DP6046-08 UL

SA54020099



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 polyamide with added glass fibres, they ensure long-term mechanical and electrical resistance. The material is halogen-free and UL V0 approved. 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

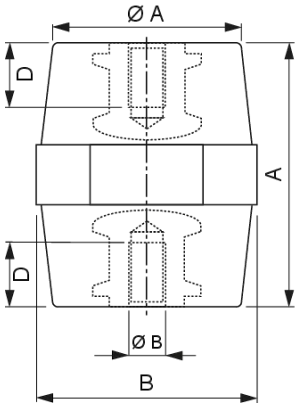
Functional characteristics	
Arc resistance	> 180 s - ASTM D-495
Tracking resistance	3 W/min - ASTM D-2302
Operating voltage	1500 AC / DC (V)
Minimum internal discharge voltage	40 AC (kV)
Rated withstand voltage at 50 Hz for 1 min	12 kV
Operating conditions	
Operating temperature range	-40 ÷ 130 °C
Approvals and certifications	
UL approval	✓
Mechanical features	
Water absorption	< 0,2% - ASTM D-570
Tensile stress	1300 daN
Bending stress	550 daN
Compressive stress	9800 daN
Physical features	
Color	Black
Material class	Self-extinguishing, class V0 (1.6 mm) according to UL-94 standard
Halogen free	✓
Material	Polyamide
Overall dimensions	
Height (A)	46 mm
Width (B)	46 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.

Other dimensions	
Dimension - D	15 mm
Diameter dimension	
Dimension Ø - A	40 mm
Dimension Ø - B	M8 mm
Dimensions	
Shape	Hexagonal

Dimensions

Total View



Product variants

DP6030-08 UL
SA52200099

DP8035-08 UL
SA52610099

DP6035-08 UL
SA52790099

DP6036-08 UL
SA53030099

DP6040-08 UL
SA53370099

DP8045-08 UL
SA53780099

DP8046-08 UL
SA53860099

DP6050-08 UL
SA54440099

DP6051-08 UL
SA54690099

DP6055-08 UL
SA54930099

DP8060-08 UL
SA55270099

DP6063-08 UL
SA55680099

DP6076-08 UL
SA57090099

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.

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

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.

TECHNICAL GUIDE

ELECTRODYNAMIC FORCES BETWEEN CONDUCTORS

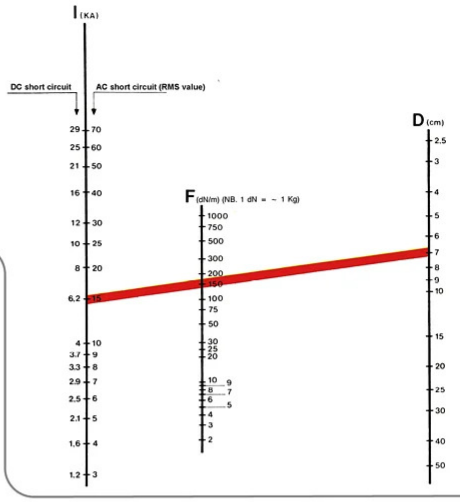
Nomogram 1

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



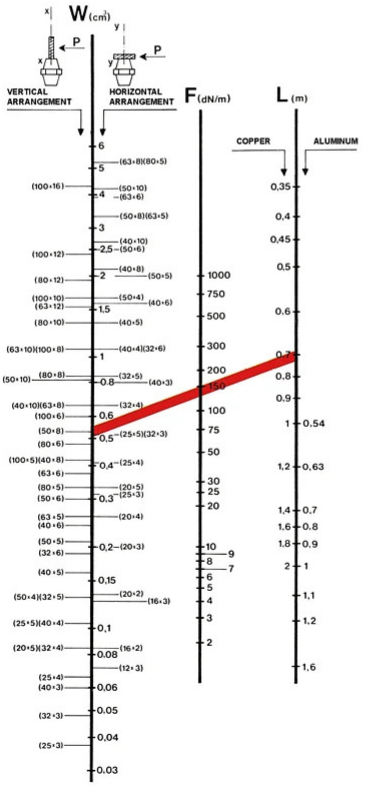
Nomogram 2

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



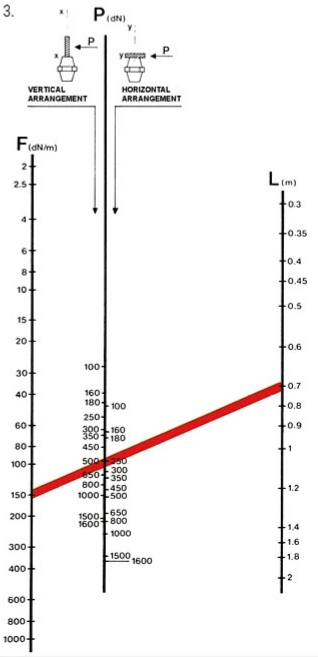
Nomogram 3

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.



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.