DP6051-08

SA546900



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-hygroscopic 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 specifications

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	750 daN
Compressive stress	9800 daN
Physical features	
Color	Red RAL-3002
Material class	Self-extinguishing, class V0 (1.6 mm) according to UL-94 standard
Material	Polyamide
Overall dimensions	
Height (A)	51 mm
Width (B)	50 mm
Other dimensions	
Dimension - D	15 mm
Diameter dimension	
Dimension Ø - A	42 mm

Vemer 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. Vemer 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.

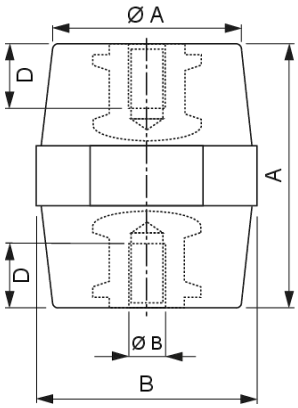
DP6051-08

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Diameter dimension	
Dimension Ø - B	M8 mm
Dimensions	
Shape	Hexagonal

Dimensions

Total View



Product variants

DP6030-08
SA522000

DP8035-08
SA526100

DP6035-08
SA527900

DP6036-08
SA530300

DP6040-08
SA533700

DP8045-08
SA537800

DP8046-08
SA538600

DP6046-08
SA540200

DP6050-08
SA544400

DP6055-08
SA549300

DP8060-08
SA552700

DP6063-08
SA556800

DP6065-08
SA558400

DP6076-08
SA570900

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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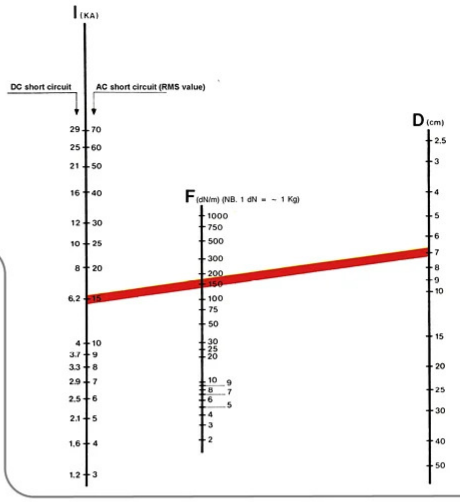
TECHNICAL GUIDE

ELECTRODYNAMIC FORCES BETWEEN CONDUCTORS

Nomogram 1

Determination of force **F** per unit length

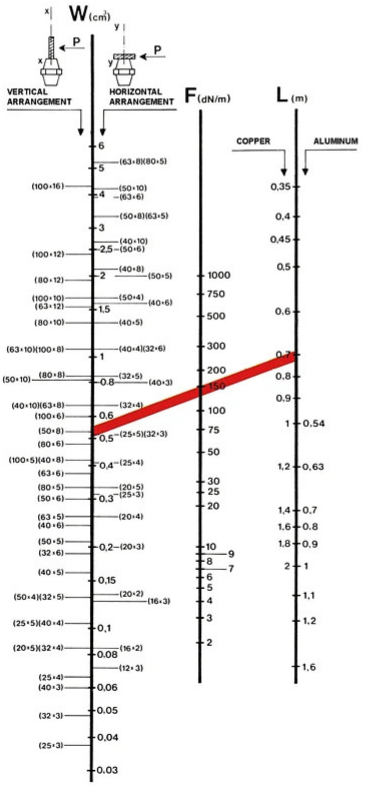
Required data: I = short-circuit current
D = distance between phases
Example: Isc = 15 kA (AC) D = 7 cm
result obtained from the nomogram: F ≅ 150 daN/m



Nomogram 2

Determinaton 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 oppure Y-Y respectively
(obtainable based on the dimensions and arrangement of the busbar, whether horizontal or vertical)
Example: F ≅ 150 daN/m W = 0,5 cm³
(50 x 8 vertical arrangement)
result obtained deducibile dal nomogramma: L ≅ 0,7 m



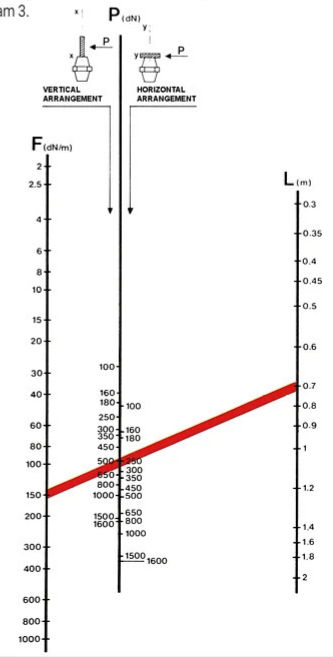
Nomogram 3

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 ≅ 150 daN/m L ≅ 0,7 m (vertical arrangement)
result obtained from the nomogram:
P ≅ 500 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.



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