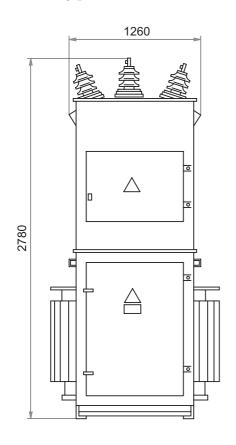
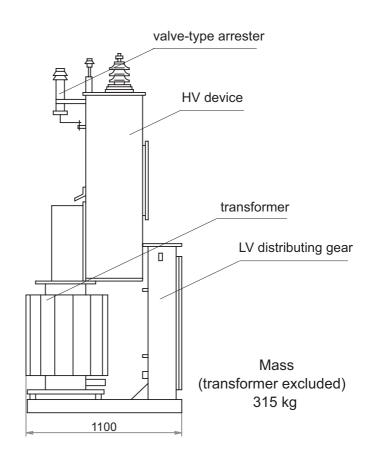
## UNITIZED TRANSFORMER SUBSTATIONS OF КТПНД SERIES rating 40-100 kVA and 400-630 kV·A, with a voltage 6(10) kV

## КТПНД of cabinet type, rating 40-100 kV·A

КТПНД substations for oil production are for outdoor installation and are intended to receive power frequency electric energy of 6(10) kV to convert it into 0.4 kV for power supply under moderate climatic conditions (from -45°C to +40°C). Substations are designated for energy supply of oil production wells as well as of other industrial units. КТПНД delivery set includes HV disconnecting switch which is to be installed on the nearest transmission line tower. High voltage lead-in is of air (overhead) type, 0.4 kV outgoing lines are of cable type. КТПНД is equipped with interlockings ensuring safety of attending personnel.





Туре	Rated voltage, kV	Rated current, A		
		of fuse	of lines automatic release	
КТПНД-40/10/0.4	6	10	63	
	10	8	05	
КТПНД-63/10/0.4	6	16	100	
	10	10	100	
КТПНД-100/10/0.4	6	20	160	
	10	16	160	

## КТПНД (400; 630 кV·A) of kiosk type

КТПНД are unitized one-transformer substations for outdoor installation and are intended to receive electric energy – three-phase, 50 Hz a.c. of 6 or 10 kV to convert it into 0.4 kV for power supply of various consumers (including petroleum refining plants) under moderate climatic conditions (from -40 $^{\circ}$ C to +40 $^{\circ}$ C). Substations are connected to the nearest transmission line tower through a disconnecting switch.

## Specific features of КТПНД substations are as follows:

- natural ventilation in transformer cabinet providing cooling of a power transformer;
- LV distributing gear cabinet is of two-sided attendance access;
- a facility allowing to roll in/roll out a power transformer in/out of a transformer cabinet:
  - outgoing lines are fitted with withdrawable automatic circuit-breakers;
- substations are equipped with two sockets to plug in leads for 380 V/60 A and 220 V/40 A respectively.

КТПНД is equipped with electrical and mechanical interlocking ensuring safety of attending personnel. HV-side inlet is of air (overhead) type, LV outgoing leads are of cable type.

КТПНД has function of active energy metering. КТПНД is equipped with exterior lighting feeder with automatic ON/OFF switching. Number of outgoing lines and current thereof may vary as per customer's will.

Parameter denomination		Parameter value				
		КТПНД-400		КТПНД-630		
Transformer type		ТМГ-400		ТМГ-630		
Transformer connection / vector group		Yyn-0				
Transformer rated power, kV·A		400		630		
HV rating, kV		6	10	6	10	
Transformer rated current at LV side, A		38.5	23.1	60.69	36.4	
HV fuse rating, A		80	50	100	80	
LV rating, kV		0.4				
Transformer rated current on LV side, A		577.4		910.4		
	No 1	250				
Α,	No 2	160				
ing	No 3	100				
Outgoing lines current rating, A	No 4	50				
	No 5	25				
	No 6	-		250		
Jes	No 7	-		160		
g liit	No 8	-		100		
oin	No 9	60				
No 10		40				
	Lighting line	16				