

TRANSFORMER DATA SHEET

DATE : 03/12/2024
 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

KVA RATING: 1000 Continuous, Self Cooled
 Continuous, Forced Air

LV WINDING: ALUMINUM

HV WINDING: ALUMINUM

LV: 65°C rise, BIL: 30kV

HV: 65°C rise, BIL: 75kV

NAMEPLATE DATA

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

Fluid Type : Mineral Oil

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

MEGGER TEST RESULTS

TRANSFORMER TEST DATA

1 Minute

POLARIZATION INDEX

CAPACITANCE

High-> Ground	25.0k	M-Ohms, @	5	kV DC	2.14	0.02	micro-farad
Low -> Ground	35.7k	M-Ohms, @	1	kV DC	1.85	0.02	micro-farad
High-> Low	34.5k	M-Ohms, @	1	kV DC	3.25	0.02	micro-farad

TRANSFORMER TTR TESTS

TAP (V)	CALC. TTR	PHASE 1	PHASE 2	PHASE 3
4368	15.769	15.761	15.754	15.762
4264	15.394	15.385	15.387	15.379
4160	15.018	14.997	15.009	15.001
4056	14.642	14.639	14.637	14.629
3952	14.267	14.251	14.256	14.259
2400	8.664	8.671	8.674	8.675

COMMENTS

Tag 10941

Date of Manufacture: 04/2006

03/12/2024 Power Factor tested:

High-Ground at 5kV AC = 0.37% PF

High-Low at 1kV AC = 0.41% PF

Low-Ground at 1kV AC = 0.55% PF

Oil Level - Satisfactory

Oil Temperature Gauge - Satisfactory


Pressure Vacuum Gauge - Satisfactory

Bushings - Satisfactory

NO. 61830038.741

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

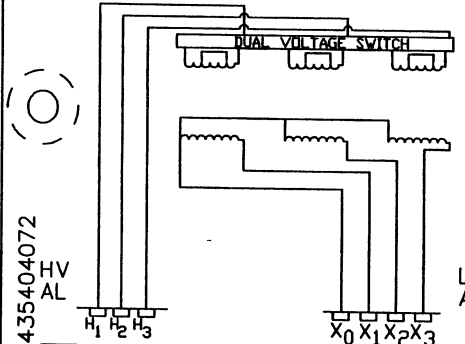
READ INSTRUCTION HI 105 BEFORE OPERATING

KVA 1000 BIL HV 75 LV 30KV  %IMP

HV 2400 X 4160 LV 480Y/277 AMPS 1202

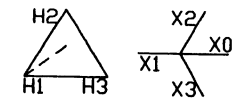
WT TANK 2069 C&C 2861 OIL II 2611 LBS TOTAL 7541 LBS

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			



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

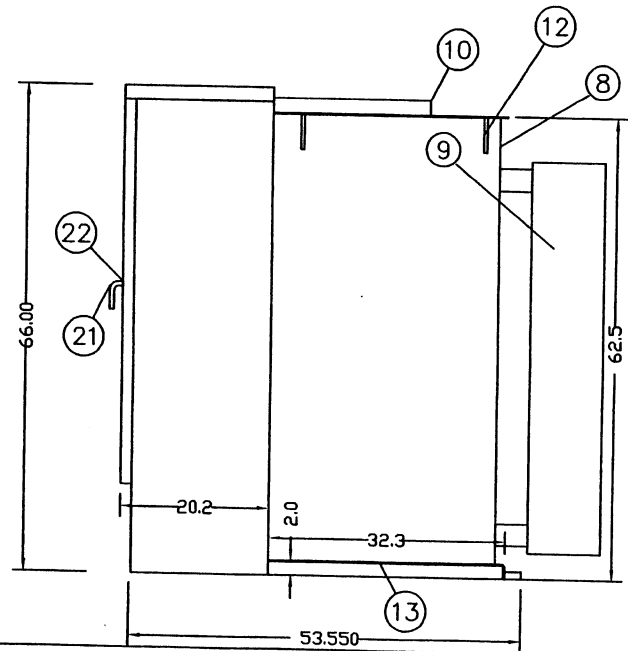
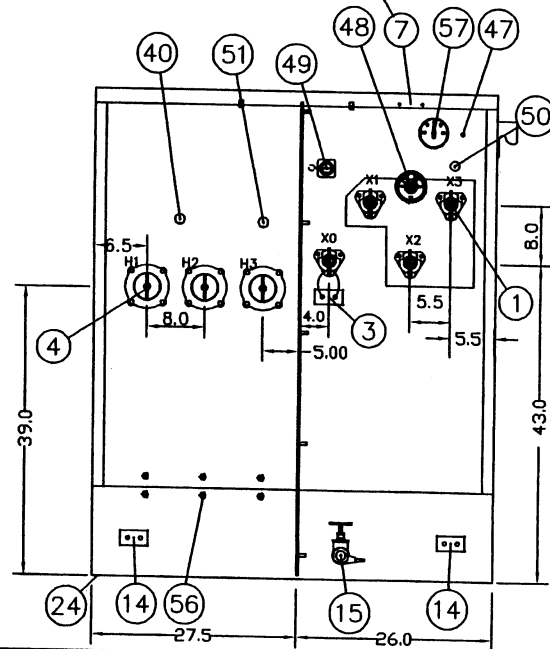
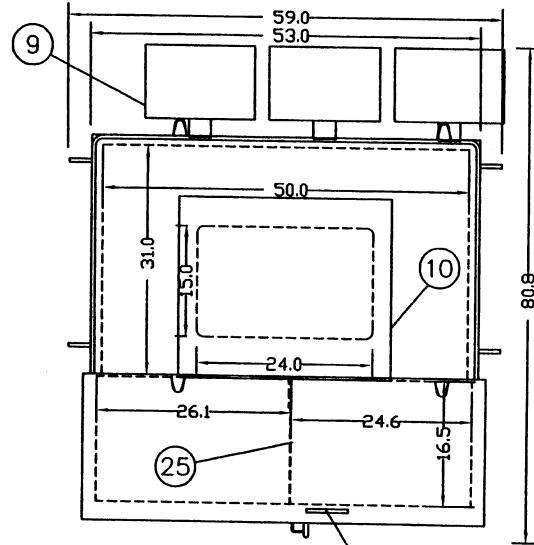
DESCRIPTION

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		
HOWARD INDUSTRIES INC.			
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