

## Bus-bar supports

# DELTA-Compact

## DELTA 110C • DELTA 210C • DELTA 305C

The product is a new compact system designed for mounting bus-bar systems in LV distribution facilities up to 1000 V, rated current up to 3700 A and short circuit strength up to 220 kA.

### Properties of the DELTA-C systems

- Favourable price
- Excellent performance
- High operating strength
- Limited number of parts
- Simple and fast installation
- Rigid non-metallic skeleton
- Fixed phase spacing 100 mm
- Will carry bus-bars 5 and 10 mm thick
- DELTA 305C System spares up to 40% copper
- Reduced weight and price owing to the small size of the product
- Can be readily installed in cubicles 400 mm depth

### Technical Data

Support width	272 mm
Mounting spacing of the bolts	100 mm
Phase spacing of the conductors	100 mm
Permissible tensile load	16 kN
Critical tensile load	22 kN
Weight of the support assembly	1100 g
Rated withstand voltage	12 kV
Operating voltage	1200 V
Operating temperature	-40 °C to +130 °C
Flammability rating	UL94-VO
Assembly load-bearing capacity	80 kg
Nut torque	15 N/m
Enclosure	IP 00

### Product use and installation

The product is designed for building up bus-bar systems in LV distribution facilities up to 1000 V. The DELTA-C support body is made of a high-strength plastic material, owing to which the product will retain its mechanical strength up to 130 °C. The rigid supporting parts allow two vertically oriented copper conductors 5 and 10 mm thick to be perfectly fixed. Two M10 screws at a 100 mm spacing are used to clamp the supporting parts together and to fasten them to the structure. The screws pass through a pair of insulating and spacer tubes which define the clamping of the copper conductors. Since their height is different for different heights of the conductors, they must be specified in the purchase order.

The mounting density of the DELTA-C supports is determined by the manufacturer in dependence on the mechanical and short-circuit load of the entire system. Recommended values are given in tables 1 – 5 for each product type, respectively. For the DELTA 210C and DELTA 305C supports we recommend interconnecting

the conductors in each phase with screws in order to obtain conductor bundles, whereby the system strength is improved and the required short-circuit strength declared by the manufacturer is attained. The DELTA 110C support is designed for the use of a single 10 mm conductor in-phase, whereas DELTA 210C allows the use of two 10 mm conductors in phase.

DELTA 305C is designed to carry one, two or three conductors 5 mm thick. The DELTA 305C support system provides for a better cooling of the conductors, thus allowing the current load to be up to 40% increased. In this way the copper conductor weight as well as the production cost can be reduced.

The DELTA-Compact system is only 272 mm wide, thus sparing space in the distribution facility. It is well suited to installation in cubicles 400 mm depth.

### Certificates

The products has been certified by EZÚ, Pod Lisem 129, 170 08 Praha 8, Czech Republic  
Testing protocol No. 502959-01/01  
Certificate No. 1051155  
Date of certification: 1 December 2005

### Declaration of Conformity

The product: DELTA-Compact conforms to the requirements of the standards ČSN EN 60439-2 ed.2:2001 following up the standard ČSN-EN 60439-1 ed.2:2000 + A1:2004 sections 8.2.2, 8.3.4, 8.2.5., 8.2.13, 8.2.10, ČSN EN 60439-3:1995+A1:1997+A2:2002 section 8.2.12. Conformity of the products to the above standards implies conformity to the basic requirements of the Czech Governmental Decree No. 17/2003.