

Metallic Compact Substation

1. CONSTRUCTIVE DATA

CABIN		
1	Metallic frame from welded steel sheet. It is covered with epoxy primer chromed with zinc, one layer, min 40 microns; Epoxy paint against corrosion V341 type, one layer, min 30 microns; Polyurethane paint 477 series, one layer, min 30 microns	1 pc.
2	Thermal insulated walls, 80 mm thick, made from sandwich metallic panels, REI wall type - with insulation made of mineral wool fire resistant class EI60 conf. EN 13501-2 / 200;	4 pc.
3	Thermal insulated roof, 80 mm thick, made from metallic sandwich panels REI wall type - with insulation made of mineral wool fire resistant class EI60 conf. EN 13501-2 / 200;	1 pc.
4	Technological floor made of 4 mm steel plates	1 pc.
5	Concrete basement equipped with cable glands HSI type for LV cables input	1 set.
6	Aluminium profile door;	1 pc.
7	Canopy installed over the access door in the ladder area;	1 pc.
8	Collecting and evacuating rainwater gutter;	1 set.
MAIN ELECTRICAL EQUIPMENT		
1	Compact substation equipped with: <ul style="list-style-type: none"> ▪ 1 power transformer ▪ 1 MV switchboard ▪ 1 LV panel 	
CABIN ACCESSORIES		
1	Internal grounding belt;	1 pc.
2	External earthing junction box with insulation metering of the ground insulation resistance;	2 pcs.
3	2 x 36 w neon lamp for internal lighting;	2 pcs.
4	8w battery emergency lighting lamp OVA37071E (Schneider) type, installed on the top of the door;	1 pc.
5	SCADA communication panel	1 pc.
6	Shucko socket 230 V ac;	1 pc.
7	10A normal lighting CB;	1 pc.
8	Thermostat with contact min./max. temperature surveillance inside the cabin;	1 pc.
9	12000BTU air conditioning unit (OPTIONAL)	1 pc.
10	Warning signs mounted on the cabin entrance door;	1 pc.

11	ID plate;	1 pc.
12	Rubber carpet with insulating properties on the access lane to the equipments;	1 pc.
13	Lifting rings;	1 set.

2. TECHNICAL CHARACTERISTICS

Nr.Crt.	Characteristic	Value
1	Total length;	4.500 mm
2	Height with roof and basement	3.650 mm
3	Total depth;	2.660 mm
4	Total weight unequipped;	3.5 tons
5	Protection degree;	IP54
6	Combustibility class;	B
7	Smoke emissions in the equipment compartment;	S 1
8	Fire melted particles in the equipment compartment;	d 0
9	Fire protection degree according to IEC 13501-2;	EI 60
10	Water permeability;	Class C
11	Thermal transfer type;	10K

3. OPERATING CONDITIONS

Nr.Crt.	Characteristic	Value
1	Mounting	Exterior
2	Operating conditions	N3
3	Min/Max Temperature	-35 °C / + 45 °C
4	The highest average temperature	+35 °C
5	Relative average humidity	90%
6	Maximal altitude	1000 m

4. CABLING AND MONTAGE TYPE

Nr.Crt.	Characteristic	Value
1	Montage	On concrete basement with 600mm height
2	External cables access	Through the basement;
3	Internal cabling type	On the cable traces installed on the top part.