



Safety Manager Release 162



Hardware Reference

EP-SM.MAN.6284

Issue 2.1 | December 2023

- Original Instructions -

18 Power distribution

18.6 MB-0002

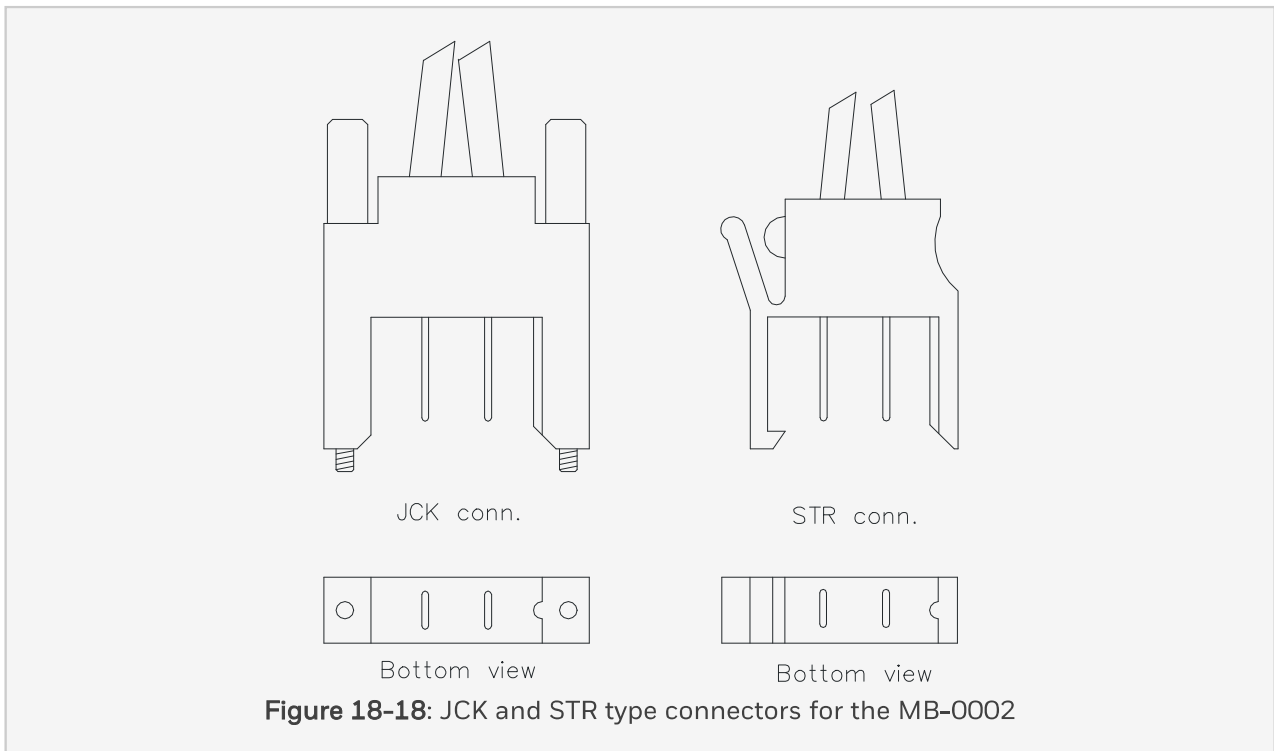
18.6 MB-0002

18.6.1 Mains power rail (24Vdc–110Vdc) with 4 sections

The MB-0002 mains power rail distributes a DC voltage in the range of 24Vdc- 110Vdc from (multiple) redundant power supplies to its users.

The MB-0002 mains power rail has 48 connection points and can distribute up to 200 A. Connection to the rail requires special connectors.

They may be of type Jackscrew (JCK) or of type Squeeze-To-Release (STR), as shown in the below figure.

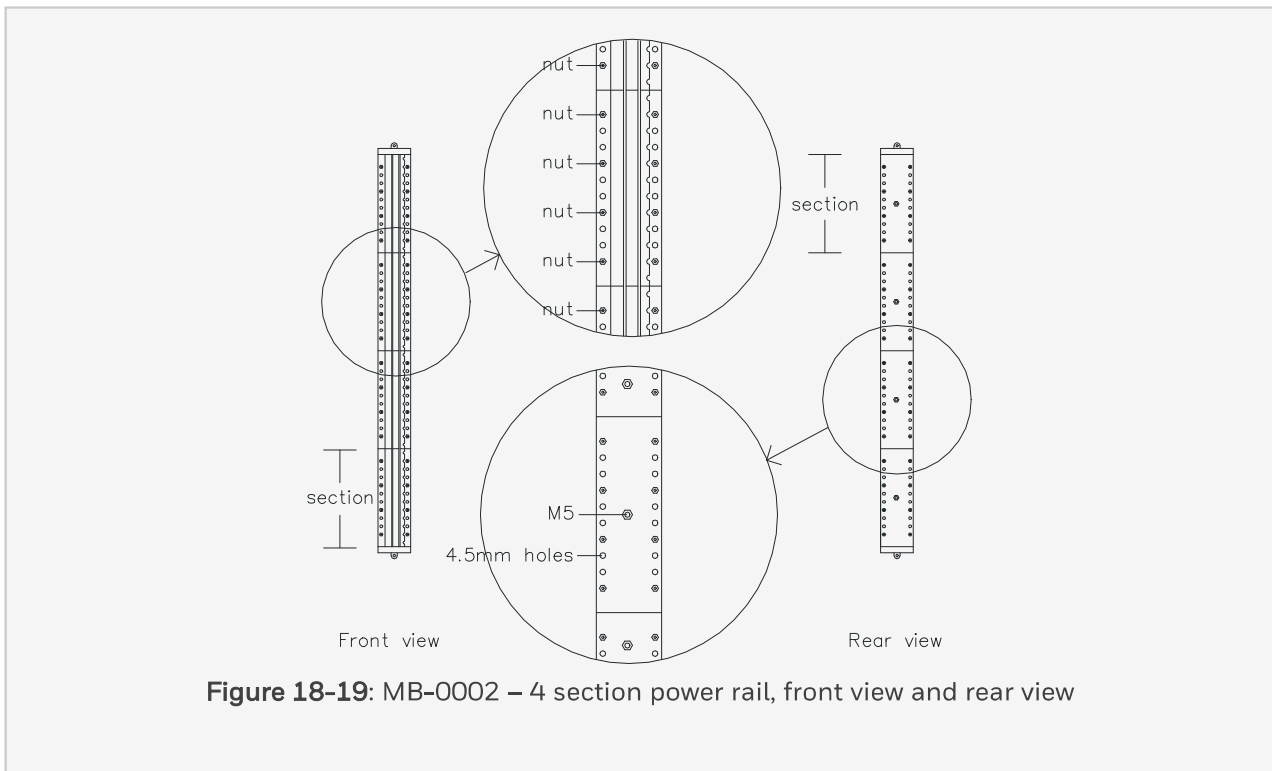


The below figure shows that the MB-0002 mains power rail consists of:

- Two copper rails,
- Two end caps and
- Four 6 inch sections.

Each section has twelve connector positions.

- The second, fifth, eighth and the eleventh connector position of each section have nuts in the housing to accommodate for JCK connectors.
- All (twelve) positions (of each section) can be used for STR connectors.



The rail can be mounted using the M5 thread hole on the rear centre of the rail, as shown in the above figure.

Mounting without rear access is possible using the 4.5mm diameter holes on both sides of the rail and on each end cap.

18 Power distribution

18.6 MB-0002

18.6.2 Technical data

General	Type number:	FS-MB-0002
	Approvals:	UL, CSA, FM pending
Load	Rail current:	max. 200 A
Connectors	D-TAB-200-JCK	max. 55 A (with AWG 8 wire)
	D-TAB-200-STR	max. 25 A (with AWG 12 wire)
	Temperature rail and JCK connector	max. 125°C (257°F)
	Temperature STR connector	max. 105°C (221°F)
Sections	quantity per rail	4
	JCK positions per section	max 4
	STR positions per section	max 12
	length per section	152.4 mm (6 inch)
Physical	Rail dimensions	649 x 5.08 x 34.8 mm (L x W x H)
		25.52 x 2.0 x 1.37 in (L x W x H)
	Weight	1.5kg (3.3 lb)
	M5 mounting thread hole	6.5mm (0.256 inch) depth, 152.4mm (6 inch) mounting interval