PASSPORT

Cross modules

1 PURPOSE

The busbars in the housing (hereinafter referred to as cross-modules, products) are intended for connecting neutral working (N) and neutral protective (PE) conductors in panel equipment and are used in the assembly of electrical distribution boards to organize a safe and reliable connection of wires. The use of cross-modules as phase conductors is permitted.

2 TECHNICAL CHARACTERISTICS

The main technical parameters and characteristics of the cross-modules are given in Tables 1, 2, 3.

Table 1 – General technical parameters

Parameter	General parameters
Protection level	IP20
Screw tightening torque, Nm	3
Tire material Screw	Brass
material	Steel, covered with zinc
Body material	Polyamide
Lid material	Polycarbonate

Table 2 – Main technical parameters and characteristics of cross-modules 2x7, 2x11, 2x15

Parameter		Values for Cross-module (article)		
		(2x7) 100 A	(2x11) 125 A	(2x15) 125 A
Nominal voltage, V		400	400	400
Rated current, A		100	125	125
Rated surge current Ipk, kA		20	20	20
Number of holes in one tire, pcs.				
– diameter 5.5 mm		5	7	11
– diameter 7.5 mm		2	2	2
– diameter 9.0 mm		-	2	2
Cross-section of connected conductors, mm2				
with a twist indecent com-sleeve for holes diameter	5,5 mm	from 1,5 to 6,0	» 1,5 » 6,0	» 1,5 » 6,0
	7,5 mm	» 6,0 » 16,0	» 6,0 » 16,0	» 6,0 » 16,0
	9,0 mm	-	» 10,0 » 16,0	» 10,0 » 16,0
without a trace night owl for screwing diameter	5,5 mm	» 2,5 » 6,0	» 2,5 » 6,0	» 2,5 » 6,0
	7,5 mm	» 10,0 » 25,0	» 10,0 » 25,0	» 10,0 » 25,0
	9,0 mm	-	» 10,0 » 35,0	» 10,0 » 35,0

Table 3 – Main technical parameters and characteristics of cross-modules 4x7, 4x11, 4x15

Parameter		Values for Cross-module (article)		
		(4x7) 100 A	(4x11) 125 A	(4x15) 125 A
Nominal voltage, V Nominal current,		400	400	400
A Nominal surge current		100	125	125
Ipk, kA		20	20	20
Number of holes in one tire, pcs.				
– diameter 5.5 mm		5	7	11
– diameter 7.5 mm		2	2	2
– diameter 9.0 mm		-	2	2
Cross-section of connected conductors, mm2				
with a twist indecent com-sleeve for holes with a diameter of	5,5 mm	from 1,5 to 6,0	» 1,5 » 6,0	» 1,5 » 6,0
	7,5 mm	» 6,0 » 16,0	» 6,0 » 16,0	» 6,0 » 16,0
	9,0 mm	-	» 10,0 » 16,0	» 10,0 » 16,0
without a trace night owl for holes with a diameter	5,5 mm	» 2,5 » 6,0	» 2,5 » 6,0	» 2,5 » 6,0
	7,5 mm	» 10,0 » 25,0	» 10,0 » 25,0	» 10,0 » 25,0
	9,0 mm	-	» 10,0 » 35,0	» 10,0 » 35,0

2.2 Overall and installation dimensions

The overall drawing of the product is shown in Figure 1.

The overall dimensions of the product are given in Table 4.

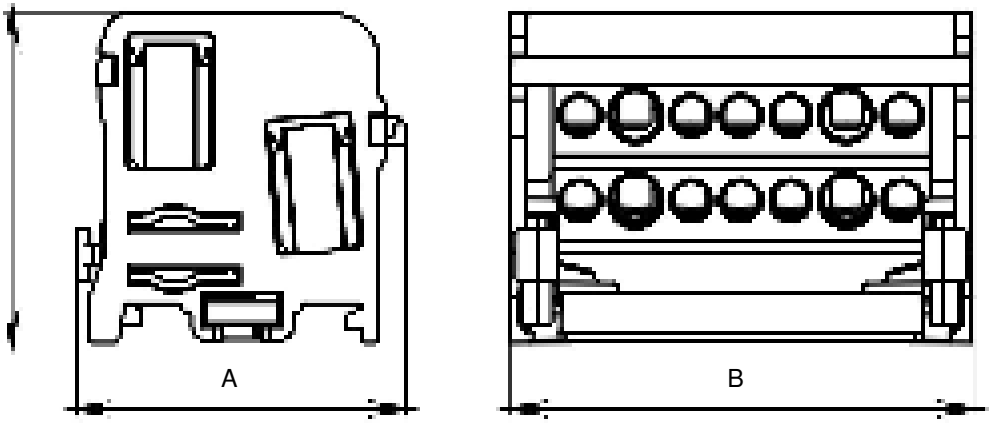

Figure 1 – Overall dimensions of the cross-module (2x7) 100 A

Table 4 – Overall dimensions of cross modules

Parameter	(2x7) 125 A	(2x11) 125 A	(2x15) 125 A	(4x7) 125 A	(4x11) 125 A	(4x15) 125 A
Length A, mm	50,0	50,0	50,0	90,7	90,7	90,7
Width B, mm	70,5	106,5	136,5	70,5	106,5	136,5
Height C, mm	50,0	50,0	50,0	50,0	50,0	50,0

2.3 Construction and operating principle

The cross-module consists of a housing with metal busbars and terminal screw clamps fixed inside. The conductors are connected via a screw clamp.

clamp. The design ensures reliable
electrical contact and protection against accidental
touching live parts.

3 COMPLETENESS

The cross module delivery set includes:
- bus in the housing (cross-module) – 1 pc.;
- passport – 1 pc.

4 OPERATING INSTRUCTIONS

4.1 Installation procedure

Operation and installation of products must be
carry out in accordance with the requirements
security.

1) Turn off the voltage on the distributor.
nom shield.

2) Install the cross module on a DIN rail or secure it with screws through the housing holes.

3) Strip the ends of the wires if necessary
- crimp with tips. Copper stranded
the wires must be terminated with sleeve terminals
end-pieces.

4) Insert the wire into the appropriate clamp (N, PE) and tighten securely with the screw.

5) Check the tightness of all connections.

6) Turn on the voltage and perform a control check of the circuits.

4.2 Operating conditions

Operating temperature range: from minus 25 up to plus 50 ÿÿ. The ambient temperature range during operation is from minus 25 ÿÿ to plus 50 ÿÿ, the average annual relative humidity is 75% at a temperature of plus 15 ÿÿ, the maximum value of relative air humidity is 98%.

at 25 ÿÿ (without moisture condensation).

4.3 Maintenance

When servicing products, it is necessary to comply with the “Occupational Safety Rules”

when operating electrical installations."

Under normal operating conditions, it is sufficient to carry out maintenance of the products at least once a year.

visual inspection and control of tightening of clamping elements screws.

If visible external damage to the product body is detected, their further operation is prohibited.
tion is prohibited.

5 SAFETY REQUIREMENTS

Installation and connection of cross-modules must be performed by qualified personnel in compliance with the requirements of the “Rules for labor protection during the operation of electrical installations”.

It is prohibited to use the product if there is damage to the housing or insulation of the connected electrical conductors.

It is not permitted to operate products with removed protective housings that provide protection against electric shock.

Connecting conductors with a cross-section that does not meet the specifications is not permitted. Leaving the cross-module housing open while voltage is present is prohibited. **ATTENTION!**

All installation and connection work must be carried out with the power off!

Be sure to make sure there is no voltage at the work site!

The products are not repairable. In case of malfunction, replacement is required.

6 TRANSPORTATION AND STORAGE

Transportation can be carried out by any type of closed transport that ensures the protection of packaged products.

damage from mechanical impacts (shocks)
and exposure to atmospheric precipitation. Transportation of products must be carried out
at air temperatures from minus 45 to plus
50 ÿÿ. Maximum relative humidity
up to 80% at a temperature of plus 25 ÿÿ.
Storage should be carried out in the manufacturer's packaging in closed areas at
ambient air temperature from minus 40
up to plus 50 ÿÿ and relative humidity no more than 80% at plus 25 ÿÿ.

7 DISPOSAL INFORMATION

Expired and out of order
products must be disposed of in accordance with
with the current requirements of the legislation in the territory where the product is sold.

The product must be disposed of by handing it over to a specialized enterprise for processing secondary raw materials in accordance with the requirements of the legislation of the territory of implementation.

8 MANUFACTURER'S WARRANTIES

The manufacturer guarantees the conformity of the products requirements of technical documentation, provided that the consumer complies with the conditions of installation, operation, transportation and storage.

Service life: 10 years.
Guaranteed shelf life, calculated from the date of manufacture: 7 years.
Warranty period of operation, calculated from date of sale: 7 years.

Tel.: +37369104125

https://altal.md
Moldova, Chisinau