

## Bus-bar supports

# DELTA-Compact

DELTA 110 C • DELTA 210 C • DELTA 305 C

We offer a new highly compact system designed for the installation of bus-bar systems in LV distribution facilities up to 1000 V with rated currents up to 3700 A and short-circuit withstand up to 220 kA.

### Properties of the DELTA-C system

- Favorable price
- Good performance
- High operational strength
- Limited number of parts
- Simple and quick installation
- Rigid non-metallic frame
- Fixed phase spacing 100 mm
- Enables installation of 5-mm and 10-mm bus-bars
- The DELTA 305C system saves up to 40% of copper
- Reduced weight and price due to the small size
- Conveniently fits into cabinets with a depth of 400 mm

### Product use and installation

The product is intended for setting up bus-bar systems in LV distribution systems up to 1 000 V. The body of the DELTA-C support is made of highly resistant plastic, and provides the product with mechanical strength up to 130 °C. The rigid support enables perfect fixing of vertically oriented 5-mm and 10-mm copper conductors. The supports are tightened and fastened to the structure using two screws M10 with the spacing of 100 mm. The screws pass through a pair of insulating and spacing tubes that determine the clamping of the copper conductors. Their height varies according to the height of the conductors used, and this must therefore be specified in each order. The installation density of the DELTA-C supports is determined by the manufacturer according to the mechanical and short-circuit load of the entire system. The recommended values are provided for each product type in Tables 1–5. For the DELTA 210C and

### Certificates

The product is certified by EZÚ, Pod lisem 129, 170 08 Prague 8, Czech Republic. Test protocol: 502959-01/01  
Certificate number: 1051155  
Certification date: 1 December 2005

### Technical data of products

Support width .....	272 mm
Mounting bolts spacing .....	100 mm
Phase spacing of conductors .....	100 mm
Permitted tensile load .....	16 kN
Critical tensile load .....	22 kN
Support system weight .....	1 100 g
Rated withstand voltage .....	12 kV
Rated operating voltage .....	1 200 V
Operating temperature .....	-40 °C až +130 °C
Flammability rating .....	UL94-V0
Load capacity of the system .....	80 kg
Nut torque of the products .....	15 N/m
Coverage .....	IP 00

DELTA 305C supports, we recommend to connect the conductors with screws multiple times in each phase to form bundles to reinforce the systems and provide the required short-circuit withstand declared by the manufacturer.

The DELTA 110C support is designed for the use of one conductor in a 10-mm phase, whereas the DELTA 210C support allows the use of two conductors in a 10-mm phase. The DELTA 305C support is designed for mounting one, two or three conductors with thickness of 5 mm. The DELTA 305C support system provides better cooling of the conductors, and thus allows an increase in the current load of the systems by up to 40%. Thus, a reduction in copper conductor weight and production costs can be achieved. Being only 272 mm in width, the DELTA-Compact system saves space in distribution equipment, and is suitable for installation in cabinets with a depth of 400 mm.

### 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 ensures the compliance of the product to the basic requirements of the Czech Governmental Decree No. 17/2003 Coll., as amended.

## Bus-bar supports

# DELTA-Compact

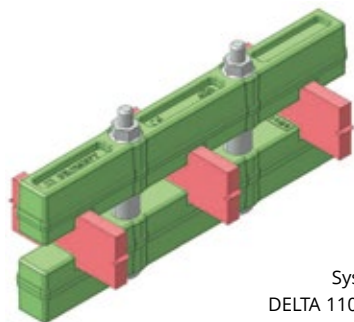
**DELTA 110 C • DELTA 210 C • DELTA 305 C**

The system is designed for setting up bus-bar systems with a phase spacing of 100 mm.

### DELTA 110C – copper conductor 1 x 10 mm

Table 1 – DELTA 110C support spacing according to the required short-circuit withstand

Ic kA ef. 1s	10	20	30	40	50	60	70	80	90	100
Ic kA dyn.	17	40	63	84	105	132	154	176	198	220
1 x 30 x 10	800	700	600	400	300	225	200	175	175	150
1 x 40 x 10	900	800	600	450	350	300	250	200	175	150
1 x 50 x 10	1 000	900	700	500	400	300	250	200	175	150
1 x 60 x 10	1 000	900	700	600	400	350	300	200	175	150
1 x 80 x 10	1 000	900	800	600	500	350	300	200	175	150
1 x 100 x 10	1 000	1 000	900	750	500	350	300	200	175	150
1 x 125 x 10	1 000	1 000	1 000	800	500	350	300	200	175	150

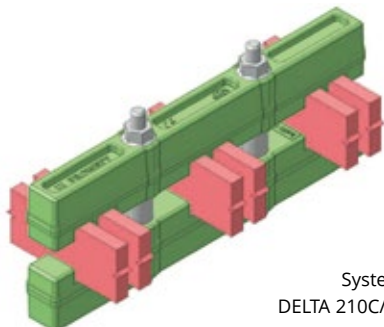


System  
DELTA 110C/60

### DELTA 210C – copper conductor 2 x 10 mm

Table 2 – DELTA 210C support spacing according to the required short-circuit withstand, conductor bundles formed

Ic kA ef. 1s	10	20	30	40	50	60	70	80	90	100
Ic kA dyn.	17	40	63	84	105	132	154	176	198	220
2 x 30 x 10	1 000	900	700	600	300	250	200	175	175	150
2 x 40 x 10	1 000	900	700	600	350	300	250	200	175	150
2 x 50 x 10	1 000	900	800	600	400	300	300	200	175	150
2 x 60 x 10	1 000	1 000	900	700	450	350	300	200	175	150
2 x 80 x 10	1 000	1 000	900	800	500	350	300	200	175	150
2 x 100 x 10	1 000	1 000	1 000	900	500	350	300	200	175	150
2 x 125 x 10	1 000	1 000	1 000	1 000	500	350	300	200	175	150



System  
DELTA 210C/60

## Bus-bar supports

# DELTA-Compact

**DELTA 110 C • DELTA 210 C • DELTA 305 C**

The system is designed for setting up bus-bar systems with a phase spacing of 100 mm.

### DELTA 305C – copper conductor 1 x 5 mm

Table 3 – DELTA 305C support spacing according to the required short-circuit withstand

Ic kA ef. 1s	10	20	30	40	50	60	70
Ic kA dyn.	17	40	63	84	105	132	154
1 x 30 x 5	700	350	250	200	150	100	100
1 x 40 x 5	800	400	300	225	175	125	125
1 x 50 x 5	900	450	350	275	200	140	125
1 x 60 x 5	1 000	500	400	300	200	140	125
1 x 80 x 5	1 000	550	450	325	225	140	125
1 x 100 x 5	1 000	650	500	375	225	140	125
1 x 125 x 5	1 000	700	550	400	225	140	125

### DELTA 305C – copper conductors 2 x 5 mm

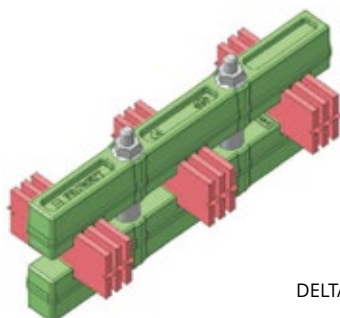
Table 4 – DELTA 305C support spacing according to the required short-circuit withstand, conductor bundles formed

Ic kA ef. 1s	10	20	30	40	50	60	70
Ic kA dyn.	17	40	63	84	105	132	154
2 x 30 x 5	1 000	500	350	250	200	150	150
2 x 40 x 5	1 000	550	450	300	200	200	150
2 x 50 x 5	1 000	600	500	350	250	200	200
2 x 60 x 5	1 000	700	550	400	300	250	200
2 x 80 x 5	1 000	800	600	450	300	250	200
2 x 100 x 5	1 000	900	650	500	300	250	200
2 x 125 x 5	1 000	1 000	700	600	400	300	200

### DELTA 305C – copper conductors 3 x 5 mm

Table 5 – DELTA 305C support spacing according to the required short-circuit resistance, conductor bundles formed

Ic kA ef. 1s	10	20	30	40	50	60	70	80	90
Ic kA dyn.	17	40	63	84	105	132	154	176	198
3 x 30 x 5	1 000	600	400	350	250	200	150	150	150
3 x 40 x 5	1 000	700	500	400	300	200	200	150	150
3 x 50 x 5	1 000	800	600	450	300	250	200	200	150
3 x 60 x 5	1 000	900	650	500	350	300	250	250	200
3 x 80 x 5	1 000	1 000	700	550	400	300	300	250	200
3 x 100 x 5	1 000	1 000	800	600	450	350	300	250	200
3 x 125 x 5	1 000	1 000	900	700	500	400	350	250	200

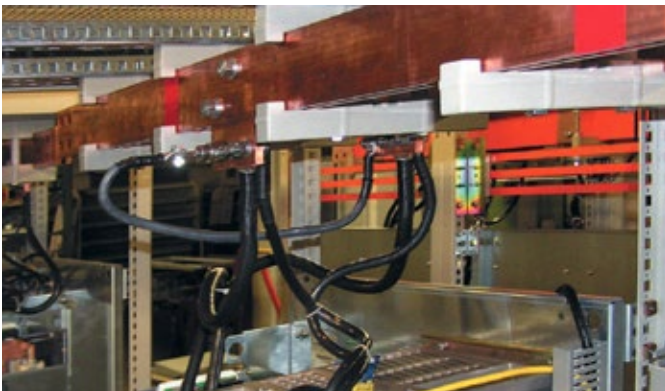
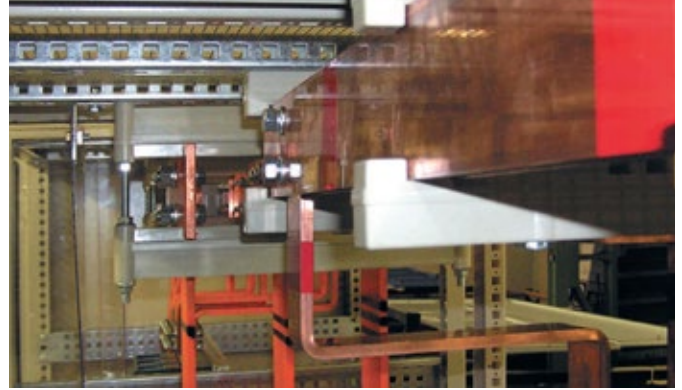


System  
DELTA 305C/60

## Bus-bar supports

# DELTA-Compact

### Application of the product DELTA 210C/80



### Product order

The product design requires that the height of the conductor for which the system is to be used is always specified. When ordering the DELTA system, you can order the entire system as a complete assembly or individual parts of the assembly. The assembly includes: 2 pcs DELTA plastic pressings, 2 pcs spacing tubes, 2 pcs M10 screws, 2 x nuts M10 and flat washers. The spacing tubes and the above-mentioned fasteners are supplied as a DS assembly set, see the valid price list.

#### Example A:

When ordering ten DELTA 210C mounting assemblies for 80 x 10 mm strip, order:

- the DELTA 210C/80 assembly .... 10 pcs

#### Example B:

Or you can order the same material item by item according to the product price list, e.g.:

- DELTA 210C pressing ..... 20 pcs
- mounting kit DS80 ..... 10 pcs