Fully automated production of terminal strips with the clipx MASTER line

The clipx MASTER line enables the fully automated production of terminal strips, including marking. Following the fully automated assembly of the DIN rails, the entire terminal strip is then laser marked without interrupting the process. Using Phoenix Contact terminal blocks from the CLXM and CLM product families with integrated markers and setup-optimized packaging can increase efficiency during mounting and marking. The information required for production is obtained directly from engineering, so that sources of error due to system incompatibilities are reduced. With these features, the clipx MASTER line contributes significantly to the process optimization and implementation of automated production processes in control cabinet building.

Automated transport of mounted terminal strips to the marking station by handling unit
- Terminal strip changed from vertical to horizontal orientation
- No process interruption between mounting and marking

Automated marking of mounted terminal strips with laser marking
- Robust and permanent identification with increased resistance to abrasion
- Real measurement results compared with digital twin

Automated mounting of terminal blocks on DIN rails
- Maximum number of terminal blocks that can be set up: 70 (7 racks with 10 stack spaces each)
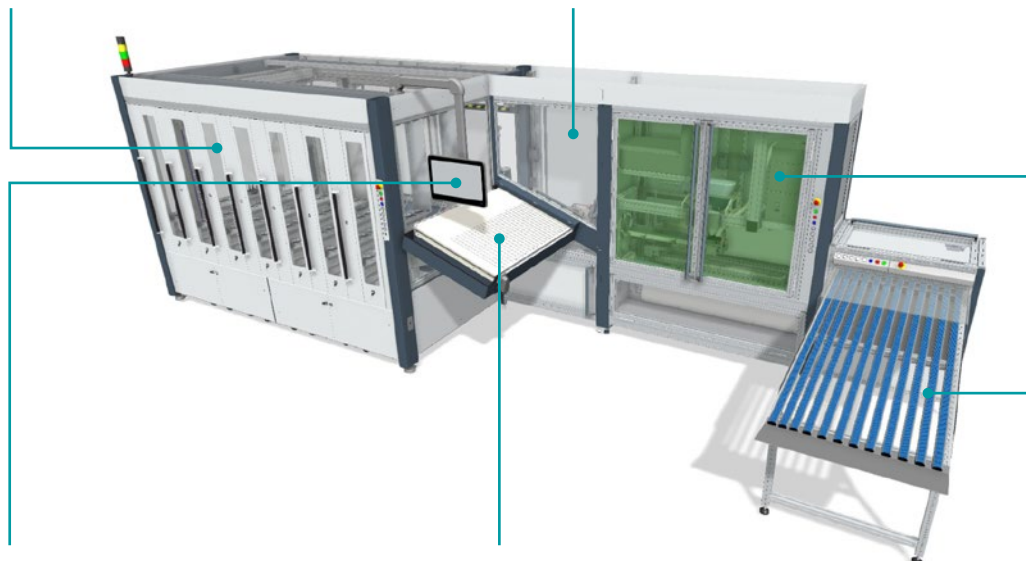
Production information from engineering
- Information extracted from PROJECT complete planning and clipx ENGINEER

Feeder for manually cut DIN rails
- DIN rails are automatically conveyed to the machine

Automated output of mounted and laser-marked terminal strips incl. output buffer

General information	
Width x height x depth	7500 mm x 2200 mm x 2500 mm
Electrical supply	400 V AC / 50 Hz / 3 x 16 A
Electrical power consumption	Max. 5.8 kVA
Interfaces	USB, Ethernet
Compressed air supply	5 bar / <5 m³/h
Noise level	<75 dB (A)
DIN rail input capacity	Max. 30
Number of different terminal blocks	Max. 70
Performance in terms of terminal blocks per hour	Typically 720, max. 1200
Terminal block height*	Max. 118 mm
Terminal block depth*	63 mm (NS 35/15) 70.5 mm (NS 35/7,5)
Terminal block width*	Max. 16 mm
DIN rail types	NS 35/7,5 perforated and unperforated NS 35/15 perforated and unperforated
Length of DIN rail	Min. 100 mm Max. 800 mm

* Dimensions outside of the specifications must be checked separately by Phoenix Contact.

## Your advantages

✅ Increased efficiency and productivity through fully automated production

✅ Minimized errors through data transfer from engineering

✅ Significant time savings during marking by using terminal blocks with integrated markers

✅ High marking quality and precision due to laser marking

Maximum efficiency through fully automated assembly and marking

Optimize your production processes in control cabinet building with our clipx MASTER line for the fully automated mounting and laser marking of terminal strips. The entire production process includes component mounting, subsequent marking, and fully automated transport between the individual steps. A key advantage of our system is the parallel execution of mounting and marking processes. This means that it is the longest step that determines the processing time, keeping production times to a minimum. The clipx MASTER line helps to make processes in terminal strip production more efficient and cost-effective, and also helps to significantly reduce manual intervention.

a) 600 mm, 80 terminal blocks

b) 320 mm, 40 terminal blocks

c) 100 mm, 6 terminal blocks
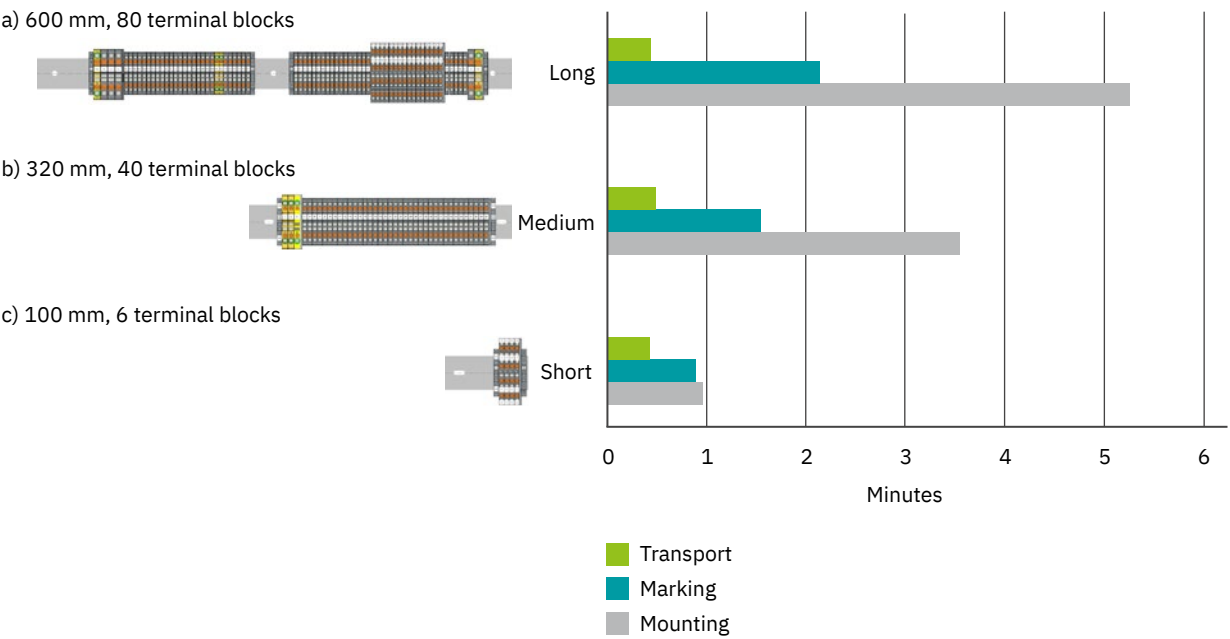
Typical production times for terminal strip production

Legend:
- Transport
- Marking
- Mounting