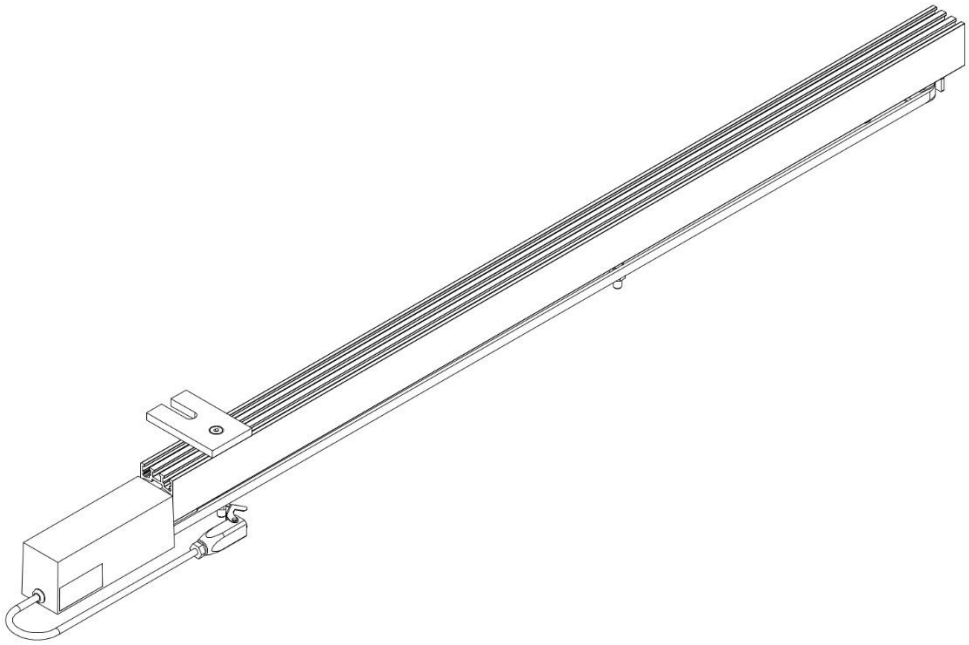
SLIDING SHUTTERS



Motorization

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Building Elegance BV
Pottenbakkerstraat 10
4871 EP Etten-Leur

info@buildingelegance.com

www.buildingelegance.com

MOTORIZATION - IMPRINT

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Declaration of conformity

This product fulfils the basic requirements of the applicable European Directives. The conformity was detected. The original of the Declaration of conformity is available as a separate document from the manufacturer.

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MOTORIZATION – TABLE OF CONTENT

Building Elegance sliding shutter motorization

This document describes the basic information of the Building Elegance sliding shutter motorization. The motorization enables the user to move the shutter left and right by means of two push buttons, a remote control or an external open/close switch of own choice. When the shutter is running near one of the both endpoints it slows down and stop when it reach the endstop. both endpoints it slows down and stop when it reach the endstop.

The motorization provides safety by stopping when obstacles block the path of movement. This will be obtained when an overcurrent of the motor will be detected. After an overcurrent the motor will only run in safety speed, till it reaches one of the both endpoints.

As standard the sliding shutter motor is of a self-braking type. This means that it is not possible, or only with great force, to push the shutter away by hand. Should it be required for certain situations emergency exits) that the shutter can be pushed away manually with little force then an alternative motor type (“free run”) is available. Dimensions and connections are the same alternative motor type (“free run”) is available. Dimensions and connections are the same as for the standard motor.

The motorization for sliding shutters consists out of the following parts;

- Motor unit
- Controller in two versions. A wall mounted and a DIN rail version
- Toothed belt
- Return wheel
- Belt connector

This manual must be read in conjunction with the product manual for sliding shutters. For the electrical components a manufacturer's manual is also available on request.

CE declaration

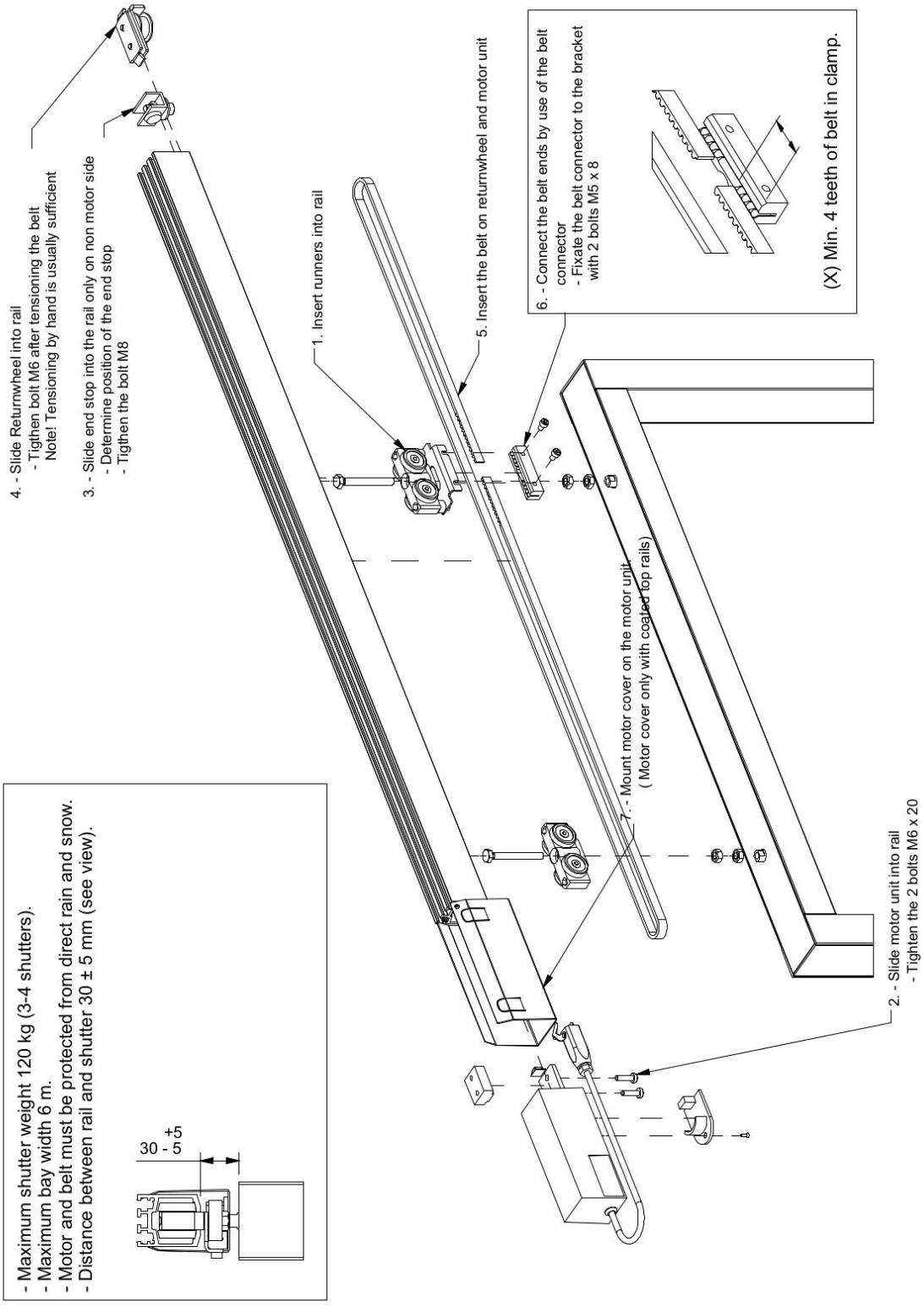
The motorization described in this document conforms to CE applicable standards.

Installation requirements

Please note that all electrical components must be installed by qualified personnel only. Wrongful actions may lead to damage or personal injury.

Motor and belt must be protected from direct rain and snow.

MOTORIZATION – ASSEMBLY COMPONENTS

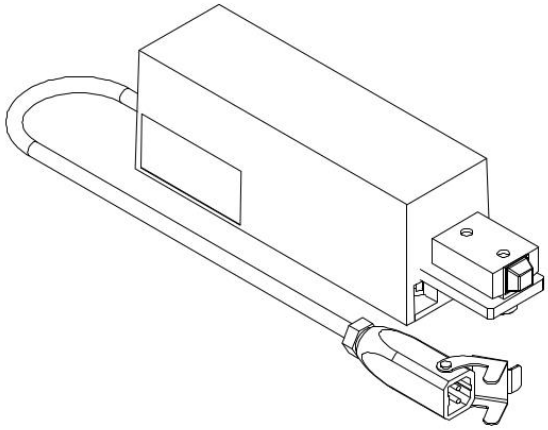


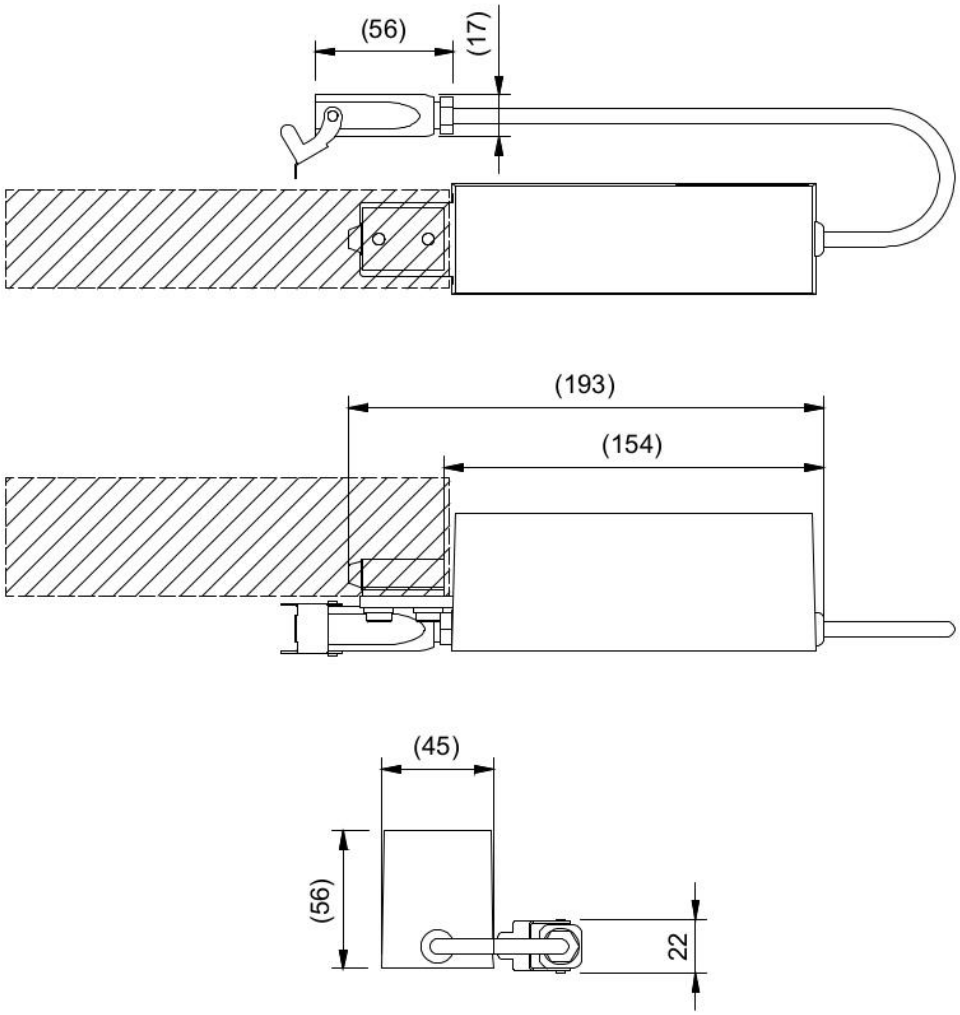
MOTORIZATION – MOTOR SPECIFICATIONS

Motor specifications

Motor type: XS-2/120/MT/SH
Operating voltage: 24 V DC
Operating power: 24 Watt
Max. Operating power: 30 Watt
Current: 1.0 Ampere
Running speed: 12 cm/s
Safety speed: 4 cm/s

Cable length: 0.3 mtrs
Connector: Hirschmann STAS 2





Characteristic values of control BE XS-2/STR

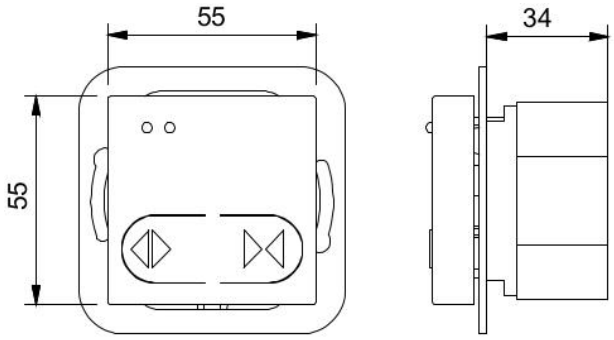
Description	Value
Input voltage	230 V AC
Output voltage	24 V DC
Maximum output current	1,5 A
Power consumption	
- Idle	2 W
- At maximum load	30 W
Control buttons	Open and Close Stop (command in other direction)
Dimensions of the flush mounting case	
- Push-button cover (width x height)	55 x 55 mm
- Depth of the flush mounted fitting (plus cable)	34 mm
Protection	
- mounted	IP 20
- not mounted	IP 00
Operating temperature range Regard the Additions below!	-10 °C to +50 °C
Connection possibilities	- Motor - Control contact, potential free

Characteristic values of engine (combination motor and control)

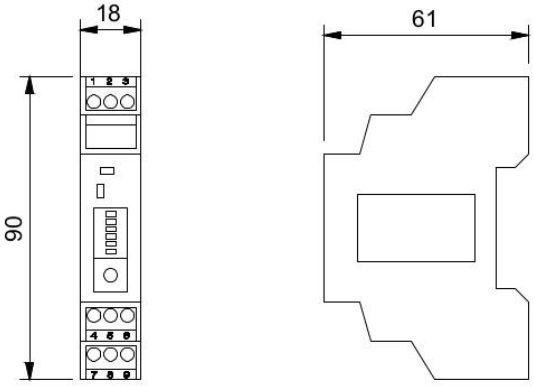
Description	Value
Shutter or door speed	0,1 – 0,2 m/s
Limiting technology	over current measurement
Additional information about the temperature range: The limit technology of the engine is based on an over current measurement. As colder the environmental conditions get as more current is consumed by the motor. Depending on the adjusted parameters at the initial operation and the programming the control unit may limit the engine in a smaller temperature range. Please also refer to the operating and maintenance instructions.	

MOTORIZATION – PARTS DIMENSIONS

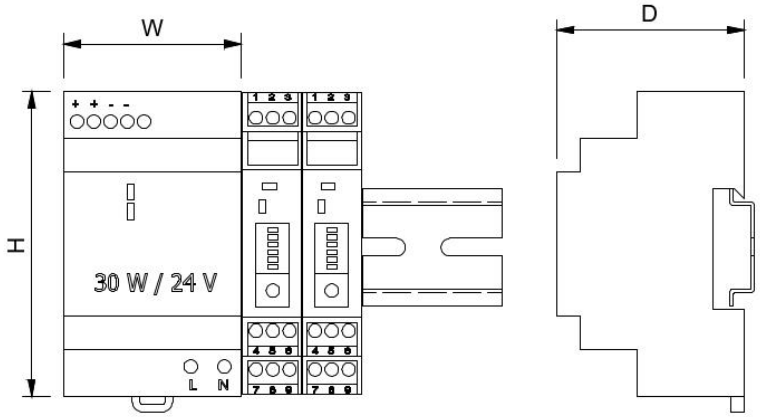
Controller Wall mounting



Controller DIN-rail mounting

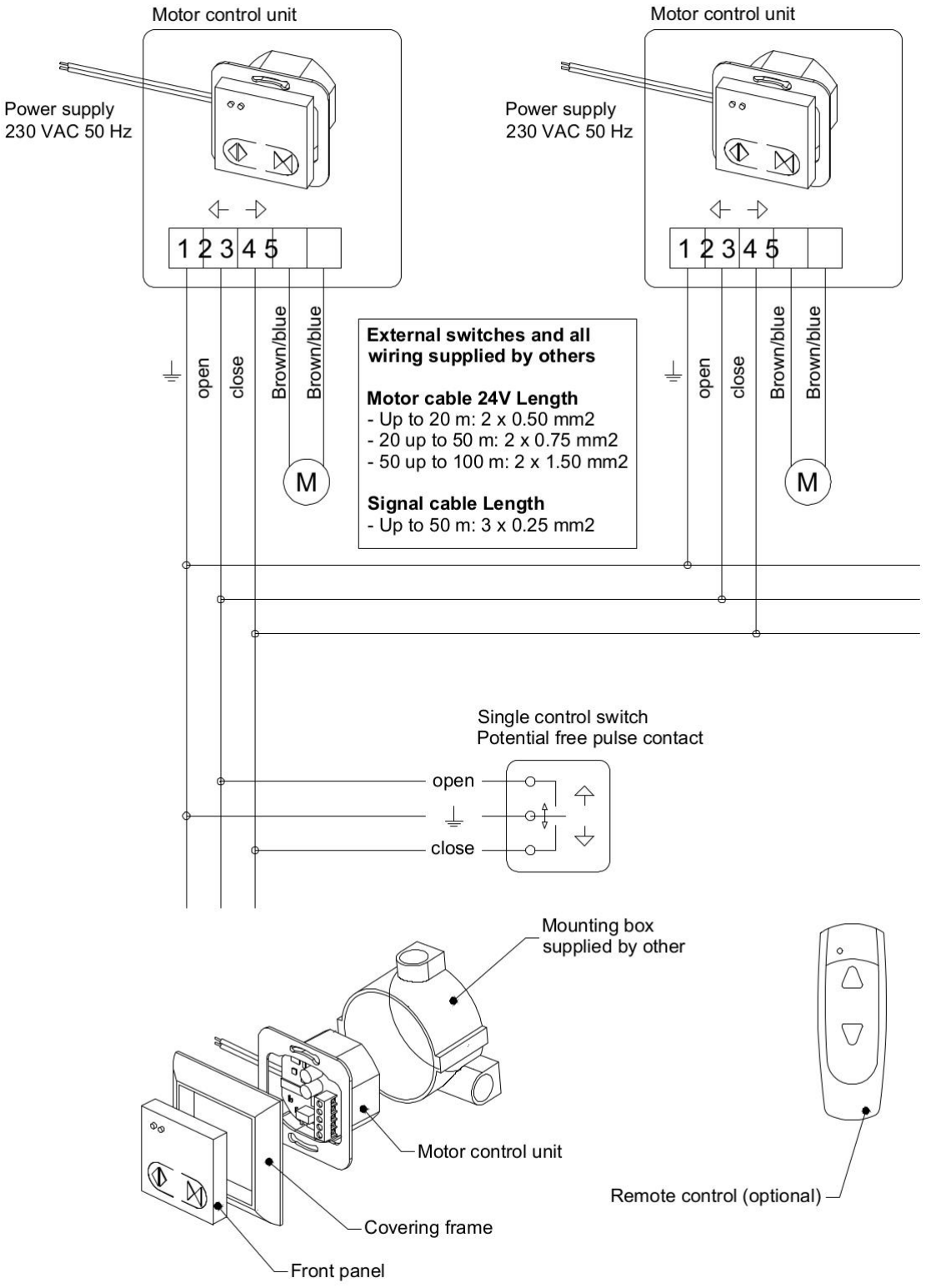


Power supply DIN rail mounting



Dimensions W x H x D			
Type (Watt)		H	D
30	53	91	60
60	71	91	60
100	90	91	60

MOTORIZATION – WIRING DIAGRAM WALL MOUNTING



MOTORIZATION – INITIAL OPERATION WALL MOUNTING

The XS-2 motor control unit controls one sliding shutter motor unit which can drive several shutters. The wall mounted version is intended for installation in flush mounted wall box. It works with a slow stop function. It has buttons on the front, an external switch or other external control signal can be connected. The unit is also available with an integrated RF receiver for a remote control.

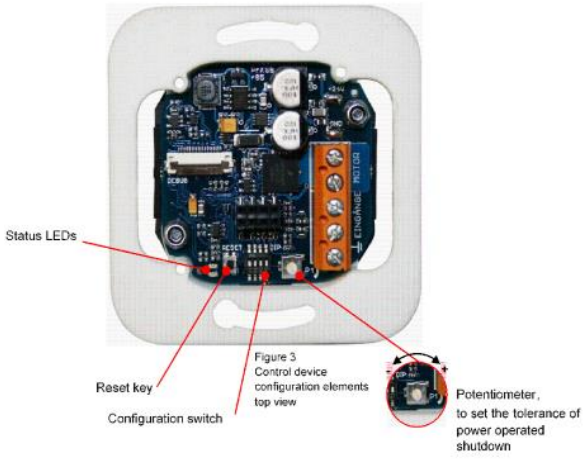


Figure 3
Control device configuration elements top view

The controller has 4 configuration switches to configure the controller.

The standard settings for Building Elegance motor unit XS-2/120

1 off
2 on
3 off
4 off

Optional settings			
Switch	Description	OFF	ON
1	Signal	Pulse signal	Continuous signal
2	Motor type	80 Kg version	120 Kg version
3	Running speed	100%	60%
4	Not in use	Not in use	Not in use

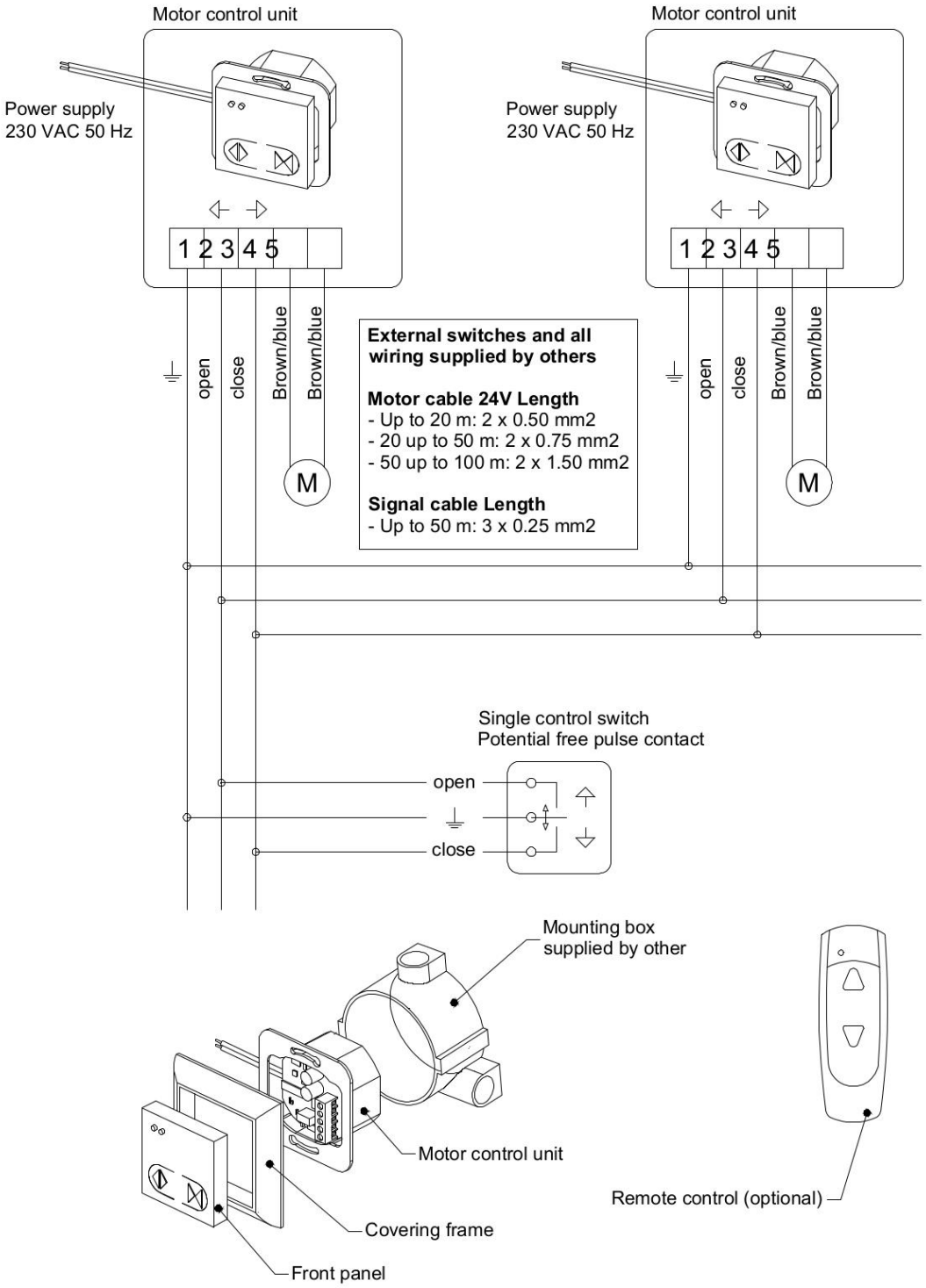
1. Take the front cover off the controller.
2. Put power (230 VAC) on the controller, the red LED light will now blink: two blinks, pause, two blinks, pause, etc.
3. Push the reset button for two seconds, the red LED light will now blink: blink, pause, blink, pause, etc.
4. Check the running direction by pushing the buttons. If the direction is not ok, change the motor wires.
5. Push the reset button again for two seconds, the red LED light will light up continuously, the green light is on when the system is moving. The system will now make a few test runs by itself. When this is finished the red light starts blinking for 30 seconds. In this time you can make extra test runs if you want.
6. When the red light has gone out, the system is ready for use and testing.

When the shutter does not run after step 2, check that all connections are ok.
If that is ok, you can try to increase the current limit by turning the little potentiometer (next to the dipswiches) to the right.

If the motor does not stop but keeps running after reaches the end, the potentiometer needs to be turned to the left to decrease the current limit.

Set up remote control (only for modules with RF receiver)

1. Take the front cover off the controller
2. Push the button shortly to get the module in learn mode (LED blinks)
3. Push a button on the remote control (LED stops blinking).
4. Push the button again shortly to confirm and close learn mode
5. Place the cover on the module


Motor control unit
Power supply
230 VAC 50 Hz
1 2 3 4 5
open
close
Brown/blue
Brown/blue
M
Motor control unit
Power supply
230 VAC 50 Hz
1 2 3 4 5
open
close
Brown/blue
Brown/blue
M
External switches and all wiring supplied by others
Motor cable 24V Length
- Up to 20 m: 2 x 0.50 mm2
- 20 up to 50 m: 2 x 0.75 mm2
- 50 up to 100 m: 2 x 1.50 mm2
Signal cable Length
- Up to 50 m: 3 x 0.25 mm2
Single control switch
Potential free pulse contact
open
close
Mounting box
supplied by other
Motor control unit
Covering frame
Front panel
Remote control (optional)

MOTORIZATION – INITIAL OPERATION WALL MOUNTING

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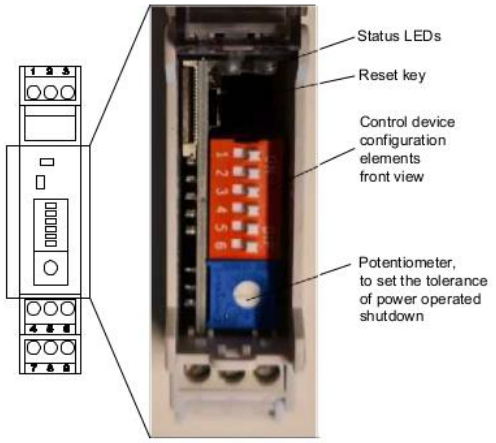

The controller has 6 configuration switches to configure the controller.The standard settings for Building Elegance motor unit XS-2/120

1 off
2 on
3 off
4 off
5 off
6 off

Optional settings			
Switch	Description	OFF	ON
1	Signal	Pulse signal	Continuous signal
2	Motor type	80 Kg version	120 Kg version
3	Running speed	100%	60%
4	Group control	Refer to manual	
5	Group control	Refer to manual	
6	Group control	Refer to manual	

1. Put power (24 VDC) on the controller, the red LED light will now blink: two blinks, pause, two blinks, pause, etc.
2. Push the reset button for two seconds, the red LED light will now blink: blink, pause, blink, pause, etc.
3. Check running direction with switch or other external signal. If the direction is not ok, change the motor wires.
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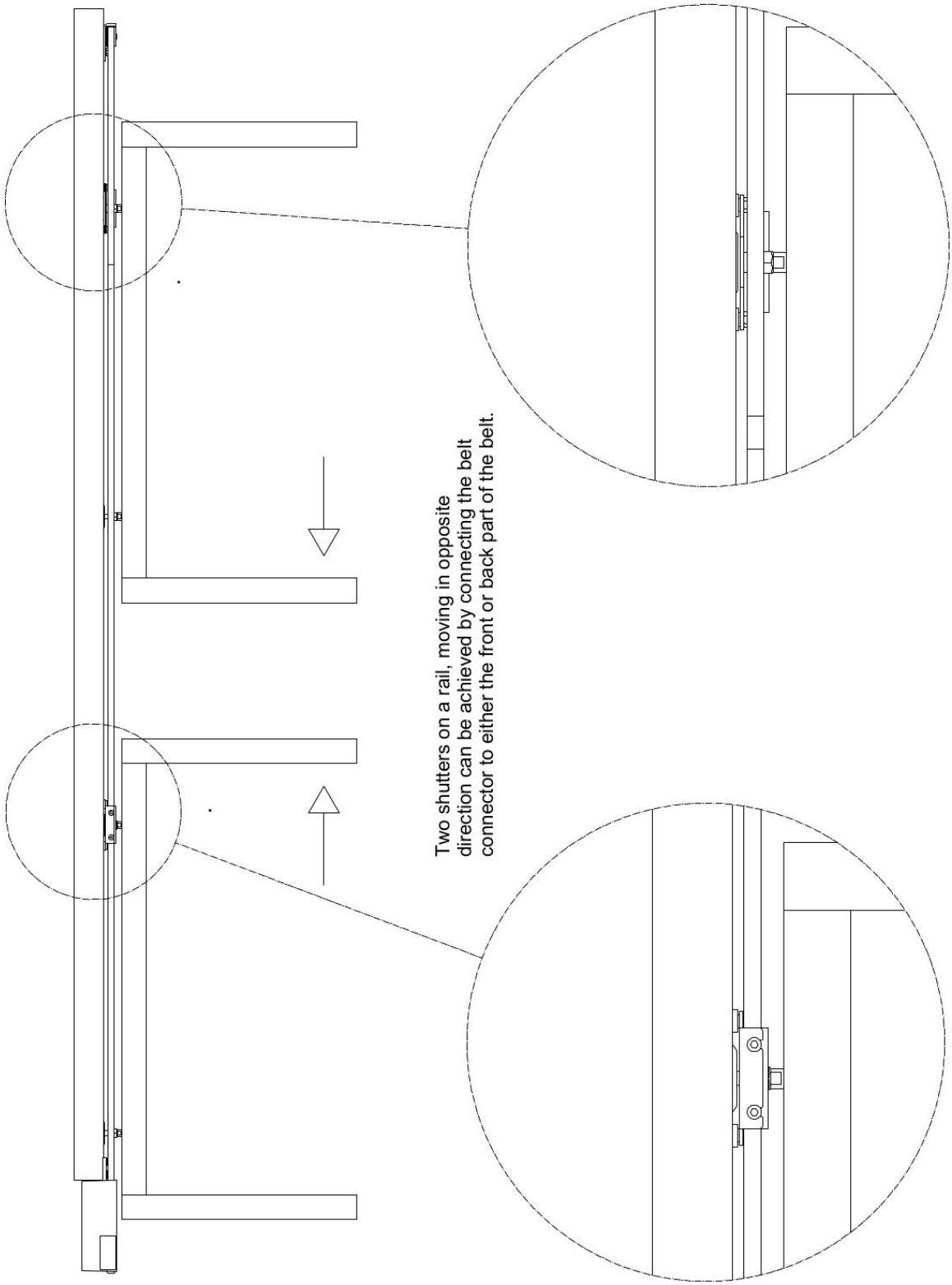
MOTORIZATION – ASSEMBLY OPTIONS



Building Elegance B.V.
Pottenbakkerstraat 10
4871 EP Etten-Leur

Info@buildingelegance.com
www.buildingelegance.com