

Busbar Trunking System Specification

Eaton's Mempower Busbar Trunking System is the obvious choice when searching for a combination of technical performance and attractive design. Constant development of the range for over 30 years has not only ensured economical and reliable solutions; Mempower has evolved into an unsurpassed range able to adapt to virtually any installation. Mempower is an integral part of the product offering from Eaton Electric Limited. Complementing the Eaton range of low voltage distribution equipment from packaged substations and LV distribution switchboards to a complete selection of fused switchgear, circuit breaker systems, motor control gear and OEM products, Eaton is your source of circuit protection & control – worldwide.

Mempower Busbar Trunking Systems are thoroughly tested and comply fully with IEC 60439-2. The range extends from 25–6300A with lighting, low, medium and low impedance power versions, together with a wide selection of accessories and tap-off units. The straightforward and highly styled design makes Mempower Busbar Trunking easy to both install and use – truly the system with style!

The advantages of Mempower Busbar Trunking are impressive, hence its popularity in replacing conventional cabling systems. Not only does its unique design provide a neat and attractive alternative to cable and many other busbar brands, it also ensures flexibility and ease of installation in terms of jointing and fitting. With no requirement for cable trays and complicated terminations, all Mempower ranges are supplied in convenient 3m lengths (alternative lengths if required), which can simply be 'tapped-off' where required. An entire building can be fed from a single riser with no need for expensive and complicated cable runs to each floor. This benefit, along with the ability for single pole applications, fed from a three-phase system to load balance, means we can provide both space saving and cost-effective solutions. The design is completely re-usable and can be easily assembled in any location in the minimum of time, while tap-off devices are located at any required point.

The options of circuit protection are themselves numerous with a comprehensive choice of tap-off devices including fuses (BS, NH, DIN), switch-disconnectors and switch-disconnector-fuses, MCCBs, MCBs, FCSs and BS1363, CEE17 & IEC60309 industrial plugs and sockets. Additionally, our wide range of angles and components can be combined to meet layout requirements without compromising on economy or space.

General Construction

- LUX Strong aluminium housing; tough moulded extrusion containing rigid copper wires
- LP, MP Aluminium profile with interlocking flame retardant polyester covers
- XP Aluminium housing, sandwich construction, high-grade insulation

Enclosure

- Degree of protection to BSEN60529 (IEC60529):
 - LUX IP4X standard; IP55 on request
 - LP IP4X standard
 - MP IP4X standard; IP54 on request
 - XP IP4X standard; IP55 on request

Conductor Bars

- LUX Four or six copper conductors
- LP, MP Five copper conductors – three phases with separate neutral & earth providing facility for 'clean earth' where required
- XP Extruded copper 2 to 6 bars giving DP, TP, TP & N, TPN & E, TPN & E with 200% neutral

Voltage Drop

- Refer to individual range technical data tables for details

Insulation

- Tap-off points & support mouldings on the LP range are moulded polyester classified flammability grade UL-94 V-O with MP & XP ranges being a LSHF grade UL-94-V-O

Conductor Joints

- Each length is supplied complete with all components necessary for connection to adjacent lengths or fittings

Protective Earth Conductor

- LUX provided by the housing
- LP, MP Separate PE conductor included in the system up to 800A
- XP provided by the housing; an internal PE conductor can be supplied if required

Straight Lengths & Fittings

- Supplied as standard in 3m lengths – shorter lengths, angles, intersections & special bends are available on request

Incoming Feed Arrangements

- LUX Insulated cable end feed box with cable gland
- LP, MP can be end or centre fed
- XP Transformer and switchboard flange connections plus end feeders for cables can be tailor-made to customer requirements

Mounting & Supports

- Mempower lighting trunking can be mounted in any plane, long-face vertical gives maximum strength for luminaire support
- The other ranges can be mounted horizontally or vertically – universal mounting brackets are available suitable for wall mounting or suspension

Conductor Expansion

- Generally any changes in relative lengths of conductors or housing are accommodated for by movement of the joint links & no special precautions are required

Fire Barriers

- Factory fitted internal fire barriers for LP & MP are of the Intumescent Gasket type, 4 hr rated to BS476 Part 20. No internal fire barriers are necessary with XP, but has been tested with a proprietary fire barrier achieving 4 hour rating to BS476 Part 20
- Medium Power and XP ranges have been 3rd party certified to DIN4102-9, DIN4102-12 & EN1366-3

Tap-off Units

- Insulated plug-in unit for Mempower LUX
- A variety of plug-in tap-off units are available for the LP & MP ranges, which are simply clamped into position. LP units are insulated as standard (metalclad available) while MP is metalclad
- XP tap-off units are metalclad to IP54 as standard

Tapping Outlets

- Every 1m along the face of the LUX range; simple plug-in fixing with tapping seal for unused outlets
- For LP & MP, automatic shuttered outlets are provided every 0.33 of a metre on the front face of the busbar. The arrangement of tapping connections and apertures ensures the tap-off units are fitted correctly. XP tapping outlets can be engineered to the required position

Standards

- Mempower busbar trunking conforms to BSEN60439-2, & IEC60439-2