



# Single Phase Pole Mounted Transformer

ANSI & NEMA Standard

FARADY ELECTRIC CO.,LTD



### General

The Farady overhead transformer may be used alone for the supply of a single phase load or as one of three units in a bank for the supply of a three phase load. The unit may be direct mounted to a wooden or concrete pole, or cluster mounted on a pole for three phase use. Our single phase overhead distribution transformer is commonly used in various places including rural areas, remote regions and scattered villages to provide high quality power supply for daily lighting, agricultural production and industrial plants. Aside from these, it is also suitable for the energy saving projects for railway and urban grid



## **Product Standards**

- IEEE Std C57.12.00<sup>™</sup>-2000 standard IEEE Standard for Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers
- IEEE Std C57.12.20<sup>™</sup>-2005 standard IEEE Standard for Overhead-Type Distribution Transformers, 500kVA and Smaller: High Voltage, 34500V and Below; Low Voltage, 7970/13800Y V and below
- IEEE Std C57.12.31<sup>™</sup>-2010 standard IEEE Standard for Pole Mounted Equipment – Enclosure Integrity
- IEEE Std C57.12.35<sup>™</sup>-1996 standard IEEE Standard for Bar Coding for Distribution Transformers
- IEEE Std C57.12.90<sup>™</sup>-2006 standard IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers
- IEEE Std C57.12.91<sup>™</sup>-2001 standard IEEE Guide for Loading Mineral-Oil-Immersed Transformers
- NEMA TR 1-1993 (R2000) Elevated Temperatures (ASTM)American Society for Testing Materials

## Main Features

- Type: Conventional or CSP type
- Suitable for both indoor or outdoor
- Ambient temp: -25°C-+40°C
- Winding temp rise : 55  $^{\circ}$ C or 65  $^{\circ}$ C
- Core: CRGO or Amorphous Core
- Efficiency standard: DOE 2016 or NEMA TP1
- Winding material : CU or AL
- Frequency: 50HZ or 60HZ
- Capacity : 5kVA to 333kVA



## **Product Design**





Table of Liquid Single phase pole mounted transformer (<150kV BIL) Temp rise 65°C5°C								
kVA	Primary	Secondary	Α	В	С	Weight	Efficiency %	
	voltage	voltage	mm	mm	mm	(kG)	DOE2016	NEMA TP1
10			530	600	1060	160	98.70%	98.40%
15	4160	) ) 120/240 ) 240/480	530	600	1060	180	98.82%	98.60%
25	7200		580	660	1080	230	98.95%	98.70%
37.5	7620		610	690	1090	290	99.05%	98.80%
50	12470	277	650	700	1100	340	99.11%	98.90%
75	13200 13800 24940	346	680	750	1250	450	99.19%	99.00%
100		600	730	800	1250	500	99.25%	99.00%
167			900	850	1300	780	99.33%	99.10%
250	19920		1200	900	1450	1100	99.39%	99.20%
333			1350	1200	1500	1300	99.43%	99.20%



## **Quality Assurance**

Farady Quality assurance is an integral part of the process. All electrical testing is per IEEE standards.. Quality of processed parts and subassemblies are the responsibility of the production personnel. Regular quality inspections and spot checking are conducted to make sure that good and consistent quality is achieved and maintained.

#### **Routine Tests**

- In-process Core Loss Test
- Transformer Turns Ratio Test
- Winding Resistance Test
- Polarity and Phase Displacement Test
- Insulation Power Factor Test
- Liquid Insulation DBV Test
- No Load Loss & Excitation Test
- Impedance Voltage & Load Loss Test
- Voltage Ratio Test
- Applied Potential Test
- Induced Potential Test

### **Type Tests**

- Temperature Rise Test
- Basic Impulse Level (BIL)
- Sound Level test

## **Production**



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