



APPLICATION

- Providing power supply for construction site, repair areas, outdoor events and other temporary recipients of electricity.
- Distribution of electricity and protection of electrical devices against consequences of shortings and overloads on the LV side.
- Metering consumption of energy.
- For LV networks in TN-S, TN-C, TN-C-S types.

EQUIPMENT

Enclosure

Thermosetting plastic

SMC enclosure with IP 44 or 54 rating. Built to Class II protection standard, with HB to V0 flammability rating, painted in RAL 7035, with the possibility of additional painting to ensure temporary resistance to environmental factors and UV radiation.

Aluminium OU-1S / Steel OU-1(2)

The enclosure made of aluminium or steel sheet (welded or riveted). Powder painted in any colour. The size matching the type and range of devices and individual needs of the Client. The enclosure is highly resistant to degradation, environmental factors and UV radiation.

The enclosure is executed in the Class I and II appliance protection standard.

Class II appliance protection rating of the enclosure is achieved with an additional insulation layer permanently applied on the internal surfaces of the enclosure. The thickness of the layer ensures the required insulation. Labyrinth ventilation allows continuous flow of air with simultaneous elimination of penetration of pollutants and accumulation of water and moisture.

The door with internal hinges with anti-burglary lock and multiple bolts, an espag lock with a padlock or a system cylinder.

Installation parts

- Installation profiles: steel, with openings, installed on the enclosure structure.
- Installation base: plastic or galvanised steel, installed on vertical installation profiles made of galvanised sheet for current circuit switches.
- Cable clamps with the cable management bar.
- Masking panels: made of plastic or sheet metal, installed on the enclosure structure.

Devices

We use devices from many leading and proven producers.

Switchgears are fitted with: protection, separation, measurement, signalling, control, and communications devices along with other additional components selected to meet the needs of the Client.

Power module

- (Fuse) insulator switch or power switch (up to 910 A) with the possibility of locking under load, a handle on the door of the enclosure; Available models: RA, FWA, RBK, other.
- The power supplied with cables, with V type or screw terminals for cables with the cross section up to 240 mm².
- Possible powering of further switchgears.
- Cable clamps, the cables are run from the bottom of the switchgear.

Receptacles module

- 3-phase fuse insulation disconnecting switches: 160 A.
- 3-phase insulation receptacles: 16 A, 32 A, 63 A, 125 A.
- 1-phase insulation receptacles: 16 A.
- Isolated receptacles.

Protection module

- RCDs up to 63 A.
- Overcurrent protection of receptacles.

Direct and semi-direct metering module

- The metering board for installation of active and reactive energy meters installed on an insulating plastic panel, tilting or fixed.
- Current transformers match the load, in class 0.2-1s.
- The measurement and inspection strip for connecting voltage and current circuits of the electricity meter with secondary sides of measurement transformers. Possible installation of the bar directly on the board or on the TH-35 rail, available models: Ska, LPW, other.
- Protection of the metering system: overcurrent breaker switch with signalling.
- Control signalling: presence of phases, control lamps.
- The components are ready for sealing.

Cabling

- Cabling of the cabinets is provided with flexible insulated cables (LgY) with cross section matching the required current load and types of devices.
- The PEN busbar with PE + N separation.
- V type cable terminals for connection of cables with the cross section 4x240mm².

Markings

The external marking of the switchgear is laser engraved, on metal or plastic plates of any colour.

Accessories

- **RBP base** for handling and setting the switchgear at any place in the construction site.

- **Thermosetting foundation block:** matching the dimensions of the thermosetting enclosure.
- **FM aluminium foundation block:** matching the dimensions of the enclosure, fitted with removable front and back covers.
- **FB concrete foundation block:** built of reinforced concrete slabs, screwed with the aluminium or thermosetting enclosure.
- **Cable base.**
- **Plinth:** solid or ventilated, of any height to match the cable duct.
- **Wall mounting:** made of profiled metal sheet, to enable setting the enclosure on the wall.

BASIC TECHNICAL DATA

Rated operational voltage:	230 V / 400 V
Insulation rated voltage:	500 V
Rated frequency:	50 Hz
Impulse withstand voltage:	4 kV
Busbar rated continuous current:	25/40/63/100/200/400/630 A
Outgoing busbar rated continuous current:	16/32/63/125/160 A
Rated short-time withstand current:	6 kA
IP protection level:	44 - 54
IK level of protection against mechanical impact:	10
Appliance class:	I / II
Dimensions of incoming / outgoing terminals:	2 x 4 x 240 mm ² / 4 x 240 mm ²
Network arrangements:	TN-S, TN-C, TN-C-S
Height / width / depth:	without limitations for metal enclosures built to Class II protection standards

COMPLIANCE WITH STANDARDS

- **PN-EN 61439-1**
„Low-voltage switchgear and controlgear assemblies. Part 1: General rules.”;
- **PN-EN 61439-4**
„Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks.”;
- **PN-EN 60529**
„Degrees of protection provided by enclosures (IP Code).”;
- **PN-EN 62208**
„Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements”;
- **PN-EN 62262**
„Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code) (IDT PN-EN 50102:2001).”;
- **PN-EN ISO 4628**
„Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 6: Assessment of degree of chalking by tape method.”;
- **PN-EN ISO 2409**
„Paints and varnishes - Cross-cut test.”

