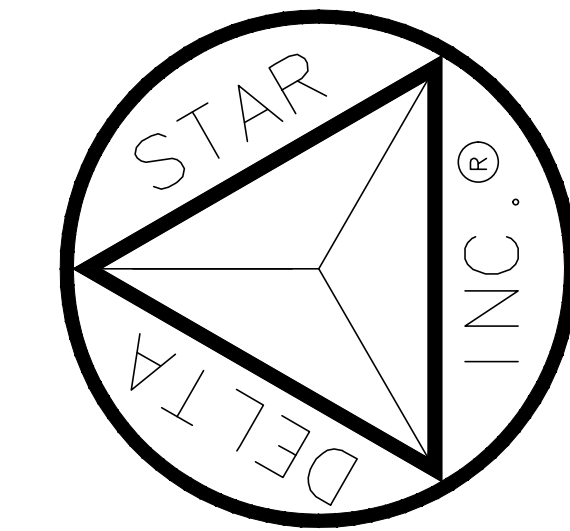


ENG.	PKM		
DR	RAS		
CK	PKM		
APP	MALANEY	1/6/2014	RECORD DRAWINGS
		8/26/2012	CONSTRUCTION
		DATE	ISSUED FOR

NOTE: PROVIDE 1/8" MOUNTING HOLE.



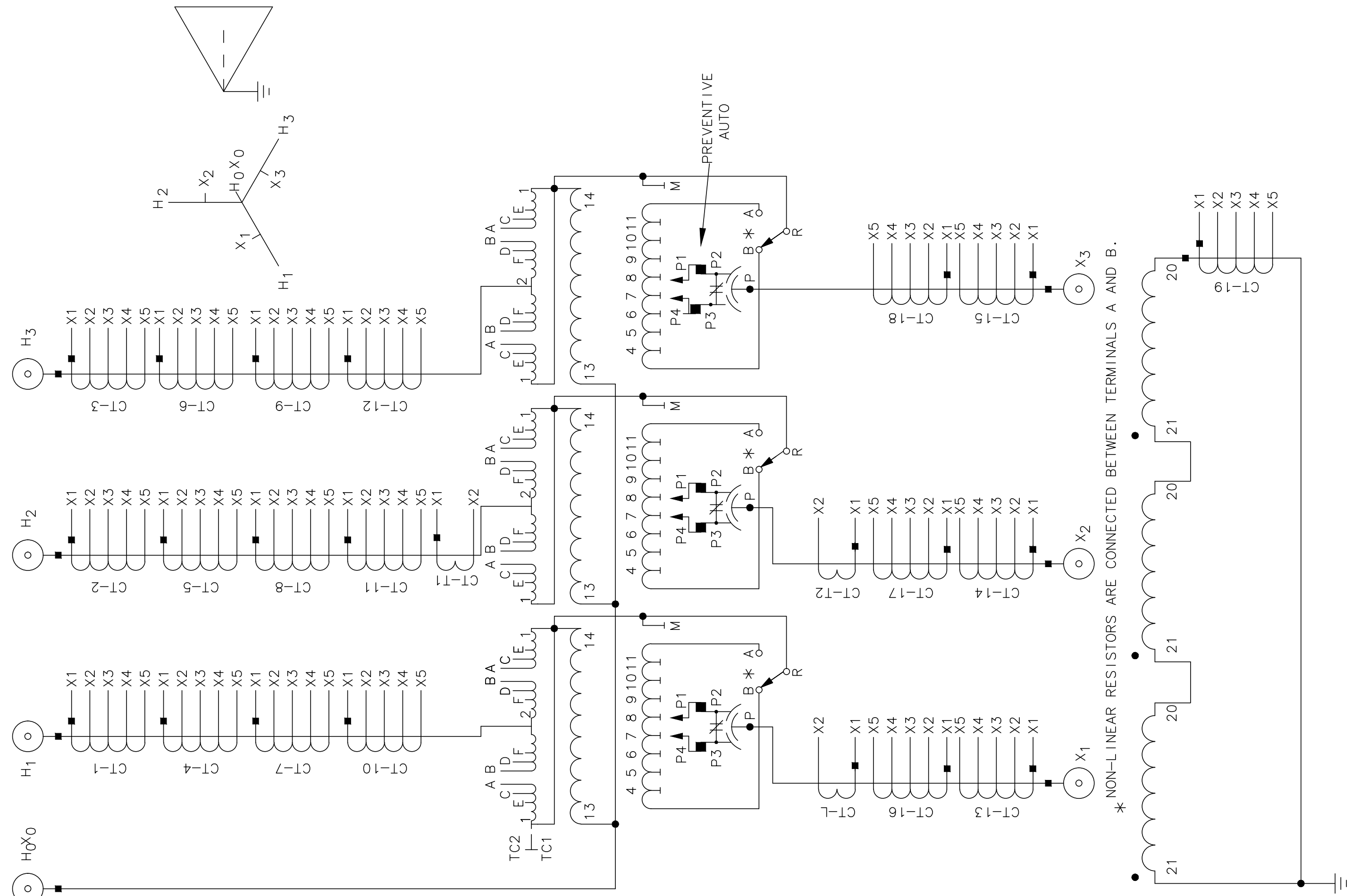
LOAD-TAP-CHANGING AUTOTRANSFORMER
CLASS ONAN/ONAF/ONAF THREE PHASE 60 HERTZ
S/N E40870213
HV (CU) 650 KV BIL
LV (CU) 350 KV BIL
TV (CU) 150 KV BIL
NEUTRAL 110 KV BIL
CONT. TEMP. RISE 55°C
CONT. TEMP. RISE 55°C
TERTIARY RISE 65°C
TERTIARY RISE 65°C
IMPEDANCE 6.79 % AT 138000 - 69000 VOLTS AND 90 MVA

HIGH VOLTAGE		HV DE-ENERGIZED TAP CHANGER (TC1 & TC2)	
VOLTS L-L (H)	AMPS AT 168MVA	POSITION	CONNECTIONS
144900	669	1	A TO B
141450	686	2	B TO C
138000	703	3	C TO D
134550	721	4	D TO E
131100	740	5	E TO F

NOTE: TC1 & TC2 ARE CONNECTED IN PARALLEL AND MUST BE OPERATED IN THE SAME TAP POSITION.

LOW VOLTAGE LOAD-TAP-CHANGER (REINHUSEN, RMV-11, 1500 AMPS)			
VOLTS L-L (X)	AMPS AT 168MVA OR RATED AMPS	POSITION	CONNECTIONS
75900	1280	16	P1 TO 11
75470	1285	15	10 TO 11
75040	1290	14	10 TO 10
74610	1300	13	9 TO 10
74180	1310	12	9 TO 9
73740	1315	R	8 TO 9
73310	1325	A	8 TO 8
72880	1330	I	7 TO 8
72450	1340	S	7 TO 7
72020	1350	E	6 TO 6
71590	1355	5	5 TO 6
71160	1365	4	5 TO 5
70730	1370	3	4 TO 5
70290	1380	2	4 TO 4
69860	1390	1	4 TO 4
69430	1400	NEUTRAL	M TO M
69000			M TO M
68570		1	11 TO 11
68140		2	10 TO 11
67710		3	10 TO 10
67280		4	9 TO 10
66840		5	9 TO 9
66410		L	8 TO 9
65980		O	8 TO 8
65550		W	7 TO 8
65120		E	7 TO 7
64690		R	6 TO 7
64260		12	6 TO 6
63830		13	5 TO 6
63400		14	5 TO 5
62960		15	4 TO 5
62530		16	4 TO 4

FOR STEP UP AND STEP DOWN OPERATION
OIL LEVEL BELOW TOP OF MANHOLE FLANGE AT 25°C IS 14 INCHES. OIL LEVEL CHANGES 1.02 INCHES PER 10°C CHANGE IN OIL TEMPERATURE. TRANSFORMER TANK TO WITHSTAND FULL VACUUM AND 15 LBS. POSITIVE PRESSURE. TRANSFORMER FILLED WITH 0.15% INHIBITED MINERAL OIL.



BEFORE INSTALLING OR OPERATING, READ INSTRUCTIONS. (DS-100 & 106) THE UNIT DID NOT CONTAIN PCB AT TIME OF INITIAL FILLING.

APPROXIMATE WEIGHTS (LBS.)	
UNTANKING (CORE & COIL)	133,000*
TANK & FITTINGS	75,500
MAIN TANK (11,215 GAL.)	
RADS (1,555 GAL.)	
OIL LTC (345 GAL.)	98,500
TOTAL (13,115 GAL.)	
TOTAL	307,000

* INCLUDES 9,200 LBS FOR PREVENTIVE AUTO

DELTA STAR, INC.
LYNCHBURG OPERATING DIV.
3550 MAYFLOWER DR., LYNCHBURG, VA 24501

BUSHING CURRENT TRANSFORMER TRF 2.0			
MULTI-RATIO	ACC. CLASS	C800	CT-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21
CURRENT RATIO	TAP	CURRENT RATIO	TAP
300/5	X3-X4	100/5	X2-X3
400/5	X1-X2	200/5	X1-X2
500/5	X4-X5	300/5	X1-X3
600/5	X2-X3	400/5	X4-X5
1100/5	X2-X4	500/5	X3-X4

DATE OF MANUFACTURE
02/2013

BUSHING CURRENT TRANSFORMER TRF 2.0	
MULTI-RATIO	ACC. CLASS
CURRENT RATIO	C800
1600/5	CT-T1
1600/5	CT-T2
1600/5	CT-L

REVISION 4

NOTE: TRANSFORMER IS DESIGNED FOR A NOMINAL 7.0% IMPEDANCE ON A 90 MVA BASE. EXACT IMPEDANCE VALUE TO BE ADDED AFTER FACTORY TESTING.

SERIAL NUMBER	MVA	VOLTAGE (KV)	IMPEDANCE (%)
E40870213	90	138-69	6.79

17.08.0