TLP – Multi-metering switchboards

REM 2 Design

APPLICATION

- **In multi-family housing to distribute the low-voltage and low-current infrastructure of the building;**
- **For the installation of meter circuits for apartments and routing of the building's electrical power line;**
- **Electricity distribution and protection of electrical equipment from the effects of short circuits and overloads on the LV side;**
- **For Lv networks of the following types: TN-S, TN-C, TN-C-S, TT, IT.**

EQUIPMENT

Enclosure

Steel OU-1/OU-2

Indoor, under- or surface-mounted, made of galvanized steel sheet (joining by welding), powder-coated in any color, the size adapted to the prepared opening of the cable tray and the equipment and individual needs of the customer. Mounting brackets (screw) on the sides or back of the enclosure allow for efficient seating of the board in the cable duct.

The back of the enclosure provides space for vertical wiring for the entire building. Doors having internal hinges and single or multi-point locking. Doors equipped, depending on the equipment, with a regular system lock, a power lock or a basquil lock for an insert and a padlock.

Equipment

- A power strip that allows wiring up to 95 mm2;
- metering board 1 or 3 phase, suitable for mounting energy meters, mounted on an insulating plastic plate, made in a fixed version;
- pre/post meter protection – according to the guidelines (overcurrent protection, fuse isolation switch, isolation switch, power limiter);
- remote reading of meter data via GPRS wireless network or fiber optic cable;
- moduł słoboprądowy dla TV, internetu i domofonów;
- administration module equipped with modular apparatus to protect lighting circuits, automation, etc;
- cable compartment;
- sealable components.

Wiring

- Wiring of arrays made with insulated flexible cables (LgY) with cross sections selected for current carrying capacity and type of apparatus;
- PEN bus with division into PE and N;
- terminal strip suitable for connection of cable with a cross-section: 5×95 mm2.

Accessories

- rising masking cover – riser cover, suitable for mounting above and below the TLP board, the size adapted to the width of the mounted board and the size of the riser opening.

TLP switchboard equipment is selected according to the requirements of the distributors and at the request of the customer.

RATED PARAMETERS

Rated switching voltage:	230 V / 400 V
Rated insulation voltage:	690 V
Rated frequency:	50 Hz
Surge voltage withstanding:	4 kV
Rated continuous current of the main rails:	up to 630 A
IP rating:	30 -45
IK degree of mechanical resistance:	08 -10
Protection class:	I/II
Dimensions of the supply/receiving terminals:	240 mm^2 / 16 mm^2
Network systems:	TN-S, TN-C, TN-C-S, TT, IT
Height/Width/Depth:	Unlimited for metal enclosures in protection class II

COMPLIANCE WIH STANDARD

- **PN-EN 61439-1**
  „Low-voltage switchgear and controlgear – Part 1: General provisions”;
- **PN-EN 61439-3**
  „Low voltage switchgear and controlgear - Part 3: Distribution boards intended for use by members of the public (DBO)”;
- **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 the 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”.