

Minirail 48V Connector

Mounting instructions

Safety instructions:



Warning!
Risk of electrical shock!

International: Connect to 48V DC SELV only!
USA/Canada: Connect to 48V DC Class 2 only!



Warning!
Risk of fire!

Max load
International: 500W (48V/10A)!
USA/Canada: 95W (48V/2A)!

Only use power supply units approved by ERCO!



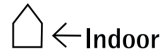
Caution!
Risk of falling parts!

Electrical connectors are not suitable for any mechanical load:
Use accessories and mount the track as indicated!

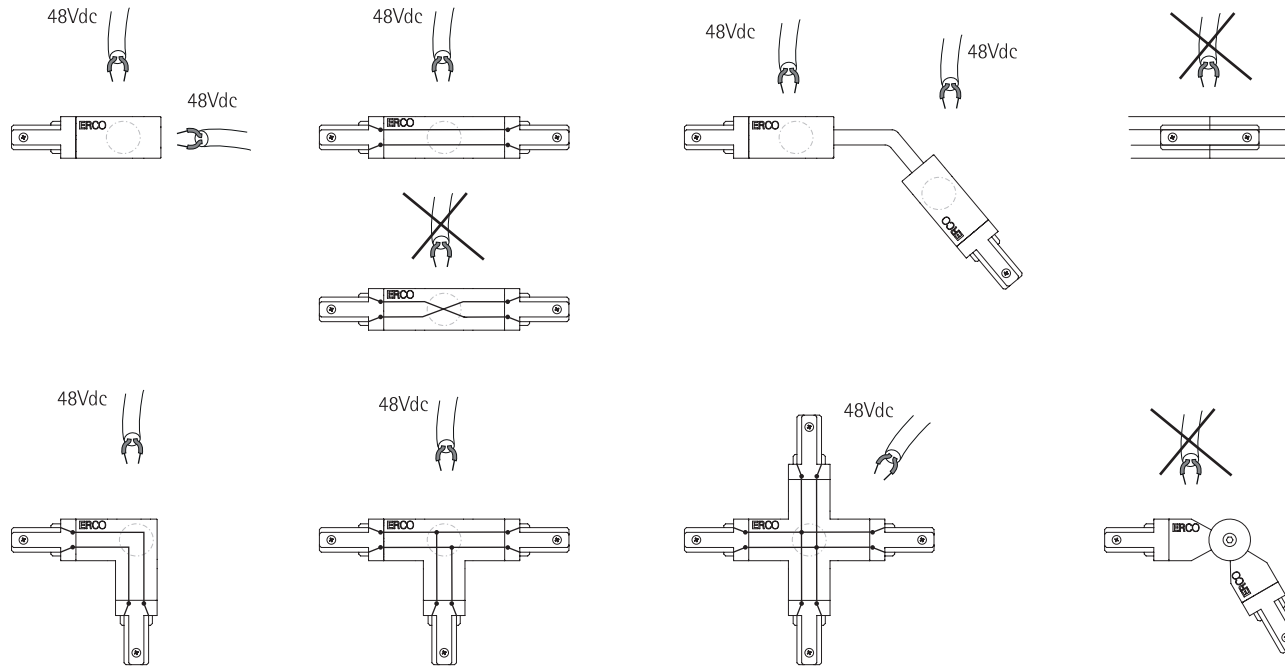
When mounted horizontally or vertically take care of the maximum weight of the luminaire.
For max. values check luminaire manuals



Dry Damp Wet



Indoor



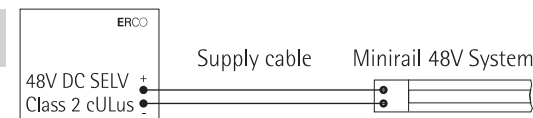
2

Maximum length of supply cable and cable cross-section

ERCO power supply unit	Minirail 48V system length*	Maximum length of supply cable for cable cross-section		
		2.5mm ² / AWG14	1.5mm ² / AWG16	1.0mm ² / AWG18
75W (international)	10m 20m (max.)	70m 60m	40m 35m	25m 25m
120W (international)	10m 20m (max.)	35m 25m	20m 15m	10m 7.5m
250W (international)	20m (max.)	12m	5m	-
2x250W (international)	20m (max.)	10m	-	-
96W (USA/Canada)	70ft / 20m (max.)	200ft / 60m	100ft / 30m	65ft / 20m

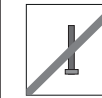
*without luminaires!

Power supply unit

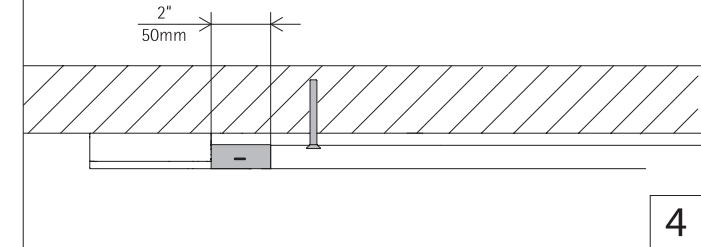


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Connectors Coupler

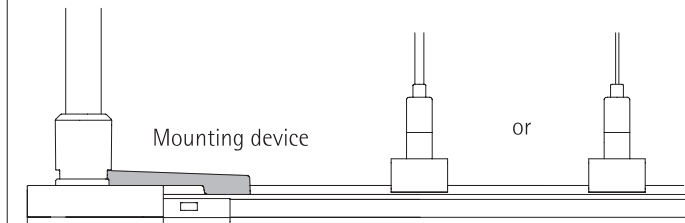
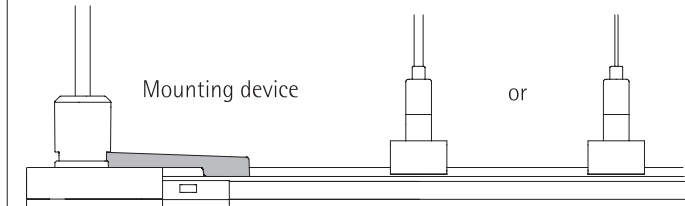


No screw in this area

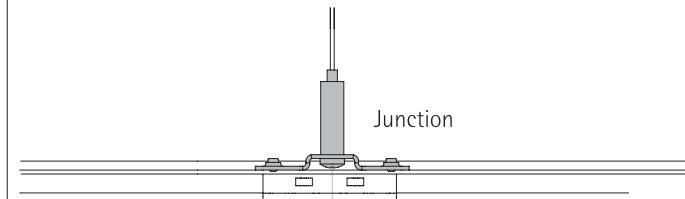


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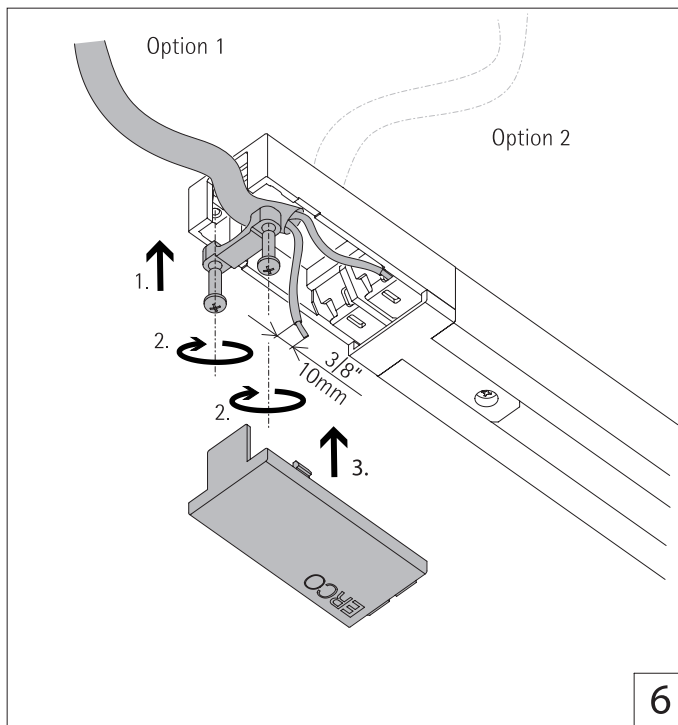
Connector



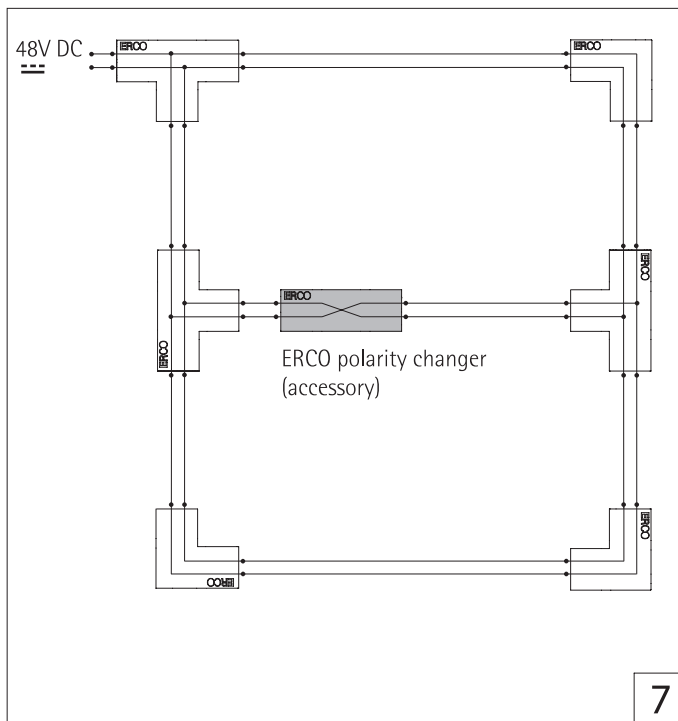
Coupler



5



6



7

English

Please read these instructions carefully before installation and commissioning and hand over to the customer for retention.

General safety information

Warning! **Risk of electric shock!**

ERCO Minirail 48V track and electrical accessories must only be operated with 48V DC SELV (International) and 48V DC Class 2 (USA/Canada), never connect to mains voltage!

Warning! **Fire hazard!**

- The maximum current load of the track and accessories is 10A (International) and 2A (USA/Canada).

- Only use ERCO-approved power supply units (48V DC SELV (International) and 48V DC Class 2 (USA/Canada)).

Use of other power supply units is not approved and is the responsibility of the electrical contractor. In addition to the risk of overloading the track, there is also the risk that the luminaires will not function as expected when using power supply units from other suppliers.

- To avoid short circuits always fit the free end of the track with the end plate (accessory).

- Do not install the ERCO Minirail 48V DC track system as an electrically closed circuit, otherwise there is a risk of short circuit! The wiring of a connector must not be modified!

Caution! **Danger from falling parts!**

All electrical connectors must not be subjected to mechanical loads in any direction.

Attention!

- The electrical contractor is responsible for ensuring the electrical, mechanical and thermal compatibility between the track system and the luminaires fixed to it.

- Installation requires specialist electrical knowledge and must only be carried out by an approved specialist.

- When installing, always observe the national installation and accident prevention regulations.

Intended use

- The track and the mounting accessories are only approved for use in dry indoor areas.

- Installation and operation is only permitted together with luminaires, adapters and accessories tested and approved by ERCO.

Electrical connection

- Installation of the electrical Minirail 48V track and accessories must not be carried out under load. Always switch off the power supply units before carrying out installation work.

- In order to avoid interference you should avoid secondary-side switching, i.e. between the power supply unit and the live end.

- You can create a visually closed but electrically isolated circuit by butting track with attached end plates together. Avoid short circuits when creating more complex structures (e.g. "eight" or "ladder") by using the polarity changer accessory (Fig. 7).

The wiring of a connector must not be modified!

Line dimensioning

- Connection terminals are suitable for cable cross-sections up to max. 2.5mm² (AWG14).

- See Fig. 3 for permissible cable lengths and system lengths.

- When inserted laterally into the live end, the outer diameter of the connection cable must not exceed 10.6mm.

Flexible cables

Flexible cables can be connected without further measures. To do this, open the terminal with a small screwdriver before inserting the conductor.

Pendant mounting (Fig. 5)

- Install mounting components together with connector. Retroactive installation is not possible!

- The coupler is not mechanically loadable in any direction, therefore only use with a mechanical connector (e.g. wire suspension).

Installation of the connector

- Insert the connector into the track and lock it with the fixing screw.

- Depending on the installation, it may be useful to carry out the power feed before installing the connector.

Commissioning

Always check for short circuits before commissioning – this applies especially for more complex installations such as those with a ladder or figure of eight.

Cleaning

Always clean carefully using a soft cloth and a commercially available, pH-neutral, alcohol-free, non-abrasive cleaning agent.