

REM 2

Design



## APPLICATION

- For industrial, construction and commercial facilities to provide a degree of protection for modular apparatus up to 160 A;
- distribution and measurement of electricity;
- protection of electrical equipment against the effects of short circuits and overloads on the LV side.

## EQUIPMENT

### Enclosure

#### Aluminum OU-1/OU-2 or Steel OU-1/OU-2

Housing made of aluminum or steel sheet (joining by welding), powder coated in any color, in the following versions: surface-mounted, flush-mounted, free-standing, wall-mounted, hanging. Available in a version with increased IP. Full freedom of configuration of construction and opening. Dimensions adapted to the type, amount of equipment and individual customer needs. The design and parameters of enclosures allow the installation of apparatus up to 160 A.

The enclosure comes standard with mounting profiles or a mounting plate, on which fixed-mount apparatuses are placed on the plate, and TH35 rails for mounting modular apparatuses and strip connectors. Cover plates are made of plastic plates or metal sheets, mounted to the enclosure structure with cover plate brackets. They can be used interchangeably with comb trays, with a cross-section adapted to the amount of wiring. Solid doors, have, internal or external hinges and multi-point locking. It is possible to mount signaling and measurement apparatus on the door. The enclosure is equipped with a fin lock with any shape of the insert.

The roof and bottom of the enclosure has an opening with brush grommets or a profiled rubber grommet membrane or glands to allow cable entry without lowering the IP rating. The enclosures provide high tightness from IP 30 to IP 44, mechanical resistance IK 10, I or II protection class. Thanks to the use of the whole range of enclosures, we have full freedom in the selection and configuration of the switchgear we are interested in. In the prefabrication of switchgear in metal enclosures, we use, in addition to our own products, systems of other leading manufacturers, according to the project.

### Accessories

- **plinth** - made in solid or ventilated version of any height to be placed on the cable duct;
- **wall bracket** - made of profiled sheet metal, allows you to mount the housing on the wall.

### Apparatus

We use apparatus of many leading and proven manufacturers. Switchgears are equipped with the following apparatus: protection, distribution, measurement, signaling, control, communication and other additional elements selected according to individual customer needs.

### Wiring

Wiring of switchgear is carried out with insulated flexible buses or insulated wire, with cross-sections selected according to the required current carrying capacity and type of apparatus.

### Signs

External marking of switchboards is made by laser engraving technique, on metal or plastic plates of any color. Apparatus and strip connectors marked according to the internal wiring diagram and according to design guidelines.

## RATED PARAMETERS

Rated switching voltage:	230 V / 400 V
Rated insulation voltage:	500 V / 690 V
Rated frequency:	50 Hz
Rated continuous current of the main rails:	up to 160 A
Degree of protection:	IP30/44; IK10
Protection class:	I or II
Dimensions of the supply/receiving terminals:	70 mm <sup>2</sup> / 25 mm <sup>2</sup>
Network layouts:	TN-S, TN-C, TN-C-S, TT, IT

## COMPLIANCE WITH STANDARDS

- **PN-EN 61439-1**  
„Low-voltage switchgear and controlgear – Part 1: General provisions“;
- **PN-EN 60529**  
„Degrees of protection provided by enclosures (IP Code)“;
- **PN-EN 62208**  
„Empty enclosures for low-voltage switchgear and controlgear. General requirements“;
- **PN-EN 62262**  
„Degrees of protection against external mechanical impact provided by enclosures of electrical equipment (IK code) (IDT PN-EN 50102:2001)“;
- **PN-EN ISO 4628**  
„Paints and varnishes – Evaluation of deterioration of coatings – Determination of the amount and extent of damage and intensity of uniform changes in appearance – Part 6: Evaluation of the degree of chalking by the tape method“;
- **PN-EN ISO 2409**  
„Paints and varnishes – Testing by the notch grid method“.

