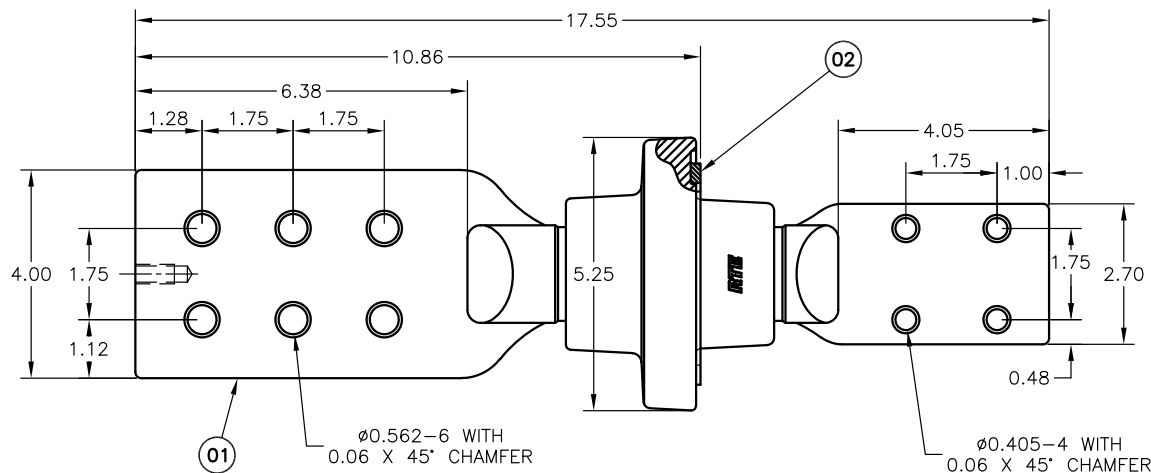
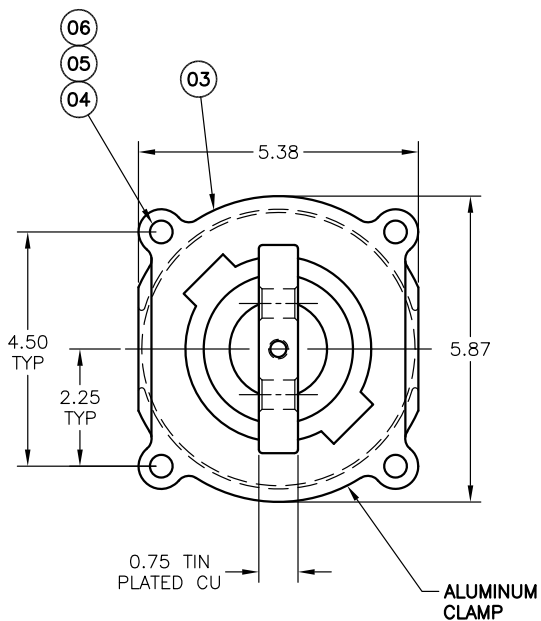
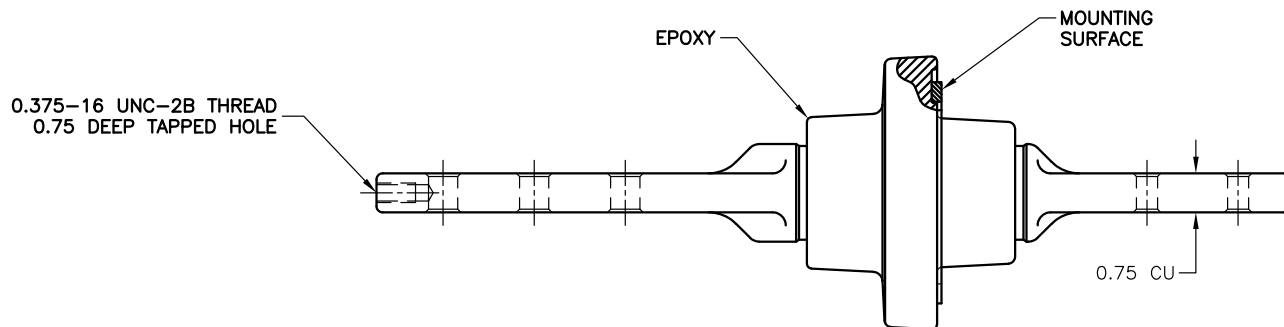


2617085B71

REVISIONS

REV 01  
AMPS WERE 4500  
KES 02/02/95

REV 03  
ADDED MATERIAL &  
MTG SURFACE.  
REV'D & REDRAWN  
TAM 11/04/96



REQUIRES  $\phi 3.062$  MTG HOLE  
&  $0.38-16 \times 2.00$  MTG STUD

KV CLASS: 1.2  
BIL (KV): 45  
RATED CONT. CURRENT: 4515 A  
MIN CREEP DISTANCE: 2.25"

MATERIAL: <b>SEE BOM</b>		<b>COOPER</b> Power Systems	
ALL DIMENSIONS ARE IN INCHES TOLERANCES UNLESS OTHERWISE SPECIFIED		TITLE: BUSH ASSY LV	
ONE PLACE DECIMAL $\pm .1$	TWO PLACE DECIMAL $\pm .06$	SUBJ: 1.2KV 4515A	
THREE PLACE DECIMAL $\pm .030$	* CRITICAL DIMENSION	6-HL EXT 4-HL INT	
ANGULAR $\pm 2^\circ$		DWG: 03/30/93	REF: 17085B05
[CONFIDENTIAL] MUST NOT BE USED IN ANY WAY DETRIMENTAL TO COOPER POWER SYSTEMS		SHEET #: 1 of 1	SCALE: 1=1
		REV: 03	
<b>2617085B71</b>			

**COOPER Power Systems**

3 $\phi$  TRANSFORMER  
WAUKESHA, WI U.S.A

FACTORY MUTUAL APPROVED PER SPEC. 3990	
COOPER CATALOG NUMBER: 00005A15ETYS	
TANK WITHSTAND PRESSURE W/O:	PERM. DISTORTION 7 PSI RUPTURE 15 PSI
PRESSURE RELIEF DEVICE/SHROUD: MFG: QUALITROL PART NUMBER: 208-001-39, SLD000-00008936	
FUSE TYPE: POWER FUSE	FUSE RATING: 80E 25kV NOM, 27kV MAX
FUSE MODEL: SM-5	PART NUMBER: 133125R4
FUSE MFG: S&C	

1192440A2923-00

1. REPLACEMENT FUSE MUST BE EXACT DUPLICATES OF THOSE INITIALLY PROVIDED.
2. INDOOR INSTALLATION REQUIREMENTS:
  - A) FOR TYPE 1 AND TYPE 2 BUILDINGS, THE TRANSFORMER MUST BE LOCATED AT LEAST 3 FT. (0.9M) FROM BUILDING WALL.
  - B) FOR COMBUSTIBLE BUILDINGS, THE TRANSFORMER MUST BE LOCATED AT LEAST 3 FT. (0.9M) FROM BUILDING WALLS AND PROTECTED BY AN AUTOMATIC FIRE SUPPRESSION SYSTEM OR MUST BE INSTALLED IN A 3 HOUR FIRE RATED VAULT.
3. OUTDOOR SITE REQUIREMENTS:  
THE TRANSFORMER MUST BE LOCATED AT LEAST 3 FT. (0.9M) FROM BUILDING WALLS AND 5 FT. (1.5M) FROM DOORS, FIRE ESCAPES AND WINDOWS.
4. SECONDARY GROUND FAULT PROTECTION, OR EQUIVALENT, MUST BE INSTALLED UNLESS SPECIFICALLY PROHIBITED BY THE AUTHORITY HAVING JURISDICTION.
5. MAX AVAILABLE FAULT CURRENT OF 5.96kA.

ALSO CLASSIFIED FOR USE AS LESS-FLAMMABLE LIQUID-INSULATED TRANSFORMER IN ACCORDANCE WITH SEC. 450-23 OF THE NATIONAL ELECTRIC CODE (NEC) AND MARKED USE RESTRICTIONS ON THE TRANSFORMER.



LIQUID-FILLED DISTRIBUTION TRANSFORMER  
LIQUID-IMMERSED DISTRIBUTION TRANSFORMER



APPROVED

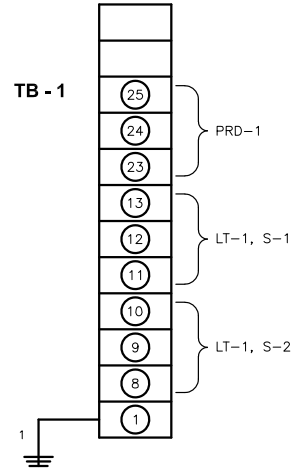
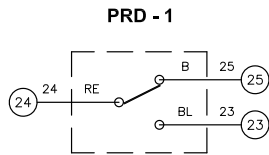
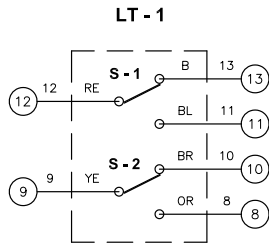
- NOTES:**
- 1) ACTUAL PLATE IS A NEGATIVE OF THE ABOVE DRAWING.
  - 2) ACTUAL %IZ TO BE STAMPED IN AFTER TESTING.

NAMEPLATE MATERIAL: ALUMINUM

204493491~

1192440A2923 REVISIONS

MATERIAL:					
ALL DIMENSIONS ARE IN INCHES TOLERANCES UNLESS OTHERWISE SPECIFIED ONE PLACE DECIMAL ± .1 TWO PLACE DECIMAL ± .06 THREE PLACE DECIMAL ± .030 * CRITICAL DIMENSION ANGULAR ± 2°					
DWG: NPS	DATE: 1/6/2014	REF:	SHEET #: 1 of 1	SCALE: 1=1	REV: 00
[ CONFIDENTIAL ] MUST NOT BE USED IN ANY WAY DETRIMENTAL TO COOPER POWER SYSTEMS		<b>1192440A2923</b>			



- LT-1 LIQUID TEMPERATURE GAGE (26Q)
- PRD-1 PRESSURE RELIEF DEVICE (63PR)  
ACTIVATES AT 10±1 PSIG (69±7 kPa) RISING
- TB-1 TERMINAL BLOCK, 600V, 35A

FOR FIELD WIRING TERMINALS (CUSTOMER CONNECTIONS)  
 - USE COPPER CONDUCTORS ONLY, #22-10 AWG  
 - WIRE TO CUSTOMER SOURCE MUST BE RATED 60°C MINIMUM  
 - TB-1 SCREW TIGHTENING TORQUE 31.5-35 IN-LB

## LEGEND

- INDICATES PREWIRED DEVICE
- INDICATES REMOTE DEVICE
- INDICATES WIRE HEAT SHRINK NUMBER LABEL
- INDICATES TERMINAL BLOCK CONNECTION
- INDICATES INTRINSICALLY SAFE TERM BLOCK CONN
- INDICATES RELAY TERM AND #

- INDICATES SPLICE
- INDICATES NORMALLY CLOSED CONTACT (NC)
- INDICATES NORMALLY OPEN CONTACT (NO)
- INDICATES CUSTOMER CONNECTION
- POLARITY MARK
- INDICATES CT SHORTING PINS - TO BE REMOVED WHEN LOAD IS CONNECTED TO CT
- WIRE COLORS APPLICABLE ONLY WHEN USING CORD CONNECTORS TO SWITCHES

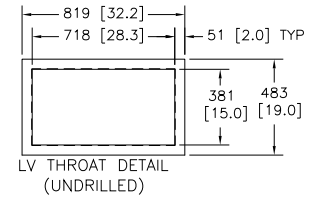
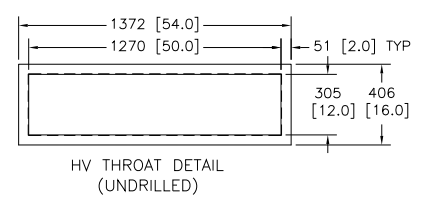
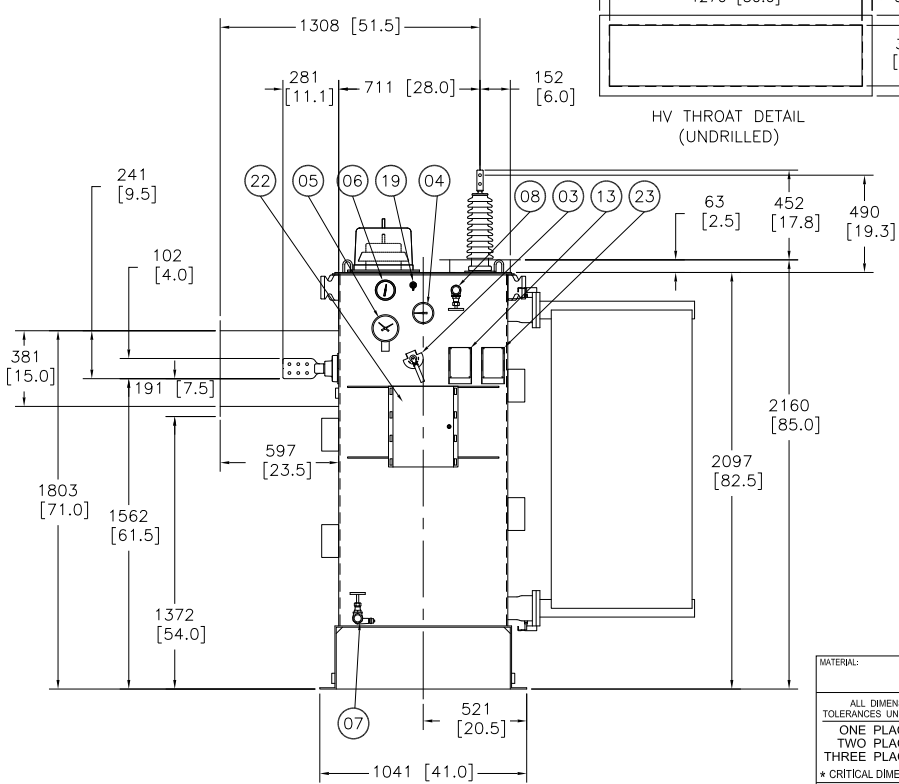
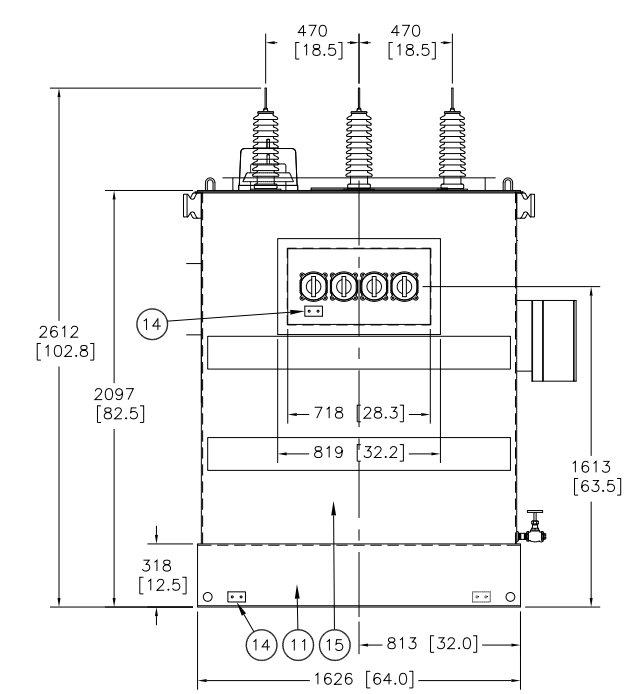
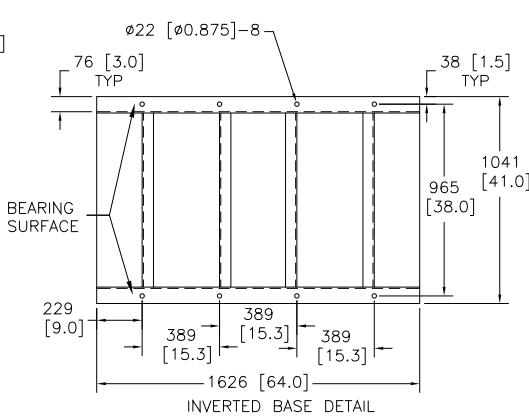
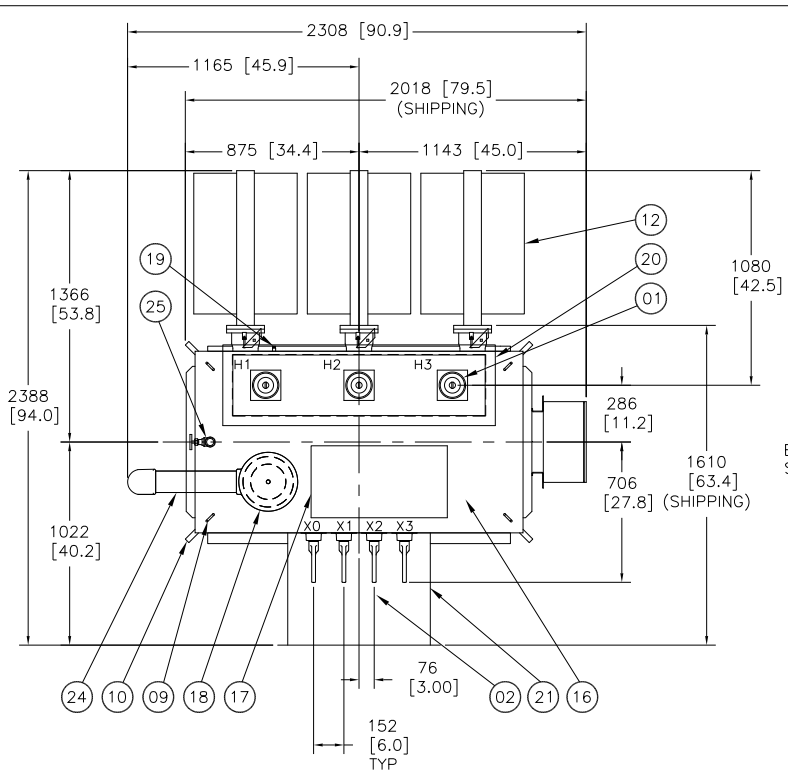
- WH - WHITE
- GR - GREEN
- BL - BLACK
- B - BLUE
- OR - ORANGE
- RE - RED
- BR - BROWN
- YE - YELLOW

DEVICE	GAGE SWITCH RATINGS (AMPS)			
	120/240VAC	48VDC	125VDC	250VDC
LT/LT/PRD/RRR	15	1.3	.50	.25
SPC	10	2.0	.50	.25
PS/VS	5	1.0	.40	.20
WTI	15	1.3	.50	.25
TPG	1	-	-	-
LCP	3	-	-	-
U	5	2.0	2.0	N/A

DEVICE	GAGE SWITCH SETTINGS		
	LT 55°C AWR	LT 65°C AWR	WTI
S-1 (FANS)	60°C	70°C	80°C
S-2 (ALARM)	80°C	90°C	120°C
S-3 (TRIP)	105°C FIXED	105°C FIXED	130°C FIXED

NOTE: AC LOADS = INDUCTIVE P.F. 75%  
DC LOADS = NON-INDUCTIVE

MATERIAL:					
ALL DIMENSIONS ARE IN INCHES TOLERANCES UNLESS OTHERWISE SPECIFIED ONE PLACE DECIMAL ± .1 TWO PLACE DECIMAL ± .06 THREE PLACE DECIMAL ± .030 * CRITICAL DIMENSION ANGULAR ± 2°				TITLE: SCHEMATIC SUB:	
DWG: DWL	DATE: 07/20/07	REF:	SHEET # 1 of 1	SCALE: N/A	REV: 00
[CONFIDENTIAL] MUST NOT BE USED IN ANY WAY DETRIMENTAL TO COOPER POWER SYSTEMS					
<b>4256240C1352</b>					



- | ITEM | DESCRIPTION   |
|------|---|
| 01   | HV BUSH: CPS 2609233B02, 34.5kV CLASS, 250 AMPS.  |
| 02   | LV BUSH: CPS 2617085B71, 1.2kV CLASS, 4515 AMPS.  |
| 03   | TAP CHANGER WITH 9.5mm [.38"] DIAMETER HOLE FOR PADLOCKING.   |
| 04   | MAGNETIC LIQUID LEVEL INDICATOR.  |
| 05   | LIQUID TEMPERATURE INDICATOR WITH CONTACTS.   |
| 06   | PRESSURE VACUUM GAUGE ±70kPa [±10 PSI].   |
| 07   | COMBINATION DRAIN AND LOWER FILTER PRESSURE VALVE WITH .38" SAMPLER, 1.0" DIAMETER.                 |
| 08   | UPPER FILTER PRESS VALVE, 1.0" DIAMETER.  |
| 09   | LIFTING EYES FOR LIFTING COVER ONLY.  |
| 10   | LIFTING LUGS FOR LIFTING COMPLETE TRANSFORMER.  |
| 11   | TRANSFORMER BASE WITH PROVISIONS FOR JACKING PER ANSI STANDARD AND FOR ROLLING IN EITHER DIRECTION. |
| 12   | REMOVABLE RADIATORS.  |
| 13   | NAMEPLATE.  |
| 14   | STAINLESS STEEL GROUND PADS WITH NEMA DRILLING.   |
| 15   | TRANSFORMER TANK-SEALED TANK LIQUID PRESERVATION.   |
| 16   | TRANSFORMER COVER: WELDED.  |
| 17   | MANHOLE 286mm [11.25"] X 610mm [24.0"] WITH BOLTED COVER.   |
| 18   | PRESSURE RELIEF DEVICE WITH INDICATOR WITH SHROUD WITH CONTACTS.                                    |
| 19   | PURGE VALVES.   |
| 20   | HV FLANGE.  |
| 21   | LV THROAT WITH BOLTED FRONT AND BOTTOM ACCESS PANELS.   |
| 22   | CONTROL BOX (NEMA TYPE 4).  |
| 23   | FACTORY MUTUAL NAMEPLATE.   |
| 24   | DIRECTIONAL PIPING FOR PRESSURE RELIEF DEVICE.  |
| 25   | COVER MOUNTED 1" VALVE.   |

- NOTES:
- UNIT IS SHIPPED WITH 2 AEROSOL CANS OF TOUCH-UP PAINT.
  - DIMENSION FORMAT: MM [INCH].
  - REMOVABLE RADIATORS AND TWO, 208 LITER [55 US GALLON] DRUMS OF FR3 SHIPPED SEPARATE WITH UNIT.
  - PRESSURE RELIEF DEVICE SHROUD DIRECTIONAL PIPING SHIPPED SEPARATE WITH UNIT.
  - TANK BRACED FOR FULL VACUUM.

**3ø POWER TRANSFORMER**  
 2000kVA KNAN/FUTURE KNAF 55°C  
 HV: 27600 DELTA  
 LV: 600Y/346  
 ENVIROTEMP FR3 FLUID FILLED  
 CUSTOMER: ROBERTSON ELECTRIC  
 WHOLESALE  
 CUSTOMER P.O. #: D9414592  
 JOB: METRO WEST DETENTION CENTRE  
 COOPER ORDER #: 204493491  
 CATALOG #: 00005A15ETYS  
 PAINT: ANSI #61

**WEIGHTS\_kgs [POUNDS]**  
 CORE & COIL: 3041 [6705]  
 TANK & FITTINGS: 1721 [3795]  
 LIQUID: 1744 [3845]  
 TOTAL: 6506 [14345]  
 SHIPPING: 5483 [12090]  
 LITERS: 1893 [US GALS: 500]

MATERIAL:			
ALL DIMENSIONS ARE IN INCHES TOLERANCES UNLESS OTHERWISE SPECIFIED			
ONE PLACE DECIMAL ±.1		TITLE: OUTLINE DRAWING	
TWO PLACE DECIMAL ±.06		SUBJ:	
THREE PLACE DECIMAL ±.030		DWG: DATE: REF: SHEET#: SCALE: REV: 04	
* CRITICAL DIMENSION ANGULAR ±2'		APP: 09/11/13	
[CONFIDENTIAL] MUST NOT BE USED IN ANY WAY DETRIMENTAL TO COOPER POWER SYSTEMS			
<b>4241200B6017</b>			

4241200B6017	
REVISIONS	
REV01	REVISED PER CUSTOMER CHANGES. DWL 11-12-13
REV02	REVISED PER ADTL CUSTOMER CHANGES. DWL 11-14-13
REV03	TANK HEIGHT WAS 81.5. ADDED ITEM 25. DWL 11-22-13
REV04	REVISED NOTE 4. DWL 12-30-13

**COOPER Power Systems**

3 $\phi$  TRANSFORMER  
WAUKESHA, WI U.S.A

2000/2660 55°C 60Hz

MATERIAL: ALUMINUM  
NAMES: 00005A15ETYS

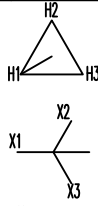
27600 KNAN/KNAF(FUT)

600Y/346 6.30 %IZ @75°C MFG DATE

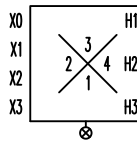
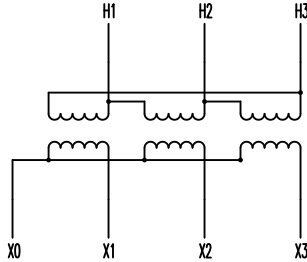
HV KV BIL 200 PCB CONTENT LESS THAN 1 PPM AT TIME OF MANUFACTURE  
 HV NEUTRAL KV BIL -- CAUTION - READ INSTRUCTION MANUAL S210-15-10  
 LV KV BIL 30 MANUFACTURED IN ACCORDANCE WITH CAN/CSA C88-M90  
 HV/LV CONDUCTOR CU/ CU ENERGY EFFICIENCY COMPLIES WITH CAN/CSA C802.1

APPROX. WEIGHT IN KGS.

CORE & COIL UNTANKING	3041
TANK & FIT	1721
FLUID: FR3™ LITERS: 1893	1744
TOTAL	6506



TAP	VOLTAGE	%	MAX AMPS	LOW VOLTAGE	MAX AMPS
A	28980	105.0	39.8	600	1925
B	28290	102.5	40.8		
C	27600	100.0	41.8		
D	26910	97.5	42.9		
E	26220	95.0	44.0		



MAX AMPS AT 2000 KVA  
%IZ AT BASE KVA AND RATED VOLTAGE

PHYSICAL BUSHING ARRANGEMENT



17YP  
LIQUID-FILLED DISTRIBUTION TRANSFORMER  
LIQUID-IMMERSED DISTRIBUTION TRANSFORMER

25 DEG.C LIQUID LEVEL 200 MM BELOW TOP OF MANHOLE FLANGE. LIQUID LEVEL CHANGES 13 MM PER 10 DEG.C CHANGE IN LIQUID TEMPERATURE. MAXIMUM OPERATING PRESSURES OF LIQUID PRESERVATION SYSTEM 40 KPA POSITIVE AND 15 KPA NEGATIVE. TANK DESIGNED FOR FULL VACUUM FILLING.

- NOTES:**
- 1) ACTUAL PLATE IS A NEGATIVE OF THE ABOVE DRAWING.
  - 2) ACTUAL %IZ TO BE STAMPED IN AFTER TESTING.

NAMEPLATE MATERIAL: ALUMINUM

204493491~

1189608A7530  
REVISIONS  
REV01  
ADDED HV  
MAX AMPS  
DWL 12-2-13

MATERIAL:

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES UNLESS OTHERWISE SPECIFIED

ONE PLACE DECIMAL ± .1  
TWO PLACE DECIMAL ± .06  
THREE PLACE DECIMAL ± .030

\* CRITICAL DIMENSION ANGULAR ± 2°

[ CONFIDENTIAL ] MUST NOT BE USED IN ANY WAY DETRIMENTAL TO COOPER POWER SYSTEMS

**COOPER Power Systems**

TITLE: LASER NAMEPLATE	
SUBJ: 00005A15ETYS	
DWG: NPS	DATE: 12/13/2013
REF:	SHEET #: 1 of 1
SCALE: 1=1	REV: 01

**1189608A7530**