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

Device functions:
- Blind protection (torque limiting)
- Commissioning the drive with the assembly cable

As-delivered condition (commissioning mode)
- Setting end positions

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 shutter) 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 eLERO 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.

Check the following before installation:
- The drive is only capable of operation as installed.
- Only perform connecting work with the power turned off.
- The blind must be attached to the winding shaft.
- The profile tube must have sufficient clearance from the motor tube.
- Make sure there is sufficient axial play (1–2 mm)

Installation in profile tubes

1. Push drive with relevant adapter and limit switch into the profile tube.
   Protect the motor cable in order to avoid it brushing against the roller shutter. Avoid kinking the cable.
2. Secure the counterpart support to prevent axial movement, e.g. screw or rivet on idler.
   Secure the drive axially in the support.
3. Attach the blind to the shaft!

Remove of the motor cable plug

Risk of injury due to electrocution.
When the motor cable plug is removed the supply line must be volt free.

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.
Types of installation

Different types of installation are possible:

<table>
<thead>
<tr>
<th>Type of installation</th>
<th>Possible with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fixed upper stop lower stop freely adjustable</td>
<td>T-strap, tapes, belt, limit plugs, angle bracket</td>
</tr>
<tr>
<td>2. Fixed upper and lower stop</td>
<td>Anti push-up device, limit plugs, angle bracket</td>
</tr>
<tr>
<td>3. Upper stop freely adjustable fixed lower stop</td>
<td>Anti push-up device</td>
</tr>
</tbody>
</table>

Connection example, RolSmart M-K Tubular Motor 230 V/50 Hz

Note:
The motor controls in up/down direction must be locked against each other.
A reversing delay of at least 0.5 sec. must be ensured.

Start up

Please note: The RevoLine RolSmart M-K requires a defined limit stop (upper or lower limit position).
For free programming of both positions, please select a RevoLine RolTop.

Note: The drive is in commissioning mode when the roller shutters are delivered.

Assembly cable connection

1. Switch on mains.
You can now set the end positions with the assembly cable.

Please note: Press the travel key until the drive signals the transition into the programming mode, by a short automatic STOP.
You can now program the end positions.

Note: The blind protection system is only adapted to the blind after a complete, uninterrupted upwards and downwards travel.

Note: Parallel switching only possible with sequencing relay.

Connection/Installation/Commissioning
End position setting
Installation Method 1: Fixed upper stop/lower stop freely adjustable

Note: Ensure that the equipment is correctly connected.

1. Move the blind up to approx. 5 cm before the upper limit stop. The drive starts up slowly with a short STOP.

2. Press the UP momentary contact switch again. Approach the upper limit stop. The drive switches off automatically when it reaches the limit stop.

3. Press the DOWN momentary contact switch until the drive stops automatically. The upper limit stop is programmed.

4. Press the DOWN momentary contact switch again. Move the blind down until it is a short distance above the desired lower limit stop. The drive starts up slowly with a short STOP.

5. Travel to the desired lower limit stop. It is possible to make corrections using the momentary contact switches.

6. Press the UP momentary contact switch until the drive stops automatically. The lower limit has been set. Setting of the end positions is now complete.
End position setting
Installation Method 2: Fixed upper and lower stop

Installation Method 2: Fixed upper and lower stop

Note: Ensure that the equipment is correctly connected.

1. Move the blind up to approx. 5 cm before the upper limit stop. The drive starts up slowly with a short STOP.

2. Press the UP momentary contact switch again. Approach the upper limit stop. The drive switches off automatically when it reaches the limit stop.

3. Press the DOWN momentary contact switch until the drive stops automatically. The upper limit stop is programmed.

4. Press the DOWN momentary contact switch again. Run the blind until shortly before the lower limit stop. The drive starts up slowly with a short STOP.

5. Travel slowly to the lower limit stop. The drive switches off automatically when it reaches the limit stop.

6. Press the UP momentary contact switch until the drive stops automatically. The lower limit has been set. Setting of the end positions is now complete.
End position setting
Installation Method 3: Upper stop freely adjustable/ fixed lower stop

Installation Method 3: Upper stop freely adjustable/ fixed lower stop

Note: Ensure that the equipment is correctly connected.

1. Move the blind up to approx. 5 cm before the desired upper limit stop.
The drive starts up slowly with a short STOP.

2. Press the UP momentary contact switch again.
Go to the desired upper end position.
It is possible to make corrections using the momentary contact switches.

3. Press the DOWN momentary contact switch until the drive stops automatically.
The upper limit stop is programmed.

4. Press the DOWN momentary contact switch again.
Run the blind until shortly before the lower limit stop.
The drive starts up slowly with a short STOP.

5. Approach the lower limit stop.
The drive switches off automatically when it reaches the limit stop.

6. Press the UP momentary contact switch until the drive stops automatically.
The lower limit has been set.
Setting of the end positions is now complete.
Changing/Deleting the limit positions

1. Switch on mains.

2. Move the blind to an intermediate position.

3. Press both momentary contact switches on the assembly cable simultaneously.

   The drive issues a weak acoustic signal after 5 sec.

   Deletion of the limit positions is complete.
<table>
<thead>
<tr>
<th>Fault</th>
<th>Possible cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive stops during travel</td>
<td>Limit positions are not set</td>
<td>Set limit positions</td>
</tr>
<tr>
<td>Drive stops after short travel</td>
<td>End position programmed</td>
<td>Set second limit position</td>
</tr>
<tr>
<td></td>
<td>Roller shutter stiff</td>
<td>Check smooth running of the roller shutter</td>
</tr>
<tr>
<td>Drive does not react to travel commands</td>
<td>No power supply</td>
<td>Check mains voltage</td>
</tr>
<tr>
<td></td>
<td>Thermostat has triggered</td>
<td>Allow drive to cool down</td>
</tr>
<tr>
<td>Drive runs only in one direction</td>
<td>Faulty connection</td>
<td>Check connection</td>
</tr>
<tr>
<td>Drive does not learn in limit positions</td>
<td>Random travel before actual limit position</td>
<td>Delete limit positions</td>
</tr>
<tr>
<td></td>
<td>act limit position setting</td>
<td>Re-programme limit positions</td>
</tr>
<tr>
<td></td>
<td>Travel to limit position/stop too short</td>
<td>Drive has to travel to short STOP</td>
</tr>
</tbody>
</table>
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

- RolTop S all versions
- RolTop M all versions
- RolTop L all versions
- RolSmart M all versions

Description: Actuator for shutters

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

- EMC Directive 2004/108/EC
- Low Voltage Directive 2006/95/EC
- DIN EN 14202:2004

Beuren, 31.05.2012

[Signature]

Ralph Trost
-CE Manager-, -Representative documentation -