

Tubular motor - 20 series



Keep these instructions in a safe place!

After installation of the tubular motor attach these instructions to the cable for the electrician.

Device functions:

- · Blind protection (torque limiting)
- · Commissioning the tubular motor 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 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 electrical parts. Do not drill in the area of the tubular motor! Keep people away from the system until it is stationary.

When working on the system (servicing, cleaning windows etc.), always disconnect the system from the mains supply.

Check the following before installation:

- The tubular motor 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



Observe the following installation instructions!

- The tubular motor must be fixed in such a way that it does not endanger personnel.
- Warning! Before installing the tubular motor, 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 option to separate all three poles from the mains must always exist (a two-pole switch with minimum 3 mm contact gap or all-pole main switch).
 - If the tubular motor 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 tubular motor, which are below 2.5 m, must be guarded.
- 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 tubular motor (type S and M tubular motors) the smallest internal tube diameter corresponds with 46 mm.
- The tubular motor must be installed so that it cannot get wet.
- Do not install tubular motor 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 electrocution.

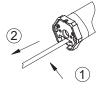
When the motor cable plug is removed the supply line **must** be volt free.



Delivery condition



Remove plug



Insert plug



Remove the motor cable plug

Switch off voltage supply.

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

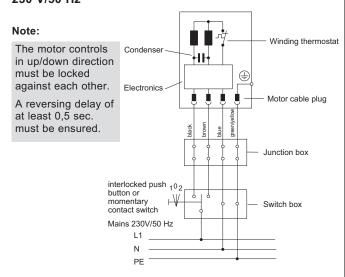
Insert the motor cable plug

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



Connection/Installation/Commissioning

Connection example, tubular motor – 20 series 230 V/50 Hz



Note: You can connect several tubular motors – 20 series in parallel.

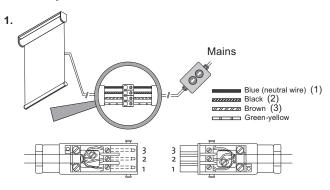
parallel.

Please note the maximum control capacity of the control unit.

Start up

Note: The tubular motor is in commissioning mode when the –roller shutters are delivered.

Assembly cable connection



2. Switch on mains.

You can now set the end positions with the assembly cable.

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

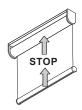
Note: The blind protection system is only adapted to the blind after a complete, uninterrupted upwards and downwards travel.

Upper/lower limit position freely programmable

Upper/lower limit position freely programmable

Note: Ensure that the equipment is correctly connected.





 Move the blind up to approx. 5 cm before the desired upper limit stop.

The tubular motor 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.

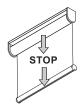




3. Press the **DOWN** momentary contact switch until the tubular motor stops automatically.

The upper limit stop is programmed.

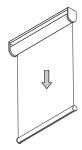




Press the **DOWN** momentary contact switch again.
 Move the blind down until it is a short distance above the desired lower limit stop.

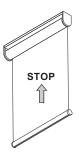
The tubular motor starts up slowly with a short STOP.





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





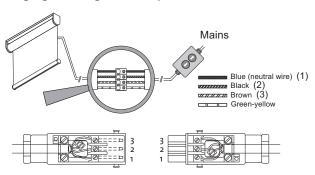
6. Press the **UP** momentary contact switch until the tubular motor stops automatically.

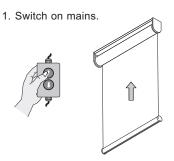
The lower limit has been set.

Setting of the end positions is now complete.

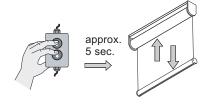
Changing/Deleting the limit positions Troubleshooting

Changing/Deleting the limit positions





2. Move the blind to an intermediate position.



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

The tubular motor travels up and down briefly after approx. 5 seconds.

Deletion of the limit positions is complete.

You can now re-programme the limit positions.

Troubleshooting

Fault	Possible cause	Remedy
Tubular motor stops during travel	Limit positions are not set Tubular motor is in setting mode	Set limit positions
Tubular motor stops after short travel	End position programmed System stiff	Set second limit position Check smooth running of the system
Tubular motor runs only in one direction	Faulty connection	Check connection
Tubular motor does not react	No power supply Thermostat has triggered	Check mains voltage Allow drive to cool down
Tubular motor does not learn in limit positions	Random travel Travel to limit position/stop too short	Delete limit positions Re-programme limit positions Tubular motor has to travel to short STOP