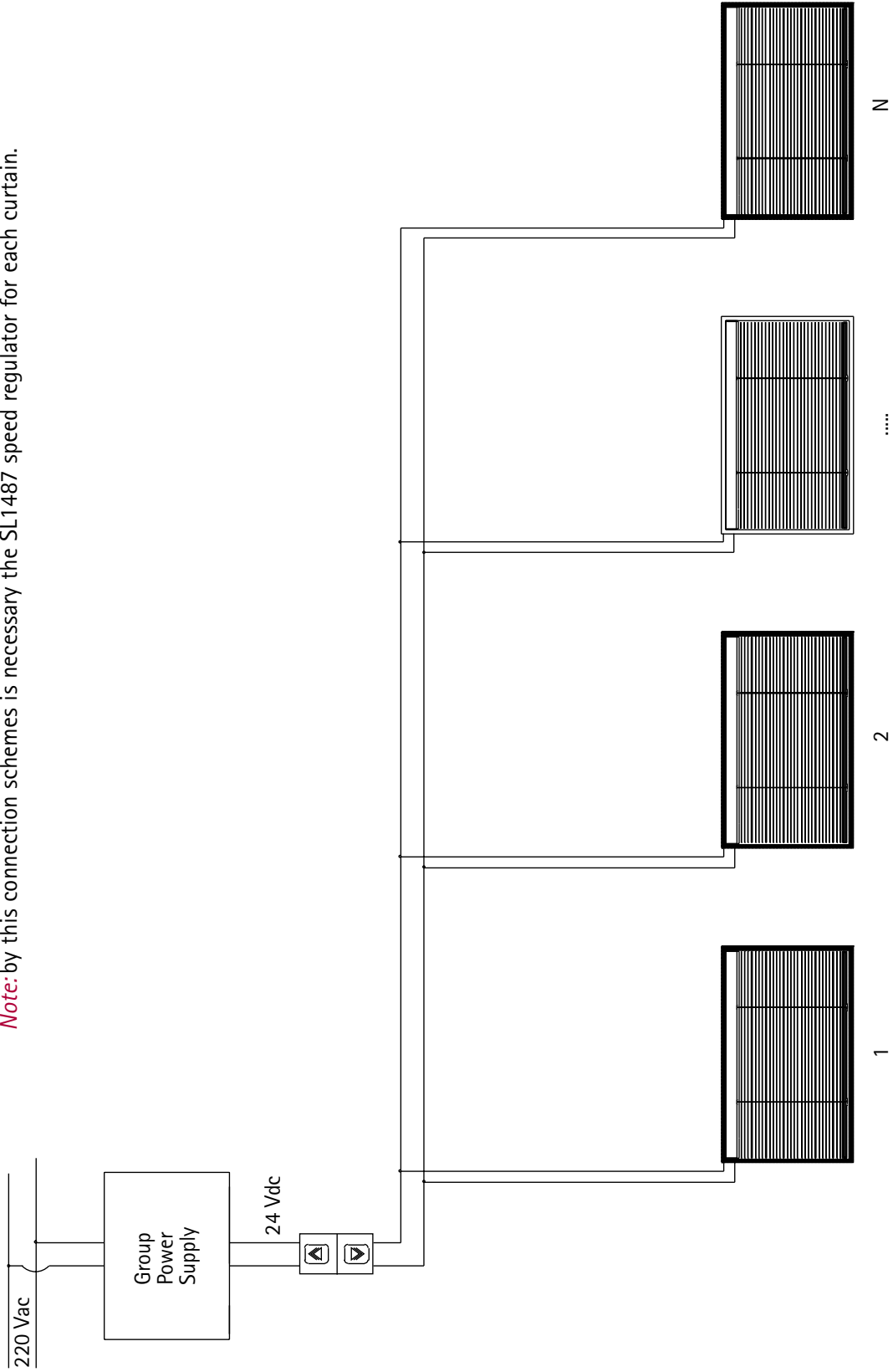
Note: by this connection schemes is necessary the SL1487 speed regulator.



SL27MS Electric Connections various



Note: by this connection schemes is necessary the SL1487 speed regulator for each curtain.



Height	Width		40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
	L	H	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
30	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
40	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
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70	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
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90	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
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110	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
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130	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
140	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
150	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
160	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
170	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
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190	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
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210	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
220	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
230	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
240	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
250	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
260	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
270	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
280	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
290	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
300	MA	MA	MA	MA	MA	MA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

MA Tilt-only feasibility
 M Raising feasibility
 Not-feasible
 Out of warranty

ScreenLine® kit components

On receipt of goods, check the integrity of the package and confirm components are as detailed on the Purchase Order. The elements of the kit comprise **A**:

- venetian blind with head-rail and electric motor with integrated electric socket
- 2 No. extruded side spacer bars (L-profile optional)
- 2 No. U-profile spacer bars
- 3 No. corner keys
- 1 No. corner key with integrated electric plug and silicone tubes for the contactor protection.

Assembly in double-glazed unit

Spacer bars preparation

Fill the spacer bars with molecular sieve **B** and extrude a continuous primary seal of hot butyl to them. **C** (See Manufacturer's quality scheme, page 38).

N.B.: Assemble the spacer bars frame so that special corner key with the integrated contacts will be positioned - top left, when the unit is glazed. The special corner key connects the vertical side spacer bar with the U-profile top spacer bar and is normally viewed TOP LEFT from inside the room

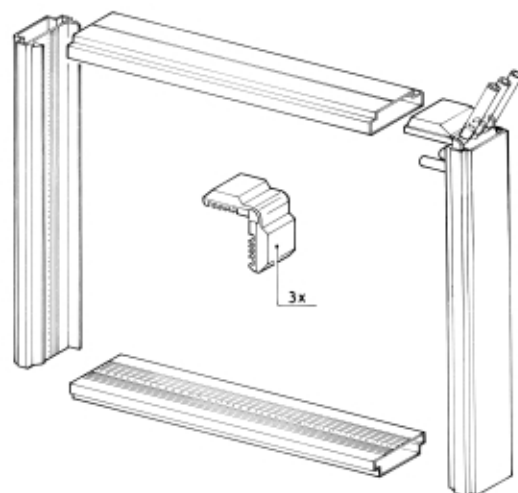
Important: the corner key / spacer bar joints must be fully filled with butyl, taking care not to contaminate the integrated electrical connectors.

Line assembly

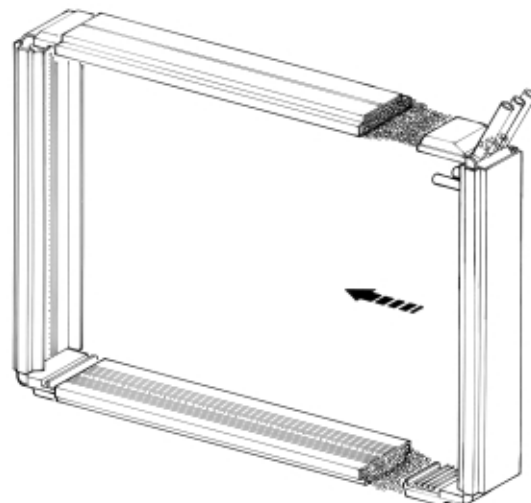
The first glass may be passed through the washing m/c on its base or height.

Remove the blind from the plastic package. Connect the blind head rail to the TOP spacer bar, the one with the special corner key, to form a mechanical seal. **D** Simultaneously insert the corner key plug into the head rail socket.

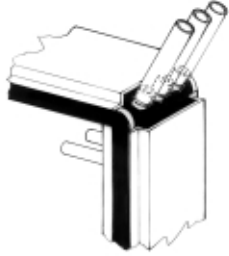
Position the assembled spacer frame and blind onto the first glass ensuring it is parallel and square (avoiding inward deflection of the spacer bars) and press to obtain good adhesion. **E1** The head rail pelmet / fin



A Kit



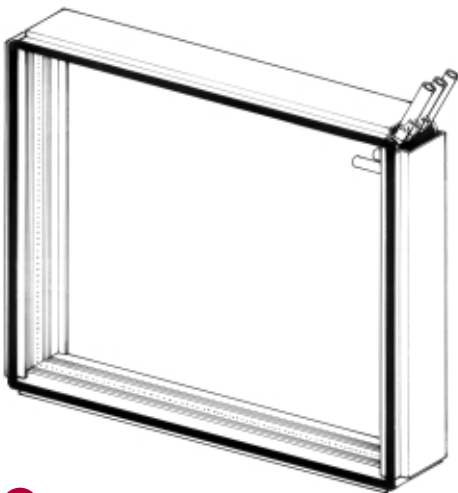
B Desiccant filling



must face the outer glass (i.e. face 2).

When the L-profile spacer is used, the spacer bar fin must be to the same side as the low emissivity coating. Avoid trapping the top slats between the head rail and the L-profile (if used).

Finally assemble the second glass and press. **E2**



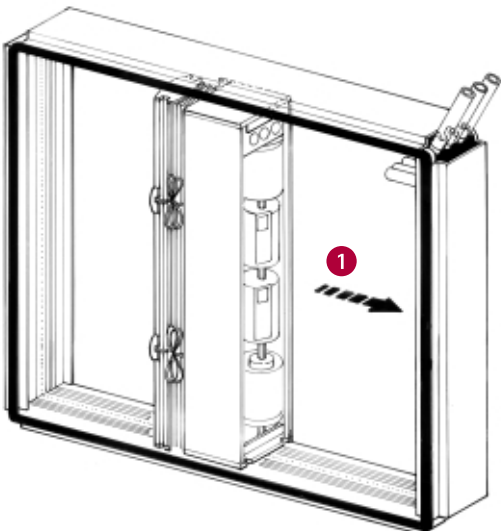
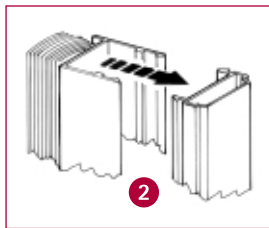
Gas filling

Using the appropriate equipment and following the requisite procedure replace the internal air with argon.

Testing

Prior to applying the final seal, test the blind using appropriate control unit after position the unit vertically with the blind head rail on top. During this operation, check that the distance between the slats and the side spacer bars is uniform. Ensure that the silicone tubes are fully inserted over electric contactors (to the bottom of the key), after testing.

C Butyl application



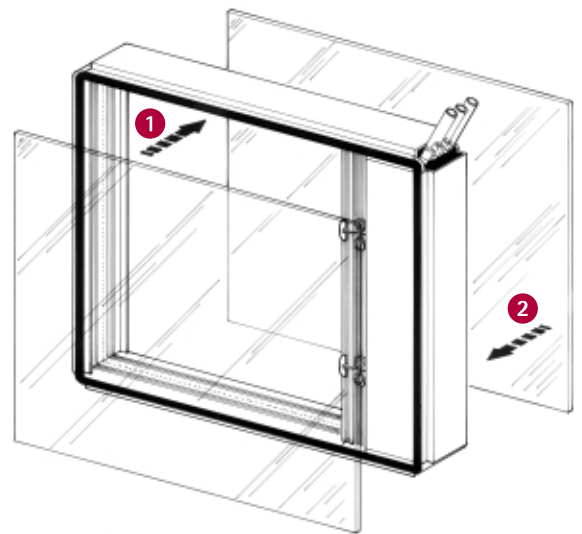
D Blind assembly

Second sealing

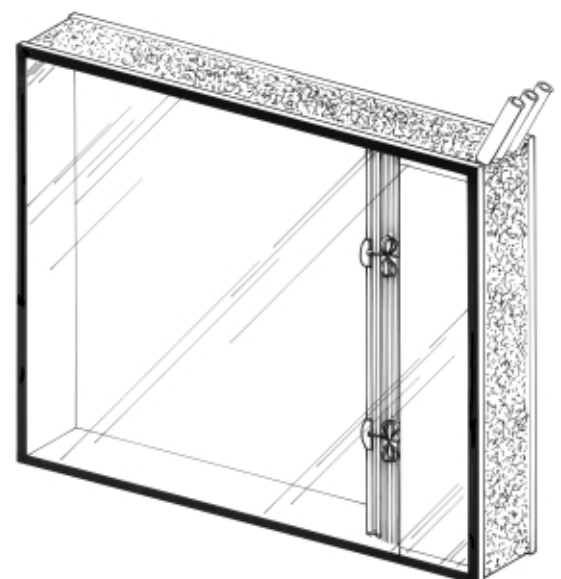
Raise the blind and apply the final seal **F**, leaving the silicone tubes to protect the electric contacts during this process.

After the secondary seal has cured (polymerised), the tubes protecting the electric contacts can be removed by pulling them upwards away from the seal. **GA**

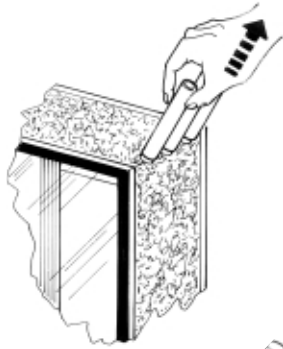
This allows the contactors to be readily connected to external supply line, (see Manufacturer's quality scheme page 38). **GB**



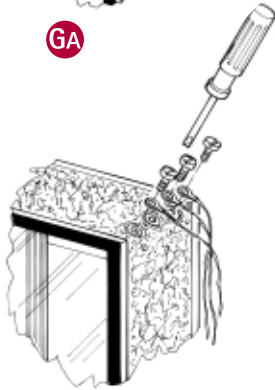
E Unit assembly



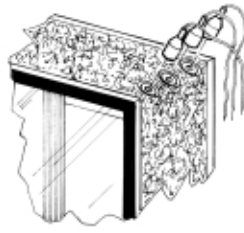
F Final seal



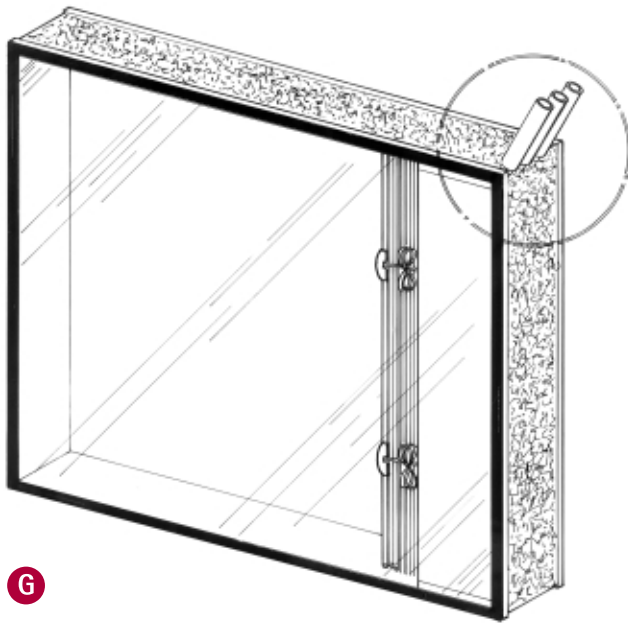
GA



GB



GC



G

Note

The blind must be fully raised prior to putting the glass in any other position than vertical.