FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN mm)

DRG. NO. 3 469 00 01389

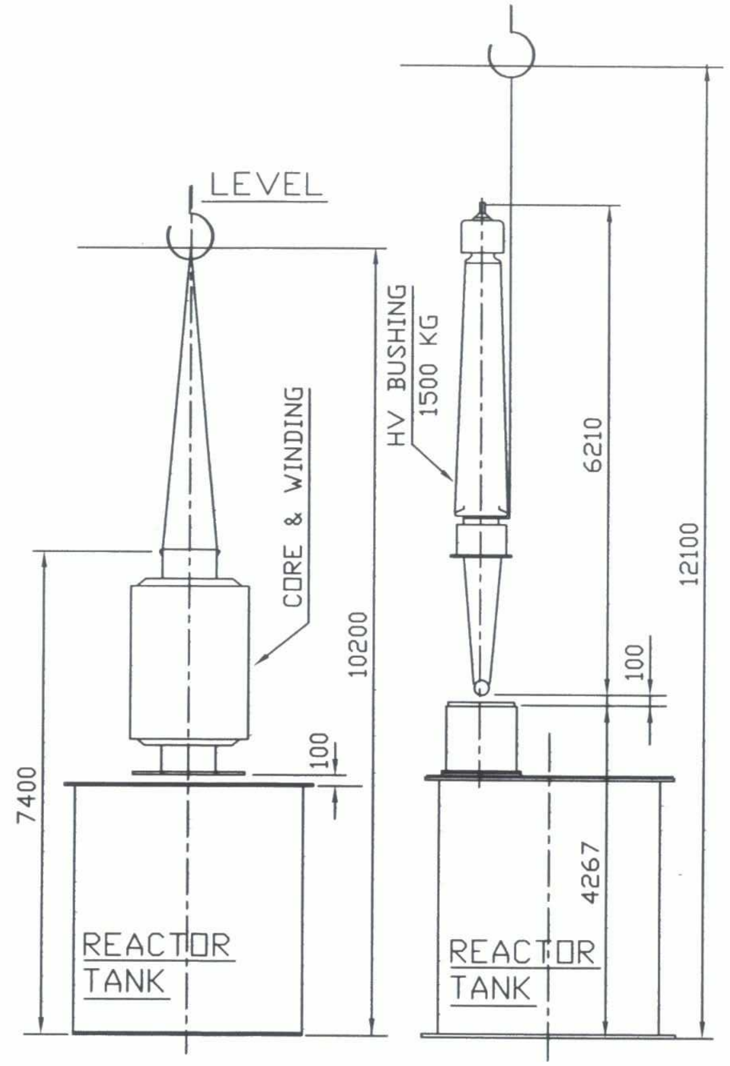
NOTES:-

1. WHEN REFERRING THIS DRAWING PLEASE QUOTE MVAR & W.O. NO.
2. 320 DIA. TWIN BI-DIRECTIONAL ROLLERS MOUNTED AT 1676 mm RAIL GAUGE IN BOTH DIRECTION ARE PROVIDED FOR MOVEMENT OF REACTOR AT SITE AND ROLLERS ARE TO BE REMOVED BEFORE ERECTION
3. PAINTING SHALL BE AS PER POWER GRID SPECIFICATION.
4. WIRING FROM INSTRUMENT CTS. ETC. ARE NOT SHOWN FOR CLARITY.
5. FOUNDATION BOLTS ARE IN THE SCOPE OF BHEL SUPPLY.
6. FOR PART LIST OF OGA REFER DRAWING NO. 3 469 00 01390.
7. DIMNS. SHOWN THUS ▭ ARE OVERALL SHIPPING DIMENSIONS EXCLUSIVE OF PACKING.
8. DIMENSIONS SHOWN ARE WITH REF.TO PLINTH LEVEL. PLEASE NOTE THAT PLINTH LEVEL IS 450 MM ABOVE THE GROUND LEVEL.
9. FOR TANK COVER BOLTING REFER DETAIL 'B' SHT. NO. 04.
10. △ REACTOR DRAWING IS MADE BASED ON POWER GRID TECHNICAL SPECIFICATION (REV.07).
11. △ FOUNDATION OF THE REACTOR (BOLTED) SHALL EXACTLY MATCHED WITH EARLIER APPROVED REACTOR.

IMPORTANT NOTE:-

1. THE DESIGN FEATURES SHOWN ON THIS DRAWING (GENERALLY INLINE WITH IEC : 60076-6 APPLICABLE STANDARD & AGREED CUSTOMER SPECIFICATION) MEETS THE STATUTORY, REGULATORY & SAFETY REQUIREMENTS WITH RESPECT TO EARTHING ARRANGEMENT, DANGER & OTHER LABELS, CLEARANCES IN AIR PROVISION FOR PRESSURE RELIEF DEVICE, GAS ACTUATED RELAY AND ANTI-EARTHQUAKE CLAMPING ARRANGEMENT.

MIN. AIR CLEARANCES		
	420 KV	145 KV
	4000	NA
PHASE TO EARTH	3500	1050



UN-TANKING

UN-TANKING OF H.V. BUSHING

TABLE

SUB ASSY. MK NOS.																							
SUB ASSY	MK02	MK03	MK04	MK05	MK06	MK07	MK08	MK09	MK10	MK11	MK12	MK13	MK14	MK15	MK16	MK17	MK18	MK19	MK20	MK21	MK22	MK23	MK24	MK25
QTY.	001	001	001	001	001	001	001	001	001	001	001	001	001	001	001	001	001	001	001	001	001	001	001	002

पावरग्रिड
Rfon (हस्ताक्षर)
SDE (पदनाम)
12614 (तिथि)
श्रेणियां CAT-I
I. फेब्रिकेशन/निर्माण/हेतु अनुमोदित/जारी
II. फेब्रिकेशन/निर्माण/हेतु अनुमोदित/जारी बशर्ते दी गई टिप्पणियों एवं आशोधनों को सम्मिलित किया जाए। कृपया आशोधित दस्तावेज अनुमोदनार्थ प्रस्तुत करें।
III. टिप्पणियों सम्मिलित कर पुनः अनुमोदनार्थ प्रस्तुत करें।
IV. सूचनार्थ एवं रिकार्ड हेतु।
V. अनुमोदित नहीं।
पावर ग्रिड कारपोरेशन ऑफ इंडिया लि० अभियांत्रिकी (उपकेन्द्र), गुड़गाँव, हरियाणा।

STANDARD DRAWING

REV	DATE	ALT		CKD	APPD	ZONE
01	15.05.14	RAKESH		KD/KG	AKP/MK	CUSTOMER COMMENTS IN CORPORATED.

TYPE OF PRODUCT	125 MVAR, 420 KV, 3-PH., ONAN COOLED SHUNT REACTOR
NAME OF CUSTOMER/ STANDARD	M/S POWERGRID CORPORATION OF INDIA LTD.
ADDITIONAL INFORMATION STANDARD	भारत हेवी इलेक्ट्रिकल्स लिमिटेड भोपाल BHARAT HEAVY ELECTRICALS LTD. BHOPAL
STATUS OF DRAWING 'U'	DEPT TRE, CODE 406, WEIGHT(kg) -----, SCALE -
DISTRIBUTION OF PRINTS TRE-1,TRM-3	TITLE OUTLINE GENERAL ARRGT. (125 MVAR SHUNT REACTOR)

	NAME	SIGN	DATE
DRN.	PARVEEN	-SD/-	10.04.14
CHD.	KD/GK	-SD/-	15.04.14
APPD.	AKP/MK	-SD/-	20.04.14

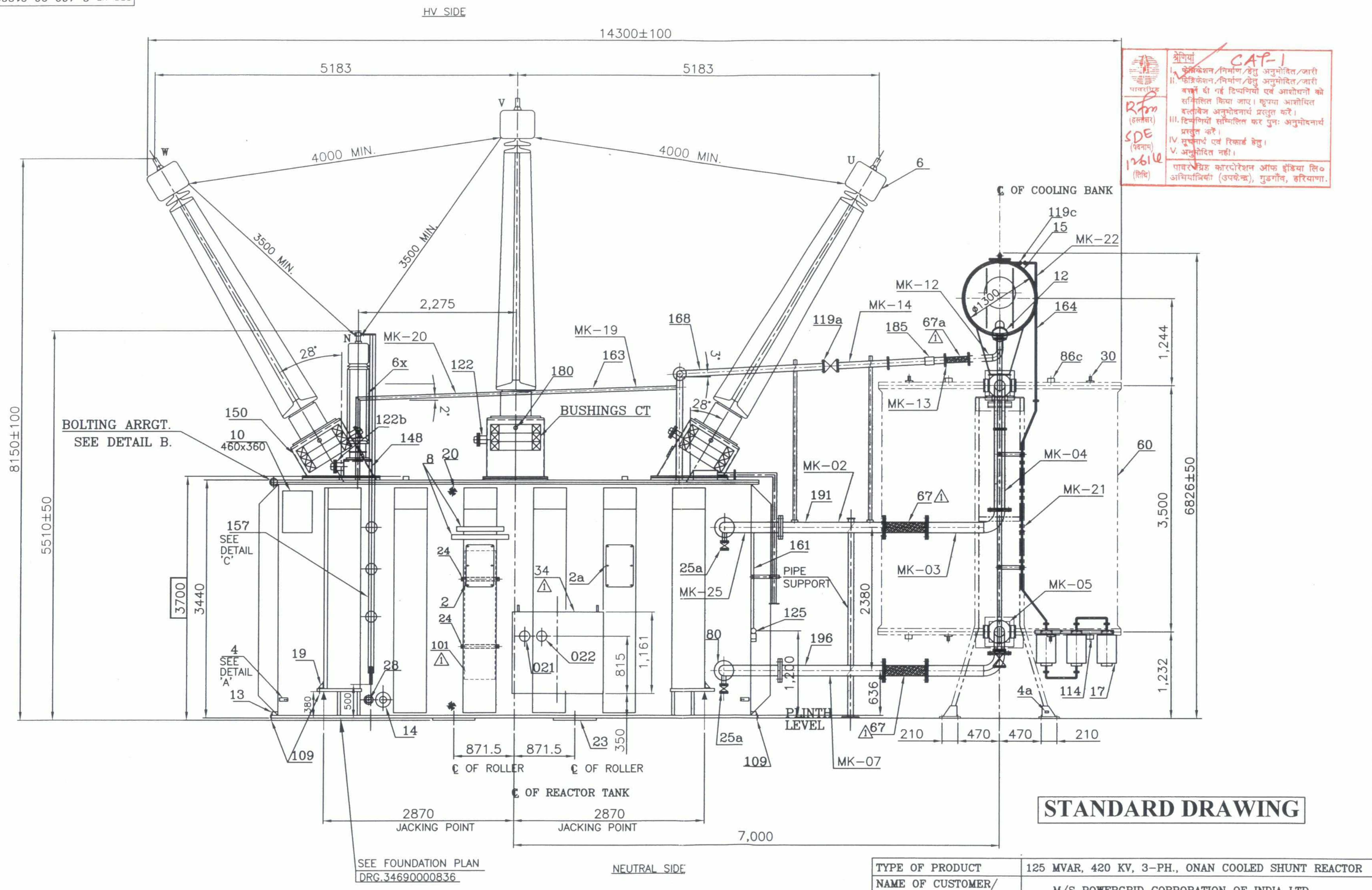
DRG. NO. 3 469 00 01389 REV. 01
SHEET 01 OF 04

INVENTORY NO. | SIGN.DATE | REF.DRG.NO.

FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN mm)

THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LTD.
IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

DRG. NO. 3 469 00 01389



श्रेणियाँ CAT-I
I. कैमिकेशन/निर्माण/हेतु अनुमोदित/जारी
II. फ़िकेशन/निर्माण/हेतु अनुमोदित/जारी बताई दी गई टिप्पणियों एवं आशोधनों को सम्मिलित किया जाए। कृपया आशोधित इलेक्ट्रोज अनुमोदनार्थ प्रस्तुत करें।
III. टिप्पणियाँ सम्मिलित कर पुनः अनुमोदनार्थ प्रस्तुत करें।
IV. सूचनार्थ एवं रिकार्ड हेतु।
V. अनुमोदित नहीं।
पावरग्रिड कारपोरेशन आफ इंडिया लि० अभियन्त्रिकी (उपकेन्द्र), गुड़गाँव, हरियाणा।
(हस्ताक्षर) (नाम) SDE (तिथि) 12/6/14

STANDARD DRAWING

TYPE OF PRODUCT	125 MVAR, 420 KV, 3-PH., ONAN COOLED SHUNT REACTOR
NAME OF CUSTOMER/ PRODUCT	M/S POWERGRID CORPORATION OF INDIA LTD.,
ADDITIONAL INFORMATION	भारत हेवी इलेक्ट्रिकल्स लिमिटेड भोपाल BHARAT HEAVY ELECTRICALS LTD. BHOPAL
STANDARD	
STATUS OF DRAWING 'U'	DEPT TRE; CODE 406; WEIGHT(kg) -----; SCALE SCALE-
DISTRIBUTION OF PRINTS TRE-1,TRM-3	TITLE OUTLINE GENERAL ARRGT. ELEVATION

	NAME	SIGN	DATE
DRN.	PARVEEN	-SD/-	10.04.14
CHD.	KD/GK	-SD/-	15.04.14
APPD.	AKP/MK	-SD/-	20.04.14

DRG. NO. 3 469 00 01389 REV. 01 SHEET 02 OF 04

REV	DATE	ALT		CKD	APPD	ZONE
01	15.05.14		RAKESH	KD/KG	AKP/MK	CUSTOMER COMMENTS INCORPORATED.

INVENTORY NO. | SIGN.DATE | REF.DRG.NO.

FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN mm)

DRG. NO. 3 469 00 01389

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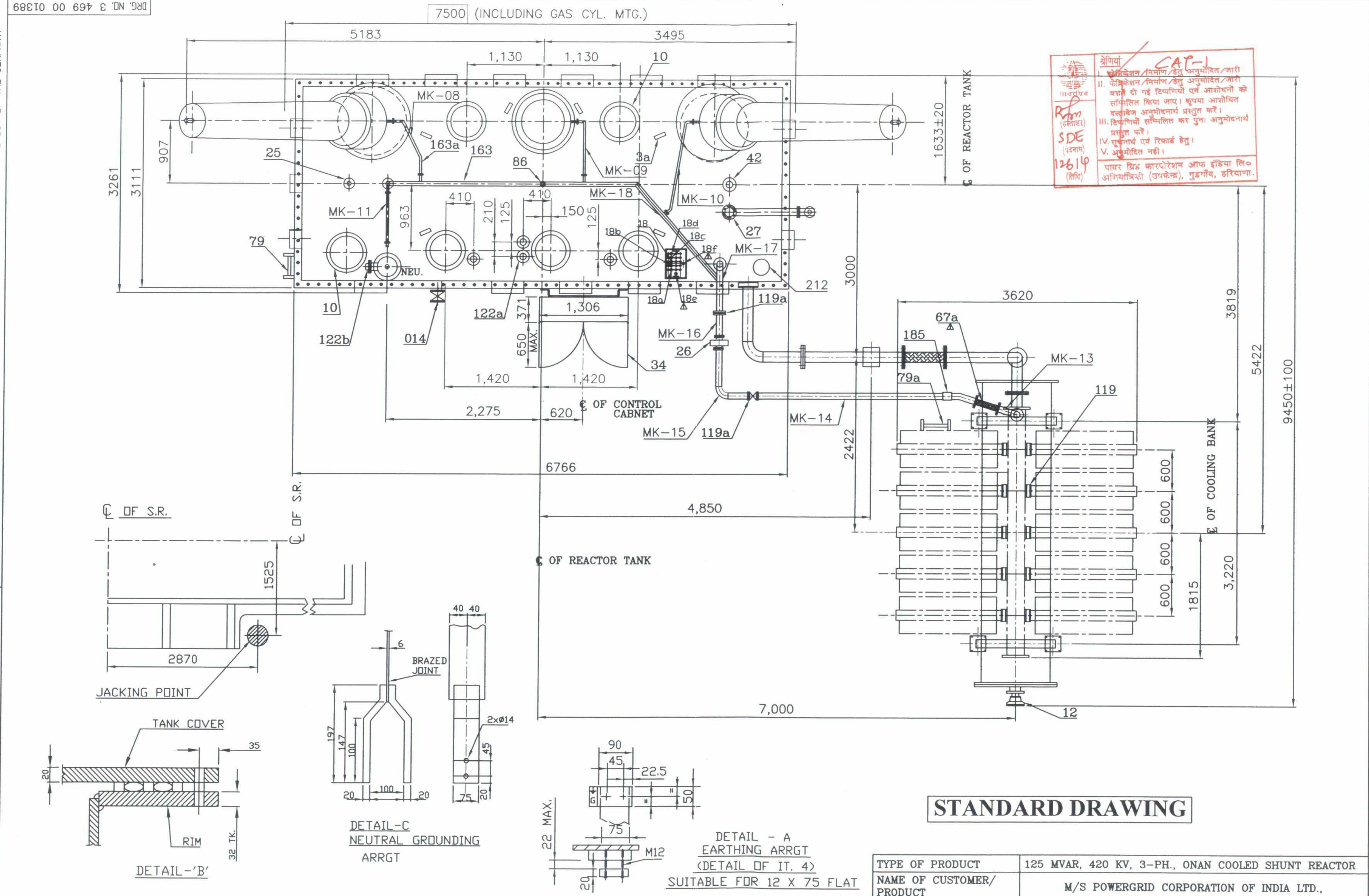
IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.



CAT-I

SDE

12.6.14

पावर ग्रिड कारपोरेशन ऑफ इंडिया लि०

STANDARD DRAWING

REV	DATE	ALT		
01	15.05.14	CKD	KD/KG	
		APPD	AKP/MK	
ZONE	CUSTOMER COMMENTS IN CORPORATED.			

ALT: RAKESH

TYPE OF PRODUCT	125 MVAR, 420 KV, 3-PH., ONAN COOLED SHUNT REACTOR
NAME OF CUSTOMER/ PRODUCT	M/S POWERGRID CORPORATION OF INDIA LTD.,
ADDITIONAL INFORMATION	भारत हेवी इलेक्ट्रिकल्स लिमिटेड भोपाल BHARAT HEAVY ELECTRICALS LTD. BHOPAL
STANDARD	
STATUS OF DRAWING 'U'	DEPT: TRE; CODE: 406; WEIGHT(kg): -----; SCALE: SCALE-
DISTRIBUTION OF PRINTS: TRE-1, TRM-3	TITLE: OUTLINE GENERAL ARRGT. PLAN

	NAME	SIGN	DATE
DRN.	PARVEEN	-SD/-	10.04.14
CHD.	KD/GK	-SD/-	15.04.14
APPD.	AKP/MK	-SD/-	20.04.14

DRG. NO. 3 469 00 01389 REV. 01

SHEET 03 OF 04

INVENTORY NO. | SIGN.DATE | REF.DRG.NO.

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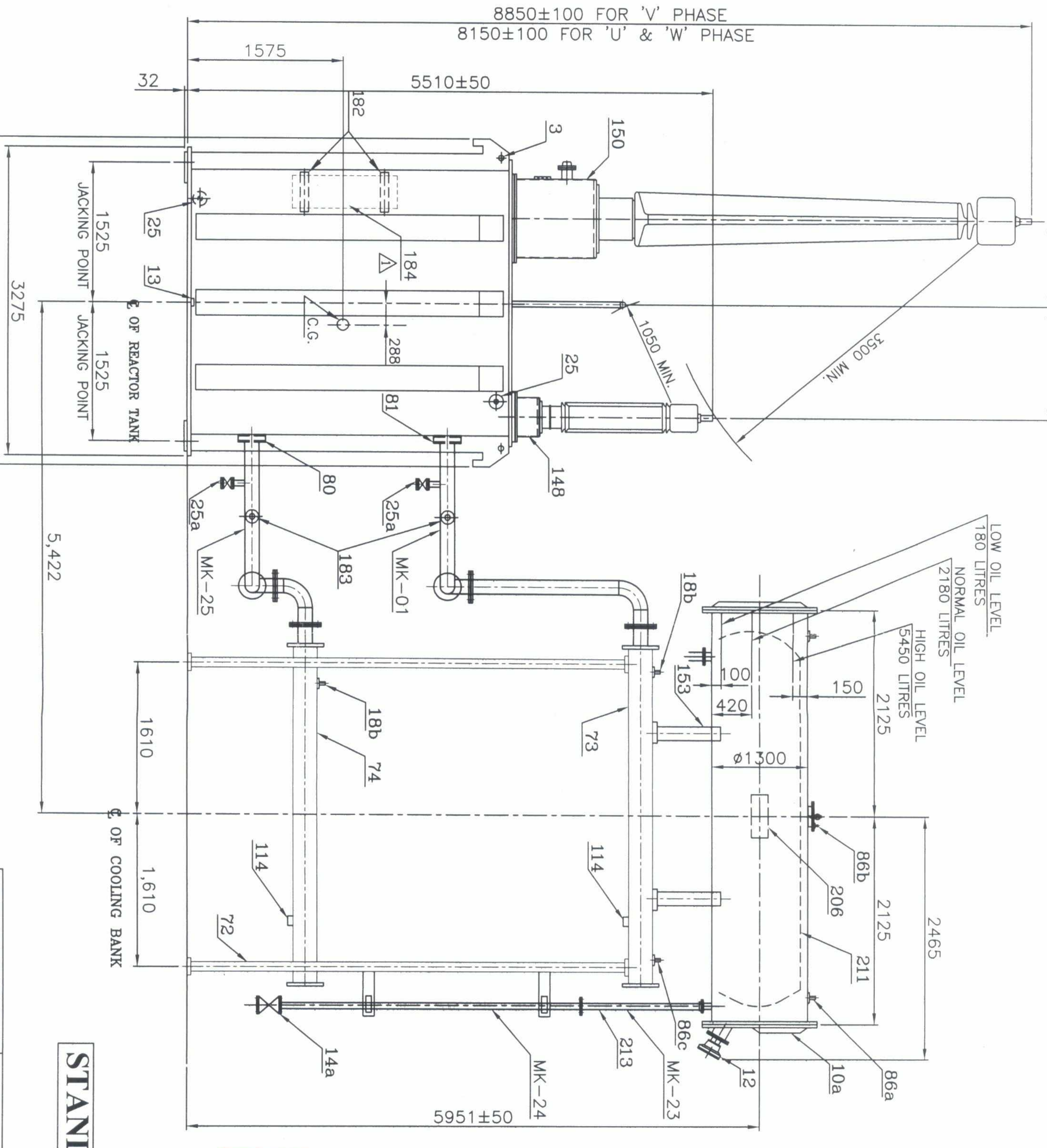
IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

FIRST ANGLE PROJECTION

DRG. NO. 3 469 00 01389

INVENTORY NO.	SIGN.DATE	REF.DRG.NO.



STANDARD DRAWING

CAT-I

12614

REV	DATE	ALT	CKD	APPD	ZONE
01	15.05.14	RAKESH	KD/KG	AKP/MK	CUSTOMER COMMENTS IN CORPORATED

TYPE OF PRODUCT	125 MVAR, 420 KV, 3-PH., ONAN COOLED SHUNT REACTOR
NAME OF CUSTOMER/ STANDARD	M/S POWERGRID CORPORATION OF INDIA LTD.
ADDITIONAL INFORMATION	STANDARD
STATUS OF DRAWING	'U'
DISTRIBUTION OF PRINTS	TRE-1, TRM-3

भारत हैवी इलेक्ट्रिकल्स लिमिटेड भोपाल
BHARAT HEAVY ELECTRICALS LTD. BHOPAL

DEPT	CODE	WEIGHT(kg)	SCALE		NAME	SIGN	DATE
TRE	406	----	SCALE-	DRN.	PARVEEN	-SD/-	10.04.14
				CHD.	KD/KG	-SD/-	15.04.14
				APPD.	AKP/MK	-SD/-	20.04.14

TITLE: OUTLINE GENERAL ARRGT. SIDE VIEW

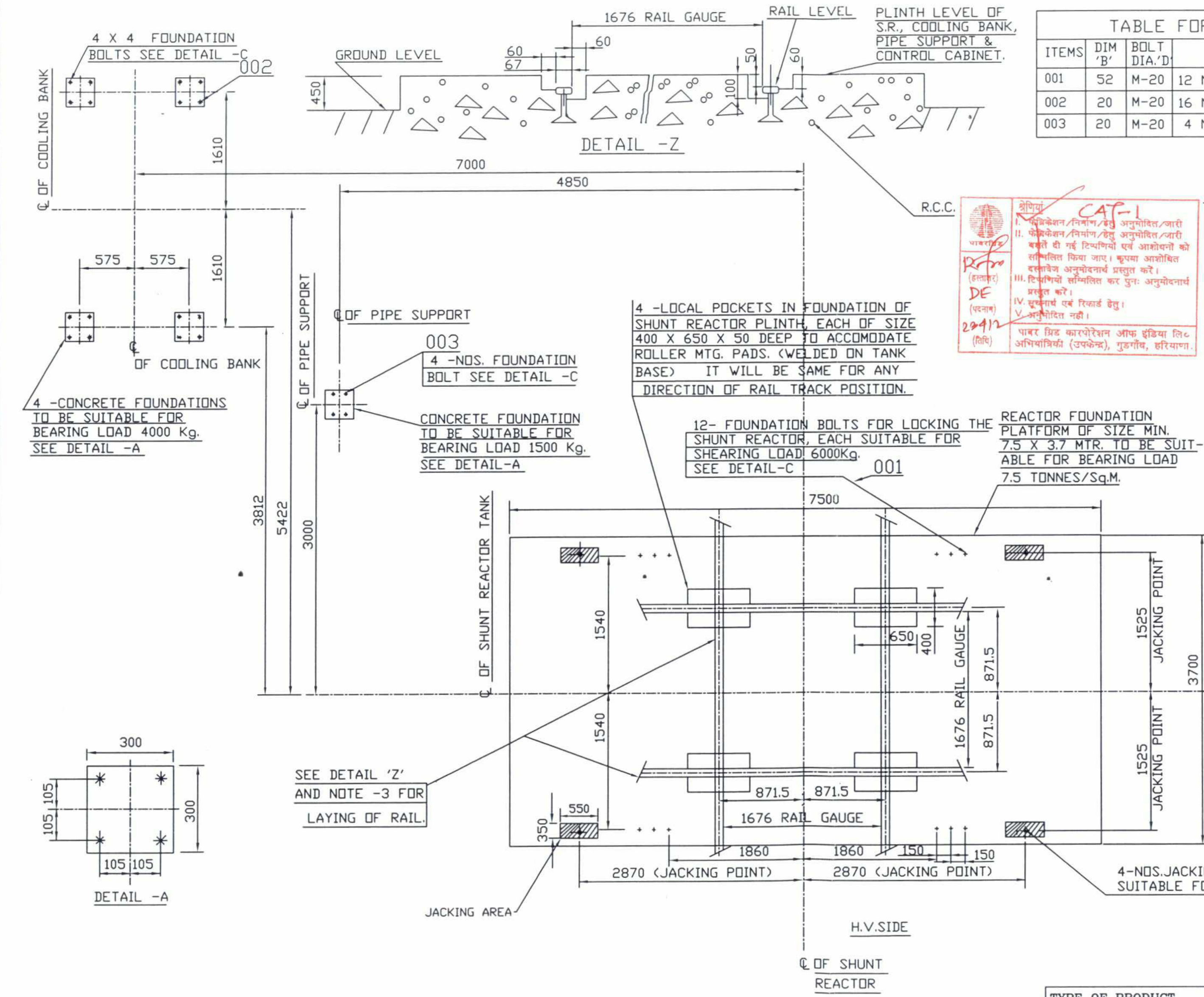
DRG. NO. 3 469 00 01389 REV. 01
SHEET 04 OF 04

(ALL DIMENSIONS ARE IN mm)

FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

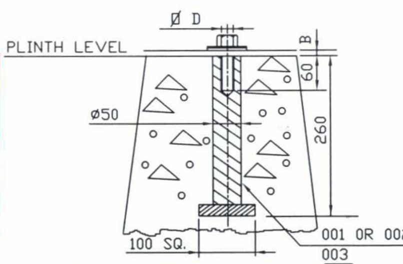
DRG. NO. 3 469 00 00836



ITEMS	DIM 'B'	BOLT DIA.'D'	DESCRIPTION
001	52	M-20	12 NOS. FOR SHUNT REACTOR MTG. MARKED THUS +
002	20	M-20	16 NOS. FOR RADIATOR SUPPORT MARKED THUS ✳
003	20	M-20	4 NOS. FOR PIPE SUPPORT MARKED THUS ⊕

TABLE FOR FOUNDATION BOLT

श्रेणियां
I. विनिर्माण/निर्माण/हेतु अनुमोदित/जारी
II. विनिर्माण/निर्माण/हेतु अनुमोदित/जारी बशर्ते दी गई टिप्पणियां एवं आशोधनों को सम्मिलित किया जाए। कृपया आशोधित दस्तावेज अनुमोदनार्थ प्रस्तुत करें।
III. टिप्पणियां सम्मिलित कर पुनः अनुमोदनार्थ प्रस्तुत करें।
IV. सूचनार्थ एवं रिकार्ड हेतु।
V. अनुमोदित नहीं।
पावर ग्रिड कारपोरेशन ऑफ इंडिया लि० अभियांत्रिकी (उपकेन्द्र), गुड़गाँव, हरियाणा।
CAT-I
DE
20/4/12



DETAIL OF FOUNDATION BOLTS
DETAIL-C
REFER TABLE FOR DIMS. - B & D

NOTES:-
1. FOUNDATION BOLTS WITH HARDWARES WILL BE SUPPLIED BY BHEL.
2. FOR OUTLINE GENERAL ARRGT. REFER DRG. 3 469 00 01075.
3. POSITION OF RAILS HAVE BEEN SHOWN IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS, HOWEVER ACTUAL LAYING OF RAILS SHALL BE IN ONE DIRECTION ONLY AS PER CUSTOMER'S REQUIREMENT AS SHOWN IN DETAIL 'Z'.
4. THE DRAWING GIVES THE SIZE AND LOCATING DIMENSIONS OF THE LOAD BEARING PADS PROVIDED WITH REACTOR AND ACCESSORIES. SUITABLE CONCRETE SLAB SIZE TO RECEIVE THESE PADS TO BE DECIDED BY CUSTOMER'S CIVIL ENGINEER.
5. POCKETS OF SUITABLE SIZE MAY BE LEFT WHILE CASTING. FOUNDATION FOR EMBEDDING FEMALE PART OF FOUNDATION BOLT(TO BE SUPPLIED BY BHEL) AT THE TIME OF FINAL ERECTION.

STANDARD DRAWING.

REV	DATE	ALT	MANOJ	REV	DATE	ALT	R.K.P
02	29.03.12	CKD	KD/KG	01	18.04.09	CKD	R.P
		APPD	A.K.P/MK			APPD	A.K.G/N.J
ZONE 107-D	DGA DRAWING NO. WAS 34690000834.			ZONE	JACKING POINT DIM. 2870 WAS 2750.		

TYPE OF PRODUCT	125 MVAR, 420 KV, 3-PH., ONAN COOLED SHUNT REACTOR
NAME OF CUSTOMER/PRODUCT	M/S POWERGRID CORPORATION OF INDIA LTD.
ADDITIONAL INFORMATION	STANDARD
STATUS OF DRAWING	'U'
DISTRIBUTION OF PRINTS	TRE-1,TRM-3

भारत हेवी इलेक्ट्रिकल्स लिमिटेड भोपाल
BHARAT HEAVY ELECTRICALS LTD. BHOPAL

DEPT	CODE	WEIGHT(kg)	SCALE
TRE	406	-----	SCALE-

TITLE: FOUNDATION PLAN

	NAME	SIGN	DATE
DRN.	R.K. PATEL	-sd-	18.02.09
CHD.	R.P	-sd-	18.02.09
APPD.	A.K.G./A.D.	-sd-	18.02.09

DRG. NO. 3 469 00 00836 REV. 02
SHEET 01 OF 01

INVENTORY NO. | SIGN.DATE | REF.DRG.NO.