

Eta-com UK betobar-r

The 'betobar-r' busbar consists of copper or aluminium conductors, embedded in an enclosure of a non flammable, self-extinguishing and homogeneous insulation mix based on epoxy cast-resin with mineral fillers ensuring high mechanical strength and chemical withstand. Standard types are available for current ratings up to 6300A and voltage ratings up to 24kV. Systems for higher current ratings or DC applications are possible.

The busbar line consists of a number of prefabricated elements. The electrical jointing of the conductors is achieved by means of double fish plates and high tensile steel bolts. The junctions and the element ends are overcast with the same insulation mix as used for the elements. In this way an integral insulating enclosure to IP68.7 is guaranteed over the full length of the busbar run. Straight junctions and elbow junctions are available each facilitating installation adjustments of 10-20mm per standard junction.

Element Shapes

The 'betobar-r' busbar system is available in a wide range of standard element shapes, forms and lengths fabricated to suit the typical project requirements:

- Straight elements
- Elbow elements, flat-wise & on edge
- Z (double elbow) & T elements
- Flanged terminal elements
- Tap-off facilities & phase-transfer elements
- Thermal expansion compensation elements
- Tailor-made terminal elements for transformer, generator or switchboard connection

Characteristics

The most important advantages of the 'betobar-r' system are:

- High short-circuit withstand
- Non flammable, self-extinguishing insulation to IEC 332 & DIN 4102 part 1
- Electrical continuity E30 – to DIN 4102 part 12
- Fire-proof wall bushings, A60, H60, S60 to S180 to DIN4102 part 9
- Fire resistant to IEC 331 (LV)
- Excellent resistance to atmospheric pollution & a wide range of chemicals (list on request)
- Integral insulation & a high degree of protection (IP68.7)
- Suitable for tropical climates (withstands rodents, insects, fungi)
- Easy assembly & short installation times
- Maintenance free
- Code EEX m II T5 certificate to EN 50028

Types

The 'betobar-r' busbars can be supplied in the following standard types:

For Low Voltage:

Up to 1000 V AC 45-55 Hz – three phase conductors and/or:

- Protective earth 50, 100, 150 & 200% neutral
- Alu-conductors range up to 5250 Amps
- Cu-conductors range up to 6500 Amps
- For DC applications up to 16.000 Amps & 1500 V DC
- To IEC-439-2 400 to 6500 Amps – 1000 V
- Models with 3 phase – 3-wire & 4-wire with full size neutral & earth conductor.

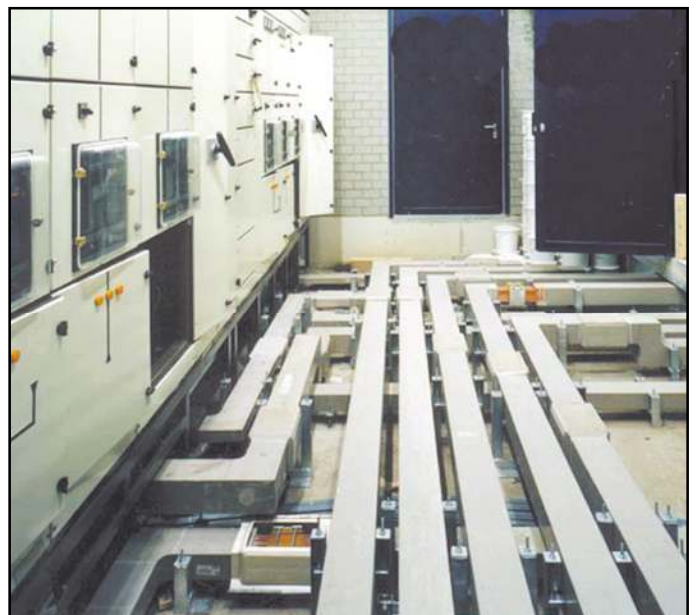
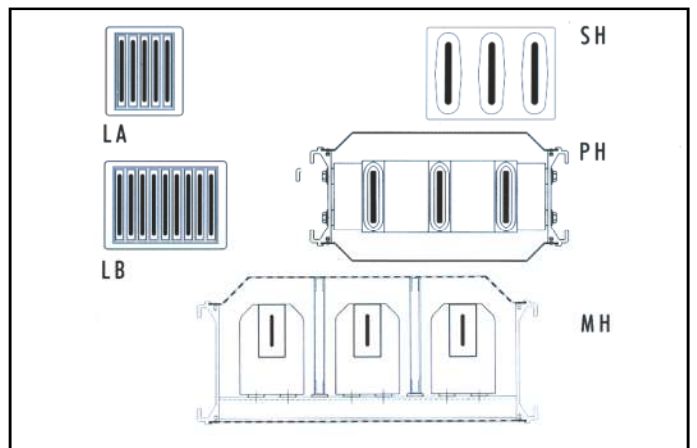
For Medium Voltage:

Type	Current rating	Voltage rating
SH	up to 2000 A	up to 7.2 kV
PH	up to 3600 A	up to 17.5 kV
MH	up to 5000 A	up to 24.0 kV

- To IEC-466 800 A to 6300 Amps
- In compact types for 3,6 – 7,2 – 12 & 17,5 kV also with segregated phases for 24 kV generator busbars
- Other current ratings on request

Test

All technical data specified, such as current ratings and temperature rise, insulation resistance, voltage and short circuit withstand, have been certified in accordance with international standards (IEC, VDE or BS) by the independent testing stations K.E.M.A., LABORELEC, LCIE. Assembled elements with cast junctions were submitted for type testing.



Applications for:

- Main busbars in powerstations
- Energy distribution main feeders
- Total energy installation
- Bus-coupler connections
- Machine (motor) feeders
- Rising mains in high-rise multistorey buildings
- Transformer stations in: industrial plants, off-shore platforms, public buildings, hospitals, hotels, banks, powerstations