

APPROXIMATE WEIGHTS (KG)

CORE AND COILS	14220
TANK AND FITTINGS	10235
RAIL TANK LOUIS (18000 LBS)	10440
UC CONVEYOR TANK LOUIS (48 LBS)	13
UC TANK LOUIS (203 LBS)	18
UC CONVEYOR TANK LOUIS (204 LBS)	90
CONVEYOR TANK LOUIS (204 LBS)	440
COILING EQUIPMENT LOUIS (2100 LBS)	1260
TOTAL WEIGHT	26188
UNLIFTING WEIGHT (NEAREST FEET)	14220
SHIPPING WEIGHT (WITHOUT AIR)	16090
WEIGHTS OF TRANSFORMER BASKET (NEAREST KG)	16040

TOLERANCES

Centerline distance of not inclined bushings	+0.2
Centerline distance of inclined bushings	+0.3
Bushing height (distance to floor)	+0.2
Outlet of control cabinet distance	+0.2
How & Lr building center line	+0.2
Bushings & surge arrester center line	+0.2
Surge arrester height (distance to floor)	+0.2
Center tank distance to short side	+0.2
Center tank distance to large side	+0.2
Conveyor height	+0.2
Approaching center line	+0.2
Bracing case center line	+0.2
Pattern distance	+0.1
Outline	+0.3
Dimensions	±0.02-0.03
Moyness	±0.30

- NOTES:**
- ITEMS REMOVED FOR SHIPMENT ARE MARKED WITH (*).
 - NUMBERING IS ACCORDING WITH G.E. PROLEC STD. LIST.
 - ALL OIL VALVES WITH MEANS OF SECURING THEM IN OPEN/CLOSE POSITIONS.
 - ACCORDING WITH GENERATOR UNIT TRANSFORMER SPEC REV. 1 POINT 21.2.0 PAGE 22 OF 79.
- OPERATION CENTER OF GRAVITY
- SHIPPING CENTER OF GRAVITY

FOUNDATION LOADS (UBC 1997; ASCE 7-08), 48x A-36 BOLTS (NOT INCLUDED)

LOADING CONDITIONS	TRANSVERSAL HORIZONTAL (PERPENDICULAR TO TRANSFORMER MAJOR AXIS) T'	LONGITUDINAL HORIZONTAL (PARALLEL TO TRANSFORMER MAJOR AXIS) T''	VERTICAL T
DEAD LOAD	-	-	38676 KG
WIND LOADING	6070 KG	18886 KG	-
SEISMIC LOADING	7492 KG	7492 KG	4694 KG
MAXIMUM ANCHOR LOADS (PER ANCHOR)	8711 KG (SHEAR LOAD)	8711 KG (SHEAR LOAD)	4694 KG (TENSILE LOAD)

FOUNDATION LOADS RADIATOR PER RANK (UBC 1997; ASCE 7-08), 1.00x(25.4x) A-36 BOLTS (NOT INCLUDED)

LOADING CONDITIONS	TRANSVERSAL HORIZONTAL (PERPENDICULAR TO TRANSFORMER MAJOR AXIS) T'	LONGITUDINAL HORIZONTAL (PARALLEL TO TRANSFORMER MAJOR AXIS) T''	VERTICAL T
DEAD LOAD	-	-	2424 KG
SEISMIC LOADING	6638 KG	6638 KG	3025 KG
MAXIMUM ANCHOR LOADS (PER ANCHOR)	1327 KG (SHEAR LOAD)	1327 KG (SHEAR LOAD)	3025 KG (TENSILE LOAD)

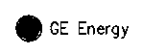
FOUNDATION LOADS ARRESTER SUPPORT (UBC 1997; ASCE 7-08), 0.75x(19x) A-36 BOLTS (NOT INCLUDED)

LOADING CONDITIONS	TRANSVERSAL HORIZONTAL (PERPENDICULAR TO TRANSFORMER MAJOR AXIS) T'	LONGITUDINAL HORIZONTAL (PARALLEL TO TRANSFORMER MAJOR AXIS) T''	VERTICAL T
DEAD LOAD	-	-	1433 KG
SEISMIC LOADING	274 KG	274 KG	163 KG
MAXIMUM ANCHOR LOADS (PER ANCHOR)	67 KG (SHEAR LOAD)	67 KG (SHEAR LOAD)	163 KG (TENSILE LOAD)

REFERENCE DRAWINGS

DRAWING TITLE	DRAWING NO.

GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC INTERNATIONAL, INC
POWER GENERATION - POWER PLANT SYSTEMS



PROJECT NAME: Fawc
STATION: Saad Awlad
SHEET NO. 8

TRANSFORMER'S OUTLINE
SCALE: NONE
DRAWN BY: MANTOVA
CHECKED BY: PROLEC
DATE: 04/20/2009
JOB NO.: G2092050801

AS-BUILT BY: _____ DATE: _____

REV. NO.	DATE	BY	DESCRIPTION	CHKD.	CERT.	APPD.

DRAWN BY: _____ CHECKED BY: _____ SCALE: _____
DATE STARTED: _____ DATE COMPLETED: _____
ORIG. DEPT.: _____ ENG. DEPT.: _____

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APPROVAL/CERTIFICATION INFORMATION
BY: _____ REV. NO. _____

JOB ORDER NO.	INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.

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PROLEC

www.prolecge.com

TRANSFORMER

SERIAL No G2092-01, THREE-PHASE, 60 Hz, ALTITUDE UP TO 1000 MASL.

Table with 2 columns: RATED WITHSTAND VOLTAGES (KV), HV LINE TERMINAL, HV NEUTRAL, LV LINE TERMINAL, LV NEUTRAL.

Table with 2 columns: IMPEDANCE @ 75°C, MAXIMUM SYMMETRICAL SHORT-CIRCUIT CURRENT, WINDING, SHIPPING WEIGHT (WITHOUT OIL).

Table with 2 columns: APPROXIMATE WEIGHTS (KGS), CORE AND COILS, TANK AND FITTINGS, MAIN TANK LIQUID (10242 LITS), LTC CONSERVATOR TANK LIQUID (16 LITS), HO CONSERVATOR TANK LIQUID (1004 LITS), COOLING EQUIPMENT LIQUID (24816 LITS), UNTANKING WEIGHT (HEAVIEST PIECE), SHIPPING WEIGHT (WITHOUT OIL).

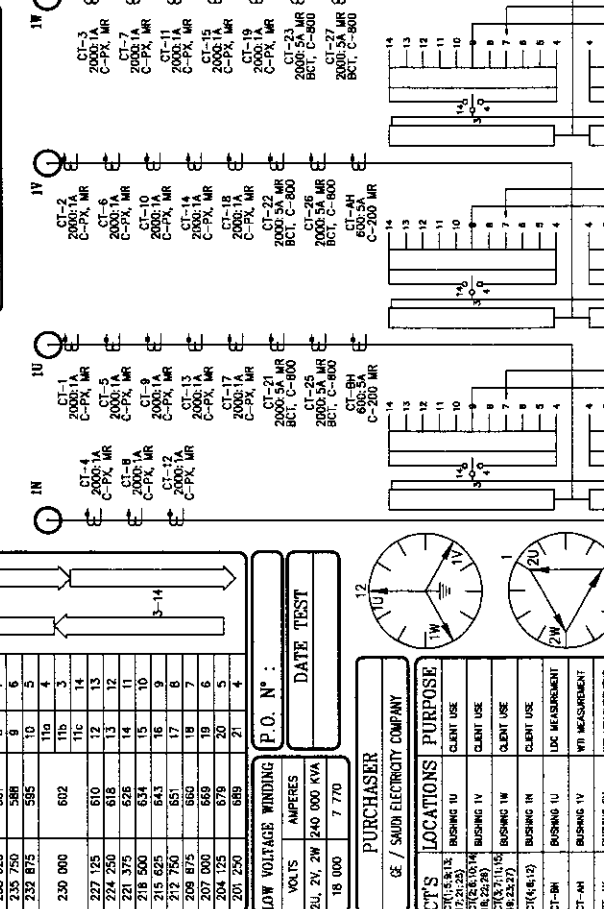


Table with 2 columns: HIGH VOLTAGE WINDING, LOAD TAP CHANGER, LOW VOLTAGE WINDING.

Table with 2 columns: PURCHASER, GE / SAUDI ELECTRICITY COMPANY, CTS LOCATIONS PURPOSE.

Table with 2 columns: RATIO TERMINALS, 3000V, 2500V, 2000V, 1500V, 1000V, 500V.

CAUTION! BEFORE INSTALLING OR OPERATING READ INSTRUCTIONS CAREFULLY. DO NOT OPERATE TRANSFORMER WHEN THE READING OF LIQUID LEVEL GAUGE IS BELOW THE LOW POINT OF THE SCALE.

NOTES: 1- MAXIMUM OPERATING PRESSURES OF LIQUID PRESERVATION SYSTEM: 0 MPa (ATMOSPHERIC PRESSURE). 2- TANK DESIGNED FOR 0.103 MPa VACUUM FILLING. 3- ALL WINDINGS COPPER. 4- TO BE FILLED WITH MINERAL OIL WHICH CONTAIN NO DETECTABLE LEVEL OF WATER. (THE OIL IS NOT PROVIDED FOR PROLEC GE). 5- CUSTOMER SPEC. SEC-QMSS-1.

MADE IN MEXICO

PROLEC GE BLDG. CARLOS SALINAS DE GORTARI KM 9.25 APODACA, NL. 66600 MEXICO

MATERIAL: STAINLESS STEEL DIMENSIONS: 23.5' x 12'

"TRANSFORMER DESIGNED FOR A NOMINAL HV - LV IMPEDANCE OF 14.75% @ 240 MVA. THE ACTUAL MEASURED IMPEDANCE VALUE WILL BE SHOWN ON THE NAMEPLATE AFTER TESTS".

GE / Saudi Electricity Company Building 59, 1 River Road Schenelectady, New York Faros Power Plant Project PROLEC GE Serial N : G2092-05

GENERATOR UNIT TRANSFORMER 170/240 MVA, ONAN/ONAF, 60 Hz, THREE PHASE, 4.3°C AVERAGE WINDING RISE, UP TO 1000 MASL, PRIMARY : 230/132.79 KV SECONDARY : 18 KV



Revision table with columns: REV. NO., DATE, DESCRIPTION, REV. NO., DATE, DESCRIPTION.

Revision table with columns: REV. NO., DATE, DESCRIPTION, REV. NO., DATE, DESCRIPTION.

Revision table with columns: REV. NO., DATE, DESCRIPTION, REV. NO., DATE, DESCRIPTION.

NAMEPLATE section containing GE Energy logo, PROJECT NAME: Faros, STATION: Saudi Arabia, IPS NO: 505525, SIZE B, DWG NO: G209205D802, MDL NO, SCALE: NONE, SHEET 1 of 1, Drawing No. G209205D802.

NOTES, REFERENCE DRAWINGS, AS-BUILT BY, REV. NO., DATE, BY, DESCRIPTION, CHKD., CRT., APPD., DRAWN BY, CHECKED BY, SCALE, DATE STARTED, DATE COMPLETED, ENG. DEPT., THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNLESS CERTIFIED AND DATED, APPROVAL/CERTIFICATION INFORMATION, JOB ORDER NO., INDEX, PLANT NO., DRAWING NUMBER, SHEET NO., REV. NO., SEC CAD-A (2004/04) CNA004

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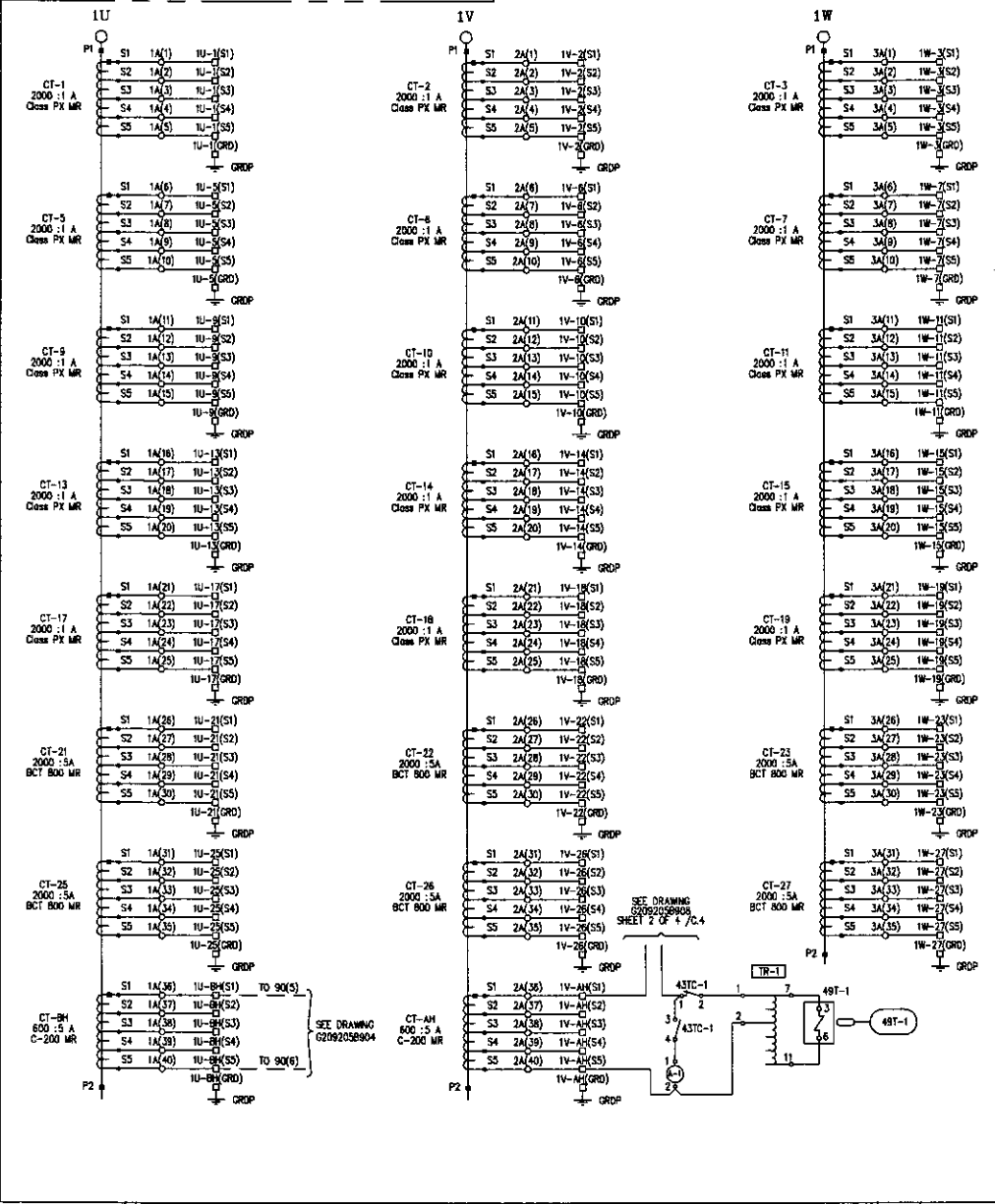
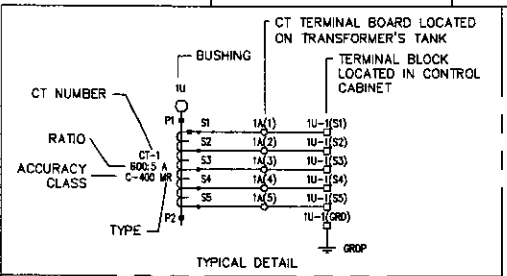
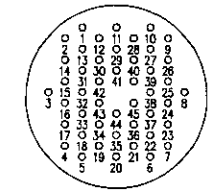
WARNING!
SHORT CIRCUIT CURRENT TRANSFORMER TERMINAL BLOCKS DURING TESTING AND SHIPMENT

- NOTES:
- CONDUCTOR TYPE SIS/ALPE, 90°C, 600 V, 10.0 mm² (#8 AWG) FOR CT'S EXTERNAL WIRING
 - CONDUCTOR TYPE ETPE, 150°C, 600 V, 6.0 mm² (#10 AWG) FOR CT'S INTERNAL WIRING
 - SEE DRAWING G209205B905 SHEET 1 OF 2 FOR TERMINAL BLOCK LOCATIONS.
 - TERMINAL BLOCKS FOR CT'S ARE SHORTING TYPE, 600 V, 45 A, 6 POLES.
 - SEE DRAWING G209205B913 FOR PART LIST.

CONTACT	NORMAL	AMMETER
1-2	X	0
3-4	0	X
5-6	X	0
7-8	0	X

X = CLOSED CONTACT
0 = OPEN CONTACT

CT'S TERMINAL BOARD
45 terminals



600:5A		2000:1A		2000:5A		12000:5A	
RATIO	TERMINALS	RATIO	TERMINALS	RATIO	TERMINALS	RATIO	TERMINALS
600:5A	S2-S3	2000:1A	S2-S3	2000:5A	S2-S3	12000:5A	S2-S3
100:5A	S1-S2	400:1A	S4-S5	400:5A	S4-S5	2000:5A	S1-S2
150:5A	S1-S3	600:1A	S1-S2	600:5A	S1-S2	3000:5A	S1-S3
200:5A	S4-S5	800:1A	S1-S3	800:5A	S1-S3	4000:5A	S4-S5
250:5A	S3-S4	1000:1A	S3-S4	1000:5A	S3-S4	5000:5A	S3-S4
300:5A	S2-S4	1200:1A	S2-S4	1200:5A	S2-S4	6000:5A	S2-S4
400:5A	S1-S4	1400:1A	S2-S5	1400:5A	S2-S5	8000:5A	S1-S4
450:5A	S3-S5	1600:1A	S1-S4	1600:5A	S1-S4	9000:5A	S3-S5
500:5A	S2-S5	1800:1A	S1-S4	1800:5A	S1-S4	10000:5A	S2-S5
600:5A	S1-S5	2000:1A	S1-S5	2000:5A	S1-S5	12000:5A	S1-S5

Item	CT-BH	CT-AH	CT-AX	CT-1/2/3 CT-5/6/7 CT-8/10/11	CT-13/14/15 CT-17/18/19	CT-21/22/23 CT-25/26/27	CT-4/8/12
Terminal	S1-S5	S1-S5	S1-S5	S1-S5	S1-S5	S1-S5	S1-S5
Ratio [A : A]	600 : 5	600 : 5	7000 : 5	2000 : 1 A	2000 : 1 A	2000 : 5 A	2000 : 1 A
Class	C-200	C-200	C-200	FX	FX	BCT	PK
Burden [VA]	50	50	50	15	15	10.4	15
Function	LDC	T	T	P	P	P	P

T - Thermal Inge
LDC - Load Drop Compensator
P - Protection

Rev	Issue Date	Issue Purpose	Description of Revision
1	08.17.10	GRS	Customer Box modified.

GE Energy

GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC INTERNATIONAL, INC
POWER GENERATION - POWER PLANT SYSTEMS

CT'S WIRING CONNECTION

PROJECT NAME: Faras
STATION: Saudi Arabia
IPS NO: 504668
SIZE B
DWG NO: G209205B901
MDL NO

SCALE: NONE
SHEET 1 of 1
Third Angle Projection
Scale: NONE
Dimensions in: NONE
Drawing No. G209205B901
Rev: 1

PROLEC

GE / Saudi Electricity Company
Building 59, 1 River Road
Schenectady, New York
Faras Power Plant Project
PROLEC GE Serial N° : G2092-05

CERTIFIED FINAL DRAWING
PROLEC
ENGINEERING DEPARTMENT

REFERENCE DRAWINGS

DRAWING TITLE	DRAWING NO.				
DRAWING CONTROL SHEET					
AS-BUILT	DATE				
DATE	BY	DESCRIPTION	CHG.	CERT.	APP.

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DATE STARTED: _____ DATE COMPLETED: _____
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