EN VariEco+-868 roller shutter/awning drive

Keep these instructions in a safe place!
After installation of the tubular drive attach these instructions to the cable fot the electrician.

Device function:

- Commissioning the drive with the assembly cable
- **Quick limit switch adjustment**
  When the drive is shipped from the factory, the quick limit position adjustment is active.
  Only use this function for the first adjustment.
  The limit switches do not switch over during the quick limit position adjustment process. Run to the limit positions. Carry out the re-adjustment via the limit switch adjusting screws after deactivation of the quick limit switch adjustment.
  Further limit position changes are only possible via the limit switch adjusting screw.

Important safety instructions!
Observe the following instructions.
Risk of injury due to electrocution.
The connections to the 230 V mains **must** be made by authorised specialist personnel.
Check the system (roller shutters, awnings) regularly for wear or damage.
The regulations of the local energy supply company as well as the regulations for wet and damp rooms according to VDE 0100 must be followed when making the connections.
Only use unmodified original **eler**o electrical parts.
Keep people away from the system until it is stationary.
When working on the system (servicing, cleaning windows etc.), always disconnect it from the mains supply.

Intended use

- Please ensure that the radio installations are not operated in areas of increased possible interference. (e.g. hospitals, airports ...).
- The radio control is only permitted for devices and units with which a functional interference in hand-held/wall-mounted transmitters or receivers poses no danger for persons, animals or materials or where this risk is covered by other safety appliances.
- The operator has no protection whatsoever from interferences by other radio emitters and local terminals (e.g. also from radio installations), that are normally used on the same frequency range.
- Only use radio receivers with equipment and units approved by the manufacturer.

Optimal use of the radio signal

- Do not bend the antenna.
- Do not shorten or extend the antenna.
- If reception is poor, adjust the antenna.
- Install the antenna so that it is as exposed as possible.
- The minimum distance between two radio drives must be at least 15 cm.

Check the following before installation:

- Only turn the limit switch ring slightly before and during assembly. (It interferes with the result of the end position adjustment)
- The drive is only capable of operation as installed.
- Only perform connecting work with the power turned off.
- Do not connect motor plug with mains on.
- The hanging must be attached to the winding shaft.
- Do not drill in the area of the tubular motor!
- The profile tube must have sufficient clearance from the motor tube.

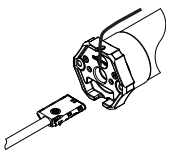
Installation

Observe the following installation instructions!

- The drive must be fixed in such a way that it does not endanger personnel.
- Before installing the drive, all lines and equipment, which are not required for operation, must be removed from the site.
- During installation, during operation and when work is carried out on the system, the opti- on to separate all three poles from the mains must always exist (Hirschmann connector and Hirschmann coupling or a two-pole switch with minimum 3 mm contact gap or all-pole main switch).
- If the drive is controlled by a switch with OFF pre-setting (dead man's button), the momentary contact switch must be fitted at a height of more than 1.50 m and separated from the moving parts. The travel range of the systems must always be visible during operation.
- Moving parts in a drive, which are below 2.5 m, must be protected.
- Set torque and set operating time must be adapted to the requirements of the product which is driven.
- Please note the technical data on the type plate.
- Please note that with this drive (type M and L tubular motors) the smallest internal tube diameter corresponds with 46 mm and 56 mm.
- The drive must be installed so that it cannot get wet.
- Do not install drives in surroundings which are at risk of explosion or in mobile appliances (e.g. motor vehicles).
- Keep children away from the (remote) control unit.

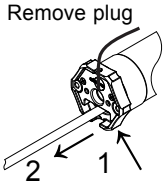
Remove of the motor cable plug

Risk of injury due to electric shock.
When the motor cable plug is removed the supply line **must** have no voltage.

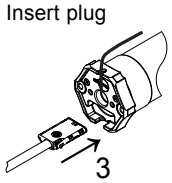


Delivery condition

Remove plug



Insert plug



Remove the motor cable plug

Switch off voltage supply.

1. Press locking mechanism on the plug towards the cable using a screwdriver.
2. Pull out the plug.

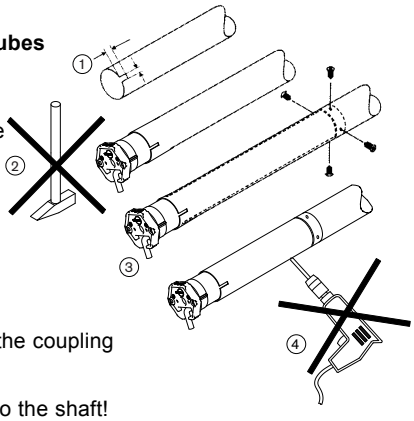
Insert the motor cable plug

3. Switch off voltage supply. Insert plug until locking mechanism engages.

Mounting and initial operation

Shaft assembly

Installation in profile tubes



①On round tubes, cut a slot in the end of the tubes on the drive side (width 4 mm, length 6 mm)!

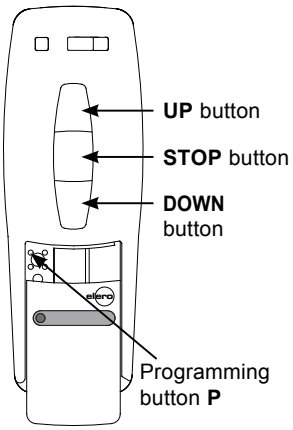
②Push the drive (do not knock in) so that the drive lug engages in the slot.

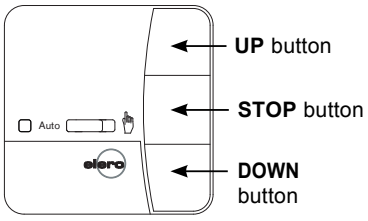
③Screw on or rivet on the coupling (adaptor)!

④Attach the hangings to the shaft! Run in the **DOWN** direction if it is necessary to install the hangings on the winding shaft.

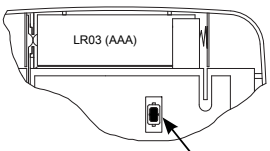
Secure the abutment against axial shifting by riveting or bolting the cross member.

Explanation of ProLine buttons Hand-held/wall transmitter





Back of wall transmitter

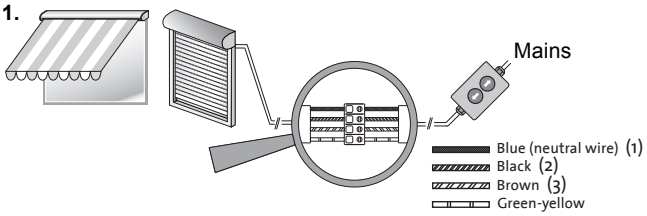


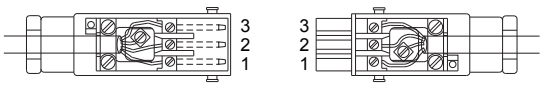
Commissioning

Note: Before you put the drive into the radio mode, you must set the end position.

Assembly cable connection
(only permissible for commissioning or setting procedures)

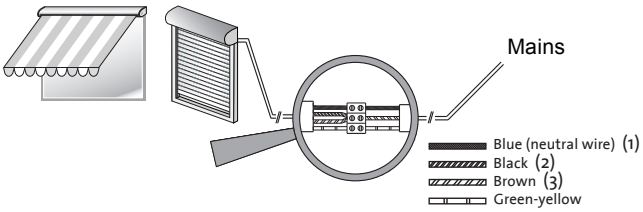
1.

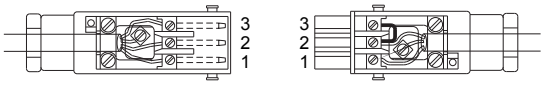




2.Switch on mains.

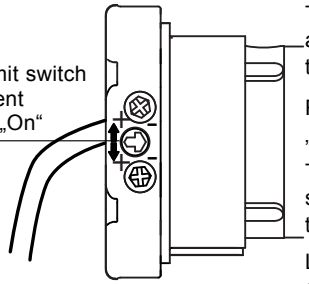
Radio connection (transmitter operation)





2. Switch on mains.

Delivery status/factory setting



The quick limit switch adjustment is **activated** at the factory.

Releasing screw is in the „On“ position.

The arrow of the releasing screw points in the direction of the crown adaptor.

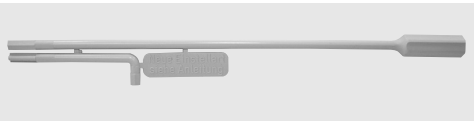
Limit switches are **not** active in the quick limit switch adjustment.

Note: The maximum limit switch range is 35 revolutions of the shaft.

Use the adjusting tool for carrying out the adjustment.

Adjusting tool

Adjusting tool
13 116.3801

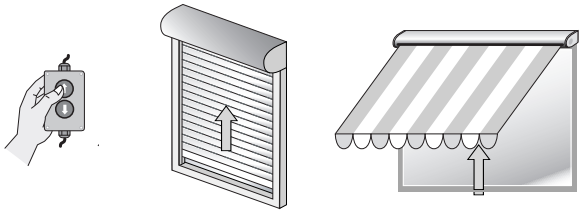


Note: The limit switches will only work after the motor has been installed in the shaft.

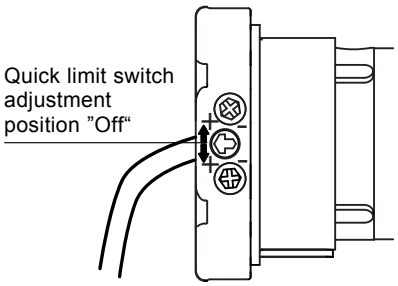
Only at commissioning

Quick limit switch adjustment

1. Attach the hangings to the shaft.
   Run in the **DOWN** direction if it is necessary to move the winding shaft.



2. Use the motor cable to move the hangings in the **UP** direction until you reach the desired limit position.



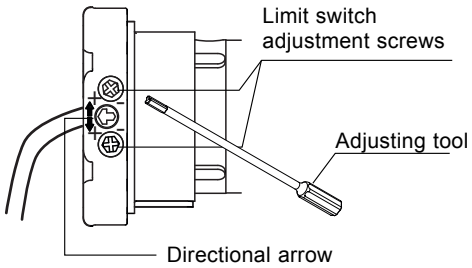
3. Turn the releasing screw to the „Off“ position.
   The arrow of the releasing screw points in the direction of the cable.
   Use an adjusting tool to do so.

4. Both limit positions are now roughly pre-set.
   The fine adjustment must be carried out using the individual adjusting screws.

Adjustment of the end positions

Setting of the upper end position
(Fine adjustment or end position changes)

1. Allow the drive to run fully in the „Down“ direction.
2. Attach the roller shutter to the shaft.
3. Press the **UP** button on the assembly cable and **keep it depressed**.

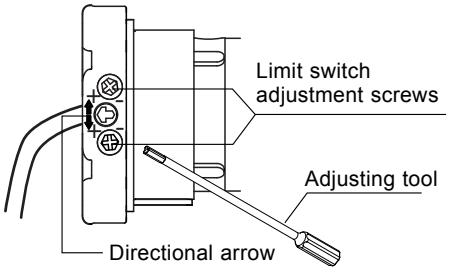


4. Turn the adjusting tool of the **UP** limit switch adjustment screw in the **+** or **–** direction until the end position is reached.
   One turn of the limit switch adjustment screw represents approx. 60° of turning of the winding shaft.

Checking the end positions
Allow the drive to run alternately in both directions until the limit switch switches off.

Setting the lower end position
(Fine adjustment or end position changes)

1. Press the **DOWN** button on the assembly cable and **keep it depressed**.



2. Turn the adjusting tool of the **DOWN** limit switch adjustment screw in the **+** or **–** direction until the final end position is reached.
   One turn of the limit switch adjustment screw represents approx. 60° of turning of the winding shaft.

The directional arrows show the corresponding travel direction of the limit switch screws (4 mm Allen screws).

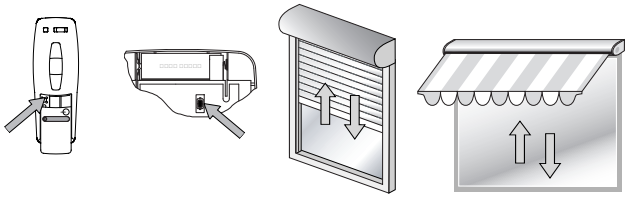
minus (–) = shorter travel
plus (+) = longer travel

Programming the transmitter

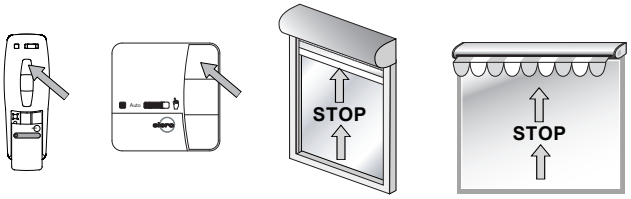
Condition: The drive is in radio mode.
The end positions must have been programmed.
If the end positions have not been programmed, remove the blind from the shaft.

1. Switch off/on mains.

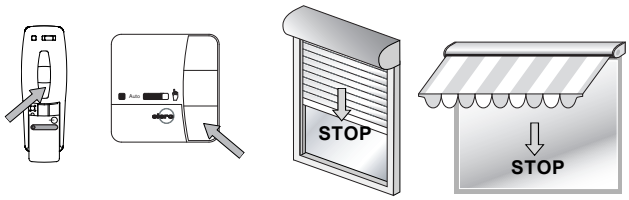
When the mains has been switched off for a short time, the drive is ready to be programmed for 5 minutes.



2. Press programming switch **P** on your transmitter.
The drive runs up and down for 2 minutes.



3. Press the **UP** button **immediately** after the start of upward travel.



4. Press the **DOWN** button **immediately** after the start of downward travel.
The drive will stop.
The transmitter is now programmed.

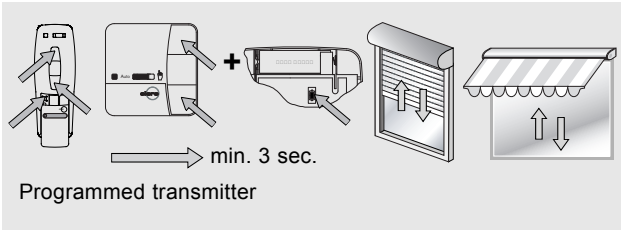
Programming procedure for other transmitters

Programming procedure possible for max. 16 transmitters.

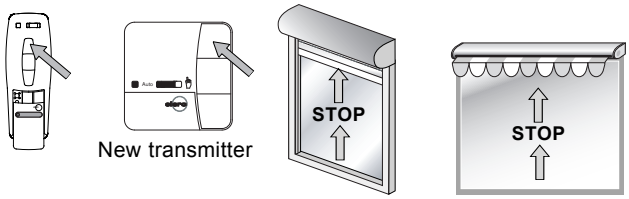
In order to program further transmitters, start with the new transmitter at 1

or

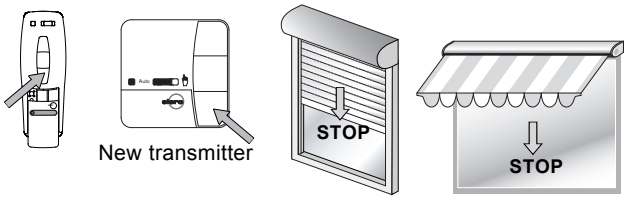
1. Switch off/on mains



2. Press **simultaneously:**
UP and **DOWN** buttons and programming button **P** on the programmed transmitter for min. 3 sec.
The drive runs up and down for 2 minutes.



3. Press the **UP** button **immediately** after the start of upward travel.



4. Press the **DOWN** button **immediately** after the start of downward travel.
The drive will stop.
The transmitter is now programmed.

Stopping the radio programming mode

→ see transmitter instructions

Deletion of individual transmitters

→ see instructions for the control unit

Deletion of all transmitters

→ see instructions for the control unit

Notes on troubleshooting

Troubleshooting

Fault	Possible cause	Remedy
• Radio programming mode does not start	• Faulty connection • Drive not connected to mains • Time frame already expired (5 min) • Thermostat has triggered • Radio transmitter has no battery	• Check connection • Check mains voltage • Interrupt mains voltage briefly • Allow drive to cool down • Check transmitter (LED must be illuminated)
• Radio transmitter not in programming mode	• UP/DOWN button pressed too late. Note time frame (1 sec.) • Sender ist bereits eingelernt	• Restart radio programming mode • Push STOP button
• Drive runs only in one direction	• Faulty connection	• Check connection
• The drive does not switch off via the limit switch • Drive does not react	• Limit switch ring is not being driven • Limit switch is not adjusted	• Readjust installation and limit switches via the limit switch adjusting screws • Set limit switch
• Drive is no longer reacting	• Wrong connection • Thermostat has triggered	• Readjust connection • Allow drive to cool down

EC DECLARATION OF CONFORMITY

We hereby declare that the following mentioned product/s meet/s the **Machinery Directive 2006/42/EC**.

Product designation: **Tubular Drive**

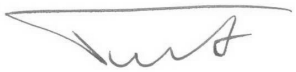
- VariEco+ S-867 / -868 / -915 all versions
- VariEco+ M-867 / -868 / -915 all versions
- VariEco M-868 / -915 all versions
- VariEco+ L-868 all versions
- VariEco L-868 all versions

Description: Actuator for shutters and awnings with 867 / 868 / 915 MHz receiver

The conformity of the above mentioned products with the relevant health and safety requirements is taken into account by the following directives and standards:

- R&TTE Directive 1999/5/EC
- Low Voltage Directive 2006/95/EC
  DIN EN 60335-2-97 (VDE 0700-97):2009
- DIN EN 14202:2004

Beuren, 30.05.2012



Ralph Trost
-CE Manager-, -Representative documentation -