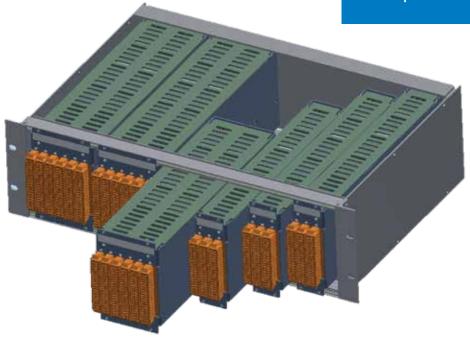


Short project lead-time and last minute design changes call for flexible electrical circuit solutions. Space- and weight issues call for compact, light weight solutions. Maximizing rolling stock operational up time call for large line replaceable units.

Mors Smitt has taken up that challenge with the new 19" relay marshalling box.

### **Features**

- Fast, flexible & versatile
- Free configurable up to 160 C/O contacts 10 A, 110 VDC
- Efficient line replaceable unit
- Tried and tested, railway proof
- Compact solution





# **Relay Marshalling Box (RMB)**

RMB compact series: 19", free configurable up to 160

#### The RMB solution; fast, flexible, compact and reliable.

Based on the D-U relay Mors Smitt introduces the RMB compact series. A modular switching solution with up to a staggering 40 D-U relays, freely configurable, with all 160 C/O contacts on front-side connectors, housed in a 19" concept only 3U high.

Easy marshalling / cross wiring inside the box enables last minute changes to the circuitry. Connections are wired not on PCB, thus enabling 10 A continuous current on ALL circuits and 200 A (@10 ms). No waiting for PCB's manufacture, no special testing, just change and apply. The relays are plugged in a special socket, making it quick and easy to exchange them, even to change into a timer or latching relay.

After design freeze, the wiring schematics and installation are tested and certified by our full automatic testing computer. Thus guaranteeing supply of a 100% correct set and Line Replaceable Unit.

All contacts are frontside connected. The train wiring is connected through connectors with a keying code, ensuring faultless installation and replacement.

Each of the relays is pluggable, making cost efficient replacement easy.





# C/O contacts, 10 A, 110 VDC



## **Customer specific**

The concept is versatile, RMB40 houses 40 relays. In cases where less relays are required, or less space is available, the RMB20 might suit the requirements. In every case, the benefits remain: flexible, fast and, through our certified testing methods: very, very reliable.

### The relay

Currently there are 10 million D-U rolling stock relays in service world-wide. This tried and tested electro mechanical work horse has proven its worth in all climates and all applications from 1 mA to 10 A. The D-U has a contact rating of 10 A and has proven to reliably break 7 A at 110 VDC at all of its 4 C/O contacts, due to its magnetic arc blow-out. With timers and latching relays on the same plug-in concept, it is the versatility of this relay concept that makes it the GoTo, safety- and general purpose relay for many rolling stock engineers around the globe.

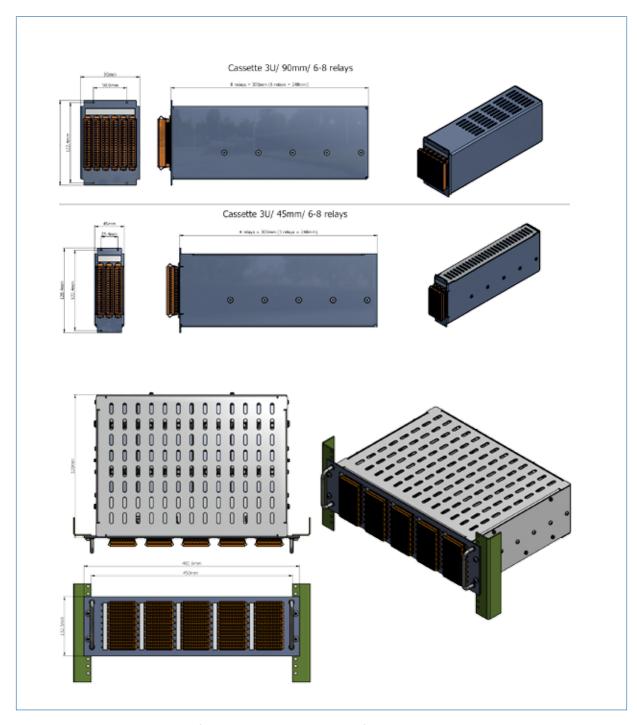
### **Applicable standards**

EN 50155	Electronic equipment used on rolling stock
EN 50264-1	Rolling stock power & control cables
IEC 60571	Electronic equipment used on railway vehicles
IEC 60077	Electrical equipment for rolling stock
IEC 60947	Low voltage switchgear and control gear
IEC 61373	Rolling stock equipment - Shock & Vibration
EN 50121	Electromagnetic compatibility for railway
	applications
NF F16-101/102 /	Fire behaviour - railway rolling stock
EN 45545-2	
IEC 60529	Protection class standard (IP class)
IEC 60068-2	Salt/mist, damp/heat









Mors Smitt is a railway supplier for onboard and trackside safety-critical solutions. Its solutions combine electro-mechanical ultra-high dependability relays with safety-critical electronics, all of which is manufactured to the strictest standards (IRIS, ISO 9001, ISO 14001).

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