

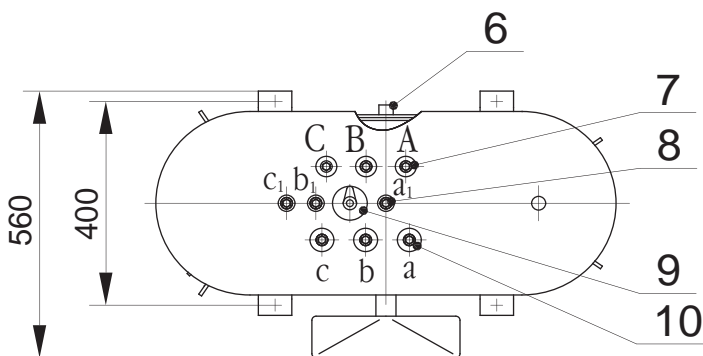
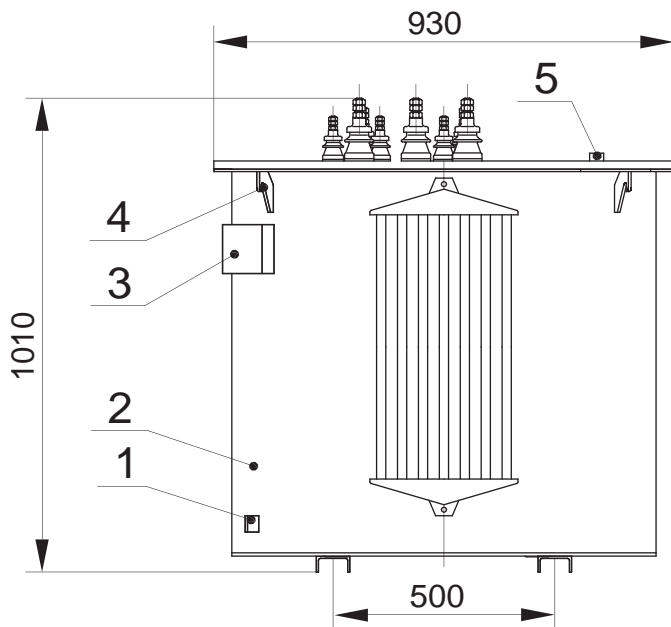
# TMTO TRANSFORMERS

TMTO-80/0.38 type three-phase oil transformers are intended for transforming of electric energy, being incorporated into devices for thermal treatment of concrete and ground, as well as for power supply to electric-tools and temporary lighting fixtures, and are operable under moderate climatic conditions. Ambient air operative temperature range makes -45 °C to +10 °C. Transformers are designed for inexplusive environments excluding dust content that could affect transformer parameters to inadmissible limits. Transformers are not assigned either for operation under jolting, vibration, impact effects, or in chemically active environments. Transformers are operable at altitude elevation above sea level not more than 1000 m.

Rated frequency: 50 Hz. Winding connection/vector group: Ydd-11-11. Voltage regulation in MV-winding is carried out in steps *with a fully de-energized transformer* (power-off changing).

**TMTO-80/0.38 transformers specifications**

| Rated power, kV·A | Loss, W |               | No-load current, % | Winding data      |                  |                  |                   |                      |             |                  |                   |                  | Mass, kg |       |                  |
|-------------------|---------|---------------|--------------------|-------------------|------------------|------------------|-------------------|----------------------|-------------|------------------|-------------------|------------------|----------|-------|------------------|
|                   | no-load | short-circuit |                    | HV-winding        |                  |                  | MV-winding        |                      |             | LV-winding       |                   |                  | of oil   | total |                  |
|                   |         |               |                    | Rated power, kV·A | Rated voltage, V | Rated current, A | Rated power, kV·A | Tap-changer position | Tap voltage | Rated current, A | Rated power, kV·A | Rated voltage, V |          |       | Rated current, A |
| 80                | 270     | 2200          | 2.3                | 80                | 380              | 121.5            | 77.5              | V                    | 95          | 471              | 2.5               | 42               | 34.4     | 124   | 375              |
|                   |         |               |                    |                   |                  |                  | 69.34             | IV                   | 85          |                  |                   |                  |          |       |                  |
|                   |         |               |                    |                   |                  |                  | 61.18             | III                  | 75          |                  |                   |                  |          |       |                  |
|                   |         |               |                    |                   |                  |                  | 58.54             | II                   | 65          | 520              |                   |                  |          |       |                  |
|                   |         |               |                    |                   |                  |                  | 49.53             | I                    | 55          |                  |                   |                  |          |       |                  |



- 1 - earth terminal;
- 2 - tank;
- 3 - nameplate;
- 4 - eye-ring for transformer hoisting;
- 5 - oil-level indicator;
- 6 - drain plug;
- 7 - HV-bushing;
- 8 - LV-bushing;
- 9 - tap-changer;
- 10 - MV-bushing.