

DP6055-12

SA551900



Spacer and load-bearing insulators / Insulators and busbar supports



Series of insulators suitable for use as supports or spacers for electrically active parts such as busbars used in the construction of electrical panels. Made of polyester or polyamide resin with added glass fibres, they ensure long-term mechanical and electrical resistance. The material is anti-hygrosopic and highly self-extinguishing, and can be supplied in an acid-proof version on request, particularly suitable for contaminated environments. The insulators feature a female threaded insert in brass or white galvanised steel on both support sides, allowing coupling with the relevant parts via special headless screws. The central band, depending on the model, is octagonal or hexagonal and allows fastening.

Technical features

Functional characteristics	
Arc resistance	> 180 s - ASTM D-495
Tracking resistance	3 W/min - ASTM D-2302
Operating voltage	1500 AC / DC (V)
Minimum internal discharge voltage	40 AC (kV)
Rated withstand voltage at 50 Hz for 1 min	15 kV
Operating conditions	
Operating temperature range	-40 ÷ 130 °C
Mechanical features	
Water absorption	< 0,2% - ASTM D-570
Tensile stress	1600 daN
Bending stress	800 daN
Compressive stress	11700 daN
Physical features	
Material class	Self-extinguishing, class V0 (1.6 mm) according to UL-94 standard
Material	Polyamide
Overall dimensions	
Height (A)	55 mm
Width (B)	55 mm
Other dimensions	
Dimension - D	14 mm
Diameter dimension	
Dimension Ø - A	46 mm
Dimension Ø - B	M12 mm

Vemere S.p.A. declines all responsibility for the use of the products for purposes other than those for which they are intended, as indicated in the technical documentation. Vemere S.p.A. reserves the right to make, without prior notice, such changes as may, in its sole discretion, improve the technical and functional characteristics of the products and the related production logic. The technical characteristics and images of the products indicated are given for information only and are not binding in any way, since they may be modified without prior notice.

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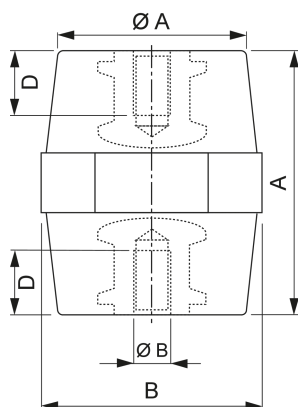
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Dimensions

Shape Hexagonal

Dimensions

Total View



Product variants

DP6040-12

SA535200

DP6046-12

SA542800

DP6051-12

SA548500

DP6065-12

SA560000

DP6070-12

SA562600

DP8075-12

SA566700

DP6076-12

SA572500

DP6080-12

SA574100

DP8100-12

SA576600

DP8102-12

SA578200

DP6060-12

SA554300

Reference standards

Compliance with Community Directives:

• 2014/35/UE (LVD) • 2011/65/UE e 2015/863/UE (ROHS)

is declared with reference to the following Standards:

• EN IEC 61439-1 • EN IEC 63000

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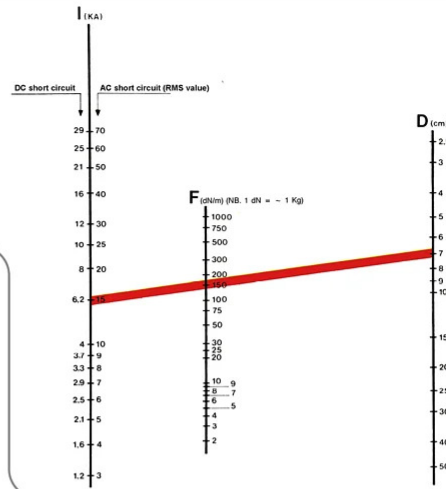
TECHNICAL GUIDE

ELECTRODYNAMIC FORCES BETWEEN CONDUCTORS

Nomogram 1

Determination of force F per unit length

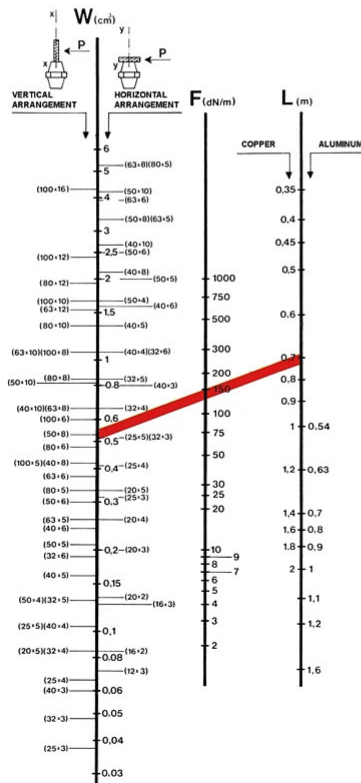
Required data: I = short-circuit current
 D = distance between phases
 Example: $I_{sc} = 15 \text{ kA (AC)}$ $D = 7 \text{ cm}$
result obtained from the nomogram: $F \approx 150 \text{ daN/m}$



Nomogram 2

Determination of distance L between supports

Required data: F = force per unit length (obtained from the previous nomogram)
 W = longitudinal and transverse section modulus of the busbars according to X-X or Y-Y respectively (obtainable based on the dimensions and arrangement of the busbar, whether horizontal or vertical)
 Example: $F \approx 150 \text{ daN/m}$ $W = 0,5 \text{ cm}^3$ (50 x 8 vertical arrangement)
result obtained deducibile dal nomogramma: $L \approx 0,7 \text{ m}$



Nomogram 3

Determination of the minimum cantilever breaking load P

Required data: F = force per unit length
 L = distance between supports (obtained from the previous nomogram)

Esempio: $F \approx 150 \text{ daN/m}$ $L \approx 0,7 \text{ m}$ (vertical arrangement)
result obtained from the nomogram: $P \approx 500 \text{ daN}$
(for vertically arranged busbar system)

Once the value of load P is determined, the suitable insulator can be identified by checking the specific tables for each item (cantilever breaking load columns) for a value greater than or equal to the one obtained from Nomogram 3.

