
Mounting- and Operating Instruction

troll

Article No. 2600



VBD 399-1 (06.02) GB

WR
RADEMACHER

Dear Customer, ...



...with the purchase of the TUBE MOTOR CONTROL you have decided in favour of a quality product from the House of Rademacher. We thank you for your confidence.

This instruction...

...describes the mounting and the electrical installation of your TROLL.



Please read through this instruction completely. Observe all safety advices before starting with your work. Please keep this instruction for further reference.

The guarantee expires in the case of damages occurring from not observing this instruction and the safety advices. We do not accept any liability for indirect damages resulting from this.

Overall View



Installation-
housing
*without
illustration*

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Explanation of Signs



Danger to life caused by electric shock

This sign indicates dangers, when working on electrical connections, components, etc. It requires safety measures for the protection of health and life of the person concerned.



Here it concerns your safety

Please do observe and obey all instructions marked like this.

COMMENT

In this way we draw you attention to the perfect function of important contents.



The necessary steps to be taken are indicated in form of enumeration.

Correct Application



Local operation

The TROLL tube motor control is only to be used for the connection and control of a tube motor. The tube motor has to be equipped with an end limit switch (mechanic or electronic).



Please do observe the instructions given by the motor manufacturers regarding switching time and maximum operating time.

Operating Conditions

- ◆ Do only operate the Troll in dry rooms.
- ◆ The mounting place has to be equipped with a power supply of 230 V/50 Hz including an installed clearing device (safety fuse) for the electrical connection.

Wrong Application



It is not allowed to connect or control other consumers or facilities, than the ones stated above.

Do only use original parts of the manufacturer.

The TROLL roller shutter control and the Rademacher tube motors are coordinated components. Non-original components, which replace or influence the function of the Troll are to be employed only after being released particularly by Rademacher GmbH. As manufacturer we do not accept any guarantee for the application of non-original components and the indirect damages resulting from this.

Safety Instructions



Danger to life exists caused by electric shock

The electrical connection of the Troll is only allowed to be executed by an authorized electrician. Observe the regulations of the local power supplier.

- ◆ Before starting to execute the electrical connection switch the power line/connecting point in an idle condition and secure it against restoring power.
- ◆ Control if the power line/connecting point is really in an idle condition.

Safety Instructions



The application of defective appliances can endanger people and cause damages (electric shock, short circuit).

- ◆ Before mounting examine the Troll for not being damaged and do never use defective or damaged appliances.
- ◆ In this case please do contact our service department.



Incorrect executed repairs can endanger your life caused by electric shock or it can lead to the destruction of the Troll.

Please have all your repairs on the Troll executed by an authorized service department.

Functional Description



The Troll serves to control the tube motors and it can be mounted in each commercial flush box using the enclosed installation housing.

The different operating modes and functions:

- ◆ Manual mode
 - with the operating keys on the appliance
 - with the assistance of an external sensor
- ◆ Automatic mode
 - simple time automatic with an opening and closing time (adjustable)

Manual mode

Operation by hand is always possible

Using manual mode the roller shutter can be opened/closed with the (▲) UP and (▼) DOWN key and stopped again.

Functional Description



The manual operation is possible with ...

- ◆ the operating keys on the appliance
 - ◆ with the assistance of an external switch
- In addition, the parallel connection of several Trolls on one external switch permits the mutual “remote” control of several roller shutter drives.

Automatic mode

You can take the current time as opening and closing time for your roller shutter. In this case, the switching times are valid for all weekdays. In addition, the automatic mode can be switch on or switched off.

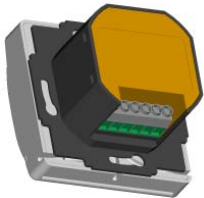
Regarding power failure, a time of approximately 10 minutes can be overcome, but afterwards, the switching times have to be readjusted.

Before the electrical connection



Assembly and electrical connection of the Troll...

... are only to be executed with the enclosed installation housing. The connection terminals are located on the bottom side of the installation housing.



Limit stops adjustment of the tube motor

Before the final electrical connection is executed the limit stops of the tube motor have to be adjusted. Please do observe the details of the respective operating instructions.



You are urgently requested to adjust both limit stops as otherwise malfunction can occur.

Safety instructions/Electr. connection



Danger to life exists caused by electric shock.
The electrical connection of the Troll is only allowed to be carried out by an authorized electrician. Please do observe the safety instructions stated on page 8.



Faulty wiring can lead to short circuit and to the destruction of the appliance.
◆ Please do observe the sequence of the pin connection.

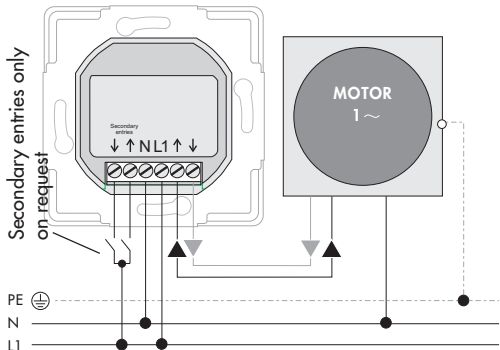


◆ Please do observe the details regarding the electrical connection stated in the operating instruction of your tube motor.

Electrical connection



Basic circuit diagramm



Mounting Instructions/Procedures



In addition, the following is required

1 x 58-flush socket according to DIN 49073.

(We recommend a deep socket)

1 x Covering frame, enclosed (*)

* The Troll can be integrated with most commercially available and frame programs (see page 24).

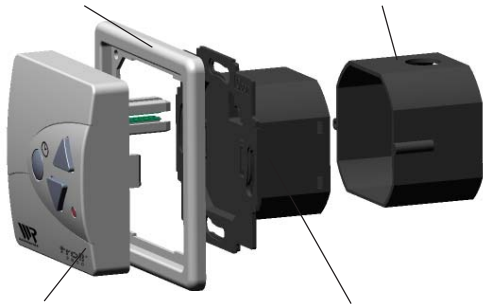
- ▼ Put power supply in an idle condition.
- ▼ Electrical connection (if not already executed).
- ▼ Push installation housing into the flush box and tighten with the corresponding screws.
- ▼ Put the covering frame on.
- ▼ Insert the Troll carefully.
- ▼ Switch on power supply.

Mounting construction



Covering frame

Flush box



Troll control

Installation housing

Adjustments/Important Instructions



Observe key symbols



This means: press or tip the key



This means: let the key go

Start-up of the troll



Connect current

The Troll is ready for operation immediately after switching on, provided the limit stops of the tube motor are adjusted.

Adjust opening and closing time

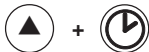


Current time is taken as opening time



press and hold

To confirm the control LED is flashing twice shortly and the roller shutter moves up.



let the keys go...

...as soon as the control LED illuminates.

Current time is taken as closing time



As described above, only with the DOWN (▼) key.

Operating the Troll/Manual Mode



The operation by hand is in every operating mode possible and it has priority before the automatic mode.



UP

DOWN

The roller shutter moves to the corresponding limit stop.

Stop the roller shutter



or



press shortly

Operating the Troll/Manual Mode



Automatic ON/OFF



1 s

press

Observe the LED conditions

LED ON = Automatic ON

LED OFF = Automatic OFF

Remote Control with External Switch



It exists the possibility to operate the Troll with an external switch or another control.

Switching sequence with external sensor

Ext. UP press (▲) key the roller shutter moves up

Ext. UP tip (▲) key the roller shutter stops

or

Ext. DOWN press (▼) key change direction of rotation

The same applies for the DOWN (▼) direction

COMMENT

If required, several Trolls can be connected parallel to a manual switch. They can be operated by remote control. In this case, the tube motors are synchronized with each switching process by means of a switching logic.

What to do, if ...?



... the red LED is flashing?

Cause: Power failure longer than 10 minutes

Solution: Remove the cause for the power failure and verify the appliance afterwards. The adjusted switching times are deleted. Readjust the switching times.

... the roller shutter does not react on the adjusted time?

Cause: Possible power failure or the automatic is switched off.

Solution: Verify the red LED. The LED has to illuminate in automatic mode. In case of power failure readjust both switching times.

Technical Data



Supply Voltage: 230 V/50 Hz

Switching Capacity: 8 (4) A

Protection class: II

Standby-Capacity: 2 W

Secondary Entries: 2

Breaking Voltage of
Secondary entries: 230 V

Connecting cross section: 3 x 1,5 mm²

Mounting mode: concealed

Dimensions: 70 x 70 x 17,8 mm

Mounting Depth: 34 mm

Permitted Ambient Temp.: 0 to 40 °C

Suitable Switch programmes



Manu- facturer	Serie	Colour
Jung	LS 990 Stainless steel	white/alpin white stainless steel
Busch-Jaeger	impulse	alpin white/brilliant black
GIRA	Standard system Trias-Form Trias Facet Trias Gala S-Color System	creme white/pure white creme white/pure white/brown pure white creme white/brown/metallic pure white pure white/brown
PEHA	Dialog Tangenta	white/pure white pure white/grey white
Kopp	Vision Noblesse Rio Objekt 3000	arctic-white/brown/pearl white aranja/platinum brilliant white/antic-white brown/arctic-white

Guarantee conditions



Rademacher Geräte-Elektronik GmbH & Co. KG offers a **24 months guarantee** for new appliances mounted according to the mounting instructions. The guarantee covers all construction faults, material faults, and fabrication faults. Further claims, especially regarding the taking over of mounting and dismantling cost do not exist.

Not covered by the guarantee are faults and defects due to:

1. Defective mounting or installation
2. Non-observance of the mounting and operating instructions
3. Improper operating or stressing
4. External influences, f. ex. damages caused by shocks, impacts, or weather influences
5. Repairs and modifications executed by unauthorized third parties
6. Application of unsuitable accessories.

Defects occurring within the guarantee period are removed free of charge by Rademacher Geräte-Elektronik GmbH & Co. KG either by repairing or replacement of the corresponding parts. There is no prolongation of the original guarantee period in the case of compensation delivery for guarantee reasons.

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