



APPLICATION

Switching set MV type PB-24m is designed for temporary emergency power supply outdoors.

EQUIPMENT

Enclosures and baffles

The outer casing is made of aluminum. The set has two separate compartments: a compartment for power cables (angle heads) and a compartment for drain cables (straight heads). Internal PVC partitions allow safe access between live rails. The enclosure is protected against corrosion and painted with a layer of high-quality varnish in the standard RAL 1021 color (the color can be different by agreement). Thanks to the use of appropriate varnish, the structure is characterized by impact and corrosion resistance.

Busbars

Busbars are made of tinned copper flat bars and bolted to the insulators with bolts.

ISM25 circuit breaker

The MV switching set of PB-24m type was equipped with a circuit breaker of VCB/TEL ISM25_LD_1 type from TAVRIDA ELECTRIC with 210 mm pole pitch. The switching unit is made in a three-pole version. Each pole contains a vacuum chamber and an electromagnetic drive. The vacuum chamber is enclosed in a housing made of permanent insulation.

The control units are microprocessor-based devices that contain built-in capacitors: on-off and off-off. These capacitors are discharged in the drive coil circuit. The ON/OFF coil control currents flow in opposite directions so as to ensure proper operation of the drive.

The switch is controlled by the CM control unit. There are two basic assemblies that make up the switch:

- Switching Assembly (ISM) used to close and open primary circuits.
- The control unit (CM) used to control the ISM unit (operations: on-off) and to reflect the auxiliary circuits of the circuit breaker.

The CM_16 control unit

The CM_16_1 control unit is designed to control the ISM switching unit of the vacuum circuit breaker and coordinate the functions of protection automation, control and signaling. The CM16_1 control unit is designed for applications with AC or DC supply voltage (110 ÷ 220 DC ; 100 ÷ 230 AC).

Power cable compartment

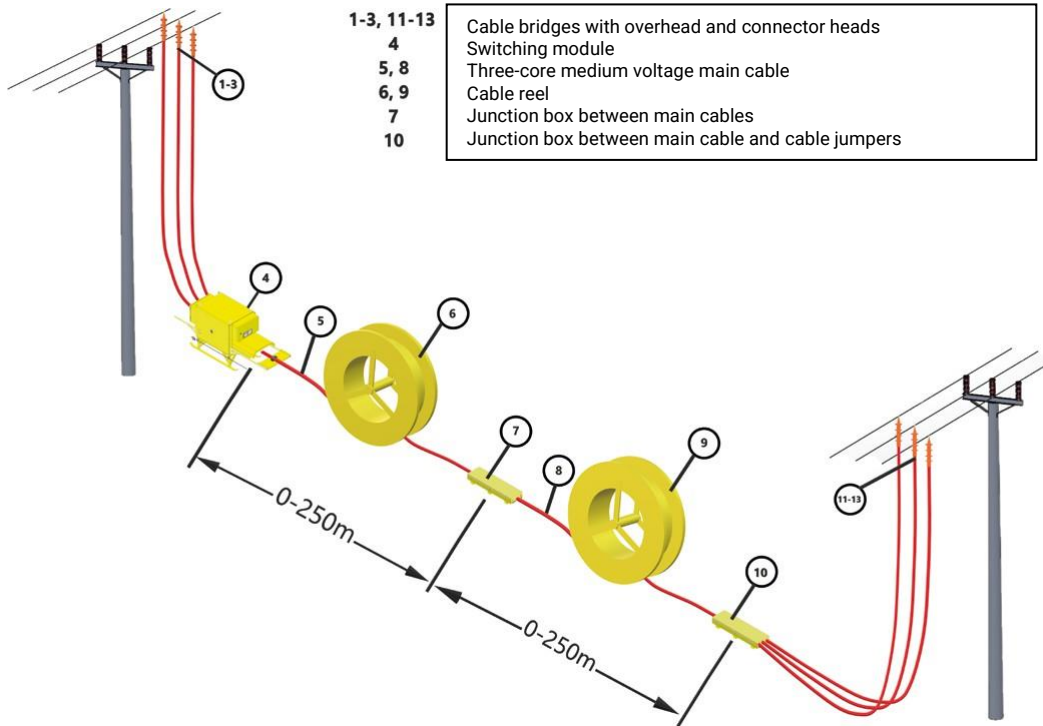
The power cable compartment is lockable. This compartment is suitable for three type A (250A) angular connector heads. Under the cable compartment there are cable clips and a copper grounding bar with a place for grounding the entire structure, return conductors and cable heads. On the power supply, there is space for connecting three single-core cables with a cross-section of up to 240 mm² per phase.

Drain cable compartment

The drain compartment is suitable for three straight connector heads type A (250A), the heads can be connected by means of a cube. Under the cable compartment there is a Cu grounding bar with a place for earthing the structure of the set, return conductors and cable heads. The cable compartment cover is screwed onto the transport handles. There is one cable holder at the end of these brackets.

Voltage presence indicator

The presence of voltage is signaled by means of a capacitive voltage indicator manufactured by ELTOM Polska, KUVAG Czech Republic. A different voltage presence indicator can be used in the switching kit according to the customer's requirements.



RATED PARAMETERS

Rated voltage	17.5 kV
Rated continuous current	250 A
Rated frequency	50 Hz
Mains frequency withstand voltage	38 kV
Surge withstand voltage	55 kV
Rated short-circuit breaking current	16 kA
Rated withstand current 3 sec.	16 kA
Rated short-circuit switching breaking current	16 kA
Degree of protection	IP54
Weight	80 kg

Height:	1003 mm
Depth:	682 mm
Width:	2500 mm

