

SPX TRANSFORMER SOLUTIONS, INC.  
WAUKESHA, WISCONSIN, USA

# WAUKESHA®

POWER TRANSFORMER

CLASS ONAN/ONAF/ONAF 3-PHASE 60 HZ SER. NO WT05190  
 MVA 33.0/44.0/55.0 CONT. TEMP. RISE 65° C  
 HV 115000 VOLTS BIL 450 KV  
 LV 13200ZZY/7620 VOLTS BIL 110 KV  
 LV NEUTRAL BIL 110 KV  
 IMPEDANCE % AT 115000-13200 VOLTS AND 33.0 MVA  
 GUARANTEED SOUND LEVEL ONAN: 57 db(A) ONAF: 60 db(A) ONAF: 60 db(A)  
 TESTED SOUND LEVEL ONAN: db(A) ONAF: db(A) ONAF: db(A)

ANCILLARY COMPONENTS ARE THERMALLY COORDINATED WITH THE TRANSFORMER CORE & COIL ASSEMBLY.  
 NON-DIRECTED OIL FLOW.  
 3-LEGGED CORE  
 NATIONAL GRID ORDER NUMBER: 90000191146  
 EQUIPMENT REFERENCE NUMBER: 025023

BUSHING CURRENT TRANSFORMER MULTI-RATIO RELAYING  
 ACCURACY CLASS C800  
 CT: A, B, C, D, E, F  
 THERMAL RATING FACTOR = 2.0

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 MULTI-RATIO RELAYING  
 ACCURACY CLASS C800  
 CT: G, H, J, K, L, M  
 THERMAL RATING FACTOR = 2.0

CURRENT RATIO	TAP	CURRENT RATIO	TAP
300:5	X3-X4	1200:5	X1-X3
400:5	X1-X2	1500:5	X1-X4
500:5	X4-X5	1600:5	X2-X5
800:5	X2-X3	2000:5	X1-X5
1100:5	X2-X4		

BUSHING CURRENT TRANSFORMER MULTI-RATIO RELAYING  
 ACCURACY CLASS C400  
 CT: N  
 THERMAL RATING FACTOR = 2.0

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 MULTI-RATIO RELAYING  
 ACCURACY CLASS C400  
 CT: P, O, R  
 THERMAL RATING FACTOR = 2.0

CURRENT RATIO	TAP	CURRENT RATIO	TAP
300:5	X3-X4	1200:5	X1-X3
400:5	X1-X2	1500:5	X1-X4
500:5	X4-X5	1600:5	X2-X5
800:5	X2-X3	2000:5	X1-X5
1100:5	X2-X4		

BUSHING CURRENT TRANSFORMER MULTI-RATIO RELAYING  
 ACCURACY CLASS C400  
 CT: S, T, X  
 THERMAL RATING FACTOR = 2.0

CURRENT RATIO	TAP	CURRENT RATIO	TAP
300:5	X3-X4	1500:5	X2-X4
500:5	X4-X5	2000:5	X2-X5
800:5	X3-X5	2200:5	X1-X3
1000:5	X1-X2	2500:5	X1-X4
1200:5	X2-X3	3000:5	X1-X5

BUSHING CURRENT TRANSFORMER SINGLE-RATIO METERING  
 ACCURACY CLASS 0.3B-1.8  
 CT: Y, Z, AA  
 THERMAL RATING FACTOR = 2.0

CURRENT RATIO	TAP
2000:5	X1-X2

BUSHING CURRENT TRANSFORMER  
 CT: W FOR WINDING TEMP. EQUIP.  
 2500:5 RATIO CLASS C100  
 THERMAL RATING FACTOR = 2.0

HIGH VOLTAGE TAPCHANGER DE-ENERGIZED OPERATION

VOLTS L-L	AMPS AT 55.0 MVA	POS	CONNECTS
120000	265	A	3 - 4
117500	270	B	4 - 2
115000	276	C	2 - 5
112500	282	D	5 - 1
110000	289	E	1 - 6

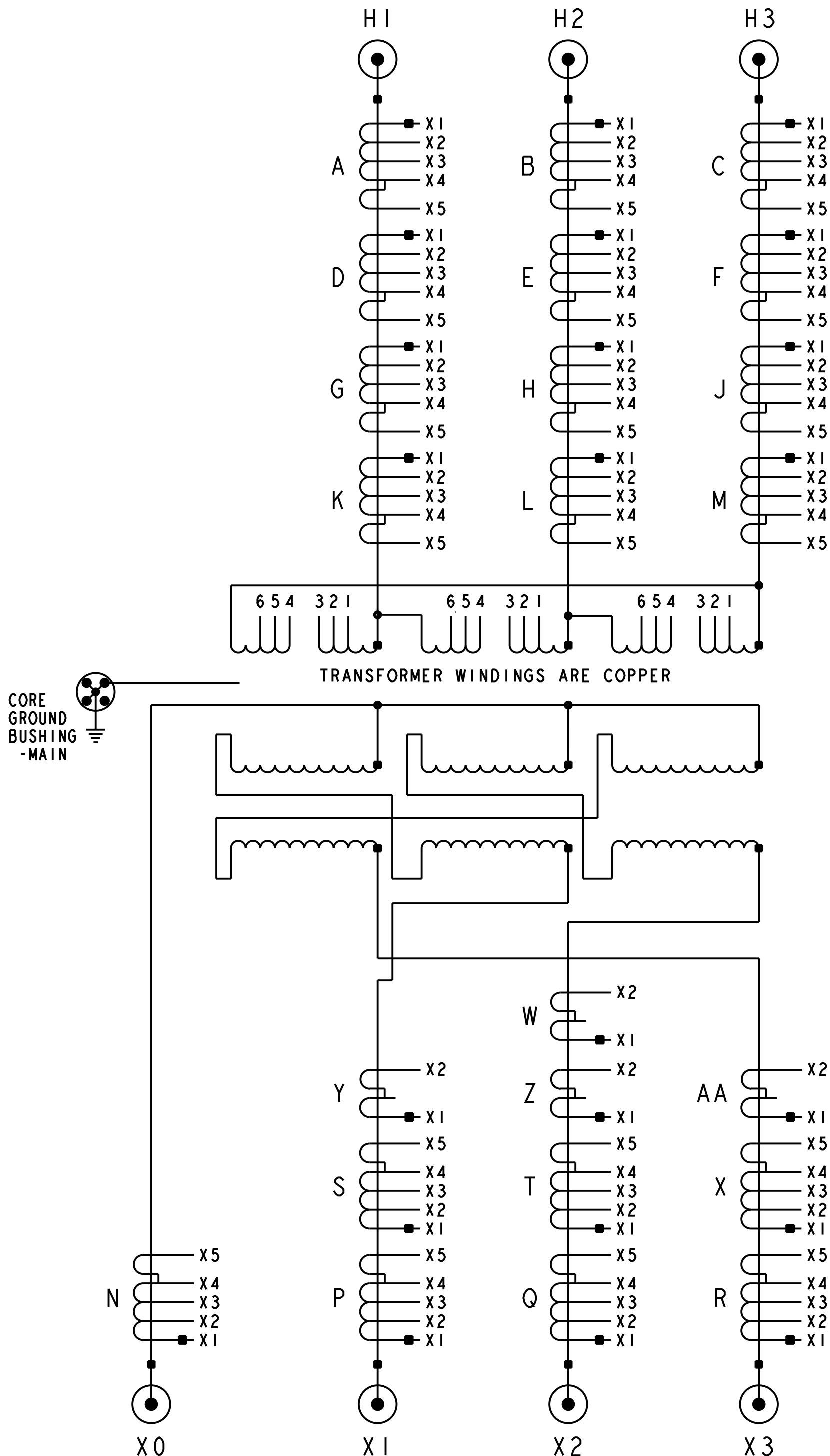
LOW VOLTAGE

VOLTS L-L	AMPS AT 55.0 MVA
13200	2406

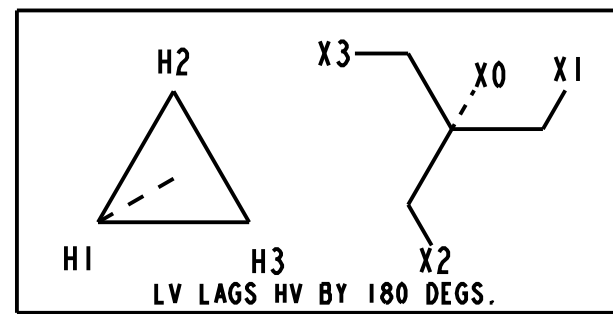
FOR STEP DOWN OPERATION

APPROXIMATE WEIGHTS

	LBS.
CORE & COIL (UNTANKING WEIGHT)	120400
TANK, FITTINGS & RADIATORS	56200
RADS. (BOLT ON)	18700 LBS.
OIL-MAIN TANK	6840 GALS.
OIL-RADIATORS	795 GALS.
OIL-TOTAL	7635 GALS. 57300
TOTAL WEIGHT	233900
SHIPPING WEIGHTS WITHOUT OIL	
SHIPPING UNIT	149600 203100
SHIPPING PARTS	27000 30800
SHIPPING TOTAL	176600 233900



OIL LEVEL BELOW TOP SURFACE OF THE HIGHEST POINT OF THE HIGHEST MANHOLE FLANGE AT 25°C IS 14.2 INCHES.  
 OIL LEVEL CHANGES 0.86 INCHES PER 10°C CHANGE IN OIL TEMPERATURE.  
 INHIBITED OIL 0.30 % DBPC  
 OPERATING PRESSURE OF OIL PRESERVATION SYSTEM IS 5 LBF/IN<sup>2</sup> POSITIVE TO 0.5 LBF/IN<sup>2</sup> POSITIVE  
 TANK DESIGNED FOR 10 LBF/IN<sup>2</sup> POSITIVE AND FULL VACUUM FILLING.  
 CONTAINS NO DETECTABLE LEVEL OF PCB (LESS THAN 1 PPM) AT THE TIME OF MANUFACTURE.  
 DESIGN ALTITUDE OF 3300 FEET AMSL.



INSTRUCTION BOOK NO. WT05190 DATE OF MANUFACTURE: 951T05190R001 REV. (1)

NOTE: THE LAST REVISION AFFECTING THE ACTUAL NAMEPLATE INFORMATION IS THE NUMBER IN THE LOWER RIGHT CORNER OF THE LAST REVISION.

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED BY
	1	ISSUED CIS AND CT TABLES PER OCR 12501	08/25/20	DHW
	1	PLATE REV. 1		

SHOP NOTE:  
 NAMEPLATE MATL: STAINLESS STEEL.  
 THE DATE OF MANUFACTURE AND PERCENT IMPEDANCE ARE STAMPED OR ADDED ELECTRONICALLY ON THE NAMEPLATE AFTER TEST AND PRIOR TO SHIPMENT.

GUARANTEE IMPEDANCE  
 HV-LV 15.00 % AT 115000-13200 VOLTS AND 33.0 MVA

0.32 [8] TYP  
 0.20 [5] 6 HOLES  
 DIMENSIONS IN MILLIMETERS  
 DIMENSIONS IN INCHES  
 NAMEPLATE  
 SPX TRANSFORMER SOLUTIONS, INC.  
 WAUKESHA, WISCONSIN, USA  
 NATIONAL GRID ORDER NUMBER: 90000191146  
 EQUIPMENT REFERENCE NUMBER: 025023  
 CUSTOMER: NATIONAL GRID USA  
 ORDER NO. 3200478738  
 PROJECT NO. WT05190  
 SERIAL NO. WT05190  
 DATE 08/26/2020  
 SCALE 1:1000  
 SHEET 1 OF 1  
 951T05190D001