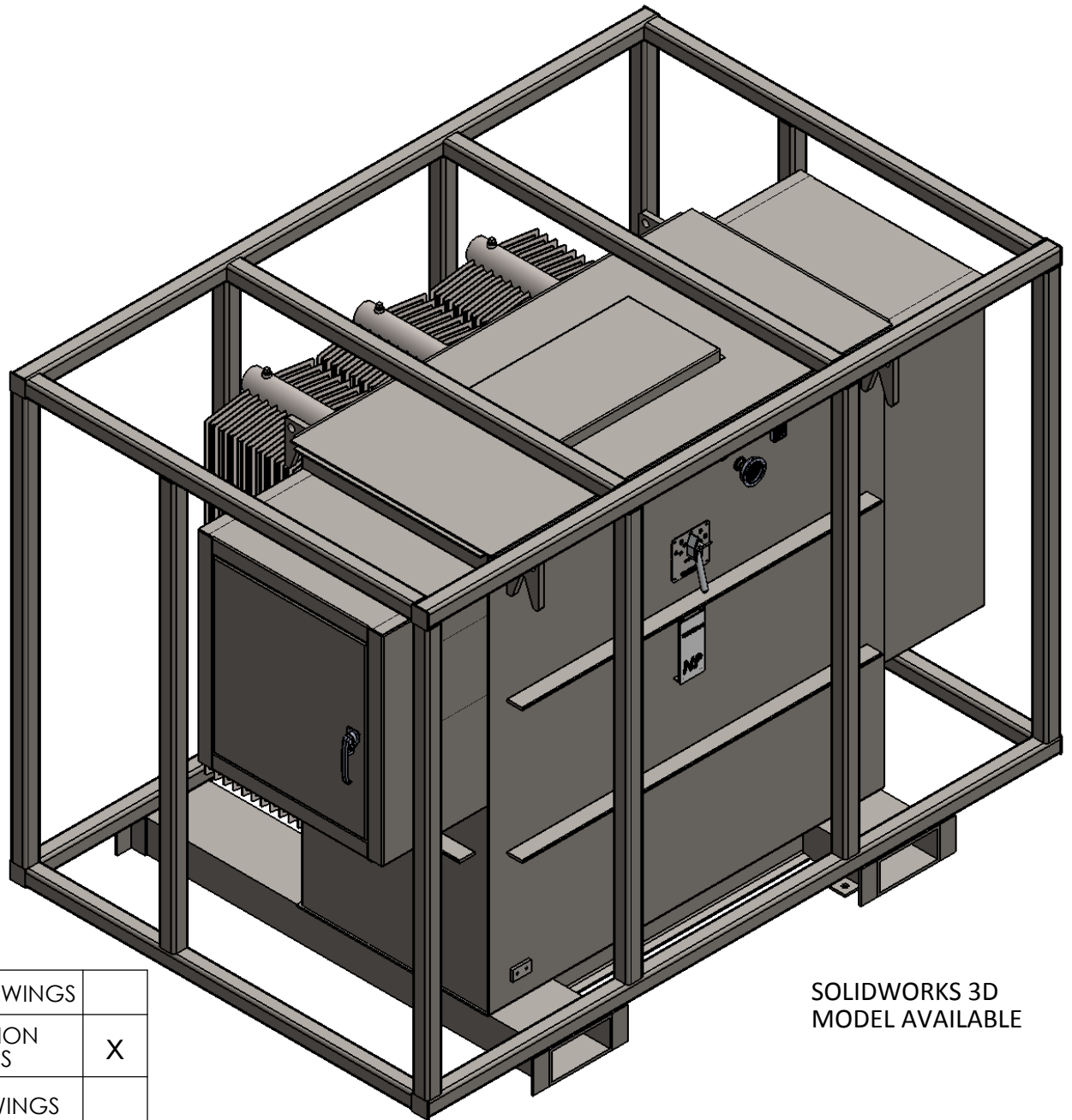


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SOLIDWORKS 3D
MODEL AVAILABLE

APPROVAL DRAWINGS	
CONSTRUCTION DRAWINGS	X
AS BUILT DRAWINGS	

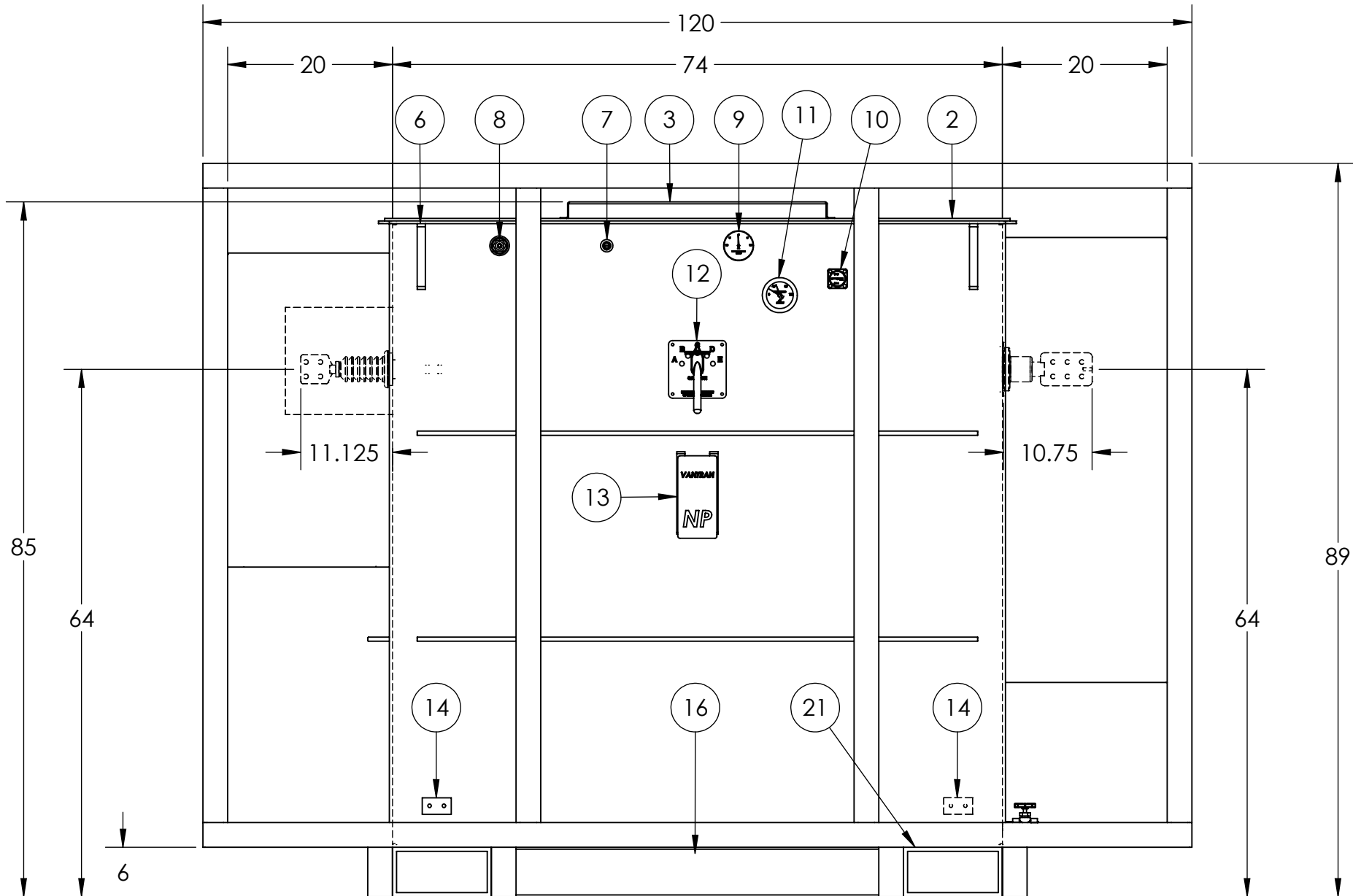
SUBSTATION TRANSFORMER 3 PHASE MINERAL OIL FILLED ONAN 65°C RISE 60 HZ

**1 EA 2500 kVA - 2400/4160Y/2400 x 7200/12470Y/7200 - 480Y/277 WITH TAPS AT
 8320-7970-7620-7200-6928-14400Y-13800Y-13200Y-12470Y-12000Y**

<u>PRINTS FOR RECORD</u>	<u>P.O #</u>	<u>TRANS.IZ:</u>	<u>TOTAL WEIGHT</u>	<u>GAL. OIL</u>
	S.O # 16V11245	5.75% 95 kV-B.I.L.	18,000 LBS	800

				
			TITLE .	
			3D MODEL	
APPROVED	DD	2/11/2016	SIZE	DWG. NO.
DRAWN	EC	2/11/2016	A	16V11245
		NAME	DATE	SCALE: 1:22
			ALL DIMENSIONS ARE IN INCHES	
				REV. 00
				SHEET 1 OF 7

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DO NOT INSTALL CAGE AT THIS TIME



TITLE: **FRONT VIEW**

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APPROVED	DD	2/11/2016	SIZE	DWG. NO.	REV
DRAWN	EC	2/11/2016	A	16V11245-1	00
	NAME	DATE	SCALE: 1:17	ALL DIMENSIONS ARE IN INCHES	SHEET 2 OF 7

VANTRAN

WACO, TEXAS


2500 KVA SUBSTATION TYPE TRANSFORMER
THREE-PHASE ONAN

MINERAL OIL FILLED
65°C RISE 60-HERTZ

- 1 RADIATORS (FLEXOPLATE) (AS REQUIRED).
- 2 WELDED ON COVER.
- 3 BOLTED ON INSPECTION PLATE.
- 4 TAMPERPROOF REMOVABLE HIGH VOLTAGE TERMINAL CHAMBER CABINET WITH THREE POINT LATCHING LIFT OFF PADLOCKABLE DOOR WITH STAINLESS STEEL HINGES AND OPEN BOTTOM FOR CABLE ENTRANCE. HIGH VOLTAGE TERMINAL CHAMBER SUPPLIED WITH THREE EACH HIGH VOLTAGE BUSHINGS WITH NEMA 4 HOLE SPADE TERMINALS. ONE EACH HIGH VOLTAGE NEUTRAL BUSHING WITH NEMA 4 HOLE SPADE TERMINAL AND REMOVABLE GROUND STRAP.
- 5 TAMPERPROOF REMOVABLE LOW VOLTAGE TERMINAL CHAMBER CABINET WITH THREE POINT LATCHING LIFT OFF PADLOCKABLE DOOR WITH STAINLESS STEEL HINGES AND OPEN BOTTOM FOR CABLE ENTRANCE. LOW VOLTAGE TERMINAL CHAMBER SUPPLIED WITH THREE EACH LOW VOLTAGE BUSHINGS WITH NEMA 6 HOLE SPADE TERMINALS. ONE EACH LOW VOLTAGE NEUTRAL BUSHING WITH NEMA 6 HOLE SPADE TERMINAL AND REMOVABLE GROUND STRAP.
- 6 LIFTING HOOKS (4 EACH REQUIRED).
- 7 AUTOMATIC PRESSURE RELIEF VALVE.
- 8 ONE INCH FILLING PLUG.
- 9 PRESSURE VACUUM GAUGE.
- 10 LIQUID LEVEL GAUGE.
- 11 DIAL TYPE THERMOMETER.
- 12 EXTERNALLY OPERATED NO-LOAD TAPCHANGER PADLOCKABLE IN ANY POSITION.
- 13 DIAGRAMMATIC CORROSION RESISTANT NAMEPLATE.
- 14 TWO EACH STAINLESS STEEL GROUND PADS, ONE ON BACK SIDE OF TANK.
- 15 ONE INCH DRAIN VALVE WITH OIL SAMPLING DEVICE AND FILTER PRESS CONNECTION.
- 16 TRANSFORMER BASE WITH PROVISIONS FOR ROLLING.
- 17 TRANSFORMER FILLED WITH NON-P.C.B. MINERAL OIL AT TIME OF MANUFACTURE.
- 18 EXTERNALLY OPERATED NO-LOAD DELTA-WYE SWITCH.

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 WACO, TX		
DRAWN BY	CHECKED BY	SHEET
EC	DD	3 OF 7
DATE	DATE	DRAWING NO.
2/11/2016	2/11/2016	11245

VANTRAN

WACO, TEXAS

2500 KVA SUBSTATION TYPE TRANSFORMER
THREE-PHASE

ONAN


MINERAL OIL FILLED
65°C RISE

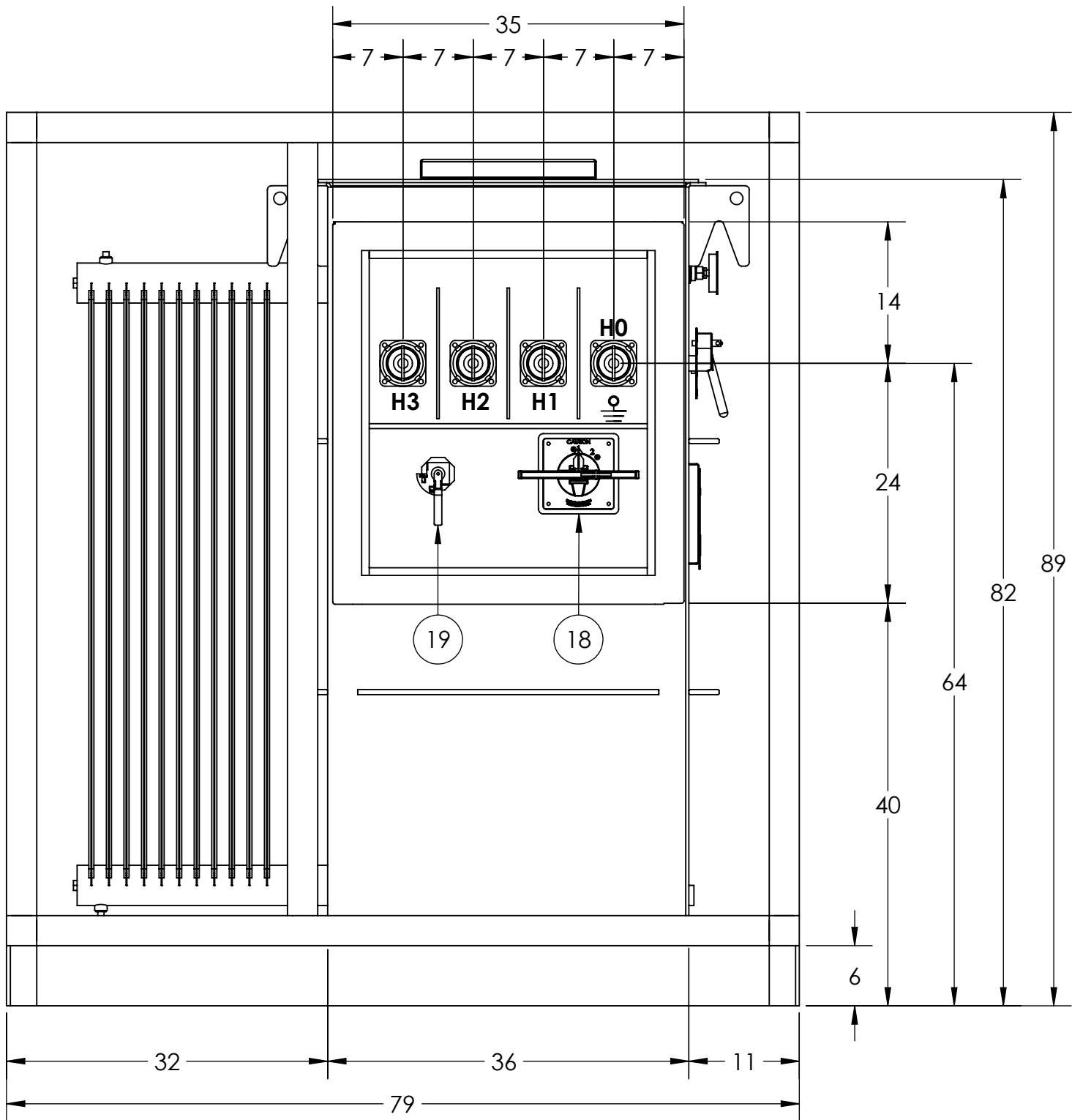
60-HERTZ

- 19 EXTERNALLY OPERATED NO-LOAD DUAL VOLTAGE SELECTOR SWITCH.
- 20 PROVISIONS FOR JACKING.
- 21 FORK TRUCK LIFTING PROVISIONS.
- 22 BOTTOM OF TRANSFORMER UNDERCOATED TO PREVENT CORROSION.
- 23 SPECIAL 3" FRAME WORK PER DRAWING.
- 24 PAINT COLOR RENTAL WHITE.

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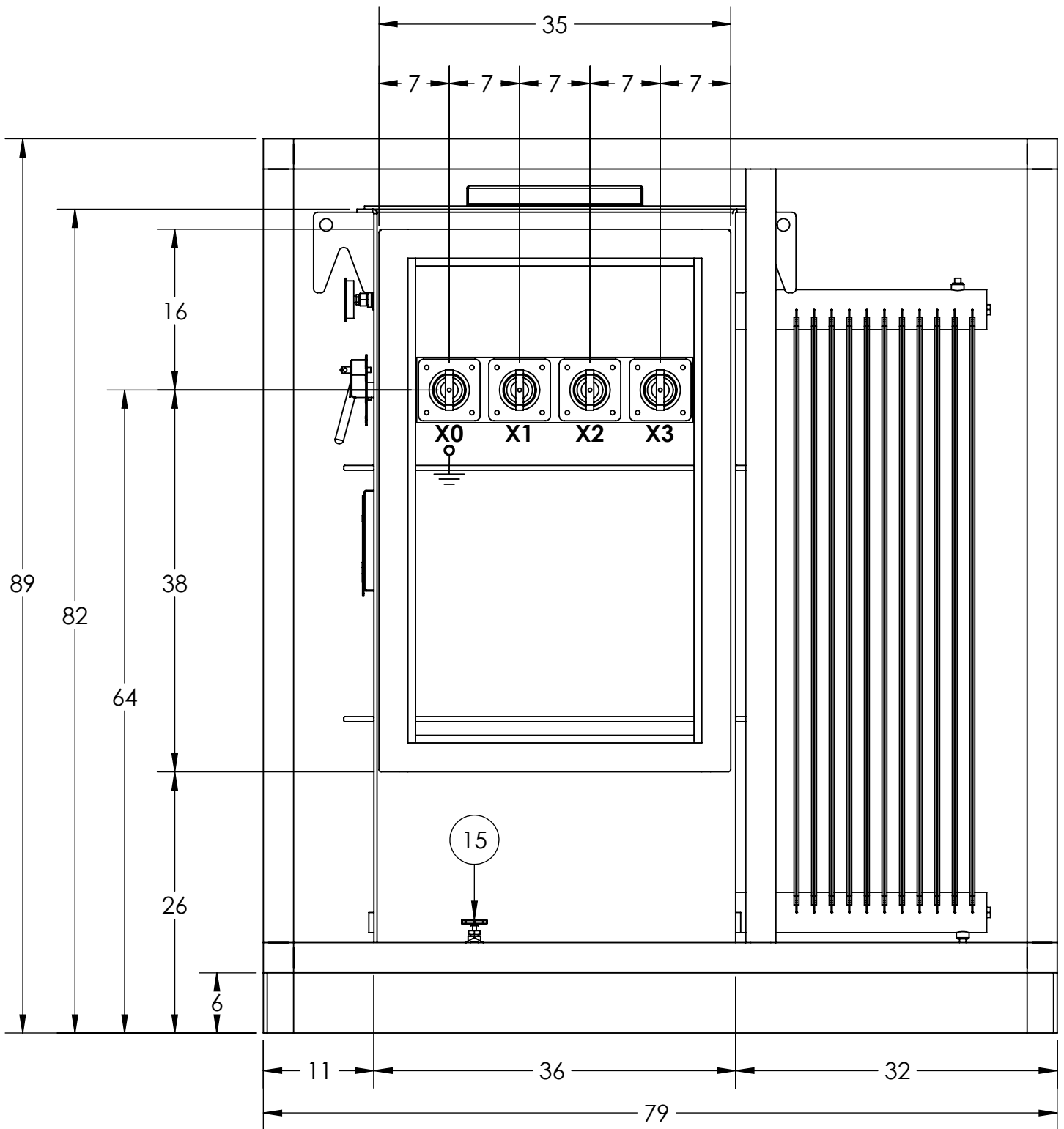
 WACO, TX		
DRAWN BY	CHECKED BY	SHEET
EC	EC	4 OF 7
DATE	DATE	DRAWING NO.
2/11/2016	2/11/2016	11245



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			TITLE .	
			LEFT VIEW	
APPROVED	DD	2/11/2016	SIZE	DWG. NO.
DRAWN	EC	2/11/2016	A	16V11245-2
		NAME	DATE	SCALE: 1:14
			ALL DIMENSIONS ARE IN INCHES	REV. 00
			SHEET 5 OF 7	



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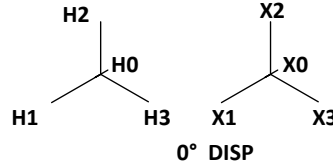
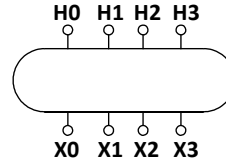
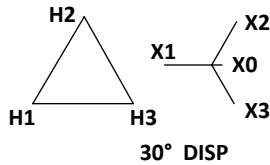
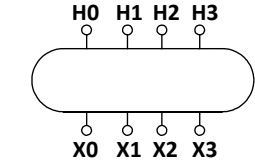
			TITLE: RIGHT VIEW	
APPROVED	DD	2/11/2016	SIZE	DWG. NO.
DRAWN	EC	2/11/2016	A	16V11245-3
		NAME	DATE	SCALE: 1:14
			ALL DIMENSIONS ARE IN INCHES	
				REV. 00 SHEET 6 OF 7

4.75



S/N:	16V11245	TYPE :	CZ	MFG DATE :	
kVA :	2500	65°C RISE		5.75% IMP	85 °C
INSULATING LIQUID	MINERAL OIL	"NON-PCB."		800 GAL	
THREE PHASE	CLASS-ONAN	60 HERTZ		INST BOOK V-100	
VOLTAGE RATING	2400 DELTA X 7200 DELTA - 480Y/277 4160 GRDY/2400 X 12470GRDY/7200- 480Y/277				
BIL - H.V /L.V	95kV / 30 kV	CONDUCTOR MAT:	H.V/L.V - AL/AL		

9.250



DELTA HIGH VOLTAGE CONNECTIONS				
VOLTS	AMP	T.C ON	DELTA-WYE SWITCH ON	DUAL VOLTAGE SWITCH ON
2400	601	D	1	1
8320	173	A	1	2
7970	181	B	1	2
7620	189	C	1	2
7200	200	D	1	2
6928	208	E	1	2

WYE HIGH VOLTAGE CONNECTIONS				
VOLTS	AMP	T.C ON	DELTA-WYE SWITCH ON	DUAL VOLTAGE SWITCH ON
4160Y	347	D	2	1
14400Y	100	A	2	2
13800Y	105	B	2	2
13200Y	109	C	2	2
12470Y	116	D	2	2
12000Y	120	E	2	2

CAUTION: TAP CHANGER MUST BE ON D POSITION FOR 2400 VOLTS CAUTION: TAP CHANGER MUST BE ON D POSITION FOR 4160Y VOLTS

NOTE: H0 AND X0 BUSHING MUST BE SOLIDLY GROUNDED WHEN THE DELTA - WYE SWITCH IS IN POSITION 2 (GROUNDED Y)

NOTE: WHEN GRDY VOLTAGE IS USED ON DELTA FEED, DROP THE NEUTRAL AT THE HIGH VOLTAGE SIDE OF TRANSFORMER. CONNECT H1,H2 AND H3 TO THE DELTA SYSTEM.

MAX OPERATING PRESSURE OF LIQUID PRESERVATION SYSTEM 7.5 LBF/IN ² POSTIVE AND 5 LBF/IN ² NEGATIVE.	CORE AND COIL	5869 LBS
TANK DESIGNED FOR 12 LBF/IN ² VACUUM FILLING LIQUID LEVEL BELOW TOP SURFACE OF THE HIGHEST POINT OF THE HIGHEST MANHOLE FLANGE AT 25°C 6.56 INCHES.	TANK & FITTINGS	6131 LBS
LIQUID LEVEL CHANGES 0.48 INCHES/10°C CHANGE IN LIQUID LEVEL TEMPERATURE.	LIQUID	6000 LBS
CONTAINS NO DETECTABLE LEVEL OF PCB (LESS THAN 2PPM) AT TIME OF MANUFACTURE	TOTAL MASS	18000 LBS
TRANSFORMER BY	UNTANKING MASS (HEAVIEST PIECE)	5869 LBS
VANTRAN	WACO, TEXAS	

**NOTE: TESTED IMPEDANCE TO BE STAMPED AFTER TRANSFORMER TESTING
TARGETED IMPEDANCE: 5.75% ± 7.5%**

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APPROVED			DD	2/11/2016	SIZE	DWG. NO.		
DRAWN			EC	2/11/2016	A	16V11245-N	NAMEPLATE REV. 00	
NAME			DATE		SCALE: NTS	ALL DIMENSIONS ARE IN INCHES		SHEET 7 OF 7