

TRANSFORMER DATA SHEET

DATE : 09/23/2021  
 CUSTOMER : HVES / Logistics for Power Systems  
 CIRCUIT/LOCATION : HVES #93  
 MANUFACTURER : Square D  
 TRANSFORMER TYPE : Pad Mount CLASS : OA  
 S/N : 36774848-001-01

THREE PHASE  SINGLE PHASE  : 60 HERTZ

VOLTAGE RATING: 13200-208Y/120

LV WINDING: ALUMINUM

KVA RATING: 75 Continuous, Self Cooled  
 Continuous, Forced Air

HV WINDING: ALUMINUM

LV: 65°C rise, BIL: 30 kV

HV: 65°C rise, BIL: 95 kV

NAMEPLATE DATA

Core & Coils	738
Case & Fittings	988
Oil in Gallons	150
Weight in Pounds	2954

Fluid Type : Mineral Oil

Impedance volts : 3.41 % at rated volts at : 75 KVA

MEGGER TEST RESULTS

**TRANSFORMER TEST DATA**

1 Minute

POLARIZATION INDEX

CAPACITANCE

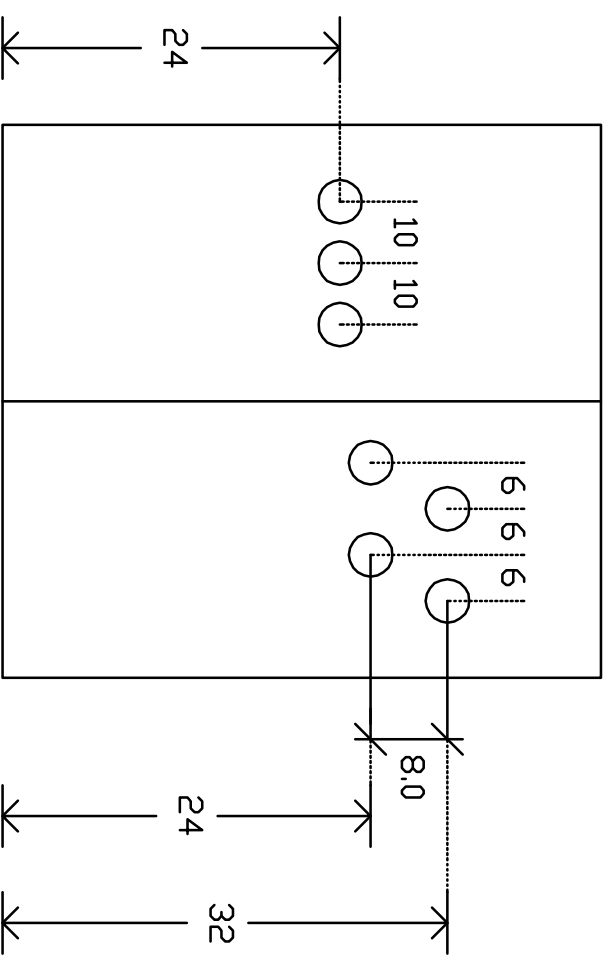
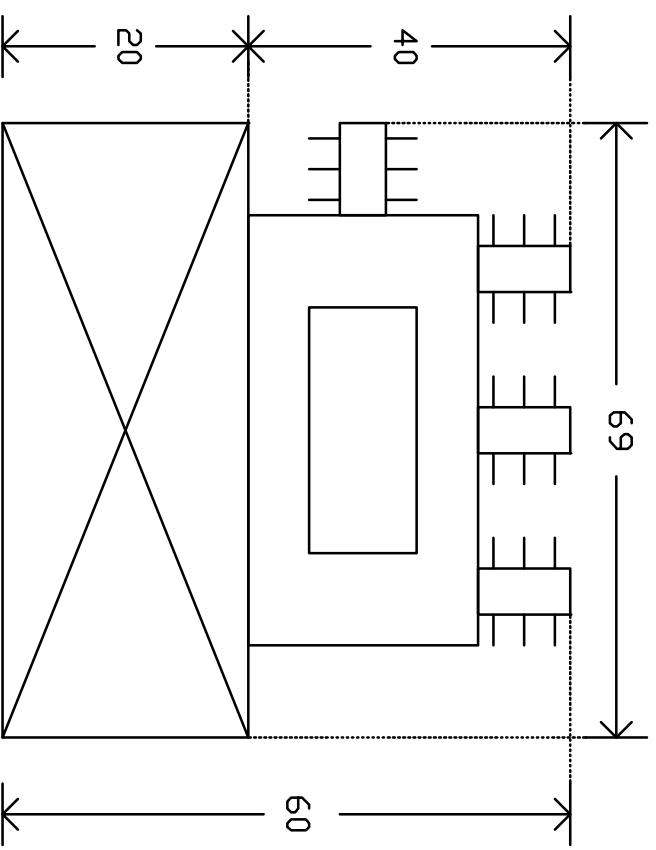
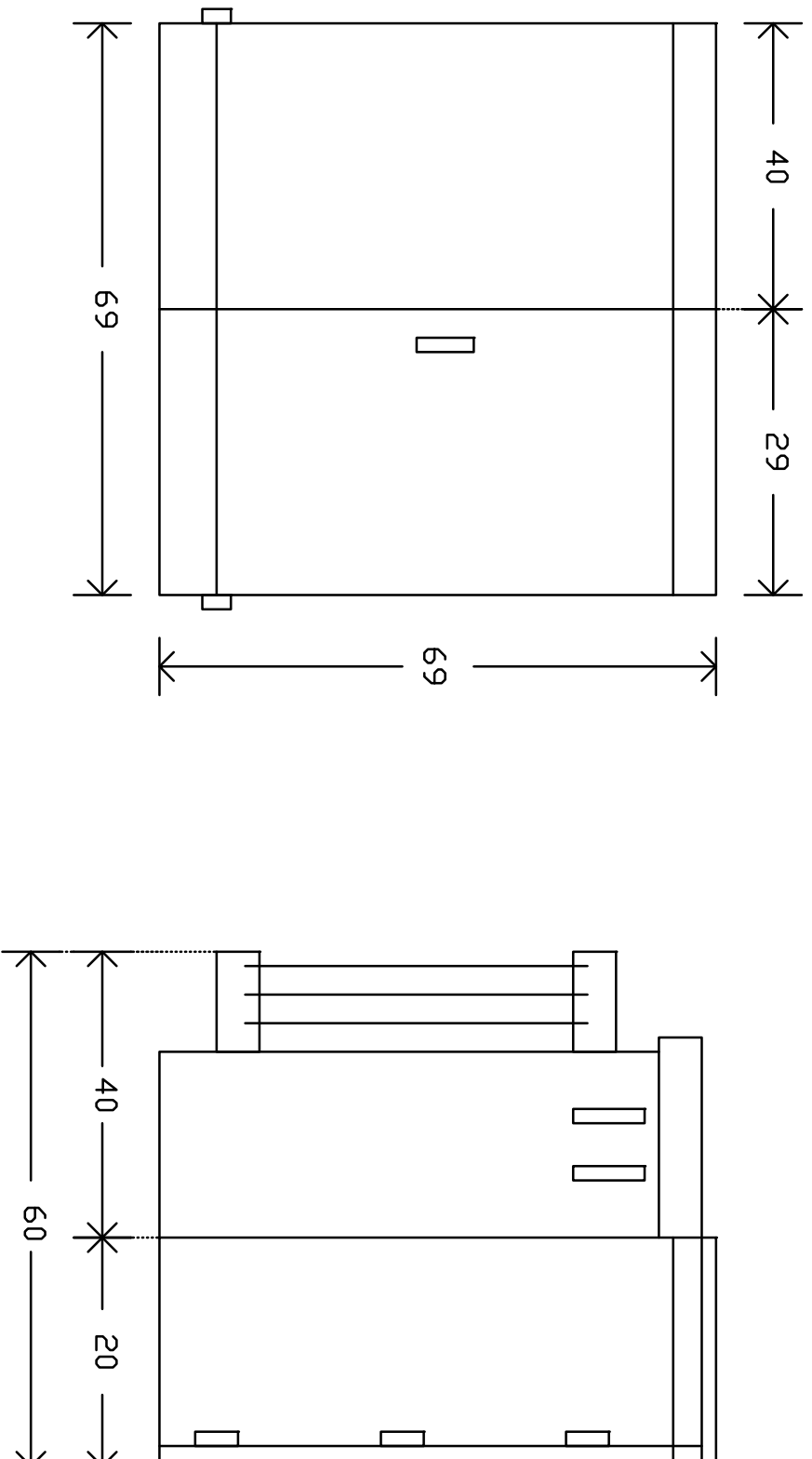
High-> Ground	20k	M-Ohms, @	5	kV DC	1.2	0.02	micro-farad
Low -> Ground	10k	M-Ohms, @	1	kV DC	1.2	0.02	micro-farad
High-> Low	15k	M-Ohms, @	1	kV DC	1.2	0.02	micro-farad

TRANSFORMER TTR TESTS

TAP (V)	CALC. TTR	PHASE 1	PHASE 2	PHASE 3
13860	115.500			
13530	112.750			
13200	110.000	110.027	110.029	110.028
12870	107.250			
12540	104.500			

COMMENTS

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	



NOTES	
MFG:	Square D
S/N:	36774848-001-01
KVA:	75
VOLTS:	13.2 DELTA - 208Y/20
IMP:	3.41
HV:	95
LV:	30
RISE:	65°
CLASS:	DA/60HZ
BUSHINGS:	200 Amp Load Break
WINDINGS:	ALUMINUM
TOTAL LBS:	2954
TANK:	738
CORE/COILS:	988
DIL:	1229 Lbs
TAPS:	13860
	13530
	13200
	12870
	12540

**HVES**  
HIGH VOLTAGE  
ELECTRIC  
SERVICE  
INC.

HVES #93

75KVA

S/N: 36774848-001-01

10062021MGM

SCALE SHEET



UNIT 87

**• DANGER - HIGH VOLTAGE**

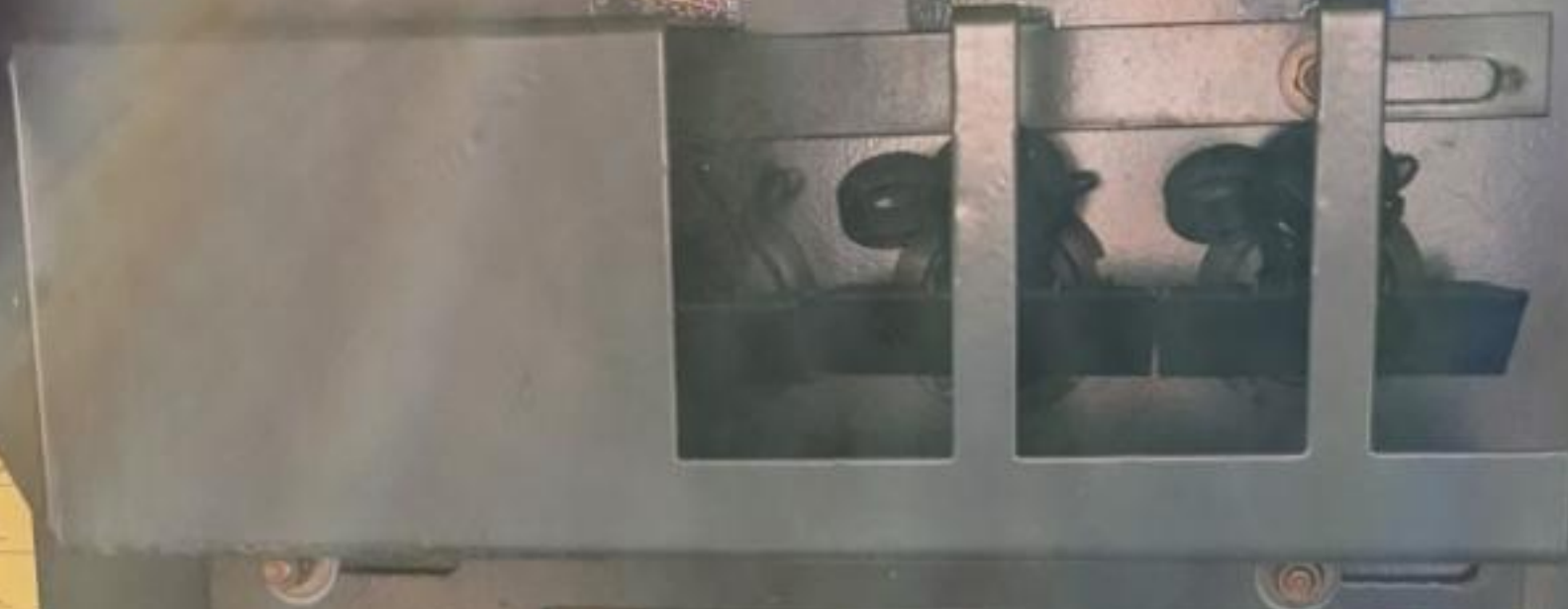
WARNING	PREVENTION	REMEDY
Do not touch the cabinet or any electrical components.	Wear appropriate PPE (hard hat, safety glasses, gloves, and safety shoes).	Report any damage or unsafe conditions to the appropriate authority.
Do not open the cabinet doors.	Do not attempt to repair or tamper with the equipment.	Do not touch any electrical components.
Do not use ladders or other equipment to reach the cabinet.	Use proper ladder safety techniques.	Report any unsafe conditions to the appropriate authority.
Do not use power tools near the cabinet.	Use caution when using power tools.	Report any unsafe conditions to the appropriate authority.
Do not use flammable liquids near the cabinet.	Use proper fire safety procedures.	Report any unsafe conditions to the appropriate authority.
Do not use compressed air near the cabinet.	Use proper compressed air safety procedures.	Report any unsafe conditions to the appropriate authority.
Do not use any equipment that could cause sparks near the cabinet.	Use proper safety procedures for spark-producing equipment.	Report any unsafe conditions to the appropriate authority.
Do not use any equipment that could cause fire near the cabinet.	Use proper fire safety procedures.	Report any unsafe conditions to the appropriate authority.
Do not use any equipment that could cause explosion near the cabinet.	Use proper explosion safety procedures.	Report any unsafe conditions to the appropriate authority.

**TOP CHANGER**  
**CAUTION**  
BE EXTREMELY CAREFUL WHEN  
OPERATING. CHANGE VOLTAGE BY  
PULLING KNOB, & PEEKING TO DESIRED  
POSITION, & THEN PUSH BACK IN PLACE.

**⚠ DANGER / PELIGRO / DANGER**

**Hazardous Voltage, Risk of Shock, Burns or Explosion.**

	<b>Caution:</b> Hazardous voltage, risk of shock, burns or explosion.	<b>Warning:</b> Hazardous voltage, risk of shock, burns or explosion.
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**⚠ CAUTION**  
**RELIEVE TANK PRESSURE**

BEFORE OPERATING, RELIEVE TANK PRESSURE BY TURNING THE RELIEF VALVE TO THE OPEN POSITION. THE VALVE IS LOCATED ON THE TOP OF THE TANK. THE VALVE HANDLE IS LOCATED ON THE TOP OF THE TANK. THE VALVE HANDLE IS LOCATED ON THE TOP OF THE TANK.



LINE A ONLY

**⚠ CAUTION**

BEFORE OPERATING, RELIEVE TANK PRESSURE BY TURNING THE RELIEF VALVE TO THE OPEN POSITION. THE VALVE IS LOCATED ON THE TOP OF THE TANK. THE VALVE HANDLE IS LOCATED ON THE TOP OF THE TANK.

**⚠ DANGER / PELIGRO / DANGER**

**Hazardous Voltage, Risk of Shock, Burns or Explosion.**

	<b>Caution:</b> Hazardous voltage, risk of shock, burns or explosion.	<b>Warning:</b> Hazardous voltage, risk of shock, burns or explosion.
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**⚠ DANGER / PELIGRO / DANGER**

**High Pressure Risk of Flying Objects and Hot Liquid.**

	<b>Caution:</b> High pressure risk of flying objects and hot liquid.	<b>Warning:</b> High pressure risk of flying objects and hot liquid.
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**⚠ DANGER / PELIGRO / DANGER**

**Hazardous Voltage, Risk of Shock, Burns or Explosion.**

	<b>Caution:</b> Hazardous voltage, risk of shock, burns or explosion.	<b>Warning:</b> Hazardous voltage, risk of shock, burns or explosion.
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H1A

H1B



H2A

H3A

H2B

H3B

18KV 18K

18KV 18K

18KV 18K



**SQUARE D**  
**Schneider Electric**

MADE IN USA

DOE 2016 COMPLIANT  
US D.O.E 10 CFR PART 431 CO  
CLASS KNAN 60 HERTZ  
THREE PHASE DISTRIBUTION TRAN

KVA  
75

AT CONTINUOUS RISE C  
65

% IMPEDANCE  
3.41

SERIAL  
36774848-001-01

MFC DA

HIGH VOLTAGE  
13200

HV BIL KV  
95

HV MTL  
AL

LOW VOLTAGE  
208Y/120

LV CURRENT  
208

LV BIL KV  
30

LV MTL  
AL

TAP CHANGER RATINGS

TAP	VOLTAGE	CURRENT
1	3860	3.1
2	3530	3.2
3	3200	3.3
4	2870	3.4
5	2540	3.5

APPROXIMATE WEIGHTS  
IN POUNDS

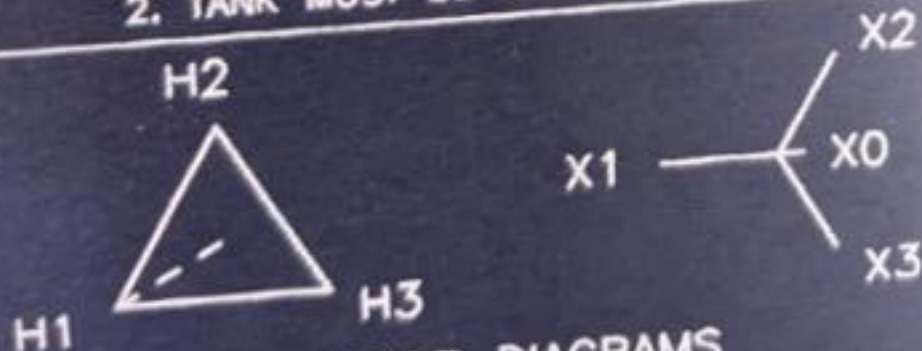
CORE & COILS 738  
OIL 1229  
CASE 988  
TOTAL 2954

THE 25 C LIQUID LEVEL IS 6.00 INCHES BELOW TOP OF HIGHEST MANHOLE FLANGE.  
LIQUID LEVEL CHANGES 0.50 INCHES FOR EACH 10 C CHANGE IN AVERAGE LIQUID TEMPERATURE.

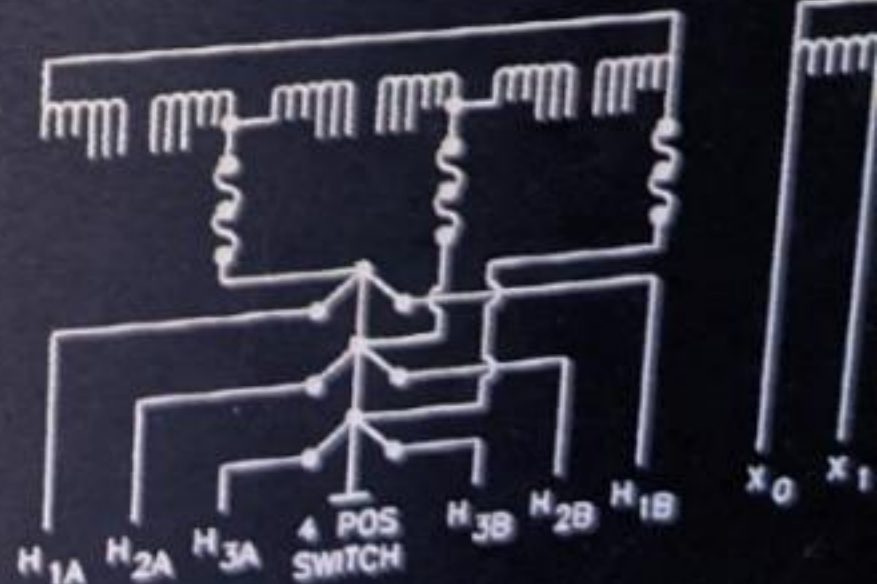
MAXIMUM OPERATING PRESSURES OF LIQUID PRESERVATION SYSTEM: 7.00 PSI POSITIVE 7.00 PSI NEGATIVE.  
TANK DESIGNED FOR 7 PSI VACUUM FILLING.

INSULATING LIQUID: FR3 FLUID  
CONTAINS FR3 FLUID WITH NO DETECTABLE LEVEL OF PCB, LESS THAN 1PPM, AT THE TIME OF MANUFACTURE  
CAUTION: 1. BEFORE OPERATING READ INSTRUCTION BOOK 43500-054-03R2

2. TANK MUST BE SOLIDLY GROUNDING.



PHASOR DIAGRAMS  
Dy1



496905200-1

75KVA



**NON-PCB**  
CONTAINS LESS THAN  
ONE PART PER MILLION  
PCB

**SQUARE D**  
Schneider Electric

DOE 2016 COMPLIANT  
US D.O.E. 10 CFR PART 431 COMPLIANT  
CLASS 1 ENERGY EFFICIENT  
THREE PHASE DISTRIBUTION TRANSFORMER

Model: 3.41  
Serial: 36774848-001-01  
Date: 07/18 2016

Winding	Volts	Amperes	VA
Primary	208/240	208	3840
Secondary	120	320	3840
Secondary	240	160	3840
Secondary	480	80	3840

PHASOR DIAGRAM

**75KVA**



**⚠ DANGER / PELIGRO**

**High Pressure  
Risk of Flying  
Objects and  
Hot Liquid.**

Do not attempt to open the door or remove the cover until the pressure has been released and the temperature has cooled. High pressure steam or hot liquid can cause serious injury or death.

Do not touch the door or cover until the pressure has been released and the temperature has cooled. High pressure steam or hot liquid can cause serious injury or death.

Do not touch the door or cover until the pressure has been released and the temperature has cooled. High pressure steam or hot liquid can cause serious injury or death.

**⚠ DANGER PELIGRO**

**Hazardous voltage.  
Will shock, burn,  
or cause death.**

Keep out.  
If open or unlocked,  
immediately call  
electric power  
and light company.

Voltaje peligroso.  
Producirá choques  
eléctricos, quemaduras,  
o causará la muerte.

Manténgase alejado.  
Si se encuentra abierto  
o sin llave llame a la  
compañía de eléctrica.

**X<sub>0</sub>** **X<sub>1</sub>** **X<sub>2</sub>** **X<sub>3</sub>**



# DANGER

Tension dangereuse,  
Risque d'électrocution,  
de brûlures ou  
d'explosion.

- L'installation et l'entretien de cet appareil ne doivent être effectués que par du personnel qualifié.
- Coupez l'alimentation de l'appareil avant d'y travailler.
- Utilisez toujours un dispositif de détection de tension à valeur nominale appropriée pour s'assurer que l'alimentation est coupée.
- Remplacez tous les dispositifs, les portes et les couvercles avant de mettre l'appareil sous tension.

Si ces précautions ne sont pas respectées, cela entraînera la mort ou des blessures graves.



**THIS TRANSFORMER IS FILLED WITH ENVIROTEMP™ FR3™ FLUID.**

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