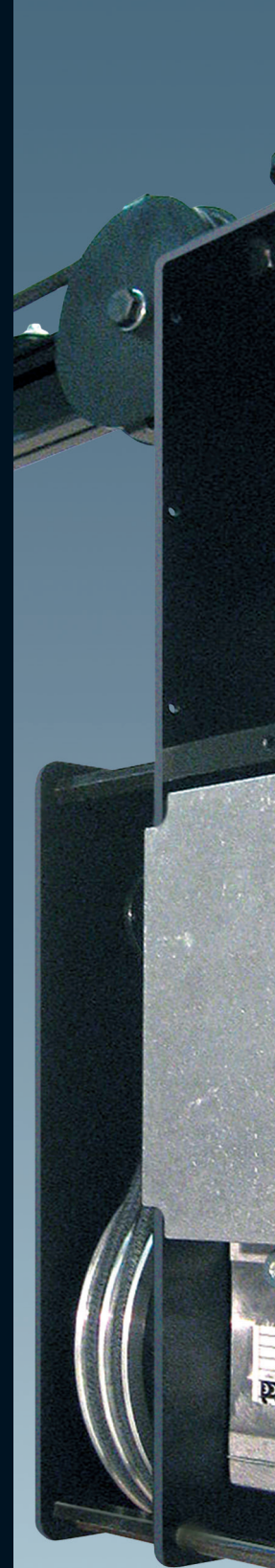


EN Installation manual**TRAC-DRIVE motor TD30**

1 Introduction

Table of contents

- 1.1 General information
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4 Safety instructions

- 4.1 Possible hazards during intended use

Page	Information
4	Subject to errors and technical modifications.
4	
5	Presentation of safety instructions
5	Safety instructions are identified by a pictogram and a signal word. The signal word describes the severity of the impending risk.
5	
5	 DANGER Imminent risk to the life and health of persons (serious injury or death).
6	
6	 WARNING Possible risk to the life and health of persons (serious injury or death).
7	
7	 CAUTION Potentially dangerous situation (minor injury or damage to property)
8	
13	 NOTICE Application tips and particularly useful information.
18	
18	 IMPORTANT Obligation to behave in a particular way or to carry out a particular activity for the safe handling of the machine.
21	
21	
21	Warning of specific risks
21	 Risk due to electrical voltage
21	 Risk from open flames
21	 Risk from suspended loads
22	 Risk of cuts
	 Risk of hand injuries
	 Risk of being drawn in
	 Risk from corrosive liquids
	 Risk from hot surfaces
	 Risk of slipping

1.1 General information

The TRAC-DRIVE TD30 is a universal motorised cord drive system for curtain moving systems. It requires little space and is easy to install. The endless pull cord of the curtain moving system wraps around the three-groove drive sheave of the TRAC-DRIVE TD30, which is driven by an electric motor.

There are two mounting variants for the **TD30**:

1. Direct mounting at the end of a curtain track of the following Gerriets track systems (standard mounting):

TRUMPF 95 with the cord guide variants:

- side
- top
- doubletop

JOKER 95 with the cord guide variants:

- Side
- Bottom
- Top
- Doubletop

KING with the cord guide variants:

- Side
- Bottom
- Top

2. Wall mounting using a wall console (special case).

3. Special mountings

- suspended
- on the floor
- relocated, e.g. using elevated guide pulleys (item no. **31150 00821** for TRUMPF 95; item no. **31250 00821** for JOKER 95)

Technical data

- Shaft-mounted geared motor – 3 × 230 / 400 V AC
- Drive sheave, 3-groove
- Automatic cord re-tensioning by compression springs.
- Traction force: from 770 to 1600 N (depending on version)
- Rope speed: 25 / 50 / 100 cm/s (depending on version)
- Weight: 23,680 g
- With G-FRAME 54 contactor control for fixed-speed operation (OPEN / STOP / CLOSE) or G-FRAME 54 frequency control unit for variable-speed operation, with functions
OPEN – STOP – CLOSE and optional control of up to three intermediate positions.

The data applicable to your TRAC-DRIVE TD30 regarding traction force and rope speed etc. can be found in the order-specific technical documents.

Safety information / Use of the installation manual



This installation manual is part of the TRAC-DRIVE TD30 drive. They are intended to help you assemble and operate the track system without injury to persons or damage to property.

IMPORTANT

In the interest of your own safety and the safety of your employees and colleagues, ensure that all persons entrusted with the assembly and operation of this TRAC-DRIVE TD30 drive read and understand this installation manual before starting work.

1.2 Area of application, field of use

Scenic movement of curtains, scenery or lighting equipment in theatres, studios, town and multi-purpose halls, exhibition stands and other event venues.

The required traction force of the drive depends on the size of the load and the track layout. The TRAC-DRIVE TD30 covers applications up to a maximum of 1600 N. It is used primarily under the following conditions:

- Medium-weight to heavy curtains or loads are moved.
- The curtain can be moved frequently.

Depending on the length of the track and its layout (straight or with curves), you should assume 10 % to 15 % of the payload as the required traction force.

1.3 Intended use

The TRAC-DRIVE TD30 is designed for the horizontal movement of curtains or other loads attached to a Gerriets TRUMPF 95, JOKER 95 or KING curtain track. The traction force (depending on the version 770 N, 1440 N, 1600 N) must not be exceeded. The motor is designed for a maximum duty cycle of 40 percent. Prolonged uninterrupted operation can cause the motor to overheat. It is then switched off automatically.



IMPORTANT

Use the machine only as intended and in a technically safe condition! This is the only way to ensure the operational safety of the machine!

1.4 Improper use and possible hazards



Any use other than driving a track system by means of a pull cord within the limits of the traction force and duty cycle of the drive is considered improper.

DANGER: Driving loads not approved for the TRUMPF 95, JOKER 95 and KING track systems, in particular moving persons, is also improper and can lead to serious accidents.

1.5 Load specifications



IMPORTANT

When operating your curtain moving system, please ensure compliance with the limits for attached point and line loads applicable to the curtain track. These can be found in the installation manual of your track system (TRUMPF 95, JOKER 95, KING or CARGO).



1.5.1 Further information

Dimensions:	
Height:	495 mm
Width:	228 mm
Depth:	198 mm

1.5.2 Connected loads, power, consumption, insulation class etc.

• Power	supply: 3 × 230 / 400 V AC / 50 Hz
• Duty	cycle: 40 %
• Ambient	temperature: 0 to 60 °C
• Degree of	protection: IP54
• Motor	speed: 2800 (1400) min ⁻¹
• Output	speed: 123.4 (61.6 / 30.8) min ⁻¹
• Gear	ratio: 22.7:1 (45.4:1)
• Rated	torque: 60 Nm (112 / 125 Nm)
• Power:	1.1 (0.6) kW

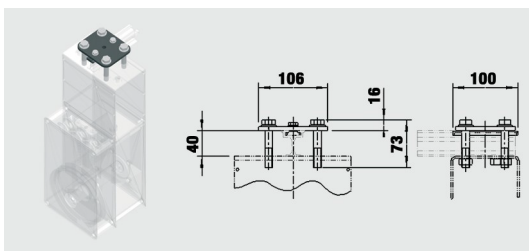
On request, the TRAC-DRIVE TD30 can be supplied with a 24 V direct current motor or a 230 V single-phase motor. The connection data applicable to the respective version can be found on the rating plate and in the product-specific documents. a 230 V single-phase motor. The motor is designed for a maximum duty cycle of 40 percent (rating period: 10 min). Prolonged uninterrupted operation can cause the motor to overheat. It is then switched off automatically. The motor housing can reach temperatures of up to 90 °C!

The data applicable to your TRAC-DRIVE TD30 can be found in the order-specific technical documents.

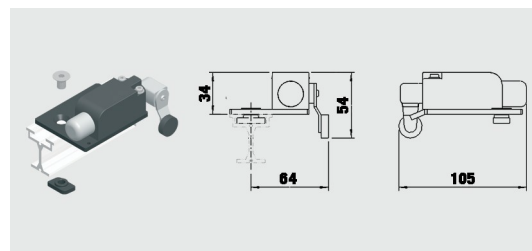
1.6 Declaration of incorporation

The TRAC-DRIVE TD30 curtain drive is “partly completed machinery” within the meaning of the EU Machinery Directive (2006/42/EC). It is intended as a drive component for installation in a curtain moving system.
 Note on the legal situation: Up to and including 19 January 2027, the Machinery Directive 2006/42/EC applies to placing on the market. From 20 January 2027, Regulation (EU) 2023/1230 on machinery applies. The legal basis applicable to the respective product depends on the date on which it is placed on the market.
 The declaration of incorporation reproduced at the front refers to the TRAC-DRIVE TD30. If Gerriets GmbH has been commissioned to erect a complete curtain moving system, it will carry out a conformity assessment of the system.
 The system will bear the CE mark.
 If you only purchase the system components from Gerriets GmbH in order to erect the system yourself, you are deemed to be the manufacturer within the meaning of the EU Machinery Directive (2006/42/EC). In this case, you yourself are responsible for carrying out the conformity assessment procedure!

1.7 Accessories and expansion options for the system (recommended)



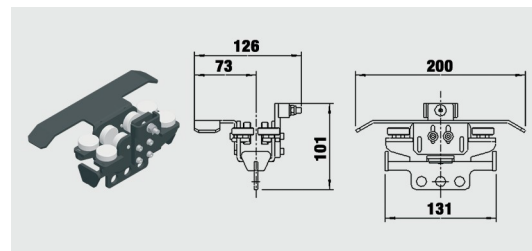
TRAC-DRIVE installation set for direct mounting on the track



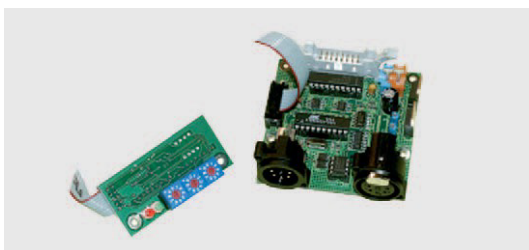
Limit switch with roller lever



Limit switch cable



Master runner with limit switch arm



Incremental encoder and evaluation unit
(for programming intermediate positions)

1.8 Safety instructions



IMPORTANT

The operator (employer) bears overall responsibility for the operation of a technical system.

After this TRAC-DRIVE TD30 drive was pre-assembled by Gerriets GmbH and handed over to you, you can assume that the properly assembled drive presents no avoidable hazards.

However, we recommend that you prepare a risk assessment for the specific conditions under which the system is operated at your premises and issue instructions that largely prevent damage caused by improper operation and residual hazards. The information listed in the table in Section 4.1 may be useful to you in this respect.

In particular, we draw your attention to compliance with the following regulations:

- BGV A1: Principles of prevention
- BGV A3: Electrical installations and equipment
- BGV C1 / GUV-V C1: Venues and production facilities for scenic presentations
- BGG 912 / GUV-G 912: Principles for the inspection of mechanical equipment in stages and studios
- Machinery Directive 2006/42/EC
- BGI 810-0: Safety in productions and events – Guide
- BGI 810-2: Television, radio and film; occupational safety in production facilities. Suspensions
- BGI 810-3: Safety in productions and events – loads above persons
- TRBS 2131: Electrical hazards
- TRBS 2111: Mechanical hazards – General requirements
- DIN 56950: Entertainment technology – Machinery installations – Safety requirements and inspections

Double track system TRUMPF 95 with top cord operation and mounted TRAC-DRIVE TD30

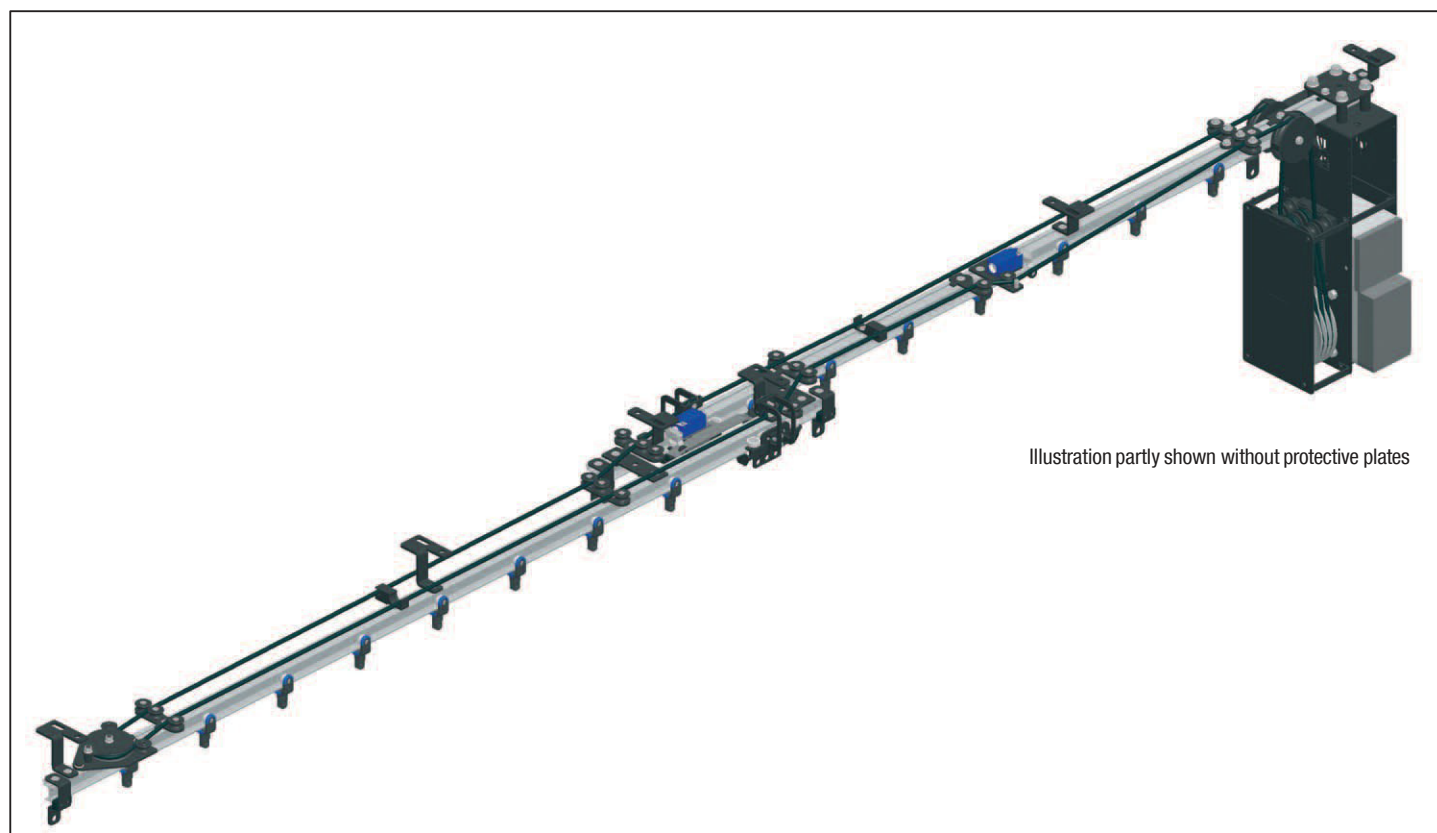


Illustration partly shown without protective plates

2.1 Qualification of assembly personnel



NOTICE

We recommend having the initial assembly carried out by qualified personnel from Gerriets GmbH.

If the assembly is to be carried out by your personnel, ensure that the TRAC-DRIVE TD30 is assembled only by qualified personnel with careful observance of the installation manual including its appendices.



The electrical installation may only be carried out by skilled electricians.

2.2 Preparing for assembly



NOTICE

Before assembling your TRAC-DRIVE TD30, plan the following points :

- On which side of the curtain track should the drive be located?
- Where should the control point (control unit) be installed?
-



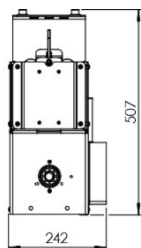
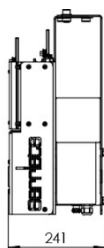
IMPORTANT

- **Note that there must be a clear view from the control point of the range of movement of the curtain or the attached loads!**
- Where should the limit switches be mounted? How should the limit switch cables be routed? They must not be laid in the range of movement of the pull cord. The cable routing must be matched to the type of cord guide.
- How is the power supply to be provided?

2.2.1 Checking the delivery for completeness

As soon as possible after delivery of your TRAC-DRIVE TD30, check the delivery note and the following component list for completeness of the delivery.

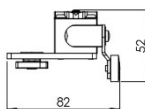
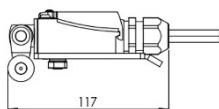
2.3. The components and their assembly



TRAC-DRIVE motor TD30

Item no.	Pull speed cm/s	Traction force N
31700 03031	25	1600
31700 03061	50	1440
31700 03121	100	770
31700 03991	Alternative pull speed and / or traction force on request	

Item no. 3170 -

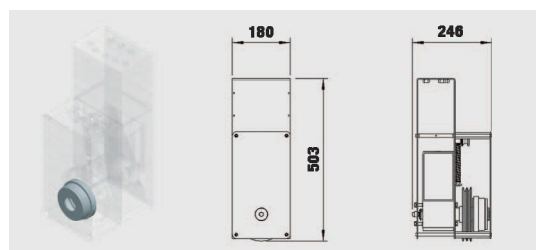


Limit switch

- With mounting plate for TRUMPF 95 track
- With slot nut
- Without cable

Additional equipment

Item no.	
31700 09251	Pluggable cable
31700 09311	Incremental encoder, mounted on output shaft
31700 09351	Brake 230 V AC

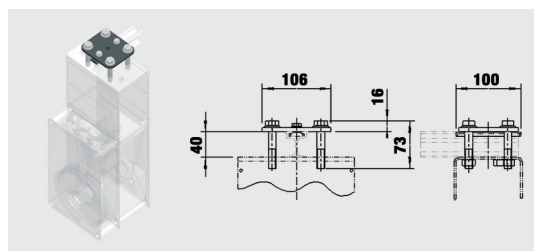


Curtain decoupling

- With coupling on the TRAC-DRIVE
- When de-energised, the cord drive system is decoupled from the motor, and the curtain can then be pulled by hand.

Item no. 31700 09441

2.3. The components and their assembly



Item no. 31-

TRAC-DRIVE installation set

Item no.	
31150 09011	For mounting on TRUMPF 95 track Weight: 840 g
31250 09011	For mounting on JOKER 95 track Weight: 1,185 g
31300 09011	For standard mounting on KING track
31300 09021	For mounting on KING track, for top cord operation
31280 00901	For mounting on CARGO track



Item no. 31800 03011

G-FRAME 54 contactor control unit*

- For fixed speed
- OPEN / STOP / CLOSE
- 3 x 230 / 400 V AC – 50 Hz
- For direct wiring
- W x H x D: 444 x 220 x 550 mm



Item no. 3190 -

Control and power supply cable for fixed speed

- Connector cable between motor and control unit.

Item no.	Length m
31900 04101	up to 10
31900 04201	up to 20
31900 04301	up to 30
31900 04991	Cable pluggable on both sides at extra charge



Item no. 3180 -

2. Control point for fixed speed – G-FRAME 54*

- For direct wiring
- W x H x D: 337 x 125 x 175 mm

Item no.	
31800 03021	Without cable
31800 03022	With cable up to 5 m
31800 03023	With cable up to 10 m
31800 03024	With cable up to 15 m
31800 03025	With cable up to 20 m
31800 03029	Cable pluggable on one side at extra charge

*The designs of the control units may differ from the illustrations shown

2.3. The components and their assembly



Item no. 31800 04011

G-FRAME 54 frequency control unit*

- For variable speed
- OPEN / STOP / CLOSE / potentiometer
- 1 x 230 V AC – 50 Hz
- For direct wiring
- W x H x D: 444 x 220 x 550 mm



Item no. 3190 -

Control and power supply cable for variable speed

- Connector cable between motor and control unit

Item no.	Length m
31900 03101	up to 10
31900 03201	up to 20
31900 03301	up to 30
31900 03991	Cable pluggable on both sides at extra charge



Item no. 3180 -

2. Remote control panel for variable speed

G.FRAME 54*

- For direct wiring
- W x H x D: 337 x 125 x 175 mm

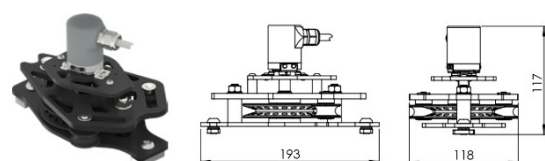
Item no.	
31800 04021	Without cable
31800 04022	With cable up to 5 m
31800 04023	With cable up to 10 m
31800 04024	With cable up to 15 m
31800 04025	With cable up to 20 m
31800 04029	Cable pluggable on one side at extra charge



Item no. 31800 03012

G-FRAME 28 contactor control unit*

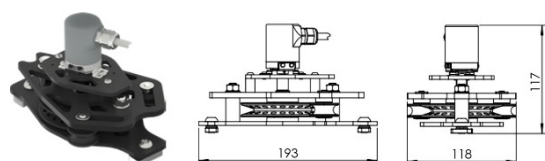
- For fixed speed
- OPEN / STOP / CLOSE
- 3 x 230 / 400 V AC - 50 Hz
- For direct wiring
- W x H x D: 444 x 220 x 290 mm



Item no. 31150 00841

Return pulley with integral incremental encoder

- Return pulley for TRUMPF 95
- With attached incremental encoder RI 36
- 500 pulses / revolution



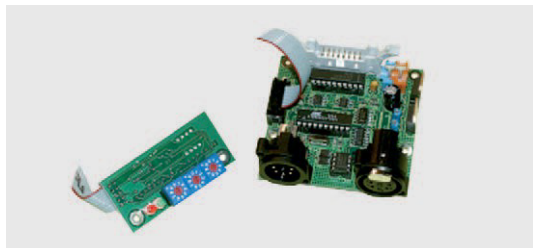
Item no. 31250 00841

Return pulley with integral incremental encoder

- Return pulley for JOKER 95
- With attached incremental encoder RI 36
- 500 pulses / revolution

*The designs of the control units may differ from the illustrations shown

2.3. The components and their assembly



Item no. 3180 -

Additional equipment for control unit

Item no.	
31800 09011	Evaluation unit for incremental encoder max. 3 intermediate positions
31800 09111	DMX card for functions OPEN / STOP / CLOSE
31800 09121	DMX card for functions OPEN / STOP / CLOSE + speed
31800 09131	DMX card for functions OPEN / STOP / CLOSE + speed and control of max. 3 intermediate positions



Item no. 31800 09911

Radio remote control with receiver*

- Narrow-band FM modulation
- Frequency 433-434 MHz
- Digital pulse code
- PLL synthesiser
- Without speed control



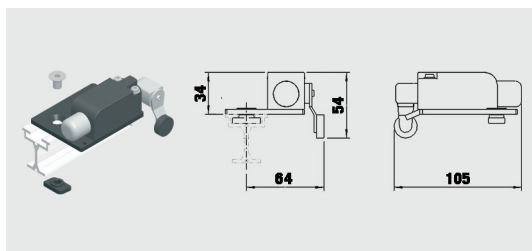
Item no. 31800 09912

Radio remote control with receiver + emergency stop circuit*

- Narrow-band FM modulation
- Frequency 433-434 MHz
- Digital pulse code
- PLL synthesiser
- Without speed control

*The designs of the control units may differ from the illustrations shown

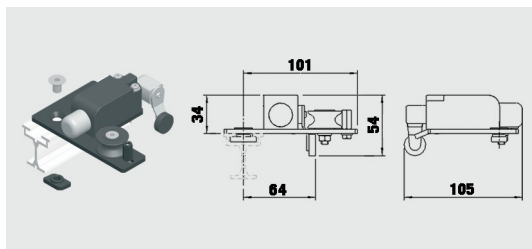
2.3. The components and their assembly



Item no. 31150 07111

Limit switch

- With mounting plate for TRUMPF 95 track
- With slot nut
- Without cable



Item no. 31150 07121

Limit switch

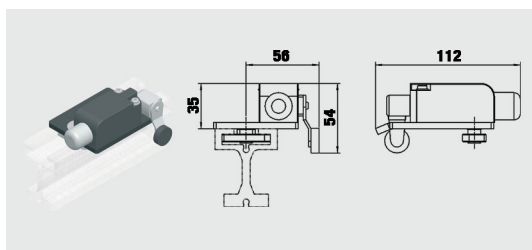
- With mounting plate and slot nut for TRUMPF 95 track
- Used for OPEN position to guide the returning cord
- Without cable



Item no. 31900 02011

Limit switch cable

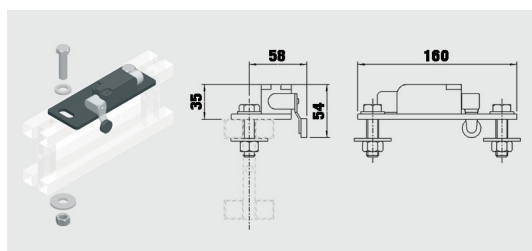
- 2-core cable, 0.5 mm²
- Colour: grey
- Wired to the limit switch
- Loose cable on one side
- Length: up to 15 m
- Greater lengths at extra charge



Item no. 31250 07111

Limit switch

- With mounting plate for JOKER 95 track
- With slot nut
- Same model for OPEN and CLOSE positions
- Without cable



Item no. 31300 07111

Limit switch

- With mounting plate for KING track
- Without cable

2.4 Assembly of the TRAC-DRIVE TD30

Track mounting



The TRAC-DRIVE TD30 is supplied fully pre-assembled. We recommend having the initial assembly carried out by qualified personnel from Gerriets GmbH.

If the assembly is to be carried out by your own personnel, proceed as follows:



- 1 If your technical facilities permit, carry out the assembly close to the floor if possible and only lift the track system to working height after assembly is complete.
If assembly close to the floor is not possible, it must be carried out from a suitable scaffold or a suitable mobile elevating work platform. **Cordon off the danger area at ground level against access by unauthorised persons, as objects may fall.**
- 2 Assemble your track system (TRUMPF 95, JOKER 95 or KING) according to the installation manual of the track system and your requirements.



Do not fit the pull cord yet!

2.4 Assembly of the TRAC-DRIVE TD30

TRUMPF 95 and JOKER 95



NOTICE

TWO INSTALLERS are required to install a TRAC-DRIVE!

Variant A

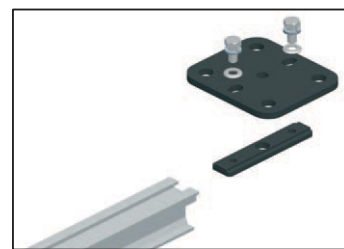
(There is sufficient space between the wall and the track end to slide the drive connected to the mounting plate sideways onto the track):

- a. Attach the TRAC-DRIVE installation set to the top plate of the TRAC-DRIVE (as shown in the adjacent figure). Insert the four M12 × 70 screws with washers through the mounting plate and the spacer sleeves into the holes in the upper part of the drive housing. Turn them only a few times hand, so that the screws hold the drive securely and there is still enough clearance to slide the mounting kit over the track end.
- b. Slide the TRAC-DRIVE over the track end to the position intended for the drive. The drive sheave must face inwards (towards the centre of the curtain).
- c. Slide the slot nut of the mounting plate from the end of the track into its top groove until the threaded holes are located under the holes of the mounting plate. Insert the M8 screws with washers.
- d. Position the TRAC-DRIVE exactly on the track. Tighten the M8 screws connecting the slot nut and mounting plate firmly.
- e. Tighten the M12 screws connecting the drive housing and mounting plate to 86 Nm (**use a torque wrench!**). Secure at least 2 of the M12 screws with lock nuts.
- f. Fit a track suspension bracket between the TRAC-DRIVE and the track end according to the type of cord guide:
 - I. Item no. **31150 08031** for top cord operation (TRUMPF 95)
 - II. Item no. **31150 08041** for side cord operation (TRUMPF 95)
 - III. Item no. **31150 08051** for double top cord operation (TRUMPF 95)
 - IV. Item no. **31250 08041** for side cord operation (JOKER 95)
 - V. Item no. **31250 08031** for top cord operation (JOKER 95)
 - VI. Item no. **31250 08051** for double top cord operation (JOKER 95).
- g. A suspension can also be attached to the M12 threaded hole located in the centre of the mounting plate. For protruding threads, there is a 13 mm hole in the slot nut underneath.

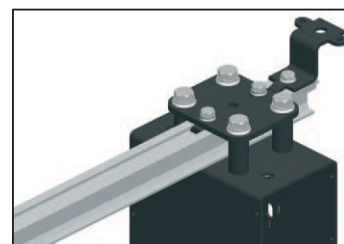
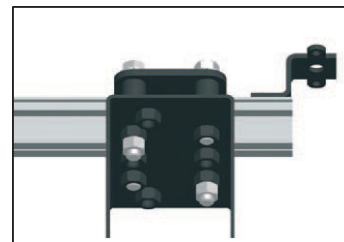
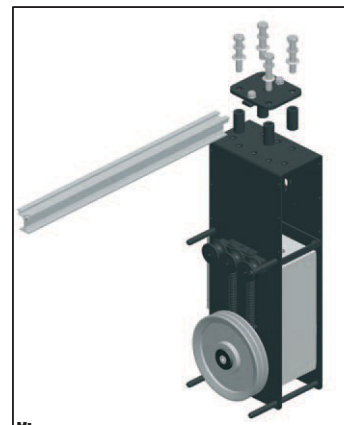
Variant B

(the distance between the wall and the track end is **smaller than the length of the slot nut**):

- a. Screw the slot nut under the mounting plate using the M8 screws and washers. Leave sufficient play.
- b. Slide the mounting plate with the slot nut onto the track / into the slot. Move the mounting plate to the point under which the drive should be mounted. Fix the mounting plate by tightening the M8 screws of the slot nut firmly.
- c. Raise the motor to the track beneath the mounting plate. The drive sheave must face inwards (towards the centre of the curtain).
- d. Insert the four M12 x 70 screws (with washers) through the mounting plate and spacer sleeves. Screw them into the threaded inserts in the cover plate of the drive housing.
- e. If you need to correct the position of the drive on the track, slightly loosen the M8 screws in the slot nut. Move the drive into the correct position. Using a torque wrench, tighten the M8 screws in the slot nut to 25 Nm and the M12 x 70 screws to 86 Nm.
- f. Fit a track suspension bracket between the TRAC-DRIVE and the track end according to the type of cord guide
 - I. Item no. **31150 08031** for top cord operation (TRUMPF 95)
 - II. Item no. **31150 08041** for side cord operation (TRUMPF 95)
 - III. Item no. **31150 08051** for double top cord operation (TRUMPF 95)
 - IV. Item no. **31250 08041** for side cord operation (JOKER 95)
 - V. Item no. **31250 08031** for top cord operation (JOKER 95)
 - VI. Item no. **31250 08051** for double top cord operation (JOKER 95).



by



2.4 Assembly of the TRAC-DRIVE TD30

TRUMPF 95 and JOKER 95

- g. A suspension can also be attached to the M12 threaded hole located in the centre of the mounting plate. For protruding threads, there is a 13 mm hole in the slot nut underneath.



IMPORTANT

The drive must not hang from a cantilever!

Variant B

(the distance between the wall and the track end is **smaller than the length of the slot nut**):

- a. Screw the slot nut under the mounting plate using the M8 screws and washers. Leave sufficient play.
- b. Slide the mounting plate with the slot nut onto the track / into the slot. Move the mounting plate to the point under which the drive is to be mounted. Fix the mounting plate by tightening the M8 screws of the slot nut firmly.
- c. Raise the motor to the track beneath the mounting plate. The drive sheave must face inwards (towards the centre of the curtain).
- d. Insert the four M12 x 70 screws (with washers) through the mounting plate and spacer sleeves. Screw them into the threaded inserts in the cover plate of the drive housing.
- e. If you need to correct the position of the drive on the track, slightly loosen the M8 screws in the slot nut. Move the drive into the correct position. Using a torque wrench, tighten the M8 screws in the slot nut to 25 Nm and the M12 x 70 screws to 86 Nm. Secure at least 2 of the M12 screws with lock nuts.
- f. Fit a track suspension bracket between the TRAC-DRIVE and the track end according to the type of cord guide
- I. Item no. **31150 08031** for top cord operation (TRUMPF 95)
 - II. Item no. **31150 08041** for side cord operation (TRUMPF 95)
 - III. Item no. **31150 08051** for double top cord operation (TRUMPF 95)
 - IV. Item no. **31250 08041** for side cord operation (JOKER 95)
 - V. Item no. **31250 08031** for top cord operation (JOKER 95)
 - VI. Item no. **31250 08051** for double top cord operation (JOKER 95).
- g. A suspension can also be attached to the M12 threaded hole located in the centre of the mounting plate. For protruding threads, there is a 13 mm hole in the slot nut underneath.



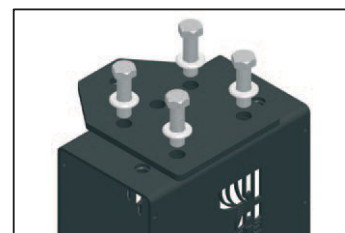
IMPORTANT

The drive must not hang from a cantilever!

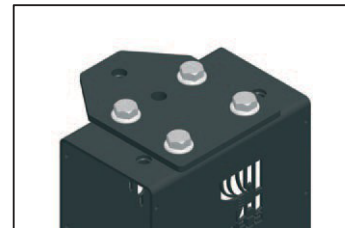
2.4 Assembly of the TRAC-DRIVE TD30

KING – top cord operation

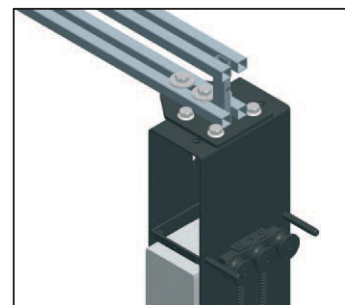
- a. Screw the mounting plate with 4 M12 screws and washers onto the TRAC-DRIVE housing so that the trapezoidal side of the mounting plate faces away from the drive sheave. (The upper part of the housing is equipped with welded-on M12 nuts.) The tightening torque must be 86 Nm. Use a torque wrench **for this**. Secure at least 2 of the M12 screws with lock nuts.
- b. Position the TRAC-DRIVE with the mounting plate at the track end under the track so that you can secure the drive using the two M12 hexagon screws with washers between the lower flanges of the KING track (as shown in the adjacent figure). Start with the hole in the mounting plate that is still above the drive housing. Underneath it is an M12 weld nut. For the bolted joint on the protruding trapezoidal part of the mounting plate, use the M12 self-locking nut from the mounting kit with a washer. The drive sheave must **face outwards**. Tighten the screws **slightly**.
- c. Align the drive so that the pull cord and the returning cord are guided as vertically as possible from the head pulley into the guide rollers of the drive. Now tighten the screws and nuts of the mounting plate to a tightening torque of 86 Nm. Secure the M12 screw that does not have a self-locking nut with a lock nut!
- d. As close as possible to the track end, mount a spacer bracket item no. **31300 09031** to accommodate a retaining screw or a hook clamp. The unavoidable cantilever with the TRAC-DRIVE must be kept as short as possible.



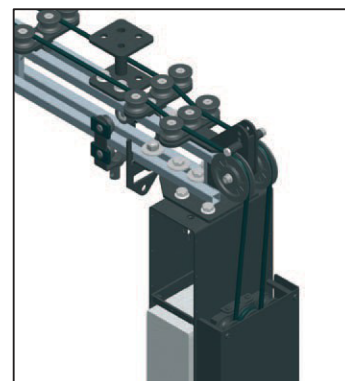
a.1



a.2



b.



c. + d.

2.4 Assembly of the TRAC-DRIVE TD30

KING with bottom cord operation

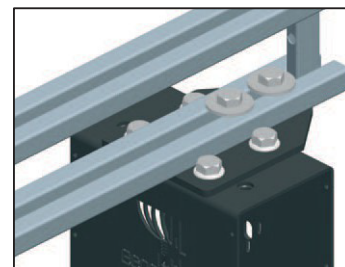
- a. Screw the mounting plate with 4 M12 screws and washers onto the TRAC-DRIVE housing so that the trapezoidal side of the mounting plate faces away from the drive sheave. (The upper part of the housing is equipped with welded-on M12 nuts.) The tightening torque must be 86 Nm. Use a torque wrench for this.
- b. Position the TRAC-DRIVE with the mounting plate at the track end under the track so that you can secure the drive using the two M12 hexagon screws and
- c. washers between the lower flanges of the KING track (as shown in the adjacent figure). Start with the hole in the mounting plate that is still above the housing. Underneath it is an M12 weld nut. For the bolted joint on the protruding trapezoidal part of the mounting plate, use the M12 self-locking nut from the mounting kit with a washer. The drive sheave must **face inwards**. Tighten the screws **slightly**.
- d. Align the drive as close as possible to the track end. Tighten the screws. Reposition the head pulley so that the pull cord and returning cord are guided vertically from the head pulley into the guide rollers of the drive. Now tighten the screws and nuts of the mounting plate to a tightening torque of 86 Nm. Secure the M12 screw that does not have a self-locking nut with a lock nut!
- e. Attach a suspension (retaining screw or hook clamp) at the end of the track so that the drive does not hang from a cantilever.



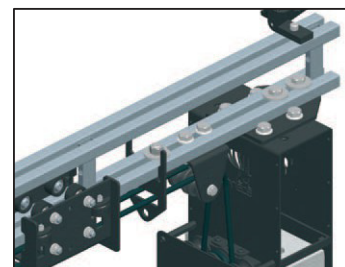
a.1



a.2



b.



d.

2.5 Installation

2.5.1 Electrical installation



The electrical installation may only be carried out by a skilled electrician. It must be carried out in accordance with the circuit diagram (Appendix)!

As a rule, TRAC-DRIVE TD30 units are fully pre-wired at the factory. You then only need to lay the cables and connect the plugs.

If you install the system yourself or need to make changes, follow the circuit diagram.

- 1 Mount the limit switches for the OPEN and CLOSE positions on the curtain track according to your requirements, using the supplied slot nuts. The limit switches are marked (OPEN or CLOSE). The limit switches for the OPEN position must be set so that they are still outside the calculated bunched length, so that the master runner does not press the bunched runner package against the end stop. (Information on calculating the bunched length can be found in the installation manual of your track system.)



IMPORTANT

- 2 **Mount the G-FRAME 54 control unit at a suitable location from which the range of movement of the curtain / load is fully visible.**

Note: If you have a second control point or radio remote controls, the required full view of the range of movement may instead be ensured from these devices.

- 3 Lay the cables according to the circuit diagram. Make sure that the cables do not obstruct the cord guide or any other moving parts of the curtain system. The cable routing must be based on the type of cord guide!
- 4 Connect all cables according to the circuit diagram.
- 5 Lay the cable for the power supply (230 V / N / PE). Connect it to the control point.
- 6 Check the system.
- 7 Do not switch on the power supply until you are certain that the system has been installed correctly.



IMPORTANT

- 8 **Test the function of the safety-relevant parts of the system (EMERGENCY STOP, limit switches).**

- 9 Carry out test runs (OPEN, STOP, CLOSE, and run the system to the "OPEN" and "CLOSE" limit switches).

- 10 Correct the positions of the limit switches if necessary.

2.5 Installation

2.5.2 Fitting the pull cord



IMPORTANT

To fit the pull cord, the system must be switched off and secured against unintentional movement! (The complete cord course is shown in the figure on page 6.)



If the drive moves while work is being carried out near the drive sheave, there is a risk of body parts (hand / arm) getting into the area between cord and drive sheave. Crushing, fractures or loss of limbs may result!

Tip: You can make fitting the pull cord easier by first unscrewing the cover over the drive sheave and the tensioning pulleys.
The prerequisite is that the system has been disconnected from the power supply beforehand!

- 1 To be able to work on the drive sheave, you must first remove the cover. Pre-tension the cord tensioning pulley mounted above the drive sheave against the spring pressure using the threaded spindle. (This tensioning pulley prevents cord slippage on the drive sheave.)
- 2 Position the master runner (for a double track or a system with curtain overlap, the front master runner) as close as possible to the drive.
- 3 Place the cord over the rear head pulley on the drive. Guide the cord over all cord guides mounted on the rear side of the track to the opposite track end.
- 4 Guide the cord around the return pulley through the cord guides mounted on the front side of the track to the fixed master runner. (We recommend leaving sufficient distance between the return pulley and the track end so that you can later re-tension the cord by moving the return pulley outwards.)
- 5 Guide the cord through the clamp of the second master runner without tightening the clamping screw. The cord must still be able to slip through.
- 6 Starting from the rear head pulley, place the remaining cord on the drive sheave as shown in the figures.
- 7 Pull the cord taut and also clamp the second cord end firmly to the master runner. To achieve the required rope tension, you can now move the return pulley towards the track end.
- 8 Move the second master runner to the required position on the other side of the track. It should be the same distance from the centre of the track as the first master runner. Clamp the cord firmly in the rope attachment.
- 9 Cut off the protruding ends of the pull cord at the first master runner so that they cannot interfere with operation.
- 10 Move the system several times by hand. If necessary, retension the cord at the master runner.
- 11 Release the preload on the drive.



IMPORTANT

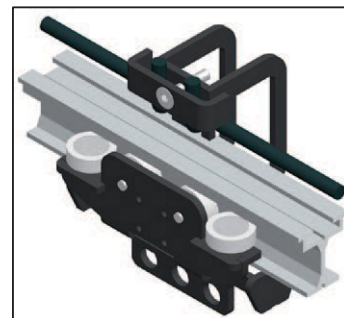
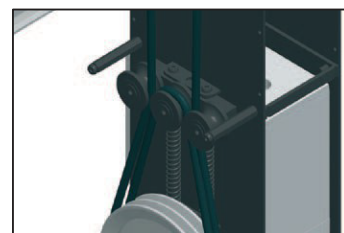
If you have removed the protective cover over the drive sheave, refit it now. This component is important for the safety of the persons who are to work with the system!

- 12 Check the rope tension. Even if you use a pre-stretched cord, you must expect that, due to elongation of the cord, its tension will not be sufficient for slip-free driving of the curtain / load. In this case, pre-tension the cord tensioning pulleys again and retension the cord at the master runner once more.

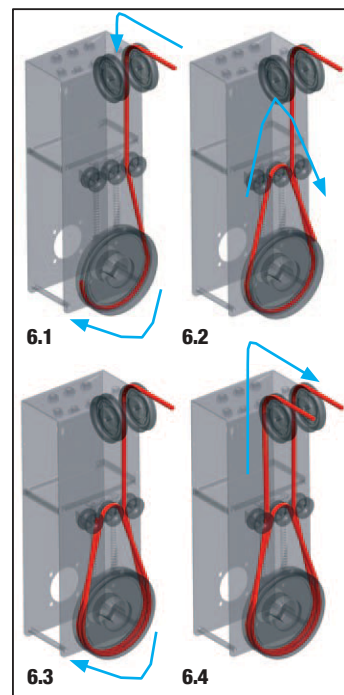


NOTICE

- 13 During the initial period after commissioning, regularly check the rope tension. Retension the cord as required.



5



2.5 Installation

2.5.3 Commissioning



IMPORTANT

- Only put the TRAC-DRIVE TD30 into operation when you are sure that it does not pose any hazard to persons or property.
- The drive may only be put into operation by competent persons.
- The installation manual and its appendices must be followed at all times!
- The persons operating the curtain moving system must be instructed about the system and how to deal with any hazards that may arise from its operation. They must have a view of the range of movement of the curtain / load(s).

2.5.4 List of appendices



IMPORTANT

For the installation, operation, inspection and maintenance of the TRAC-DRIVE TD30, the operating instructions for the respective GERRIETS track system shall also be observed. In particular, all safety, installation and operating instructions contained therein shall be complied with.

- Wiring diagram (if included in the scope of supply)
- Operating manual for the GERRIETS track system used

3.1 Training notes



IMPORTANT

For the safe operation of the drive as part of a curtain moving system, knowledge of its design and its functions is an important prerequisite. With this in mind, ensure that the operating personnel are properly trained.

3.2 Qualification of operating personnel



IMPORTANT

The operating personnel must be familiarised with the system and instructed about the hazards arising from its operation. Take suitable measures (e.g. locking the main circuit breaker) to ensure that the drive cannot be operated unintentionally or by unauthorised persons.

3.3 Instruction of persons who have to be present in the danger zone of the product / the system



IMPORTANT

Persons who have to be present in the range of movement of the system for scenic reasons must receive documented instruction in advance on the associated hazards and appropriate conduct.

3.4 Maintenance, servicing

Carry out inspections and maintenance measures at least at the following intervals:

	Every six months	Annually
Check that the bolted joints for fastening the TD30 to the track (connectors, end stops etc.) are tight using a torque wrench (M8 screws: 25 Nm, M12 screws: 86 Nm)		X
Pull cord: tension	X	
Master runner: rope attachment	X	
Suspension: visual inspection and bolted joints		X
Electrical system and control unit		X
Contamination	X	

Depending on the operating conditions, shorter maintenance intervals may also be necessary!

3.5 Modifications to the system

- Modifications, additions or conversions to the TRAC-DRIVE TD30 or to individual components of the drive are generally not permitted. Exceptions require the written consent of Gerriets GmbH.
- Only original spare parts may be used.
- Modifications, additions or conversions not approved by Gerriets GmbH will void the warranty.
- The copyright of this installation manual remains with:

Company Gerriets GmbH
Im Kirchenhüstle 5-7
D 79224 Umkirch

4.1 Possible hazards during intended use

Even with intended use, servicing and maintenance of the system, residual risks cannot be completely ruled out. Pay particular attention to the following risks:				
Hazard	Operating state	Hazard description	Hazard location	Measure
Drawing-in or trapping	Assembly, installation; troubleshooting; commissioning, settings; maintenance; cleaning	When working near the drive after operational removal of the protective cover over the drive sheaves, there is a risk of fingers or a hand being drawn in between the cord and the drive sheaves. This can lead to crushing or fractures of the affected limbs.	Between the drive sheave of the TRAC-DRIVE drive and pull cord	Before removing the protective cover, disconnect the drive from the power supply and secure it against restart.
Contact with rotating open ends	Assembly, installation; troubleshooting; commissioning, settings; maintenance; cleaning	Touching the rotating rope sheave while the motor is running	Rope sheave	Before removing the cover plate, disconnect the machine from the mains. Secure it against being restarted.
Breakage during operation	At all stages of the product life cycle	Vibrations of the curtain track during operation can loosen the four M12 x 70 fixing screws. In extreme cases, this can cause the drive to fall.	Suspension of the TD30 at the track end	1. Secure the fixing screws of the drive suspension with lock nuts or self-locking nuts. 2. Check the bolt preload regularly (at least every 1/2 year). Retighten the screws if necessary.
Direct contact	Assembly, installation; troubleshooting; commissioning, settings; maintenance; cleaning	When opening the terminal box on the drive, there is a risk of touching live parts.	Active parts of the electrical equipment	3. Disconnect the system from the mains before working in the housing. Secure the system against restart. 4. Only skilled electricians may work on the electrical system. Carry out the work in accordance with BGV A3.
Unintentional / unexpected start-up	Assembly, installation; troubleshooting; commissioning, settings; maintenance; cleaning	During servicing and maintenance work, travel movements initiated by third parties endanger the servicing / maintenance personnel	All moving parts of the system	Disconnect the system from the mains and secure it against restart.
Thermal	Assembly, installation; troubleshooting; commissioning, settings; maintenance; cleaning	Burns. Under normal operating conditions the motor housing can become as hot as 90 °C.	Drive housing	After prolonged operation, allow the housing to cool down before touching it or wear suitable protective gloves if touching it is unavoidable.

Business hours:	Monday - Thursday	08.00 - 12.00 hrs 13.00 - 17.00 hrs
	Friday	08.00 - 12.00 hrs 13.00 - 15.30 hrs
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