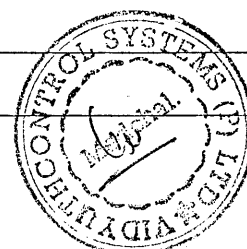


**GUARANTEED TECHNICAL PARTICULARS FOR 132KV CURRENT TRANSFORMER  
OF RATIO a)150/1A and b)300/1A**

SL.NO	PARTICULARS	
1.	Type of tank/Installation	Dead tank type/ outdoor installation
2.	Type of mounting	Pedestal
3.	Manufacturer's name and address and country of manufacture	M/s Vidyuth Control Systems Pvt. Ltd., S. No.851,IDA Medchal – 501 401, R.R District,A.P-INDIA.
4.	Conforming to standard	IS: 2705:1992
5	Type of voltage transformers	
5. a)	i) Primary and Secondary winding made out of (As per cl.4.12,4.13,4.14)	Primary – Copper Secondary – Copper Class H
	ii) Primary windings – Design density for short circuit current conductivity of metal used	185 A/ sq. mm 99.9% conductivity.
	i) Area of cross section of primary winding	a) 82 sq.mm for 150/1A b) 163 sq.mm for 300/1A
b)	ii) Area of cross section of secondary winding	0.82 sq. mm
c)	i) Material used for providing secondary terminals	Brass
6.	Rated primary voltage (KV rms)	132
7.	Rated highest voltage (KV rms)	145
8.	Rated frequency (Hz)	50
9.	Rated primary current (A)	a) 150 b) 300
10.	Rated secondary current (A)	1
11.	Ratio taps (on secondary side only)	Secondary side
12.	Type of insulation	Class 'A' in Oil
13.	Seismic acceleration (g)	0.5 g – horizontal; 0.3 g – vertical
14.	RIV at 1.1 x Rated voltage ( $\mu$ V)	< 500
15.	Tank material and tank coating (As per clause 3.1.3 & 3.1.4)	Mild steel / Zinc rich epoxy painted (or) Shade No. 697 of IS-5.
16.	Hardware exposed to atmosphere (As per clause 3.1.4)	Hot dip galvanized
17.	All other Bolts, Nuts and washers ( As per clause 3.1.4)	SS
18.	Porcelain housing and it make (Single piece only as per clause 3.1.2)	Porcelain housing is a single piece, BHEL/IEC/CJI/WSI/Jayashree/OBLUM/PUCI CHINA/RAVIKIRAN or any other reputed Make
19.	Sealing (Nitrogen gas cushion/Metal Bellow as per clause 3.1.7)	Nitrogen gas cushion
20.	Instrument security factor (As per clause 4.10)	Less than 10
21.	Whether test tap provided (As per clause 4.18)	Yes
22.	Acceptable limit of temperature	As per IS: 2705
23.	Acceptable partial discharge level at 1.1 times the rated voltage	< 10 pc at $U_m$ < 5 pc at $1.2 U_m / \sqrt{3}$
24.	Rated short time withstand current for 1 sec. duration (KA rms)	a) 150A: 15KA b) 300A: 30KA



**GUARANTEED TECHNICAL PARTICULARS FOR 132KV CURRENT TRANSFORMER  
OF RATIO a)150/1A and b)300/1A**

25.	Rated dynamic withstand current (KAP)	2.5 Times of STC Level
26.	Rated continuous thermal current (pu) where pu = rated current	120% of rated current
27.	1.2/50 micro second impulse withstand voltage (KVP)	650
28.	One minute power frequency withstand voltage (KV rms) of primary winding(Dry)	275
29.	One minute power frequency withstand voltage of secondary winding (KV rms)	3
30.	a) Minimum total Creepage distance of insulator bushing (mm)	3625
	b) Protected Creepage of distance of bushing (mm)	Not applicable
	Details of Cores	Core No. 1
31.1	Current Ratios A/A	a) 150/1 b) 300/1
31.2	Output burden (VA)	5
31.3	Class of Accuracy	0.2S
31.4	Accuracy limit factor	--
31.5	Min. knee point voltage (KPV)	Not Applicable
31.6	Secondary resistance corrected to 75°C	Not Applicable
31.7	Max exciting current at 20% of Knee point voltage 50% of Knee point voltage 100% of Knee point voltage	Not Applicable
31.8	Application	Metering
32.	Weight of oil (Kgs)	70 Kgs (Approx) *
33.	Total weight (Kg)	340 Kgs (Approx) *
34.	Mounting details	As per enclosed drawing No. 120 813
35.	Overall dimensions	As per enclosed drawing No. 120 813
36	Tan delta value measure at 10 KV to Um /√3	$< 5 \times 10^{-3}$

**NOTES:**

1. Porcelain height & other dimensions vary from manufacturer to manufacturer.
2. Total weight & oil quantity depending on porcelain insulator.
3. \* Indicated oil quantity & total weights are approximate values.

SL.NO.	CONTRACTUAL MAXIMUM DEMAND	CT RATIO
a)	Up to 30MVA	150/1A
b)	Above 30MVA and up to 200MVA	300/1A



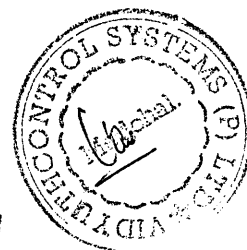
GTPs for 132 KV Single phase Current Transformer M/s  
Vidyuth Control Systems (P) Ltd make) (150/1A, 300/1A)

STD/GTP-DWG/Approval No. **207-19** Revision No. 0

Prepared & Approved during April – 2012

**APPROVED FOR TURNKEY PROJECTS**

**CHIEF ENGINEER / CONSTRUCTION -  
APTRANSCO/VIDYUTH SOUDHA/HYD**

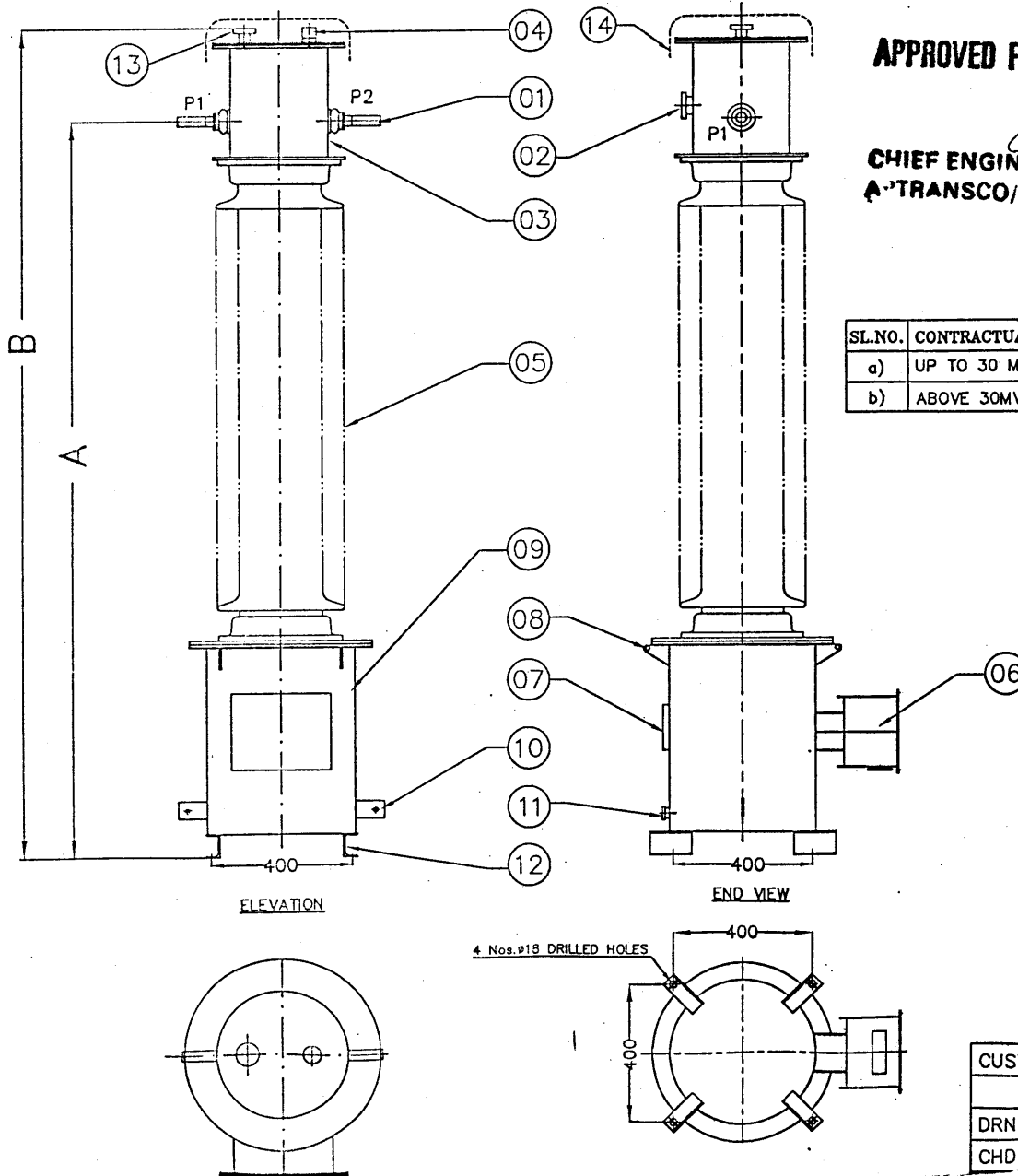


Signature \_\_\_\_\_  
Date \_\_\_\_\_

This must be returned  
Tender No. \_\_\_\_\_  
our written permission.

SYSTEMS PVT.LTD., MEDCHAL  
Connection with our enquiry/  
may it be copied or lent without

This drawing is the property of VIDYUTH CONTROL  
on request, it is submitted as confidential in  
it is not to be used for any other purpose nor



**APPROVED FOR TURNKEY PROJECTS**

**CHIEF ENGINEER / CONSTRUCTION-1**  
**A-TRANSCO/VIDYUTH SODHA/HYO.**

SL.NO.	CONTRACTUAL MAXIMUM DEMAND	CT RATIO
a)	UP TO 30 MVA	150/1A
b)	ABOVE 30MVA AND UP TO 55MVA	300/1A

SL.NO.	PART NAME	QTY
01	PRIMARY TERMINAL (30x80mm LONG)	2
02	OIL LEVEL INDICATOR	1 NO
03	TOP TANK	1 NO
04	OIL FILLING PLUG	1 NO
05	PORCELAIN INSULATOR (CREEPAGE DISTANCE : 3625mm MIN)	1 NO
06	TERMINAL BOX	1 NO
07	NAME PLATE	1 NO
08	LIFTING EYE	4 NOS
09	LOWER TANK	1 NO
10	EARTHING PAD	2 NOS
11	OIL DRAIN PLUG	1 NO
12	BASE CHANNELS	4 NOS
13	NITROGEN FILLING VALVE	1 NO
14	RAIN SHED	1 NO

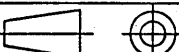

**NOTE :-**

- DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCE AND MINOR MODIFICATIONS WITHOUT ANY NOTICE.
- DIMENSIONAL TOLERANCE  $\pm 5\%$
- CTs WILL BE HERMETICALLY SEALED TYPE.
- ALL HARDWARES WILL BE HOT DIP GALVANIZED.
- CT TANKS WILL BE ZINC RICH EPOXY PAINT COLOUR-CONFORMING TO SHADE 697 OF IS:5
- OIL QUANTITY : 80 Lts (Approx) \*
- TOTAL WEIGHT OF CT : 340 Kgs (Approx) \*
- TOTAL CREEPAGE DISTANCE: 3625 mm
- SIZE OF THE SECONDARY TERMINALS : STUD TYPE CLIP ON TERMINALS (M5)

DIMENSIONS	MINIMUM	MAXIMUM
PORCELAIN HEIGHT	1280 mm	1550 mm
HEIGHT UP TO PRIMARY TERMINAL - "A"	2000 mm	2265 mm
TOTAL HEIGHT - "B"	2335 mm	2600 mm

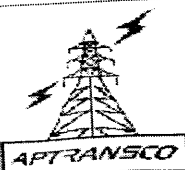
**NOTE :-**

- PORCELAIN HEIGHT & OTHER DIMENSIONS VARY FROM MANUFACTURER TO MANUFACTURER.
- DIMENSIONS A & B DEPENDING ON PORCELAIN HEIGHT.
- TOTAL WEIGHT & OIL QUANTITY DEPENDING ON PORCELAIN INSULATOR.
- \* INDICATED OIL QUANTITY AND TOTAL WEIGHTS ARE APPROXIMATE VALUES.

CUSTOMER		M/s. AP TRANSCO			
	NAME	DATE	ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE SPECIFIED.		SCALE : N.T.S
DRN.	21-9	29/12/12	GA DRAWING OF 132KV SINGLE PHASE CURRENT TRANSFORMERS		
CHD					
	(Signature)	31/1/13	 VIDYUTH CONTROL SYSTEMS (P) LTD., S.No.851, IDA, MEDCHAL - 501 401 R.R DISTRICT, A.P - INDIA		DRG.No.
					120 813
					REV. No. 00
					SHEET 1 OF 1

GA drawing of 132 KV Single phase Current Transformer  
( M/s Vidyuth Control Systems (P) Ltd make)  
(150/1A, 300/1A)  
STD/GTP-DWG/Approval No. **207-17** Revision No. 0


Prepared & Approved during April - 2012



Signature\_\_\_\_\_

Date\_\_\_\_\_

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Connection with our enquiry/  
may it be copied or lent withoutThis drawing is the property of VIDYUTH CONTROL  
on request. It is submitted as confidential in  
be used for any other purpose nor

<b>CURRENT TRANSFORMER</b> MADE IN INDIA			
IS: 2705:1992.			
HIGHEST SYSTEM VOLTAGE	145 KV	FREQUENCY	50 Hz
RATED SYSTEM VOLTAGE	132 KV		
RATED S.T.C	#	Idy	2.5 Times of STC
INSULATION LEVEL	275/650 KV	OIL QUANTITY	80 Lts(Approx)
TYPE DESIGNATION	132CT/D	TOTAL WEIGHT	340 Kgs(Approx)
CORE		CORE-I	
RATIO	PRIMARY (A)	**	
	SECONDARY (A)	1	
RATED BURDEN (VA)		5	
ACCURACY CLASS		0.2S	
YEAR OF MANUFACTURE	2012	SL NO.	*
CUSTOMER	M/s. APTRANSCO,		
PO.NO.			
 <b>VIDYUTH CONTROL SYSTEMS PVT LTD.,</b> S.No.851, IDA, MEDCHAL-501 401.R.R DISTRICT, A.P, INDIA.			

NAME PLATE

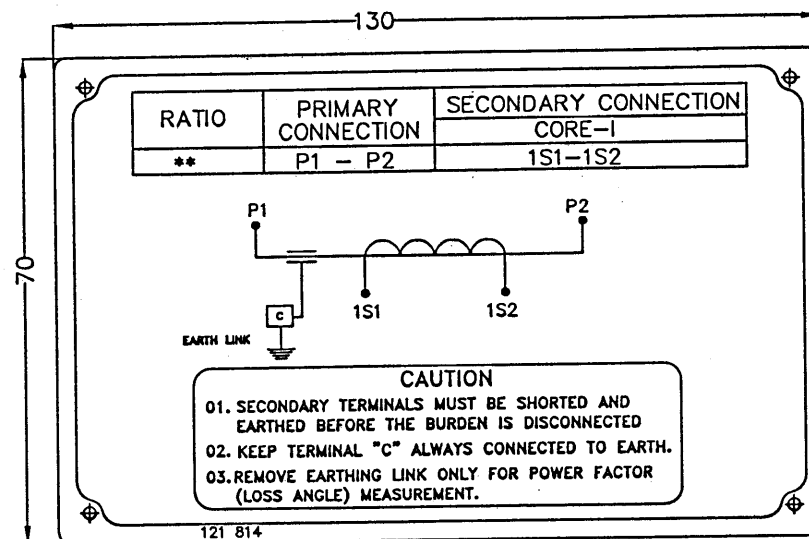
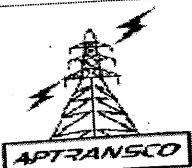
SL.NO.	CONTRACTUAL MAXIMUM DEMAND	CT RATIO
a)	UP TO 30 MVA	150/1A
b)	ABOVE 30MVA AND UP TO 55MVA	300/1A

NOTE :-

1. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCE AND MINOR MODIFICATIONS WITHOUT ANY NOTICE.
2. DIMENSIONAL TOLERANCE  $\pm 5\%$
3. CAUTION WILL BE IN RED LETTERS.
4. MATERIALS : ALUMINIUM SHEET.
- 5.\* SL.No.TO BE PUNCHED BEFORE DISPATCH.

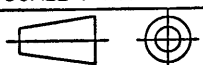

Name and connection diagram plate for 132 KV Single phase  
Current Transformer ( M/s Vidyuth Control Systems (P) Ltd  
make) (150/1A, 300/1A)  
STD/GTP-DWG/Approval No. **207-18** Revision No. 0

Prepared &amp; Approved during April - 2012

CONNECTION DIAGRAM PLATE**APPROVED FOR TURNKEY PROJECTS**

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

**RATIO	# RATED STC
1) 150/1A	15KA rms for 1 Sec.
2) 300/1A	30KA rms for 1 Sec.

CUSTOMER		M/s. AP TRANSCO		SCALE : N.T.S	
NAME	DATE	ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE SPECIFIED.			
DRN.	24/3/12	NAME & CONN. DIAGRAM PLATE FOR 132KV CURRENT TRANSFORMERS		DRG.No.	
CHD	24/3/12			121 814	
CHD.	24/3/12	 VIDYUTH CONTROL SYSTEMS (P) LTD., S.No.851,IDA MEDCHAL - 501 401. R.R DISTRICT,A.P - INDIA		REV. No. 00	
CHD.	24/3/12			SHEET 1 OF 1	
APPD.	30/3/12				