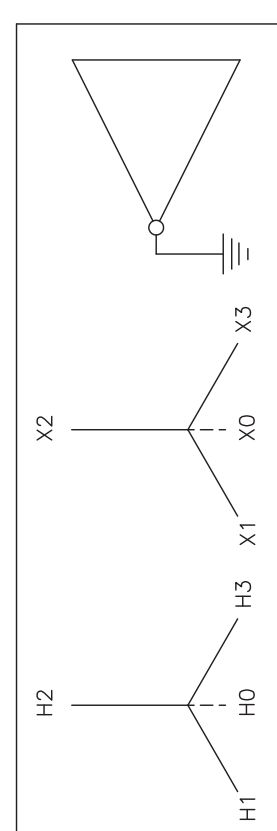




LOAD TAP CHANGING POWER TRANSFORMER

P.O. BOX 268 GOLDSBORO, NC 27533

CLASS ONAN/ONAF/ONAF 3-PHASE 60 HZ SER. NO. 55° C
 MVA 12.00/16.00/20.00 CONT. TEMP. RISE 65° C
 MVA 13.44/17.92/22.40 CONT. TEMP. RISE
 HV 67000 Y VOLTS BIL 350 KV
 HV NEUTRAL 13800 Y/7970 VOLTS BIL 350 KV
 LV NEUTRAL 7200 DELTA VOLTS STABILIZING WINDING BIL 110 KV
 TV 7200 DELTA VOLTS STABILIZING WINDING BIL 110 KV
 IMPEDANCE 8.59% AT 67000-13800 VOLTS AND 12.00 MVA



BUSHING CURRENT TRANSFORMER MULTI-RATIO RELAYING ACCURACY CLASS C400 CT:A,B,C,D,E,F

CURRENT RATIO	TAP	CURRENT RATIO	TAP
50:5	X2-X3	300:5	X2-X4
100:5	X1-X2	400:5	X1-X4
150:5	X1-X3	450:5	X3-X5
200:5	X4-X5	500:5	X2-X5
250:5	X3-X4	600:5	X1-X5

BUSHING CURRENT TRANSFORMER MULTI-RATIO RELAYING ACCURACY CLASS C400 CT:G,H,I,J,K,L,M,N

CURRENT RATIO	TAP	CURRENT RATIO	TAP
100:5	X2-X3	600:5	X2-X4
200:5	X1-X2	800:5	X1-X4
300:5	X1-X3	900:5	X3-X5
400:5	X4-X5	1000:5	X2-X5
500:5	X3-X4	1200:5	X1-X5

BUSHING CURRENT TRANSFORMER SINGLE RATIO RELAYING ACCURACY CLASS C100 CT:W1 FOR WINDING TEMP. EQUIP. 400:5 RATIO

BUSHING CURRENT TRANSFORMER SINGLE RATIO RELAYING ACCURACY CLASS C100 CT:U FOR LTC CONTROL 1200:5 RATIO

BUSHING CURRENT TRANSFORMER SINGLE RATIO RELAYING ACCURACY CLASS C100 CT:W2 FOR WINDING TEMP. EQUIP. 1200:5 RATIO

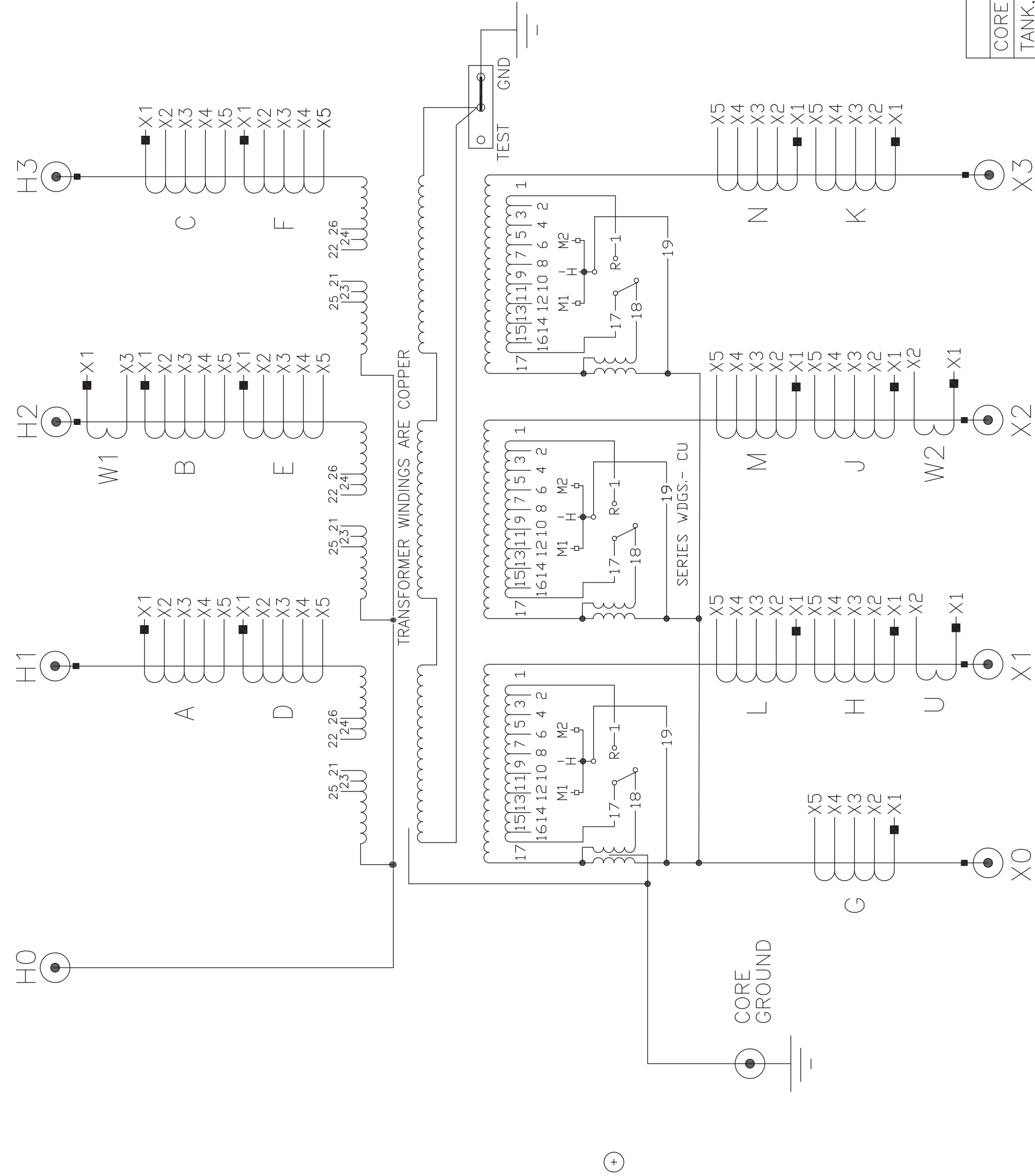
HIGH VOLTAGE TAPCHANGER DE-ENERGIZED OPERATION

VOLTS L-L	AMPS AT 22.40 MVA	POS	CONNECTS
70350	184	1	21-22
68675	188	2	22-23
67000	193	3	23-24
65325	198	4	24-25
63650	203	5	25-26

APPROXIMATE WEIGHTS LBS.

CORE & COIL (UNTANKING WEIGHT)	LBS.
46140	
TANK, FITTINGS, & RADIATORS	40210
RADS. (BOLT ON)	9232
OIL-MAIN TANK	4043
OIL-TAPCHANGER COMPARTMENT	100
OIL-RADIATORS	277
OIL-TOTAL*	4420
TOTAL WEIGHT	119500

*OIL MEETS ASTM D3487 TYPE II -- INHIBITED
 OIL LEVEL BELOW TOP SURFACE OF THE HIGHEST POINT OF THE HIGHEST MANHOLE FLANGE AT 25°C IS 14.5 INCHES.
 CONTAINS NO DETECTABLE LEVEL OF PCB (LESS THAN 2 PPM) AT TIME OF MANUFACTURE.
 OIL LEVEL CHANGES 0.69 INCHES PER 10°C CHANGE IN OIL TEMPERATURE
 OPERATING PRESSURE OF OIL PRESERVATION SYSTEM IS 5.0 LBF/IN² POSITIVE TO 0.5 LBF/IN² POSITIVE. TANK DESIGNED FOR 10 LBF/IN² POSITIVE AND FULL VACUUM FILLING.
 ALTITUDE 3300 FEET ABOVE SEA LEVEL.
 INSTRUCTION BOOK NO.: V 2.2
 A517237390 REV. (2)



VOLTS L-L	TYPE UZD LOAD TAP CHANGER		TYPE UZD LOAD TAP CHANGER		VOLTS L-L	TYPE UZD LOAD TAP CHANGER		AMPS AT 22.40 MVA	R CONNECTS AT DIRECTION	H CONNECTS	
	POS	600 AMP RATING		POS		AMPS AT 22.40 MVA	R CONNECTS AT DIRECTION				H CONNECTS
		RAISE	LOWER								
15180	16R	18-1	18-1	17-19	13800	N	18-17	18-1	18-19	18-19	
15094	15R	18-1	18-1	16-19	13800	LN	18-17	18-17	17-19	17-19	
15008	862	14R	18-1	15-19	13714	1L	18-17	18-17	16-19	16-19	
14921	867	13R	18-1	14-19	13628	2L	18-17	18-17	15-19	15-19	
14835	872	12R	18-1	13-19	13541	3L	18-17	18-17	14-19	14-19	
14749	877	11R	18-1	12-19	13455	4L	18-17	18-17	13-19	13-19	
14663	882	10R	18-1	11-19	13369	5L	18-17	18-17	12-19	12-19	
14576	887	9R	18-1	10-19	13283	6L	18-17	18-17	11-19	11-19	
14490	893	8R	18-1	9-19	13196	7L	18-17	18-17	10-19	10-19	
14404	898	7R	18-1	8-19	13110	8L	18-17	18-17	9-19	9-19	
14318	903	6R	18-1	7-19	13024	9L	18-17	18-17	8-19	8-19	
14231	909	5R	18-1	6-19	12938	10L	18-17	18-17	7-19	7-19	
14145	914	4R	18-1	5-19	12851	11L	18-17	18-17	6-19	6-19	
14059	920	3R	18-1	4-19	12765	12L	18-17	18-17	5-19	5-19	
13973	926	2R	18-1	3-19	12679	13L	18-17	18-17	4-19	4-19	
13886	931	1R	18-1	2-19	12593	14L	18-17	18-17	3-19	3-19	
13800	937	RN	18-1	1-19	12506	15L	18-17	18-17	2-19	2-19	
13800	937	N	18-17	18-1	12420	16L	18-17	18-17	1-19	1-19	

FOR STEP DOWN OPERATION

DESIGN NO. 5172373T00

DATE OF MANUFACTURE: - - - / - - -

0.31

21.50

10.75

0.31

16.50

0.15625 DIA

FOR REFERENCE ONLY

TRAVERSE CITY LGT & PWR DEPT.
 PO.NO. CONTRACT
 PARSON ROAD SUBSTATION
 SERIAL/MFG.NO. GM053114
 "APPROVAL DRAWINGS"

NOTE:
 THE DESIGN IMPEDANCE IS:
 8.61% @ 12.00 MVA
 THE SERIAL NUMBER, DATE OF MANUFACTURE,
 AND MEASURED IMPEDANCE OF EACH UNIT OF THIS DESIGN
 WILL BE STAMPED ON ITS NAMEPLATE PRIOR TO SHIPMENT.

MATERIAL: STAINLESS STEEL USS. STD. GA. NO. 22 (.0299)
 LETTERING AND NUMERALS: SUNKEN BLACK ON A POLISHED
 STAINLESS STEEL BACKGROUND
 PAINT: SPRAYED BLACK ENAMEL
 PADS: ALL RAISED PADS ARE 7/32 WIDE AND LENGTH SHOWN

ENG.	NMA	01-26-2020	RECORD DRAWINGS
DR	NMA		
CK	NMA	09-18-2018	QA/QC REVISIONS
APP	MPM	08-15-2018	BDS & CONSTRUCTION
		08-10-2018	OWNER REVIEW
DATE			ISSUED FOR