CP2050-06

SA607900



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 resin or polyamide with added glass fibres, they ensure long-term mechanical and electrical resistance. The material is anti-hygroscopic and highly self-extinguishing. 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 lower side includes a hexagonal band for fastening.

Technical specifications

Functional characteristics	
Arc resistance	> 180 s - ASTM D-495
Tracking resistance	3 W/min - ASTM D-2302
Operating voltage	750 AC / DC (V)
Minimum internal discharge voltage	30 AC (kV)
Rated withstand voltage at 50 Hz for 1 min	10 kV
Operating conditions	
Operating temperature range	-40 ÷ 130 °C
Mechanical features	
Water absorption	< 0,2% - ASTM D-570
Tensile stress	400 daN
Bending stress	100 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)	50 mm
Other dimensions	
Dimension - D	9 mm
Diameter dimension	
Dimension Ø - A	20 mm
Dimension Ø - B	M6 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.

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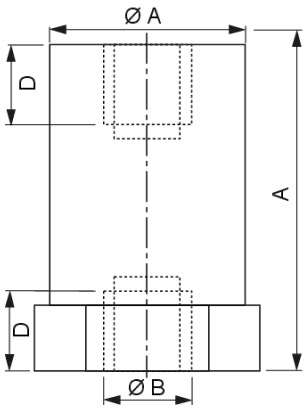
Dimensions

Total View



Product variants

CP2016-06
SA582400

CP2020-06
SA587300

CP2025-06
SA591500

CP2030-06
SA595600

CP2035-06
SA598000

CP2040-06
SA601200

CP2045-06
SA604600

CP3030-06
SA609500

CP3035-06
SA611100

CP3040-06
SA613700

CP3045-06
SA615200

CP3050-06
SA617800

CP3055-06
SA619400

CP3060-06
SA621000

CP3065-06
SA623600

CP3070-06
SA625100

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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Revision date: 2026-02-02

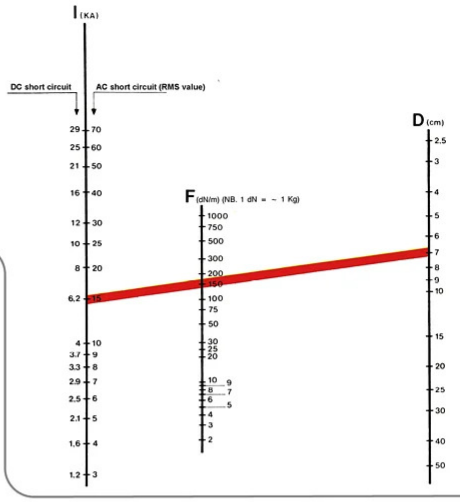
TECHNICAL GUIDE

ELECTRODYNAMIC FORCES BETWEEN CONDUCTORS

Nomogram 1

Determination of force **F** per unit length

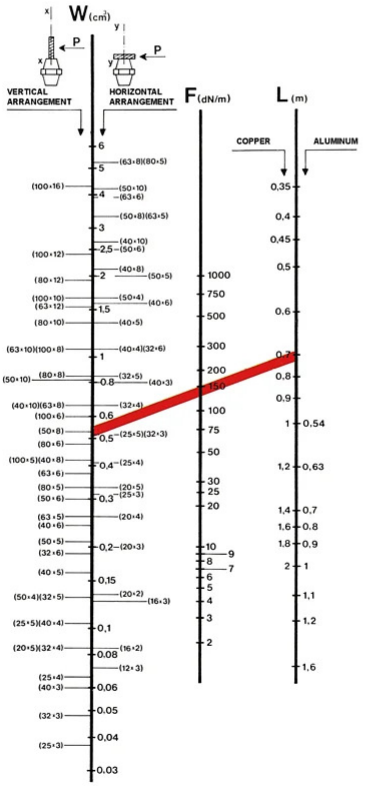
Required data: I = short-circuit current
D = distance between phases
Example: Isc = 15 kA (AC) D = 7 cm
result obtained from the nomogram: F ≅ 150 daN/m



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



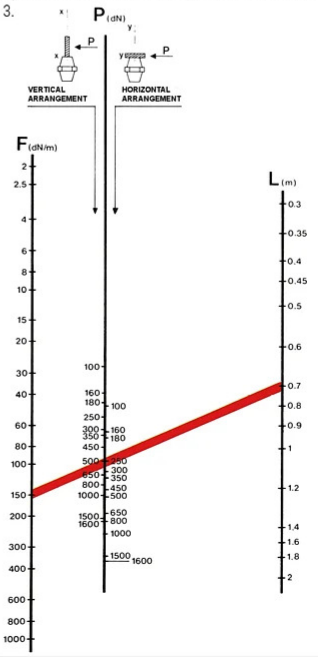
Nomogram 3

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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