

Single Phase Overhead Distribution Pole Mounted Transformer
Part Number: CWS-37-1PP-12.4-120

CWS Engineering		Aug-25	
357 West Grove Ave, Orange, CA 92865			
Contact: Ken Jenkins. Tel: 714 279 9010			
Email: ken@coilws.com			
	Description	Unit	Specifications
	General		
1.1	Manufacturer		CWS Engineering
1.2	Transformer Type		Overhead Distribution Transformer, Conventional Type
1.3	Transformer Configuration		Liquid Filled Pole Mounted
1.5	Phase		Single Phase
1.6	Transformer Polarity Type		Additive
	Electrical Characteristics		
2.1	Capacity	KVA	37.5 KVA
2.2	Primary Voltage	V	12470GrdY/7200
2.2a	Primary Voltage Switch		N/A
2.2b	Primary Voltage Class	kV	15 kV Class
2.2c	Primary Phasor		Grounded Wye
2.2d	Primary BIL	kV	95 kV
2.3a	Secondary Voltage		120/240V (L-N-L)
2.3b	Secondary Voltage Class	kV	1.2 kV Class
2.3c	Secondary Phasor		Dual Winding Single Phase
2.3d	Secondary BIL	KV	30 KV
2.4	Frequency	Hz	60 Hz
2.5	Temperature Rise	°C	65°C
2.6	Insulation Rating	°C, °F	Class E Insulation - 120°C, 248°F
2.7	Forced Air (Fans)		None
2.8	Cooling Class		ONAN; Self-Cooled
2.9a	Tap Changer		5-Position Tap Changer w/ External Operating Handle
2.9b	Tap Qty		(2) FCAN Above, (2) FCBN Below
2.9c	Tap %	%	2.5%
2.9d	Tap Changer Switch Location		Middle of Tank Body, Left of Mounting Provisions
	Ratings		
3.1	Efficiency Ratings		Meets/Exceeds DOE 2016 Efficiency Ratings
3.2	Complies with		ANSI / IEEE #C57.12.00
			ANSI / IEEE #C57.12.20
			ANSI / IEEE #C57.12.28
			ANSI / IEEE #C57.12.31
			ANSI / IEEE C57.12.70
			ANSI / IEEE C57.12.80
			ASTM D3487
3.3	Insulating Fluid		Non-PCB
3.4	Lifting Lugs		Included
3.5	Efficiency	%	98.80% Based on transformer operating at 50% of nameplate base kVA
	Load Losses Based on 85°C Reference Temp.		
4.1	No Load Loss (in watts):	W	± 137 W
4.2	Full Load Loss (in watts):	W	± 648 W
4.3	Total Load Loss (in watts)	W	± 605 W
	Note		Losses offered are typical only, not guaranteed
	Connections		
5.1	Impedance	%	1.0-4.5% Typical
5.2a	Primary Connection Type		Live Bushing Lug
5.2b	Primary Termination		Porcelain High Voltage Bushing
5.2c	Primary Connection Qty		2
5.2d	Primary Lightning Arrestors		N/A
5.2e	Primary Lightning Mounting Provision		Mounting Provisions for Installing Lightning Arrestor on H1, H2 Primary Terminals
5.2f	Primary Lightning Arrestors Voltage Rating		N/A
5.2g	Primary Lightning Arrestors MCOV Rating		N/A
5.3a	Secondary Connection Type		Live Bushing Lug
5.3b	Secondary Connections		Threaded Stud Terminals
5.3c	Secondary Connection Qty		3
5.3d	Secondary Neutral Connection	inch	Secondary X2 Neutral Grounded to Tank via 1/2"-13 UNC Tapped Hole, 7/16" Deep Bung & Copper Ground
5.4	Terminals		Tin Plated Primary and Secondary - Accepts Copper or Aluminum Connections
5.5	Grounding Provisions		(1) Lug w/ Grounding Strap, Tank Grounding Lug
5.6	Transformer Protection		N/A
5.7	Load Break Switch		N/A
5.8	Efficiency Standard(s)		Meets DOE 2016 Standards, Meets ANSI/IEEE Standards
5.9a	K-Factor Rating (Harmonic Mitigation)		K-1 (Standard)
5.9b	Pulse Drive Rating		N/A
	Physical Characteristics / Accessories		
6.1	Insulation Fluid		Mineral Oil - Non PCB Fluid
6.2a	Fluid Capacity	Gallons	12.22 Gallons
6.2b	Fluid Weight	lbs	110.23 lbs
6.3	Liquid Level Indicator		Internal In-Tank Oil Level Line
6.4	Temperature Indicator		N/A
6.5a	Pressure/Vacuum Indicator		N/A
6.5b	Pressure Relief Device		Included, Automatic Action
6.6	Fault Indicator		External IFD Fault Indicator, Included
6.7a	Oil Level Marking		Internal
6.7b	Fill Valve		N/A (Tank Filled via Removable Lid)
6.7c	Drain Valve	inch	1/2" NPT Port w/ Removable Bolt

6.8	Winding Material		Copper
6.9	Ambient Temperature Rating	°C	40°C
7.1	Sound Level	dBA	48 dBA
7.2	Elevation Level		N/A
7.3a	Core Material		Grain Oriented Steel
7.3b	Tank Material		Coated Steel
7.3c	Housing Material		Coated Steel w/ Corrosion Resistant Cover Band, Removable Top Cover
7.3d	Hardware Material		Stainless Steel Hardware
7.4a	Paint Type		Weatherproof and UV Resistant Epoxy Coating and Undercoating
7.4b	Finish Color		Munsell ANSI #61 Gray, Semi Gloss
7.5a	Mounting		Double Hanger Bracket
7.5b	Mounting		Pole Mount via Hangar Brackets
7.6	Lifting Lugs		Included
			*Please note that numbers are approximate and subject to change
7.7	Dimensions*	inch	24.8"-W x 26.77"-D x 40.16"-H
7.8	Tank Diameter*	inch	20.47" OD
7.9a	Dry Weight*	lbs	308.64 lbs
7.9b	Total Weight (Liquid Filled)*	lbs	749.56 lbs