3 Phase Overhead Distribution Pole Mounted Transformer
Part Number: CWS-75-3PP-13.8-120

CWS Engineering			Jun-25
357 West Grove Ave, Orange, Ca 92865			
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	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
1.4	Mounting Type		Pole-Mounted
1.5	Phase		Three-Phase Units
1.6	Polarity Type		Subtractive
	Electrical Characteristics		
2.1	Capacity	KVA	75 KVA
2.2	Primary Voltage	V	13800 V
2.2a	Primary Voltage Switch		N/A
2.2b	Primary Voltage Class	kV	15 kV Class
2.2c	Primary Phasor		Delta
2.2d	Primary BIL	kV	90 kV
2.3a	Secondary Voltage		208Y/120
2.3b	Secondary Voltage Class		1.2 kV Class
2.3c	Secondary Phasor		Wye-N
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
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	%	99%
	Load Losses Based on 85°C Reference Temp.		
4.1	No Load Loss (in watts):	W	± 247W
4.2	Full Load Loss (in watts):	W	± 845W
4.3	Total Load Loss (in watts)	W	± 1,092W
	Connections		
5.1	Impedance	%	1.0-5.0% Typical
5.2a	Primary Connection Type		Live Bushing Lug
5.2b	Primary Termination		Porcelain High Voltage Bushing
5.2c	Primary Connection Qty		3
5.2d	Primary Lightning Arrestors		N/A
5.2e	Primary Lightning Mounting Provision		Mounting Provisions for Installing Lightning Arrestor on H1, H2 & H3 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		4
5.3d	Secondary Neutral Connection	"	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	60 Gallons
6.2b	Fluid Weight	lbs	540.90 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		N/A
6.7a	Oil Level Marking		Internal
6.7b	Fill Valve		N/A (Tank Filled via Removable Lid)
6.7c	Drain Valve	"	1/2" NPT Port w/ Removable Bolt

6.8	Winding Material		Aluminum
6.9	Ambient Temperature Rating	°C	40°C
7.1	Sound Level	dBA	51 dBA
7.2	Elevation Level	ft	3,300ft above Sea Level
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™ 5BG 7.0/0.4 Light Grey (ANSI #70)
7.5a	Mounting		Double Hanger Bracket
7.5b	Mounting		Pole Mount via Hangar Brackets
7.6	Lifting Lugs		Included
7.7	Dimensions*	"	25"-W x 32"-D x 64"-H
7.8	Tank Diameter*	"	20"-OD
7.9a	Dry Weight*	lbs	/
7.9b	Total Weight (Liquid Filled)*	lbs	1,393 lbs