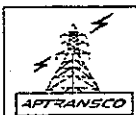


GUARANTEED TECHNICAL & OTHER PARTICULARS

S.No.	Particulars	Description
1	Make	M/s.P.E.T.E (Pan Electro Technic Enterprises Pvt.Ltd.)
2	Normal full load output (KVA)	250
3	i) Type of Transformer	Core Type 3-Ph, Oil immersed
	ii) Winding type (HV & LV)	Double Wound
	iii) Material	Copper
4	Type of Cooling	ONAN
5	Indoor or Outdoor	Outdoor
6	Rated high voltage (V)	33000
7	Rated low voltage (V)	400
8	Connection and vector group	Delta/Star, Dyn11
9	Maximum temperature rise of	
	i) Winding by resistance (°C)	55
	ii) Oil by thermometer (°C)	50
	iii) Maximum ambient air temperature (°C)	50
10	Core loss at normal voltage and frequency (KW)	0.675 (Subject to IS Tolerance)
11	Copper loss at normal voltage and current (KW)	3.600 (Subject to IS Tolerance)
12	Impedance (Percentage)	5 (Subject to IS Tolerance)
13	Tap Changer	
	i) Make	PARAGON/ASWANI
	ii) Type	Off-Circuit
	iii) Indicator arrangement	Provided
	iv) Packing arrangement	Pad Lock arrangement provided
	v) Other details	+5% to -5% insteps of 2.5%
14	Tapping on HV side for LV variation	Tapping on H.V. side
15	Impulse strength of HV winding	170 KVP
16	Impulse strength of LV winding	Not Applicable
17	Overall dimensions of transformer in mm L X B X H	1450 X 1325 X 1900
18	Approximate weight of	
	i) Core cum windings (Kg) Untanking Mass	645
	ii) Oil (Kg)	420
	iii) Complete transformer with all fittings and including oil (Kg)	1415
19	Type of tank	Conventional Type
20	Make and type of breather fitted to the transformer	Suvida / Any reputable make of conventional oil seal clear view
21	Particulars of bushings	
	i) Country of origin	INDIA
	ii) Rating	H.V: 36KV, 250A / L.V: 1.1KV, 250A
	iii) Types	
	HV bushings	Porcelain
	LV bushings	Porcelain
	iv) Impulse and flashover voltages	H.V: 170 KVP / L.V: N.A.;H.V: 70 KVrms / L.VPF: 3 KVrms
22	Efficiency at u.p.f. and 0.8 p.f.	98.32 / 97.91
23	Regulation at full load u.p.f. and 0.8.p.f.	1.55 / 4.06
24	Terminal arrangements of bushings (HV and LV)	Outdoor, Bare bushings / Outdoor, Bare bushings
25	Mounting arrangement for the transformer	Plinth



Standardised Guaranteed Technical Particulars for
250 KVA Station Transformer
STD/GTP-DWG/Approval No. 228 -1-1/ Revision Mo. 0
Prepared & Approved during October - 2011

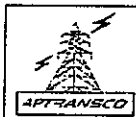
APPROVED FOR TURNKEY PROJECTS

31/10/2011
CHIEF ENGINEER / CONSTRUCTION - 1
A-TRANSCO/VIDYUTH SOUDHA/HYDR

S.No.	Description	Qty.
1	Rating and terminal marking plate	One
2	Earthing terminals	Two
3	Lifting lugs	Two
4	Main oil level gauge	One
5	Drain valve with blanking plate(20mm dia)	One
6	Thermometer pocket	One
7	Air Release plug	One
8	Conservator with drain plug & oil filling hole with cap	One
9	Pressure relief vent	One
10	Silicagel Breather	One
11	Filter valve with blanking plate(32mm)	One
12	Mounting channel and plain rollers	Four
13	Off circuit tap switch with locking provision	One
14	HV Outdoor Bushings	Three
15	LV Outdoor Bushings	Four
16	Oil level indicator	One

APPROVED FOR TURNKEY PROJECTS

[Signature] 21/10/2011
CHIEF ENGINEER / CONSTRUCTION - 1
A. TRANSCO/VIDYUT + SOU JH 4/HYD.



Standardised Guaranteed Technical Particulars for
 250 KVA Station Transformer

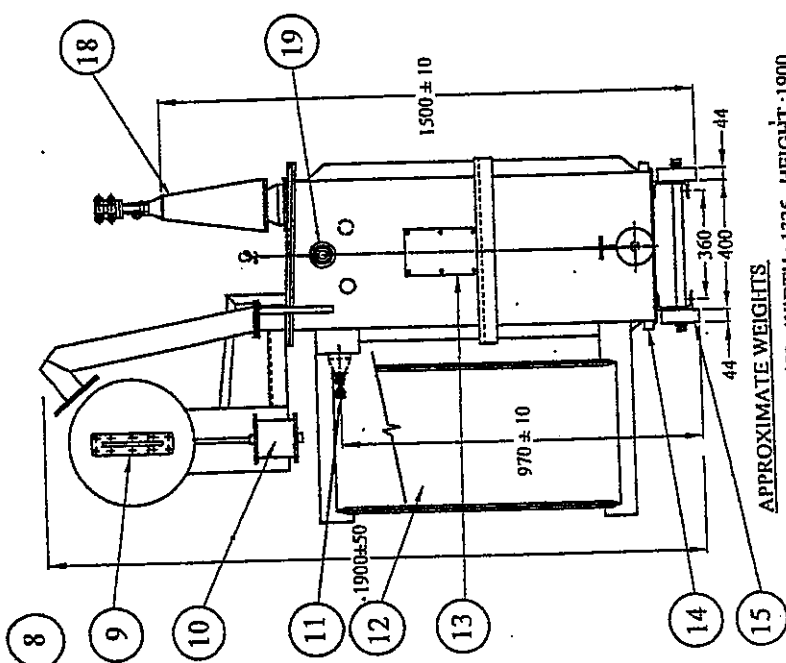
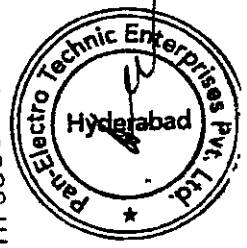
STD/GTP-DWG/Approval No. 228 -1-2/ Revision Mo. 0

Prepared & Approved during October - 2011

FOR CUSTOMER'S APPROVAL/RECORD

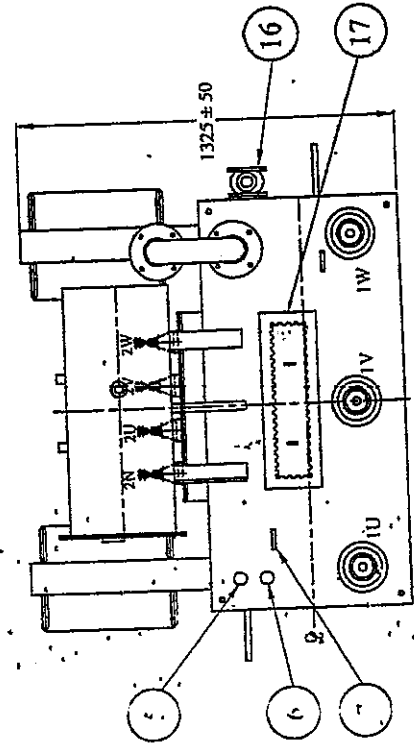
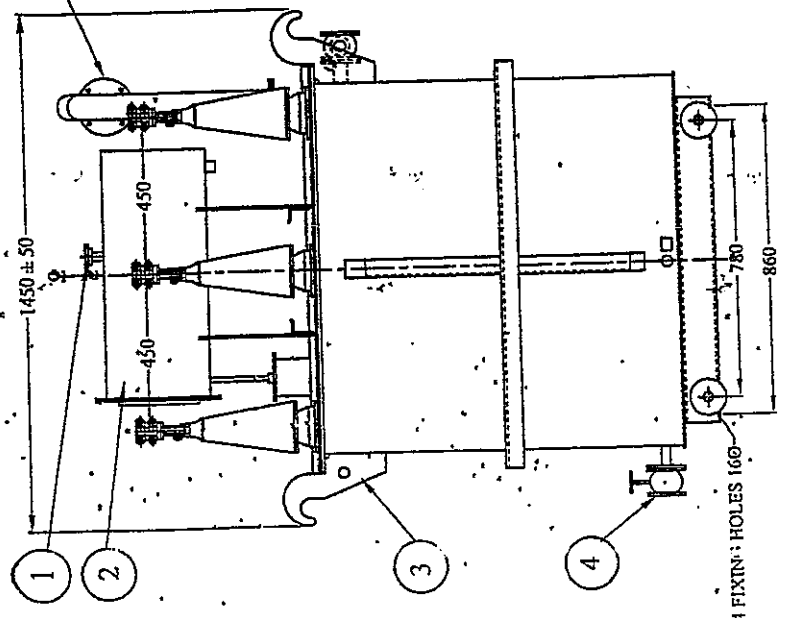
APPROVED FOR TURNKEY PROJECTS

CHIEF ENGINEER / CONSTRUCTION-1
A.P. TRANSCO / VIDYUTH SODDHA / HYD



APPROXIMATE WEIGHTS

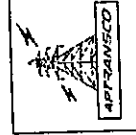
1. LENGTH : 1450, WIDTH : 1325, HEIGHT : 1900
2. UNTANKING MASS : 645 kg
3. TANK & FITTINGS : 350 kg
4. OIL WEIGHT : 420 kg
5. TOTAL WEIGHT : 1415 kg
6. OIL QUANTITY : 495 Litrs.
7. PAINT : ENAMEL DARK GREY, SHADE NO.632 OF IS 5



VECTOR GROUP	COOLING	VOLTAGE (V)		CURRENT (A)	
		H.V.	L.V.	H.V.	L.V.
Dyn 11	ON AN	33000	400	4.37	361
PETE / W.O.	SCALE NTS	PAN ELECTRO TECHNIC ENTERPRISES PVT.LTD.			
SL.NO.	PROJEC	HYDRABAD			

H.V	Ph - Ph	Ph - Earth	kVA	PHASE	FREQUENCY
350	320	320	250	3	50Hz
L.V	40	40	Customer:		

M/s. AP TRANSCO



Standardised Drawings for 250 KVA Station Transformer
General Arrangement - IZ
STD/GTP-DWG/Approval No. 228 -2-1(8)/Revision Mo. 0
Prepared & Approved during October - 2011

NOTE: ALL DIMENSIONS ARE IN mm. Ref. file. No. PETE-99106-07

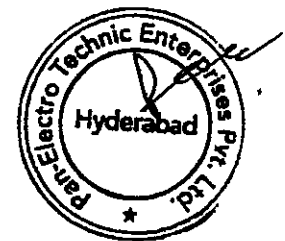
QTY	PT. NO.	DESCRIPTION
1	1	OIL FILLING HOLE WITH CAP
1	2	CONSERVATOR WITH DRAIN PLUG
2	3	LIFTING LUGS.
1	4	DRAIN CUM FILTER VALVE WITH BLANKING PLATE (20 mm Ø)
1	5	AIR RELEASE DEVICE
1	6	THERMOMETER POCKET
2	7	COVER LIFTS
1	8	PRESSURE RELIEF VENT
1	9	OIL LEVEL INDICATOR
1	10	DEHYDRATING SILICAGEL BREATHER
4	11	L.V. BARE BUSHINGS WITH CONNECTORS
2	12	RADIATORS
1	13	RATING AND TERMINAL MARKING PLATE
2	14	EARTHING TERMINALS
4	15	UNI-DIRECTIONAL FLAT ROLLERS
1	16	FILTER VALVE WITH BLANKING PLATE (32mmØ)
1	17	INSPECTION COVER
3	18	H.V. BARE BUSHINGS WITH CONNECTORS
1	19	OFF CIRCUIT TAP CHANGING SWITCH WITH LOCKING ARRANGEMENT


APPROVED FOR TURNKEY PROJECTS

31/10/2011
 CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH SOUDHA/HYDR

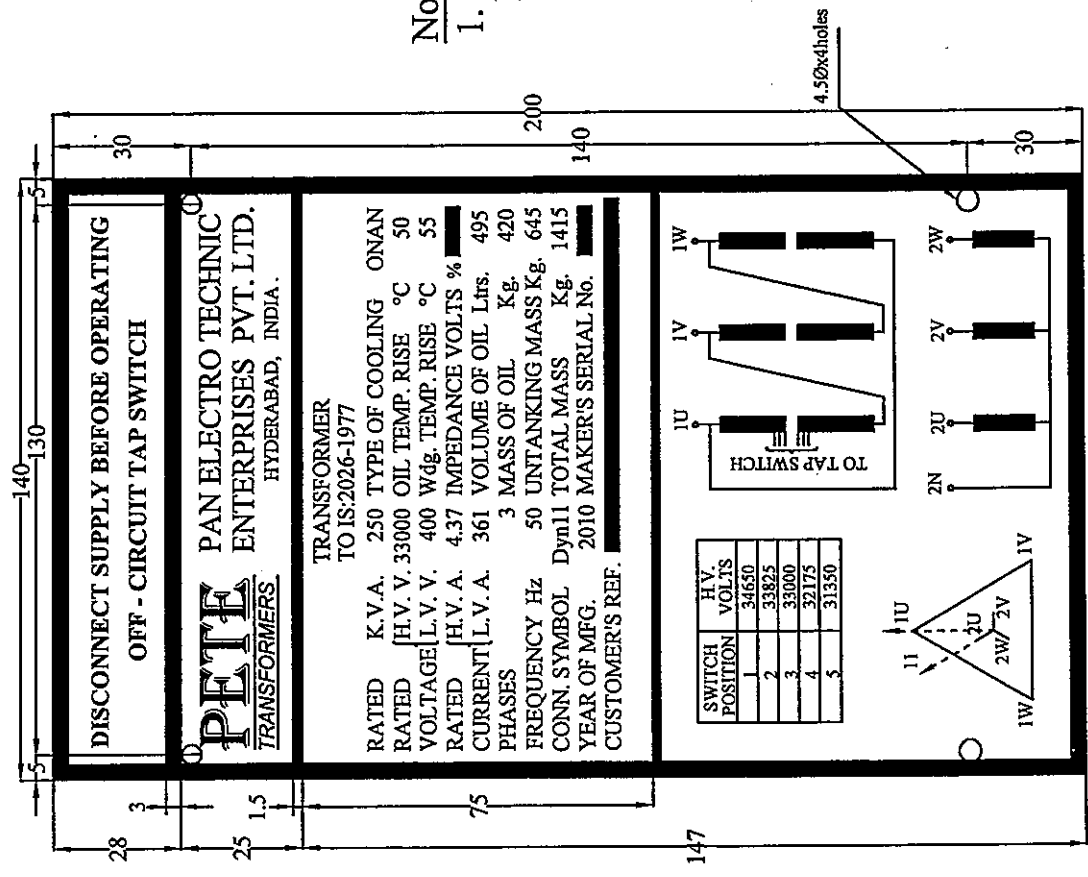
NOTE :

- BASE DIMENSIONS OF TRANSFORMERS.
 LENGTH : 900 WIDTH : 490
 - MINIMUM DIMENSIONS OF THE PLINTH.
 LENGTH : 1500 WIDTH : 1090
- ALL DIMENSIONS ARE IN mm.

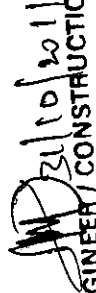


Customer : M/s. AP TRANSCO	W.O. PETE /	SCALE NTS	PAN ELECTRO TECHNIC ENTERPRISES PVT.LTD. HYDERABAD
	SL.NO. 6641 to 6650	PROJEC ⊖ ⊕	
REV.	CHANGE RECORD	SD/I	 Standardised Drawings for 250 KVA Station Transformer General Arrangement -2 STD/GTP-DWG/Approval No. 228 -2-2(8)/ Revision Mo. 0 Prepared & Approved during October - 2011

FOR CUSTOMER'S APPROVAL/RECC.DS

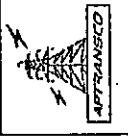


Note:
1. Impedance Value will be Punched After Testing.

APPROVED FOR TURKEY PROJECTS

 CHIEF ENGINEER / CONSTRUCTION-1
 A.P. TRANSCO / VIDYUTH SOUDHA / HYD.

W.O. PETE/	SCALE NTS	PAN ELECTRO TECHNIC ENTERPRISES PVT.LTD.
SL.NO.	PROJEC	

Customer: A.P. TRANSCO

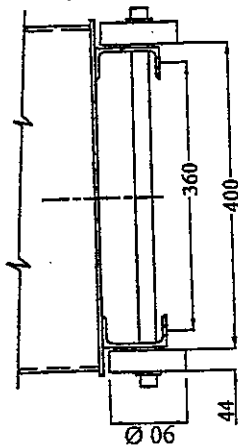


Standardised Drawings for 250 KVA Station Transformer Rating & Diagram Plate
 STD/GTP-DWG/Approval No. 228 -2-3(8)/ Revision Mo. 0
 Prepared & Approved during October - 2011

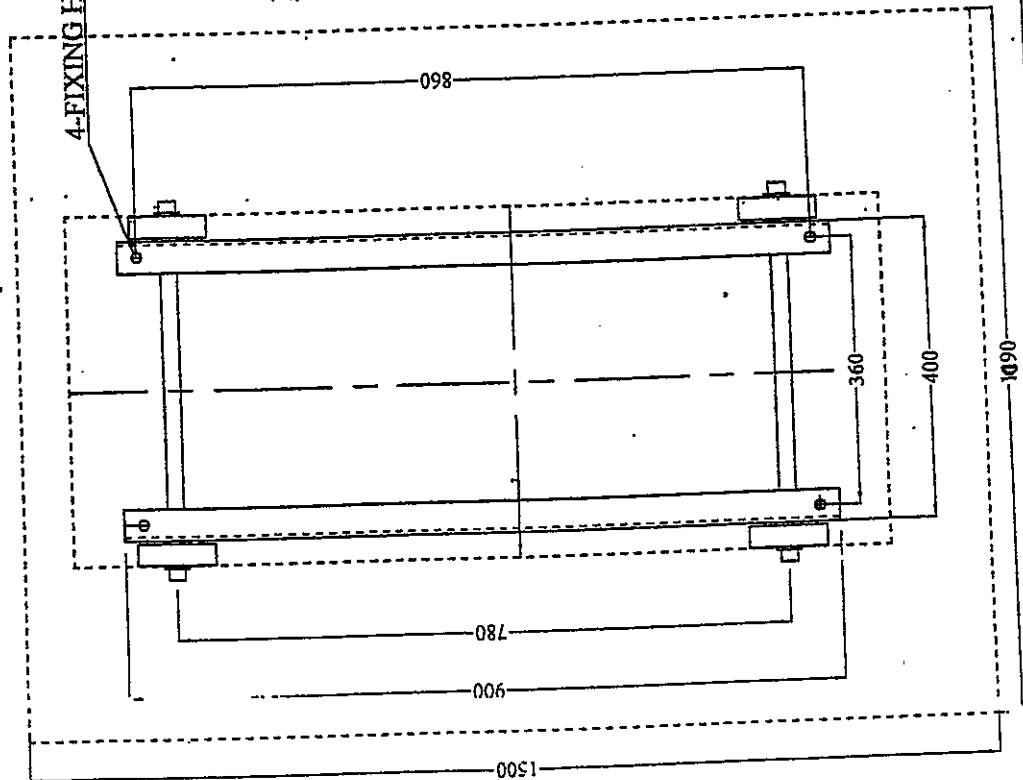
1	Comm
REV.	CH

NOTE: ALL DIMENSIONS ARE IN mm. Material: 18G AL. Sheet

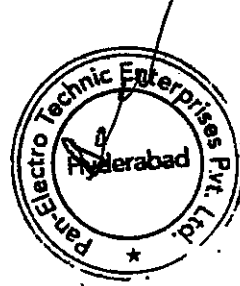
FOR CUSTOMER'S APPROVAL/RECORDS



4-FIXING HOLES $\varnothing 16$



NOTE:-
APPROXIMATE PLINTH DIMENSION
1500 x 1090



APPROVED FOR TURNKEY PROJECTS

CHIEF ENGINEER / CONSTRUCTION-1
A. TRANSCO / VIDYUTH SOUDHA / HYD.

W.O. SCALE NTS
PETE / PROJEC
SL.NO. 6641 to 6650

PAN ELECTRO TECHNIC
ENTERPRISES PVT.LTD.
HYDERABAD

Customer:
M/s. AP TRANSCO

Standardised Drawings for 250 KVA Station Transformer
Foundation details
STD/GTP-DWG/Approval No. 228-2-4(8)/Revision Mo. 0
Prepared & Approved during October - 2011

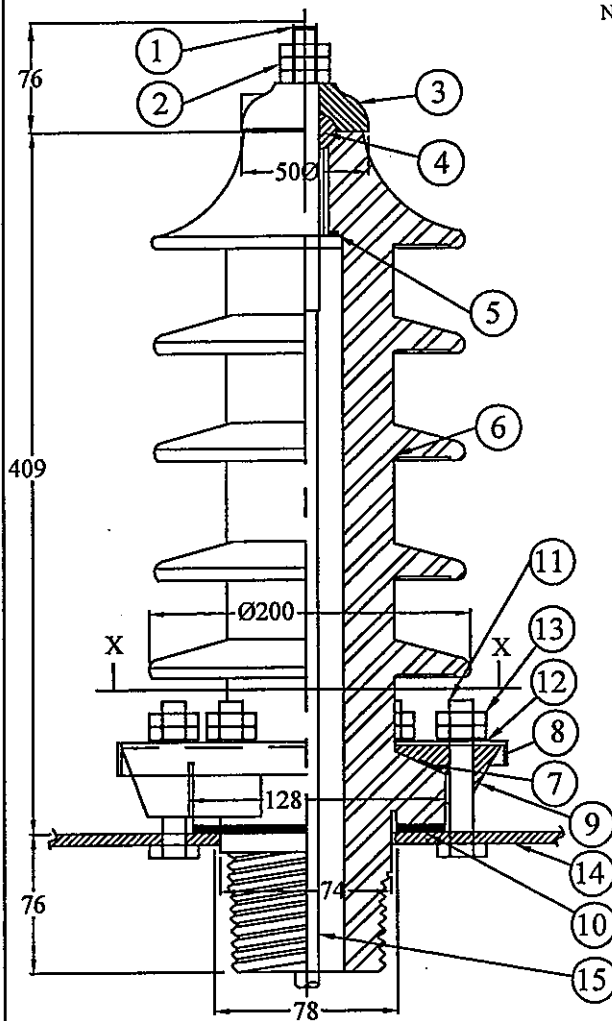


REV. C

NOTE. ALL DIMENSIONS ARE IN mm.

MATERIAL LIST

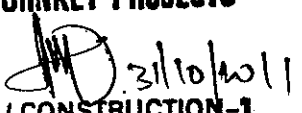
WT. KG.	QTY.	PT. NO.	DESCRIPTION AND DIMENSIONS	MATERIAL OR DRG. REF.	REMARKS
	1	1	TERMINAL STEM	BRASS	
	3	2	HEXAGONAL NUTS	-DO-	
	1	3	CAP	-DO-	
	1	4	SEALING WASHER	NITRILE RUBBER	
	1	5	SEPARATOR	SRC	
	1	6	BUSHING	PORCELINE	
	1	7	WASHER	S.R.C.	
	1	8	BUSHING CLAMP	M.S.	GALVANISED
	6	9	CLAMPING MEMBER	ALUMINIUM	
	2	10	WASHER	SRC	
	6	11	STUDS M10X70LG.	M.S.	
	6	12	SPRING WASHER	M.S.	
	12	13	LOCK NUTS	M.S.	
	1	14	MOUNTING PLATE	M.S.	
	1	15	JUMPER	COPPER	



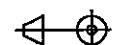
- NOTE :
1. RATING 36K.V., 250 AMPS. BARE BUSHING.
 2. PROCELAIN BUSHING PARTS REFER IS - 8603 (PART - III) - 1977
 3. BUSHING METAL PARTS REFER IS - 3347 (PART - V / SEC 2) - 1979.
 4. BUSHING MOUNTING HOLE " 78 "Ø
 5. BUSHING MOUNTING STUDS 4 NOS OF M10 X 70 mm . LONG FULL THREADED HEXAGONAL SCREWS
 6. NORMAL SYSTEM VOLTAGE : 33 KV.
 7. RATED VOLTAGE : 36 KV.
 8. VISIBLE DISCHARGE TEST VOLTAGE : 27 KV.
 9. ONE MINUT WET-DRY WITHSTAND VOLTAGE : 70 KV.
 10. LIGHTNING IMPULS WITHSTAND TEST VOLTAGE : 170KV.
 11. CREEPAGE DISTANCE (Min.) : 900mm.
 12. BUSHING ROD : 12 Ø

FOR CUSTOMER'S APPROVAL/RECORDS

APPROVED FOR TURNKEY PROJECTS


CHIEF ENGINEER / CONSTRUCTION-1
A 'TRANSCO/VIDYUTH SOUDHA/HYD.

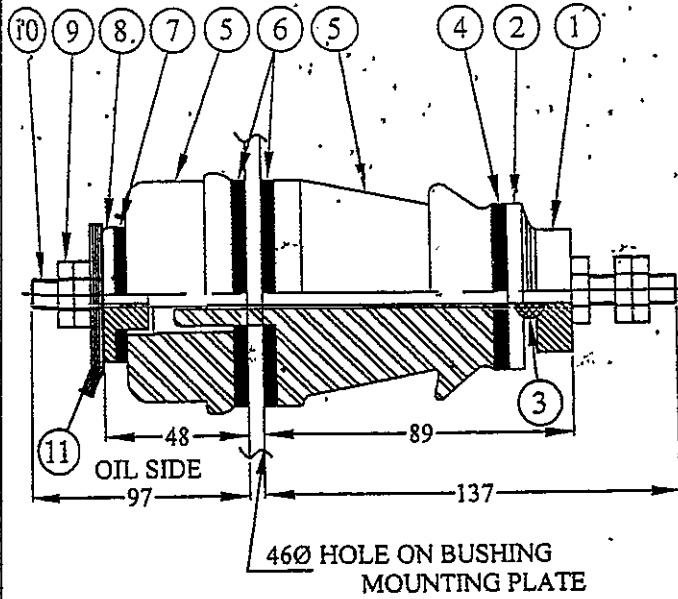
NOTE : ALL DIMENSIONS ARE IN mm.

Customer:	W.O.	SCALE NTS	PAN ELECTRO TECHNIC ENTERPRISES PVT. LTD. HYDERABAD
	SL.NO.	PROJEC 	

REV.	1 Heavily Polluted Bushing Given	Srin 27/10/11
	CHANGE RECORD	SD



Standardised Drawings for 250 KVA Station Transformer Bushing Assembly (36KV, 250 Amps, Bare)
 STD/GTP-DWG/Approval No. 228 -2-5(8)/ Revision Mo. 0
 Prepared & Approved during October - 2011



QTY.	PT. NO.	DESCRIPTION AND DIMENSIONS	MATERIAL OR DRG. REF.
1	1	COLLAR	BRASS
1	2	WASHER	BRASS
1	3	SEALING WASHER	SYNTHETIC RUBBER
1	4	WASHERS 5 X 20 I.D. X 47 O.D.	S.R.C.
1	5	BUSHING, ϕ 22 I.D.	PORCELAIN
2	6	WASHER 5 X 43 I.D. X 70 O.D.	S.R.C.
1	7	WASHER, 5 X 63 O.D.	S.R.C.
1	8	COLLAR	CAST BRASS
5	9	LOCK NUTS M20	BRASS
1	10	TERMINAL STEM ϕ 20 X 240 LG.	CU. OR BRASS
-	11	JUMPER	T.C.S.

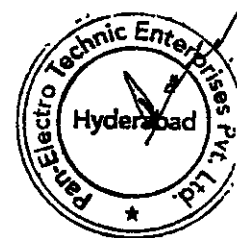
NOTE :

1. RATING 1.1kV. 630 AMPS. BARE BUSHING.
2. PORCELAIN BUSHING PARTS AS PER IS - 3347 PART - I / SEC 1 - 1979.
3. BUSHING METAL PARTS AS PER IS - 3347 PART - I / SEC 2 - 1979.
4. BUSHING MOUNTING HOLE DIA - 46 ϕ mm.

FOR CUSTOMER'S APPROVAL/RECORDS

APPROVED FOR TURNKEY PROJECTS

[Signature] 31/10/2011
 CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH SOUDHA/HYD.



NOTE : ALL DIMENSIONS ARE IN mm.

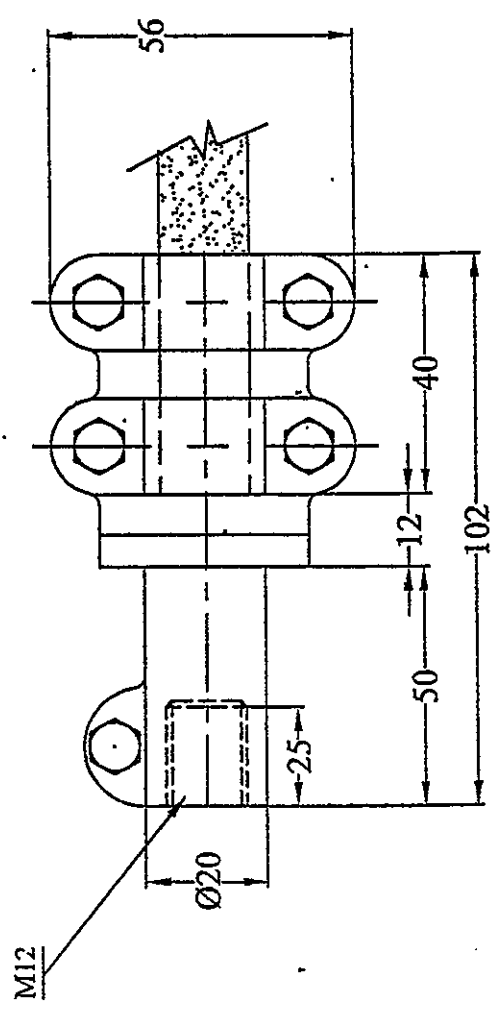
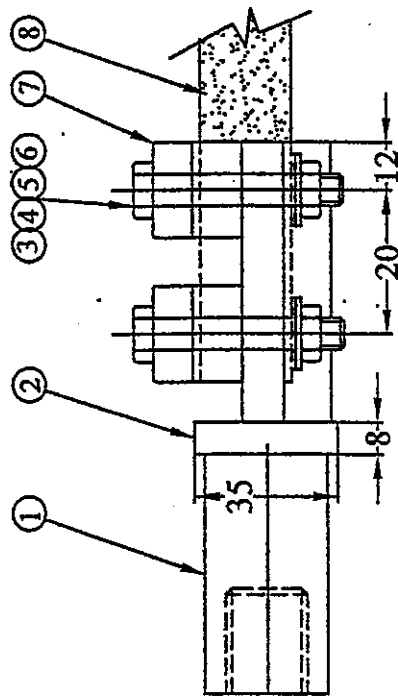
Customer : M/s. AP TRANSCO	W.O. PETE /	SCALE NTS	PAN ELECTRO TECHNIC ENTERPRISES PVT. LTD. HYDERABAD
	SL.NO. 6641 to 6650	PROJEC 	

REV.	CHANGE RECORD	SD.
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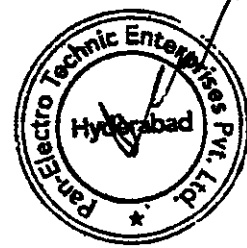


Standardised Drawings for 250 KVA Station Transformer
 Bushing Assembly (1.1 kV, 630 Amps, Bare)
 STD/GTP-DWG/Approval No. 228 -2-6(8)/ Revision Mo. 0
 Prepared & Approved during October - 2011

PT. NO.	DESCRIPTION	MATERIAL
1	STEM	BRASS
2	CONNECTOR BASE	AL ALLOY
3	HEX. BOLT M8	M.S
4	HEX. NUT M8	M.S
5	PLAIN WASHER	M.S
6	SPRING WASHER	M.S
7	GRIPPER	AL ALLOY
8	CONDUCTOR	MOOSE



APPROVED FOR TURNKEY PROJECTS
MMK 31/10/2011
 CHIEF ENGINEER / CONSTRUCTION-1
 A TRANSCO/VIDYUTH SOUDHA/HYD.

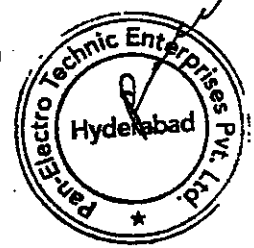
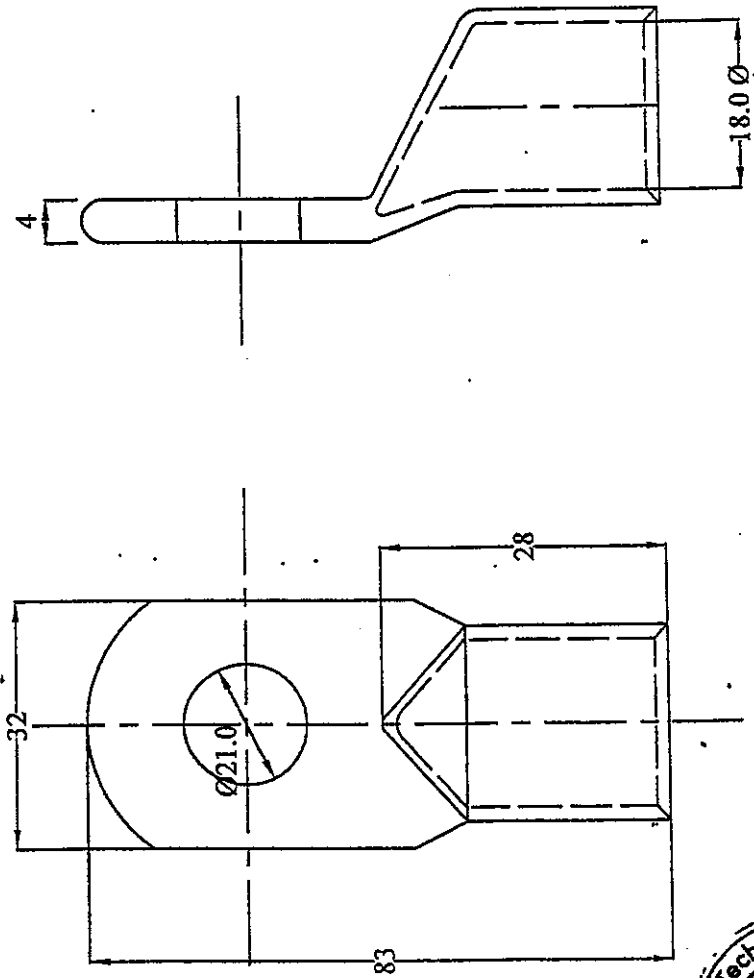


Customer : M/s. AP TRANSCO	W.O. PETE /	SCALE NTS	PAN ELECTRO TECHNIC ENTERPRISES PVT.LTD. HYDERABAD
	SL.NO. 6641 to 6650	PROJEC	
		Standardised Drawings for 250 KVA Station Transformer HV Terminal Connector STD/GTP-DWG/Approval No. 228 -2-7(8)/ Revision Mo. 0 Prepared & Approved during October - 2011	
REV.	CI		

- NOTE: 1. NAME OF THE MANUFACTURER: BHAVANI ELECTRICALS, HYDERABAD
 2. ALL SHARP EDGES WILL BE ROUNDED OFF
 3. RATED CURRENT: 250 AMPS.
 4. RATED VOLTAGE: 36 KV
 5. ALL M.S. PARTS HOT DIPPED GALVANIZED

NOTE: ALL DIMENSIONS ARE IN mm.

FOR CUSTOMER'S APPROVAL/RECORDS

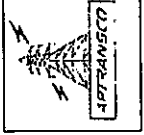


NOTE : 1. THIS TERMINAL LUG SHALL BE OF COPPER TINNED

APPROVED FOR TURNKEY PROJECTS
M/s. AP TRANSCO
CHIEF ENGINEER / CONSTRUCTION - I
APTRANSCO/VIDYUTH SQUADHA/HYD.

M.D. Srinivas

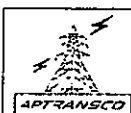
CARRIAGE:	W/O	SCALE	PAN ELECTRO TECHNIC ENTERPRISES PVT.LTD. HYDERABAD
	PETE/NTS	NTS	
M/s. AP TRANSCO	SL. NO.	PROJEC	
	16/11/10	1	



Standardised Drawings for 250 KVA Station Transformer
LV Terminal Connector
STD/GTP-DWG/Approval No. 228 -2-8(8)/ Revision Mo. 0
Prepared & Approved during October - 2011

GUARANTEED TECHNICAL & OTHER PARTICULARS

S.No.	Particulars	Description
1	Make	M/s.P.E.T.E (Pan Electro Technic Enterprises Pvt.Ltd.)
2	Normal full load output (KVA)	100
3	i) Type of Transformer	Core Type 3-Ph, Oil immersed
	ii) Winding type (HV & LV)	Double Wound
	iii) Material	Copper
4	Type of Cooling	ONAN
5	Indoor or Outdoor	Outdoor
6	Rated high voltage (V)	33000
7	Rated low voltage (V)	400
8	Connection and vector group	Delta/Star, Dyn11
9	Maximum temperature rise of	
	i) Winding by resistance (°C)	55
	ii) Oil by thermometer (°C)	50
	iii) Maximum ambient air temperature (°C)	50
10	Core loss at normal voltage and frequency (KW)	0.325 (Subject to IS Tolerance)
11	Copper loss at normal voltage and current (KW)	1.650 (Subject to IS Tolerance)
12	Impedance (Percentage)	4.5 (Subject to IS Tolerance)
13	Tap Changer	
	i) Make	PARAGON/ASWANI
	ii) Type	Off-Circuit
	iii) Indicator arrangement	Provided
	iv) Packing arrangement	Pad Lock arrangement provided
	v) Other details	+5% to -5% insteps of 2.5%
14	Tapping on HV side for LV variation	Tapping on H.V. side
15	Impulse strength of HV winding	170 KVP
16	Impulse strength of LV winding	Not Applicable
17	Overall dimensions of transformer in mm L X B X H	1250 X 950 X 1850
18	Approximate weight of	
	i) Core cum windings (Kg) Untanking Mass	360
	ii) Oil (Kg)	255
	iii) Complete transformer with all fittings and including oil (Kg)	950
19	Type of tank	Conventional Type
20	Make and type of breather fitted to the transformer	Suvida / Any reputable make of conventional oil seal clear view
21	Particulars of bushings	
	i) Country of origin	INDIA
	ii) Rating	H.V: 36KV, 250A / L.V: 1.1KV, 250A
	iii) Types	
	HV bushings	Porcelain
	LV bushings	Porcelain
	iv) Impulse and flashover voltages	H.V: 170 KVP / L.V: N.A.; H.V: 70 KVrms / L.V: 3 KVrms
22	Efficiency at u.p.f. and 0.8 p.f	98.06 / 97.59
23	Regulation at full load u.p.f. and 0.8.p.f	1.74 / 3.86
24	Terminal arrangements of bushings (HV and LV)	Outdoor, Bare bushings / Outdoor, Bare bushings
25	Mounting arrangement for the transformer	Plinth



Standardised Guaranteed Technical Particulars for
100 KVA Station Transformer
STD/GTP-DWG/Approval No. 228 -1-1/ Revision Mo. 0
Prepared & Approved during October - 2011


APPROVED FOR TURNKEY PROJECTS

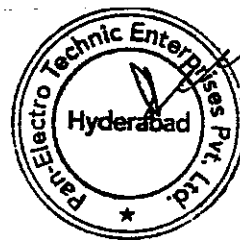
CHIEF ENGINEER / CONSTRUCTION -1
A.P. TRANSCO / VIDYUTH SOUDHA / HYD.

S.No.	Description	Qty.
1	Rating and terminal marking plate	One
2	Earthing terminals	Two
3	Lifting lugs	Two
4	Main oil level gauge	One
5	Drain valve with blanking plate(20mm dia)	One
6	Thermometer pocket	One
7	Air Release plug	One
8	Conservator with drain plug & oil filling hole with cap	One
9	Pressure relief vent	One
10	Silicagel Breather	One
11	Filter valve with blanking plate(32mm)	One
12	Mounting channel and plain rollers	Four
13	Off circuit tap switch with locking provision	One
14	HV Outdoor Bushings	Three
15	LV Outdoor Bushings	Four
16	Oil level indicator	One

APPROVED FOR TURNKEY PROJECTS

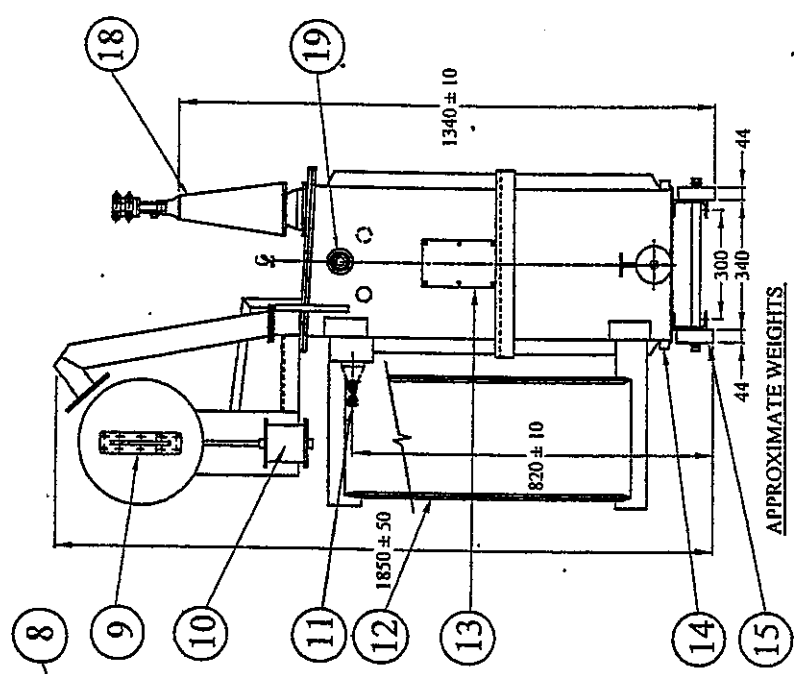
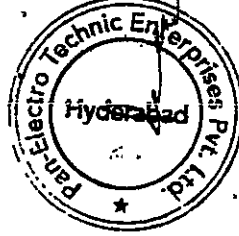
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 CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH SODHA/HYO.

	Standardised Guaranteed Technical Particulars for 100 KVA Station Transformer
	STD/GTP-DWG/Approval No. 228 -1-2/ Revision Mo. 0
	Prepared & Approved during October - 2011



FOR CUSTOMER'S APPROVAL/RECORDS

APPROVED FOR TURNKEY PROJECTS
W.D. Sridharan
 CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIJYUTH SOUDHA/HYD.



APPROXIMATE WEIGHTS

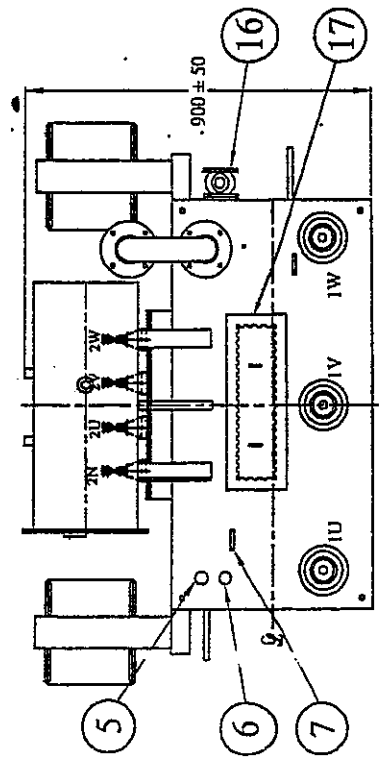
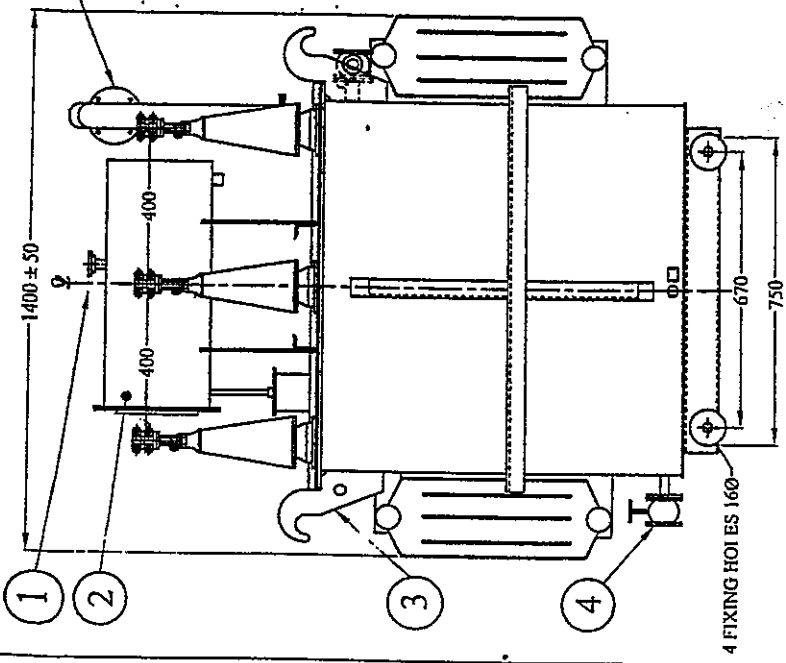
1. LENGTH : 1400, WIDTH : 900, HEIGHT : 1850
2. UNTANKING MASS : 360 kg
3. TANK & FITTINGS : 335 kg
4. OIL WEIGHT : 255 kg
5. TOTAL WEIGHT : 950 kg
6. OIL QUANTITY : 300 Ltrs.
7. PAINT : ENAMEL DARK GREY, SHADE NO.632 OF IS 5

Ph - Ph		Ph - Earth	kVA	PHASE	FREQUENCY	VECTOR GROUP	VOLTAGE (V)		CURRENT (A)	
H.V	350	320	100	3	50Hz	Dyn11	H.V.	L.V.	H.V.	L.V.
L.V	40	40	Customer			W.O.	30000	400	175	144.3
							SCALE	PAN ELECTRO TECHNIC ENTERPRISES PVT.LTD.		
							NTS			
							PROJEC.			

M/s. AP TRANSCO



Standardised Drawings for 100 KVA Station Transformer
 General Arrangement - I
 STD/GTP-DWG/Approval No. 228 -2-1(8)/ Revision Mo. 0
 Prepared & Approved during October - 2011



NOTE: ALL DIMENSIONS ARE IN mm. Ref file.No.PETE-100(05-06)

QTY	PT. NO.	DESCRIPTION
1	1	OIL FILLING HOLE WITH CAP
1	2	CONSERVATOR WITH DRAIN PLUG
2	3	LIFTING LUGS
1	4	DRAIN CUM FILTER VALVE WITH BLANKING PLATE (20 mm Ø)
1	5	AIR RELEASE PLUG
1	6	THERMOMETER POCKET
2	7	COVER LIFTS
1	8	PRESSURE RELIEF VENT
1	9	OIL LEVEL INDICATOR
1	10	DEHYDRATING SILICAGEL BREATHER
4	11	L.V. BARE BUSHINGS WITH CONNECTORS
2	12	RADIATORS
1	13	RATING AND TERMINAL MARKING PLATE
2	14	EARTHING TERMINALS
4	15	UNI-DIRECTIONAL FLAT ROLLERS
1	16	FILTER VALVE WITH BLANKING PLATE (32mmØ)
1	17	INSPECTION COVER
3	18	H.V. BARE BUSHINGS WITH CONNECTORS
1	19	OFF CIRCUIT TAP CHANGING SWITCH WITH LOCKING ARRANGEMENT

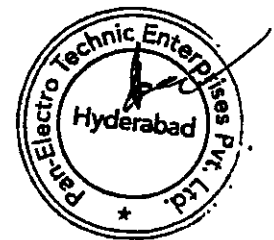
APPROVED FOR TURNKEY PROJECTS

[Signature]
 CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH SOUDHA/HYD.

NOTE :

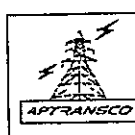
- BASE DIMENSIONS OF TRANSFORMERS.
 LENGTH : 790 WIDTH : 530
- MINIMUM DIMENSIONS OF THE PLINTH.
 LENGTH : 1400 WIDTH : 1130

ALL DIMENSIONS ARE IN mm.



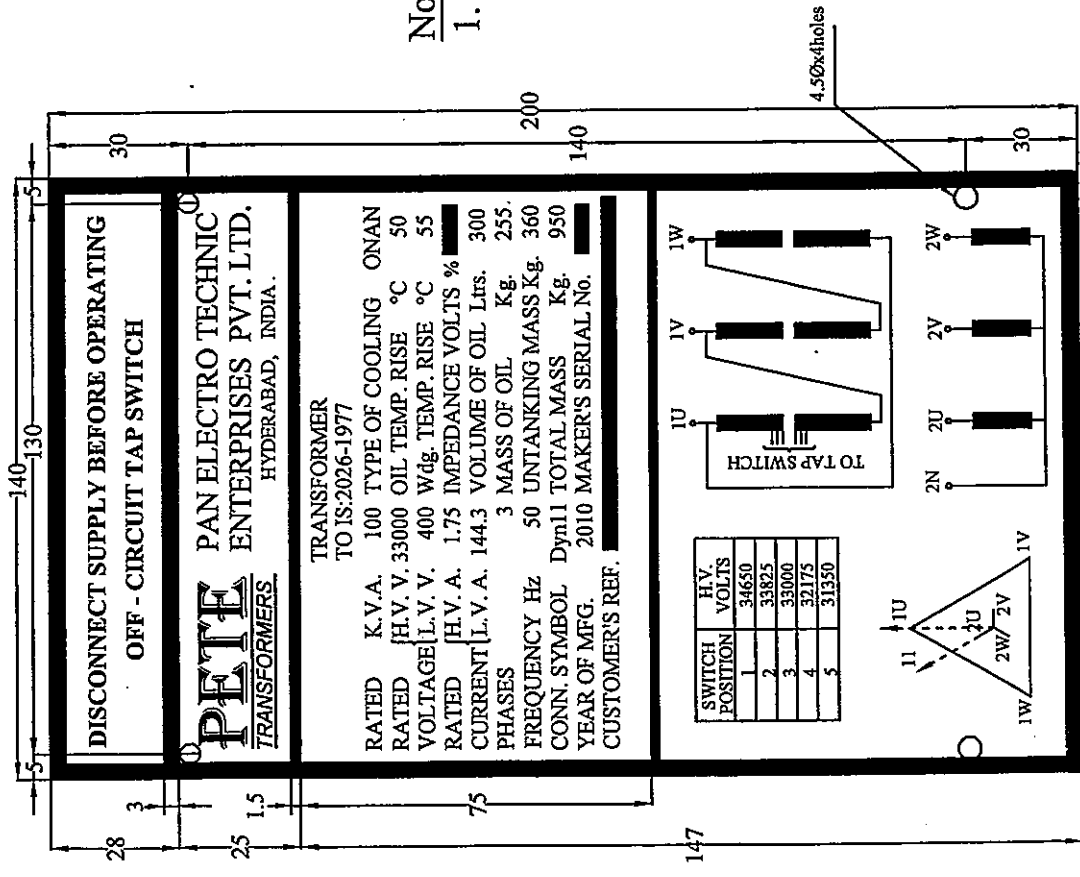
Customer : M/s. AP TRANSCO	W.O. PETE /	SCALE NTS	PAN ELECTRO TECHNIC ENTERPRISES PVT.LTD. HYDERABAD
	SL.NO. 6626 to 6640	PROJEC 	

REV.	CHANGE RECORD	SD/I
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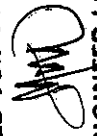


Standardised Drawings for 100 KVA Station Transformer
 General Arrangement -2
 STD/GTP-DWG/Approval No. 228 -2-2(8)/ Revision Mo. 0
 Prepared & Approved during October - 2011

FOR CUSTOMER'S APPROVAL/RECORDS



Note:
1. Impedance Value will be Punched After Testing.

APPROVED FOR TURNKEY PROJECTS

 21/10/2011
CHIEF ENGINEER / CONSTRUCTION-1
A.P. TRANSCO / VIDYUTH SOUDHA / HYD.

CUSTOMER	REV.
A.P. TRANSCO	1

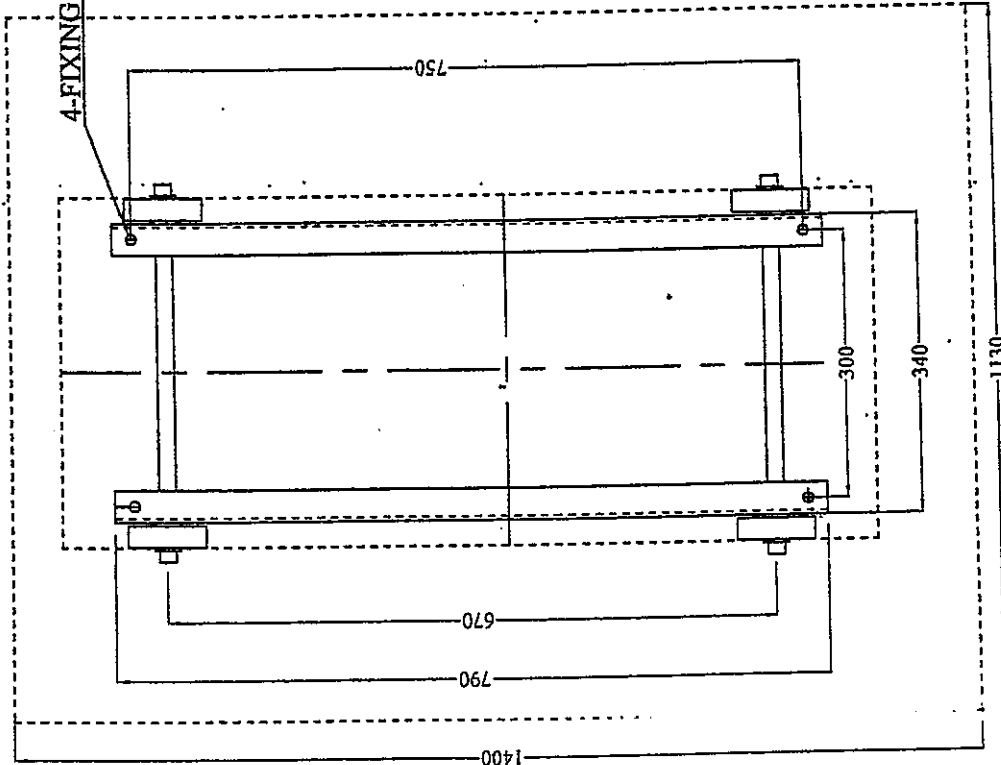
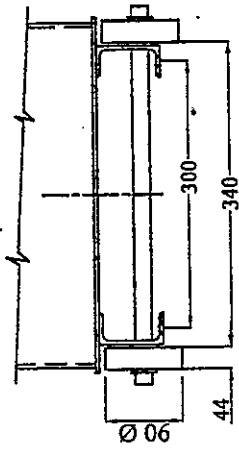
W.O. PETE/
SL.NO. _____
SCALE NTS
PROJEC -A- (E)

PAN ELECTRO TECHNIC
ENTERPRISES PVT.LTD.
HYDERABAD

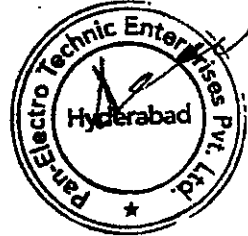
Standardised Drawings for 100 KVA Station Transformer Rating & Diagram Plate
 STD/GTP-DWG/Approval No. 228 -2-3(8)/ Revision Mo. 0
 Prepared & Approved during October - 2011

NOTE: ALL DIMENSIONS ARE IN mm. Material: ISG AL. Sheet

FOR CUSTOMER'S APPROVAL/RECORDS



NOTE:-
 APPROXIMATE PLINTH DIMENSION
 1400 x 1130



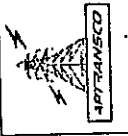
APPROVED FOR TURNKEY PROJECTS
[Signature]
 CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH Soudha/HYD.

PAN ELECTRO TECHNIC
 ENTERPRISES PVT.LTD.
 HYDERABAD

W.O. SCALE
 PETE / NTS
 SL.NO. PROJEC
 6626 to 5640

CUSTOMER:
 M/s. AP TRANSCO

Standardised Drawings for 100 KVA Station Transformer
 Foundation details
 STD/GTP-DWG/Approval No. 228 -2-4(8)/ Revision Mo. 0
 Prepared & Approved during October - 2011

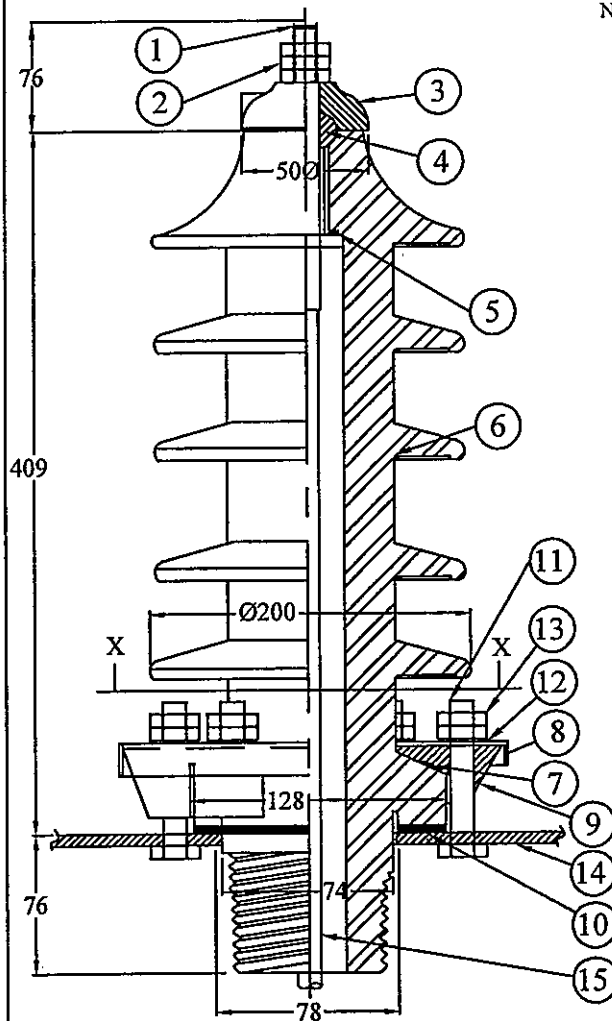


REV. CH

NOTE. ALL DIMENSIONS ARE IN mm.

MATERIAL LIST


WT. KG.	QTY.	PT. NO.	DESCRIPTION AND DIMENSIONS	MATERIAL OR DRG. REF.	REMARKS
	1	1	TERMINAL STEM	BRASS	
	3	2	HEXAGONAL NUTS	-DO-	
	1	3	CAP	-DO-	
	1	4	SEALING WASHER	NITRILE RUBBER	
	1	5	SEPARATOR	SRC	
	1	6	BUSHING	PORCELINE	
	1	7	WASHER	S.R.C.	
	1	8	BUSHING CLAMP	M.S.	GALVANISED
	6	9	CLAMPING MEMBER	ALUMINIUM	
	2	10	WASHER	SRC	
	6	11	STUDS M10X70LG.	M.S.	
	6	12	SPRING WASHER	M.S.	
	12	13	LOCK NUTS	M.S.	
	1	14	MOUNTING PLATE	M.S.	
	1	15	JUMPER	COPPER	



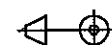
- NOTE :
1. RATING 36K.V., 250 AMPS. BARE BUSHING.
 2. PORCELAIN BUSHING PARTS REFER IS - 8603 (PART - III) - 1977
 3. BUSHING METAL PARTS REFER IS - 3347 (PART - V / SEC 2) - 1979.
 4. BUSHING MOUNTING HOLE " 78 "Ø
 5. BUSHING MOUNTING STUDS 4 NOS OF M10 X 70 mm . LONG FULL THREADED HEXAGONAL SCREWS
 6. NORMAL SYSTEM VOLTAGE : 33 KV.
 7. RATED VOLTAGE : 36 KV.
 8. VISIBLE DISCHARGE TEST VOLTAGE : 27 KV.
 9. ONE MINUT WET-DRY WITHSTAND VOLTAGE : 70 KV.
 10. LIGHTNING IMPULS WITHSTAND TEST VOLTAGE : 170KV.
 11. CREEPAGE DISTANCE (Min.) : 900mm.
 12. BUSHING ROD : 12 Ø

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 CHIEF ENGINEER / CONSTRUCTION-1
 A-TRANSCO/VIDYUTH SOUDHA/HYD

NOTE : ALL DIMENSIONS ARE IN mm.

Customer:	W.O.	SCALE NTS	PAN ELECTRO TECHNIC ENTERPRISES PVT. LTD. HYDERABAD
	SL.NO.	PROJEC 	

REV.	1 Heavily Polluted Bushing Given	Srinu 27/10/11 SD
	CHANGE RECORD	

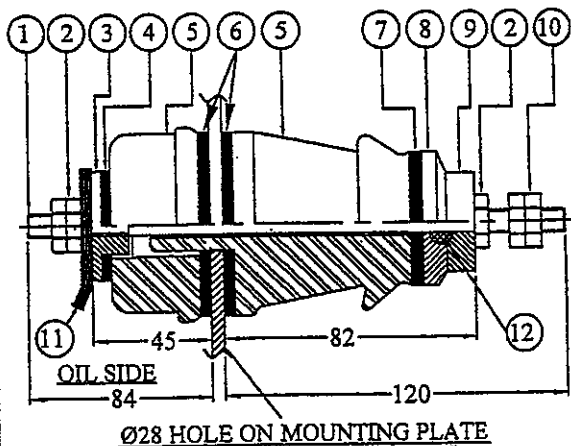


Standardised Drawings for 100 KVA Station Transformer
 Bushing Assembly (36KV, 250 Amps, Bare)
 STD/GTP-DWG/Approval No. 228 -2-5(8)/ Revision Mo. 0
 Prepared & Approved during October - 2011

QTY.	PT. No.	DESCRIPTION AND DIMENSIONS	MATERIAL OR DRG. REF.	REMARKS
1	1	TERMINAL STEM $\varnothing 12 \times 210$ Lg.	CU. OR BRASS	
3	2	LOCK NUTS M12	BRASS	
1	3	COLLAR $\varnothing 45 \times 15$ Lg.	CAST BRASS	
1	4	WASHER 5Thk. x 45 O.D.	S.R.C.	
1	5	BUSHING	PORCELAIN	
2	6	WASHER 5Thk. x 27 I.D. x 50 O.D.	S.R.C.	
1	7	WASHERS 5Thk. x 12 I.D. x 32 O.D.	S.R.C.	
1	8	WASHER $\varnothing 32 \times 4$ Lg.	BRASS ROD	
1	9	COLLAR $\varnothing 28 \times 20$ Lg.	BRASS ROD	
2	10	FULL NUTS M20	BRASS	
--	11	JUMPER	T.C.S.	
1	12	SEALING WASHER	SYNTHETIC RUBBER	

NOTE :

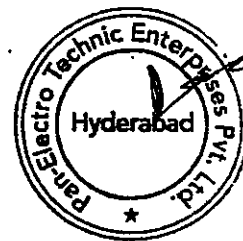
1. TERMINAL STEM TO BE SWEATED TO COLLAR (PT.No. - 3)
2. RATING 1.1 kV, 250 Amps BARE BUSHING
3. PORCELAIN BUSHING PARTS REFER IS-3347 (Part 1/Sec 1)-1979
4. BUSHING METAL PARTS REFER IS - 3347 (Part 1/Sec 2)-1979
5. MAKE OF PORCELAIN: ASSOCIATED PORCELAIN/ANY REPUTED Co.
6. ALL DIMENSIONS ARE IN mm.
7. MAKE OF BUSHING: BENGAL PORCELAIN
8. ONE MINUTE WET & DRY POWER FREQUENCY WITHSTAND VOLTAGE: 10 kVrms.
9. 1.2/50 Micro sec. IMPULSE VOLTAGE WITHSTAND : N.A



FOR CUSTOMER'S APPROVAL/RECORDS

APPROVED FOR TURNKEY PROJECTS

[Signature]
 CHIEF ENGINEER / CONSTRUCTION-1
 APTRANSCO/VIDYUTH SOUDHA/HYD.



Customer :

M/s. AP TRANSCO

W.O.
PETE/

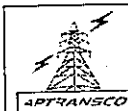
SL.NO.
6626 to
6640

SCALE
NTS

PROJEC
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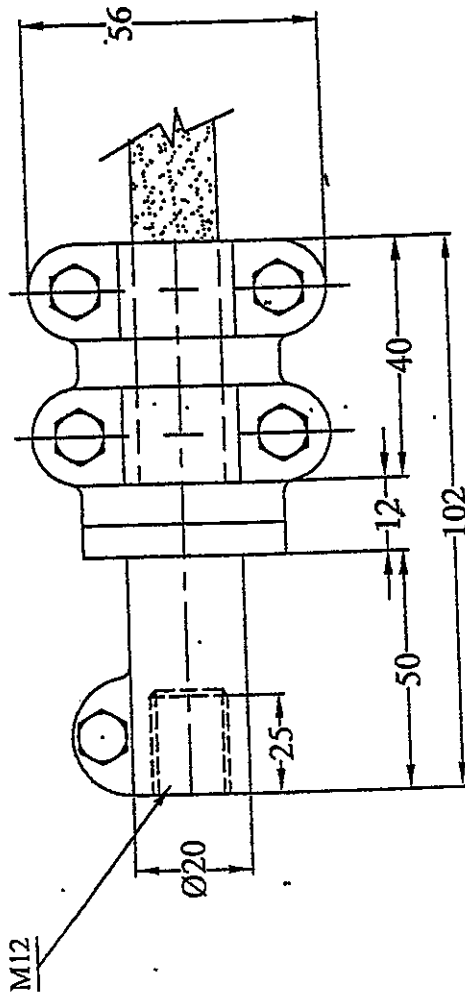
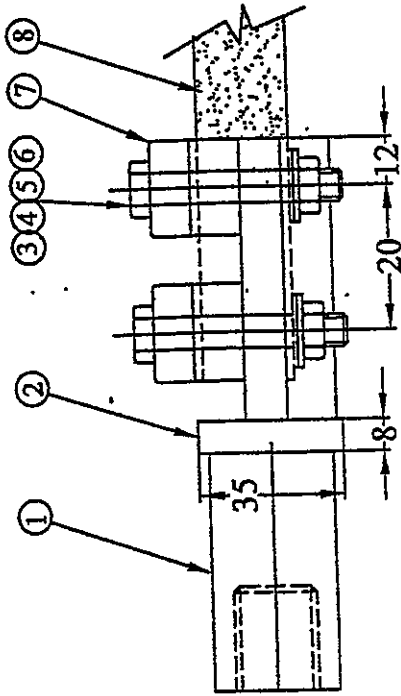
**PAN ELECTRO TECHNIC
 ENTERPRISES PVT.LTD.
 HYDERABAD**

REV. CHANGE RECORD SD/



Standardised Drawings for 100 KVA Station Transformer
 Bushing Assembly (1.1 kV, 250 Amps, Bare)
 STD/GTP-DWG/Approval No. 228 -2-6(8)/ Revision Mo. 0
 Prepared & Approved during October - 2011

PT. NO.	DESCRIPTION	MATERIAL
1	STEM	BRASS
2	CONNECTOR BASE	AL-ALLOY
3	HEX. BOLT M8	M.S
4	HEX. NUT M8	M.S
5	PLAIN WASHER	M.S
6	SPRING WASHER	M.S
7	GRIPPER	AL-ALLOY
8	CONDUCTOR	MOOSE



NOTE: 1. NAME OF THE MANUFACTURER: BHAVANI ELECTRICALS, HYDERABAD
 2. ALL SHARP EDGES WILL BE ROUNDED OFF
 3. RATED CURRENT: 250 AMPS.
 4. RATED VOLTAGE: 36 kV
 5. ALL M.S. PARTS HOT DIPPED GALVANIZED

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 Chief Engineer / Construction - 1
 APTRANSCO/VIDYUTH SOUDHA/HYD.

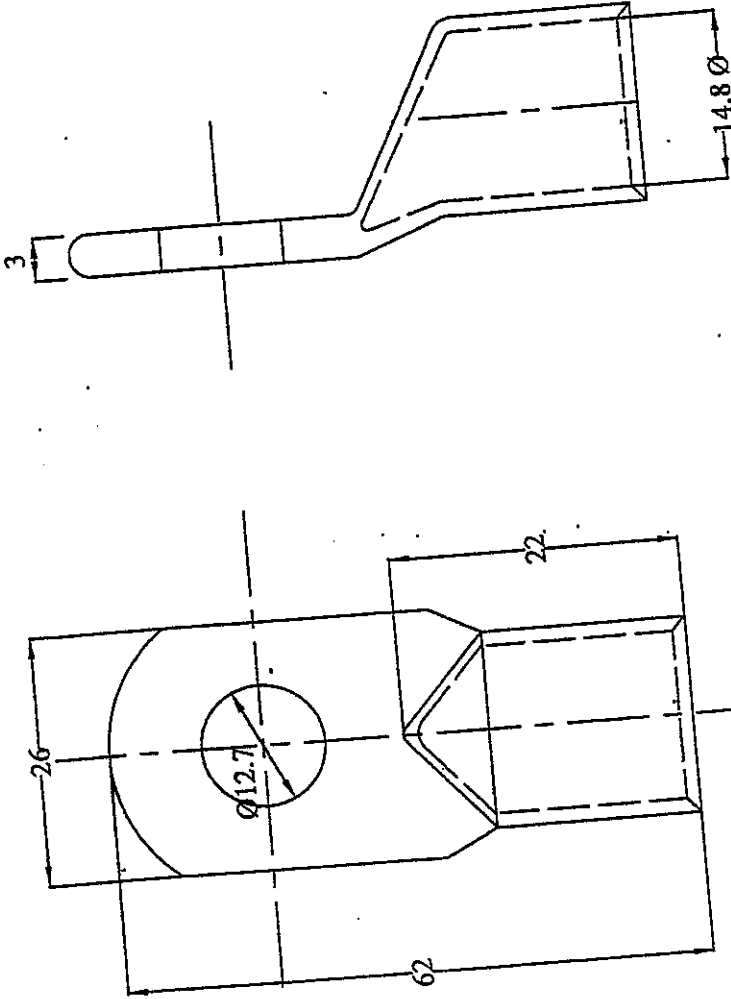


Customer: M/s. AP TRANSCO		W.O. SCALE	PAN ELECTRO TECHNIC
PETE/	SL. NO.	NTS	ENTERPRISES PVT. LTD.
6626 to	6640	PROJEC.	HYDERABAD
REV.			
Ct			

Standardised Drawings for 100 KVA Station Transformer
 HV Terminal Connector
 STD/GTP-DWG/Approval No. 228-2-7(8)/Revision No. 0
 Prepared & Approved during October - 2011

NOTE: ALL DIMENSIONS ARE IN mm.

FOR CUSTOMER'S APPROVAL/RECORDS

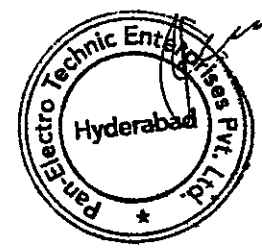


APPROVED FOR TURNKEY PROJECTS

[Signature]
CHIEF ENGINEER / CONSTRUCTION-1
A TRANSCO/MDYU-1 SOUTH/HYD.

Customer:	M/s AP TRANSCO	SCALE	PAN ELECTRO TECHNIC
		W/O	ENTERPRISES PVT LTD.
		PETE/	
		SL.NO.	PROJEC.

Standardised Drawings for 100 KVA Station Transformer
LV Terminal Connector
STD/GTP-DWG/Approval No. 228 -2-8(8)/ Revision Mo. 0
Prepared & Approved during October 2011



NOTE: 1. THIS TERMINAL LUG SHALL BE OF COPPER TINNED