

TRANSFORMER DATA SHEET

DATE : 04/27/2006  
 CUSTOMER : HVES  
 CIRCUIT/LOCATION : HVES 43  
 MANUFACTURER : Howard Industries  
 TRANSFORMER TYPE : Pad Mount CLASS : ON/AN  
 S/N : 1865850906  
 THREE PHASE  SINGLE PHASE  : 60 HERTZ

VOLTAGE RATING: 2400x4160 - 480Y/277 LV WINDING: ALUMINUM  
 KVA RATING: 1000 Continuous, Self Cooled HV WINDING: ALUMINUM  
 Continuous, Forced Air LV: 65°C rise, BIL: 30 kV  
 HV: 65°C rise, BIL: 75 kV

NAMEPLATE DATA

Core & Coils	2861
Case & Fittings	2069
Oil in Gallons	348
Weight in Pounds	7541

Impedance volts : 5.40 % at rated volts at : 1000 KVA

**TRANSFORMER TEST DATA**

MEGGER TEST RESULTS

POLARIZATION

CAPACITANCE in

INDEX

MICRO-FARAD

	1 Minute				
High-> Ground	23.0k	M-Ohms, @	5	kV DC	2.26
Low -> Ground	39.6k	M-Ohms, @	1	kV DC	2.00
High-> Low	35.6k	M-Ohms, @	5	kV DC	3.06

TRANSFORMER TTR TESTS

TAP (V)	CALC. TTR	PHASE 1	PHASE 2	PHASE 3
4368	15.769	15.748	15.751	15.750
4264	15.394	15.373	15.376	15.374
4160	15.018	14.998	15.001	14.999
4056	14.642	14.624	14.626	14.625
3952	14.267	14.248	14.250	14.250
2400	8.664	8.687	8.688	8.687


COMMENTS

Tag 10941  
 Date of manufacture: 04/2006  
 Stored at Daves's Yard

NO. 61830038.741

THREE PHASE TRANSFORMER **HOWARD INDUSTRIES** LAUREL MS 39440 USA

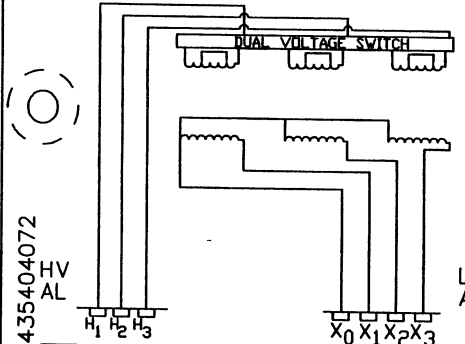
READ INSTRUCTION HI 105 BEFORE OPERATING

KVA 1000 BIL HV 75 LV 30KV  %IMP

HV 2400 X 4160 LV 480Y/277 AMPS 1202

WT TANK 2069 C&C 2861 OIL II 2611 LBS TOTAL 7541 LBS

LB 348 GAL CONT 65 °C RISE CLASS ONAN 60HZ TANK DESIGNED FOR +7 PSIG



CONTAINS NO DETECTABLE LEVEL OF PCB (LESS THAN 2 PPM) AT THE TIME OF MANUFACTURE.

VOLTAGE POS	AMPS	POS	VOLTAGE	TAPS
4368 A	132.2	1	2400	NO
4264 B	135.4	2	4610	YES
4160 C	138.8			
4056 D	142.3			
3952 E	146.1			

HV AL LV AL

H1 H2 H3 X0 X1 X2 X3

9693435404072

SER. NO. BAR CODE CAT. NO. BAR CODE

SER. NO.

BLACK ANNODIZED ALUMINUM

CAT. NO. 9693435404072

REV	DATE	REVISION	BY	APP

**HOWARD INDUSTRIES INC.**

LAUREL, MISS. USA 39440  
MFG. OF DISTRIBUTION TRANSFORMERS

NAME: LASER NAME PLATE CC 857

DESCR: RF/TP/ SM/D-Y

ID 3BCB2336 P.N. 0061830038.741

SCALE 1.000 DWG BY TB CHK BY DATE 01/20/06

3BCB2336

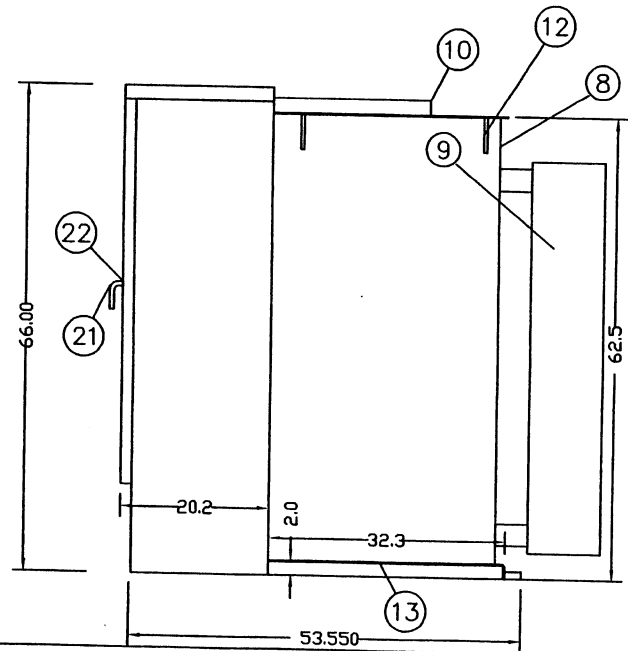
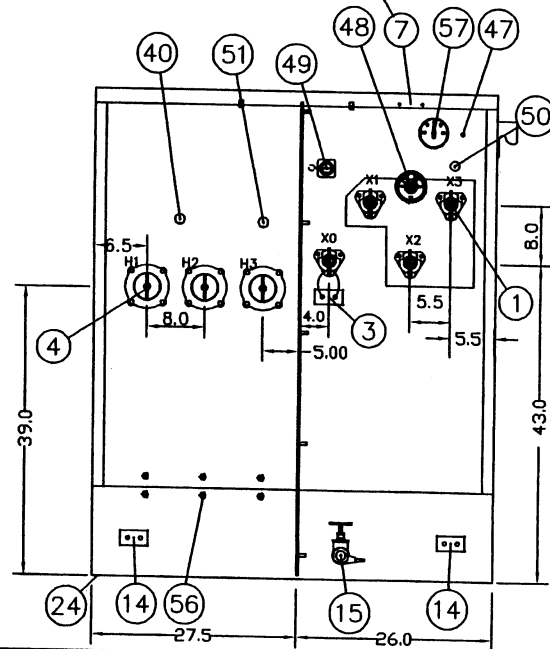
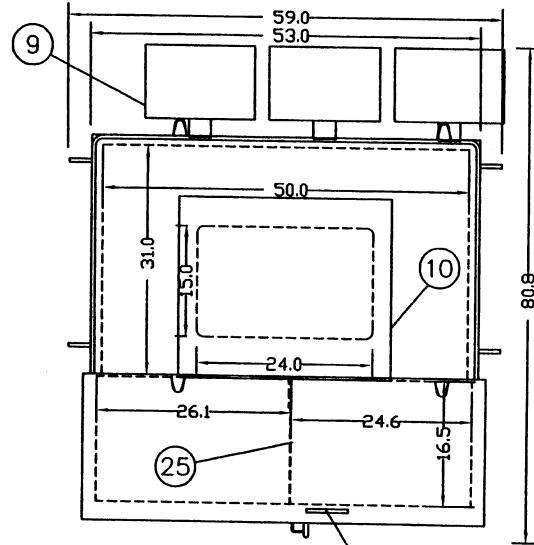
DESCRIPTION

1	LV BUSH. & 6 HOLE SPADE
3	2 HOLE HORIZ NEMA GRD PAD W/REM.GRD.STRAPS
4	WARCO HV PORC 75BIL W/4H SPADE
7	NP ON DOOR SER ON TANK
8	TANK
9	COOLING RADIATORS
10	HANDHOLE & SECURITY COVER
12	LIFTING LUGS
13	JACKING PROVISIONS
14	2 HOLE HORIZ NEMA GRD PAD
15	1 IN DRAIN VALVE AND SAMPLER
21	PAD LOCKABLE DOOR HANDLE
22	3 PT LATCH PENTA SEC BOLT
24	12 IN REMOVABLE SILL
25	METAL LV-HV BARRIER
40	S/M SWITCH HANDLE
47	PRESS. REL VALVE
48	DIAL THERM W/MAX POINTER
49	2" MAG LL GAUGE: LV COMP
50	OIL LEVEL PLUG
51	TAP CHANGER HANDLE
56	PROVISIONS FOR LTG ARR
57	PRES VAC GAUGE

SPECIAL NOTES

A	
B	
C	
D	
E	

CAT NO	9693435404072	
DWG BY	TB	DATE: 01/20/06
APP BY		CC. 745



DWG NO. 0073475040.893			
<b>HOWARD INDUSTRIES INC.</b>			
LAUREL, MISS. USA 39440			
THREE PHASE PAD DISTRIBUTION TRANSFORMERS			
CUSTOMER : GENERGY			
SPEC. CUSTOMER INQUIRY DATED			
KVA 1000.0BIL 75 TAPS TS-2 ABOVE 2 BELOW			
HIGH VOLTAGE 2400 X 4160			
LOW VOLTAGE 480Y/277			
APPROX. CORE AND COIL WEIGHT 2861			
APPROX. TANK AND ACCESS. WEIGHT 2069			
GAL. OF OIL 348; APPROX. WEIGHT 2611			
APPROX. TOTAL WEIGHT 7541			
REV.	DATE	DESCRIPTION	BY APP
A			
ID 3BCB2315			

GENERGY 9693-435404-072

0.047

9693G801S,CB,512, 0,H01 , 0, 3, V1

605031, 665369,1, 2122,2, 14046

59087146.110

3BCB2315

**DANGER**  
HIGH VOLTAGE  
KEEP OUT

**UNIT#43**

**DANGER**  
HIGH VOLTAGE  
KEEP OUT

**WARNING**  
ADVERTENCIA

**UNIT 43 NON PCB**  
**1000KVA Z=5.75%**  
**HV 4160x2400**  
**LV 480Y / 277**  
**WT=7500 LBS**  
**TAPS: 4368 / 4264 / 4160**  
**4056 / 3952 / 2400**  
**FULL LOAD AMPS=138 AT 4160V**  
**FULL LOAD AMPS-240 AT 2400V.**

**SWITCH #4**  
**480V 3000A**  
**OUTDOOR**  
**FUSES 4000A CLASS L**