

Support insulators

PROFIX PA

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The PROFIX PA support insulators are designed primarily for installation and firm fixation of bus-bar systems, bus-bars, terminal boards and boxes, cable taps, live parts of devices and other electrical equipment.



Technical data of products

	PA 30 M8 PA 30 M10	PA 40 M8 PA 40 M10 PA 40 M12	PA 50 M8 PA 50 M10 PA 50 M12
Support height	30 mm	40 mm	50 mm
Weight	90 g	110 g	165 g
Material used	PA6	PA6	PA6
Operating temperature	-40 °C to +130 °C	-40 °C to +130 °C	-40 °C to +130 °C
Tensile strength	10 kN	12 kN	14 kN
Bending strength	10 kN	8 kN	6 kN
Torsional strength	100 N/m	100 N/m	100 N/m
Rated insulation voltage	1000 V	1200 V	1200 V
Rated withstand voltage	12 kV	12 kV	12 kV
Flammability rating	UL 94-VO	UL 94-VO	UL 94-VO
Flammability rating	Hot loop 960 °C	Hot loop 960 °C	Hot loop 960 °C

Product design

The body of the PROFIX PA support insulator is made of highly resistant plastic based on polyamides reinforced with glass fiber. Steel dies for fixing screws are pressed into the insulator body on opposite sides. The extended hexagon-shaped insulator section allows for easier installation of

the product, and its locking against turning. The design and the processing technology of the product ensure its excellent thermal, mechanical and electrical strength.

Use of the product

The PROFIX PA support insulators are designed primarily for the setting up and installation of electrical equipment and distribution equipment with low voltage up to 1,000 V. They are used for the installation and firm fixation of bus-bar systems, bus-bars, terminal boards and boxes, cable taps, live parts of devices to the structure of electrical equipment. They are designed for installation in indoor

environments with operating temperatures from -40 °C to +130 °C.

The declared electrical, thermal and mechanical properties of the product are certified by EZÚ Praha, certificate no. 1060212. The properties of the PROFIX PA support insulators allow for a safe set-up of electrical distribution systems with high dynamic short-circuit current loads.

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Installation of PROFIX PA support insulators

The supporting insulators must be positioned in a way that the calculated force stress on the insulator does not exceed the permitted bending load limit of 10 kN. To facilitate

the installation of some selected types of bus-bar systems, we have provided a table with the recommended spacing for the support insulators installation.

Support insulators location overview

These values apply only to bus-bar systems with one copper conductor in each phase mounted flat.

The table is optimized for flat conductors with a rectangular cross-section and a thickness of 5 to 10 mm.

System 60 mm (Y)

Strip width in mm	Idyn(kA)	10	20	30	40	50	60	70	80	90	100
30	800	800	800	700	500	Insulators distance (X)					
40	800	800	800	800	650	500					

System 100 mm (Y)

Strip width in mm	Idyn(kA)	10	20	30	40	50	60	70	80	90	100
30	800	800	800	800	600	Insulators distance (X)					
40	1000	1000	1000	1000	800	700					
50	1000	1000	1000	1000	1000	800	600	550			
60	1000	1000	1000	1000	1000	800	700	550	500		
80	1000	1000	1000	1000	1000	800	600	500	480	250	280

System 150 mm (Y)

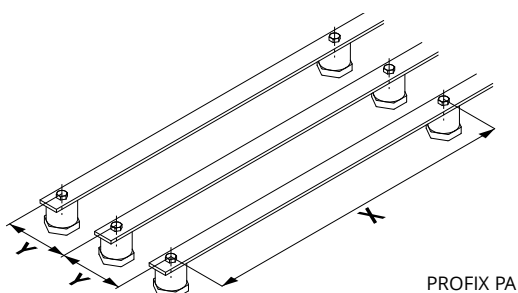
Strip width in mm	Idyn(kA)	10	20	30	40	50	60	70	80	90	100
30	800	800	800	800	750	Insulators distance (X)					
40	1000	1000	1000	1000	800	800					
50	1000	1000	1000	1000	1000	800	800	700			
60	1000	1000	1000	1000	1000	1000	900	800	700		
80	1000	1000	1000	1000	1000	1000	900	800	700	600	500
100	1000	1000	1000	1000	1000	1000	900	800	700	600	500

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System 185 mm (Y)

Strip width in mm	Idyn(kA)	10	20	30	40	50	60	70	80	90	100
30		800	800	800	800	Insulators distance (X)					
40		1000	1000	1000	1000	900					
50		1000	1000	1000	1000	1000	900	800			
60		1000	1000	1000	1000	1000	1000	1000	800		
80		1000	1000	1000	1000	1000	1000	1000	800	700	600
100		1000	1000	1000	1000	1000	1000	1000	800	700	600
120		1000	1000	1000	1000	1000	1000	1000	800	700	600



Certificates

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

Declaration of Conformity

The support insulators of PROFIX PA series, according to the certification, are in compliance with the requirements of Czech and European standards and regulations. The product has been marked with the CE symbol.