

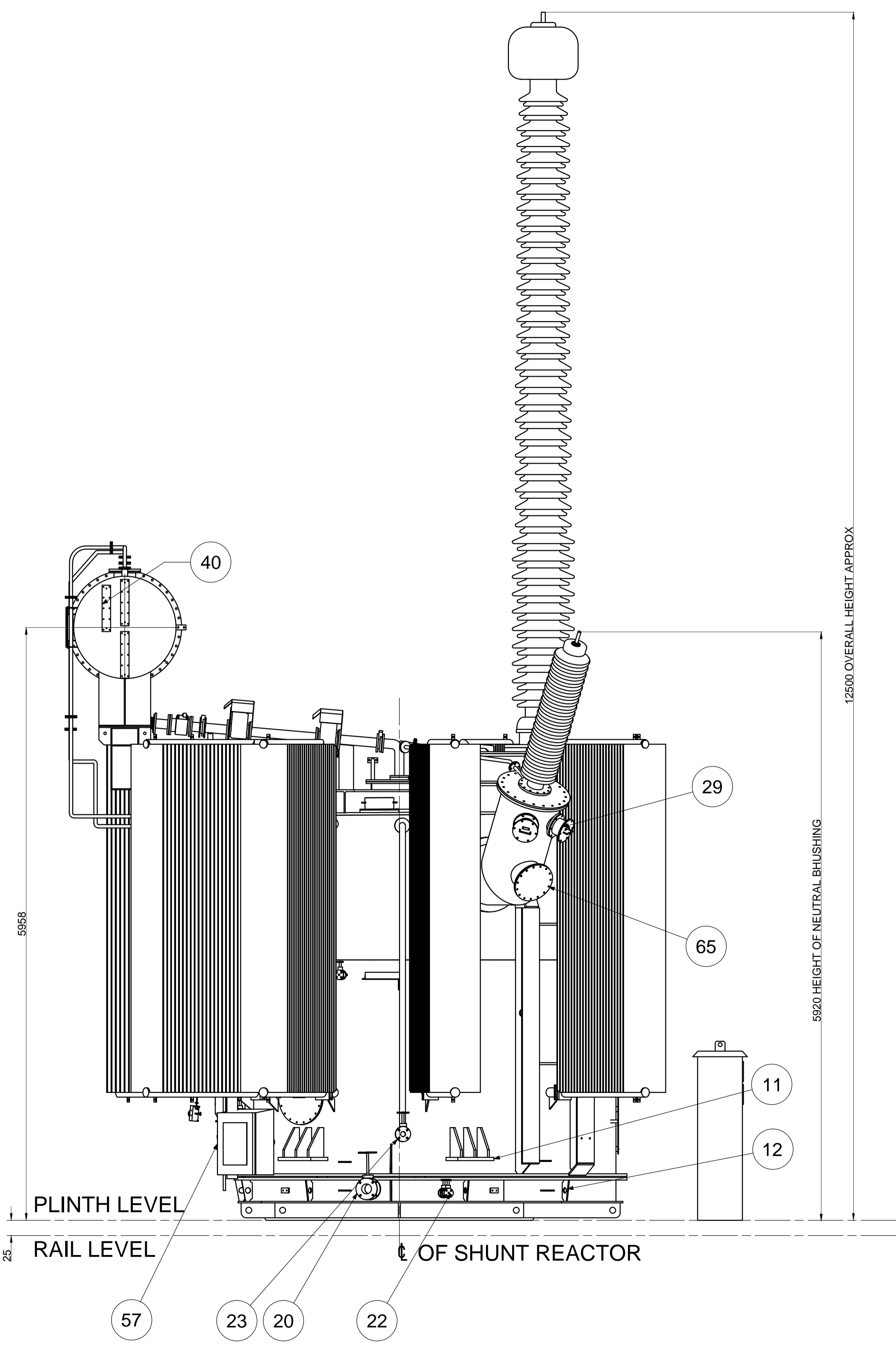
DETAIL "C"

HV SIDE

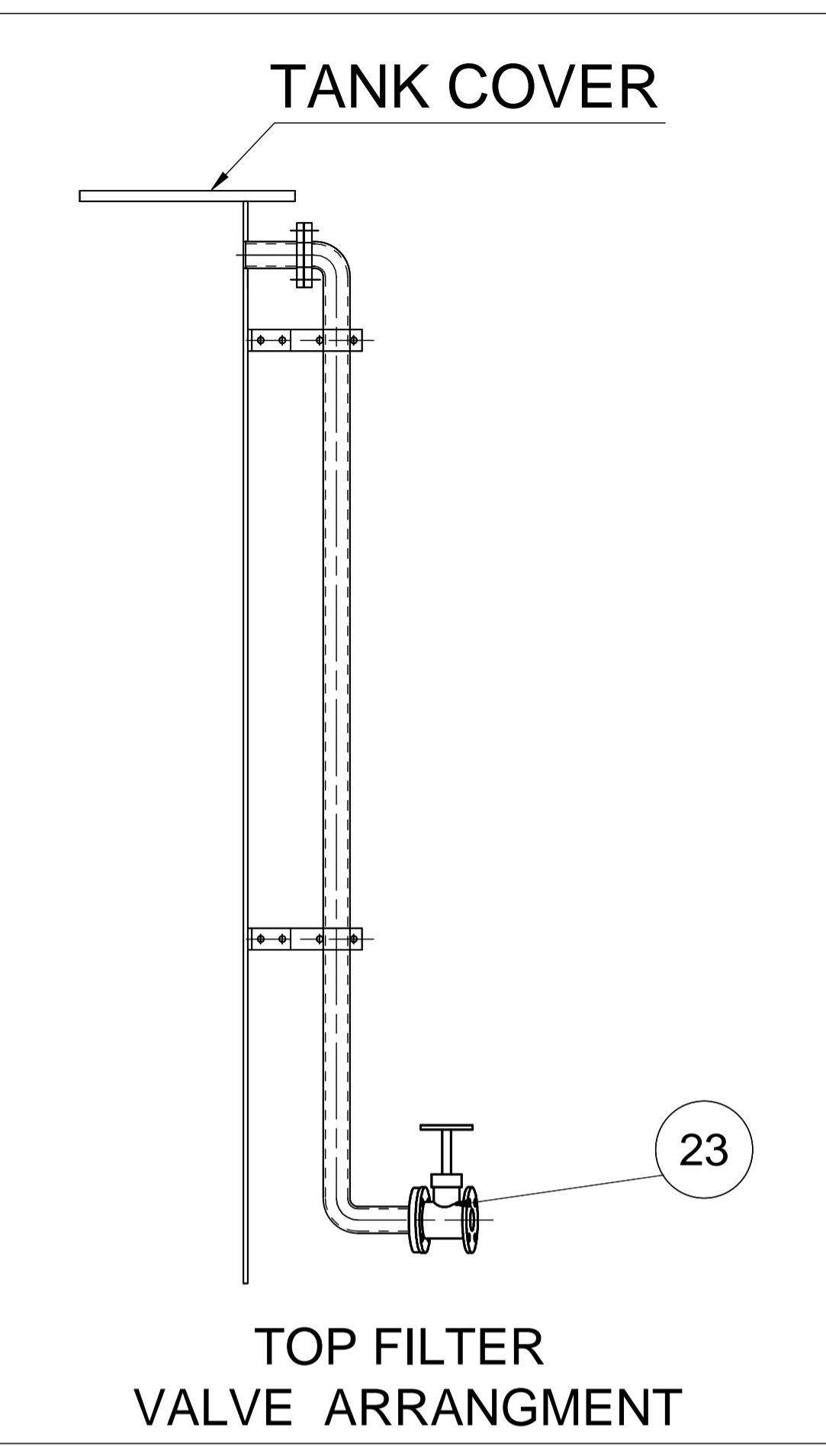
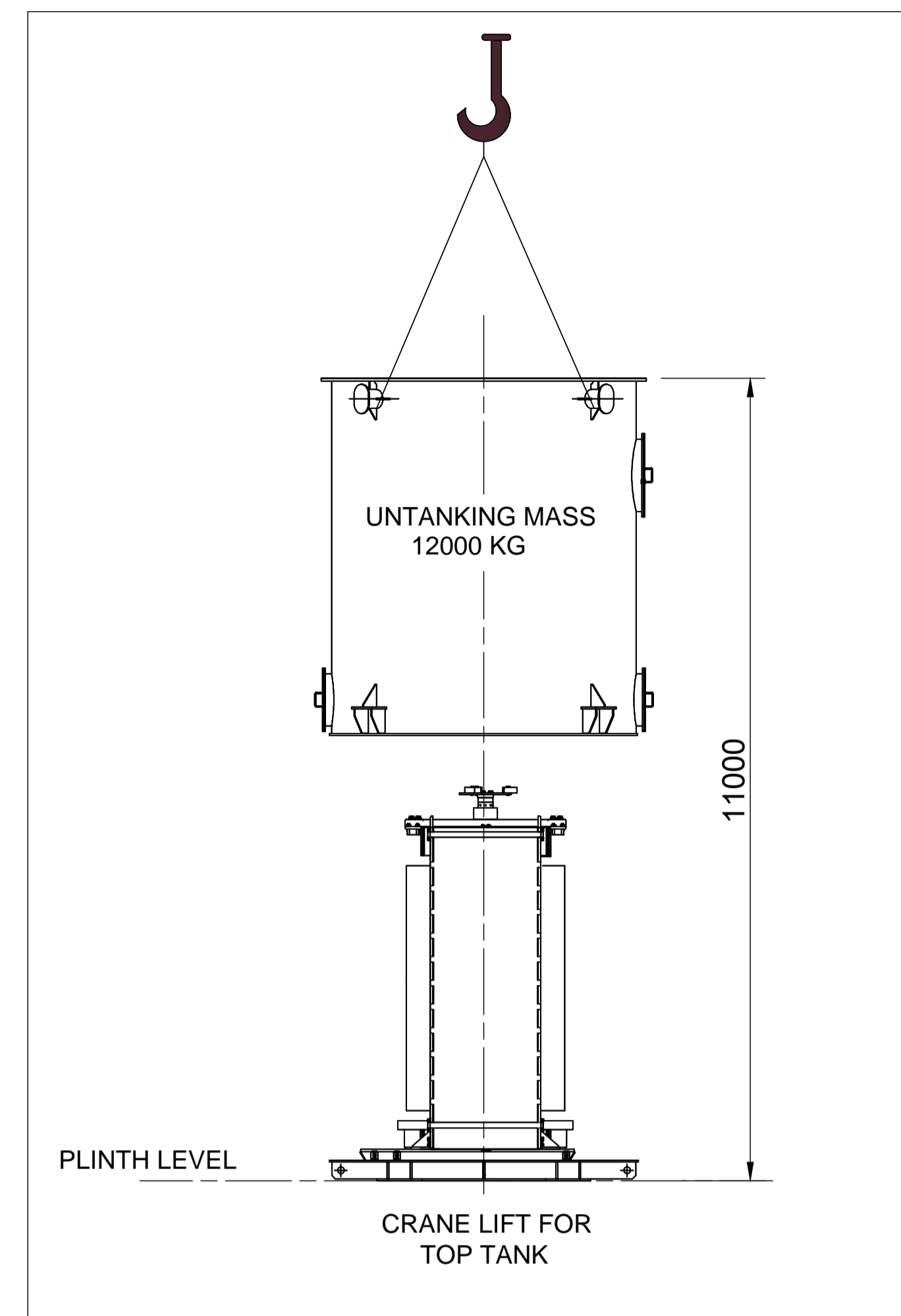
WITHDRAWAL DIRECTION

TOP VIEW

| REV. No   | REVISED DATE | DESCRIPTION    | DESIGNED                                      | DRAWN | CHECKED    | APPROVED |
|---|--------------|----------------|---|-------|------------|----------|
| 00  | 17.10.2012   | ORIGINAL ISSUE | JS  | JS    | AZAD       | ABM      |
| REVISIONS   |              |                |   |       |            |          |
| CLIENT :  |              |                | CONSULTANT :                                  |       |            |          |
| <b>POWER GRID CORPORATION OF INDIA LIMITED</b><br>(A GOVERNMENT OF INDIA ENTERPRISE)  |              |                |   |       |            |          |
| SUPPLIER / CONTRACTOR :   |              |                | PROJECT 1 :- POWERGRID - GAYA - T-21133       |       |            |          |
| <b>ALSTOM T&amp;D INDIA LTD.</b><br><small>TRANSFORMERS &amp; ELECTRICAL Power Transformers, High Voltage Products 137/Whitefield, 500110 (Gurgaon)</small>   |              |                | PROJECT 2 :- POWERGRID - VARANASI - T-21134   |       |            |          |
|   |              |                | PROJECT 3 :- POWERGRID - RANCHI - T-21136     |       |            |          |
|   |              |                | PROJECT 4 :- POWERGRID - PADGHE - T-21137     |       |            |          |
|   |              |                | PROJECT 5 :- POWERGRID - AURANGABAD - T-21138 |       |            |          |
| PROJECT :- REACTOR PACKAGE R1 FOR 765/400/220KV GAYA, 765/400KV RANCHI, 765KV DHARMANJAYGARH EXTN. SUBSTATION AND 765/400KV VARANASI GIS NEW SUBSTATION UNDER TRANSMISSION SYSTEM ASSOCIATED WITH GENERATION PROJECT IN JHARKHAND & WEST BENGAL (PART-A2)<br>PROJECT 1 :- <del>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)</del><br>PROJECT 2 :- <del>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)</del><br>PROJECT 3 :- <del>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)</del><br>NOA REF :- CC-CS/161-NR1/RT-1340/3/G8/NOA-I/4207, DATED - 16/03/2012<br><br>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)<br>PROJECT 4 :- <del>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)</del><br>PROJECT 5 :- <del>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)</del><br>NOA REF :- CC-CS/143-WR1/RT-1289/3/G7/NOA-I/4245, DATED - 24/03/2012 |              |                |   |       |            |          |
| TITLE :   |              | SCALE          |   |       | PROJECTION |          |
| 80 MVAR (765/3), SINGLE PHASE SHUNT REACTOR   |              | 1:1            |   |       |            |          |
| GENERAL ARRANGEMENT DRAWING   |              |                |   |       |            |          |
| DSGN  | JS           | SIGN           | DATE  | SIZE  | REV.       |          |
| DRWN  | JS           |                | 17.10.2012                                    | A1    | 00         |          |
| CHKD  | AZAD         |                | 17.10.2012                                    |       |            |          |
| APPD  | A.B.M.       |                | 17.10.2012                                    |       |            |          |
| DRG. No. L01-0466   |              |                |   |       |            |          |
| SHEET 01 OF 06  |              |                |   |       |            |          |
| RELEASED FOR <input type="checkbox"/> PRELIMINARY <input type="checkbox"/> TENDER <input type="checkbox"/> INFORMATION <input checked="" type="checkbox"/> APPROVAL <input type="checkbox"/> CONSTRUCTION   |              |                |   |       |            |          |



LEFT HAND VIEW

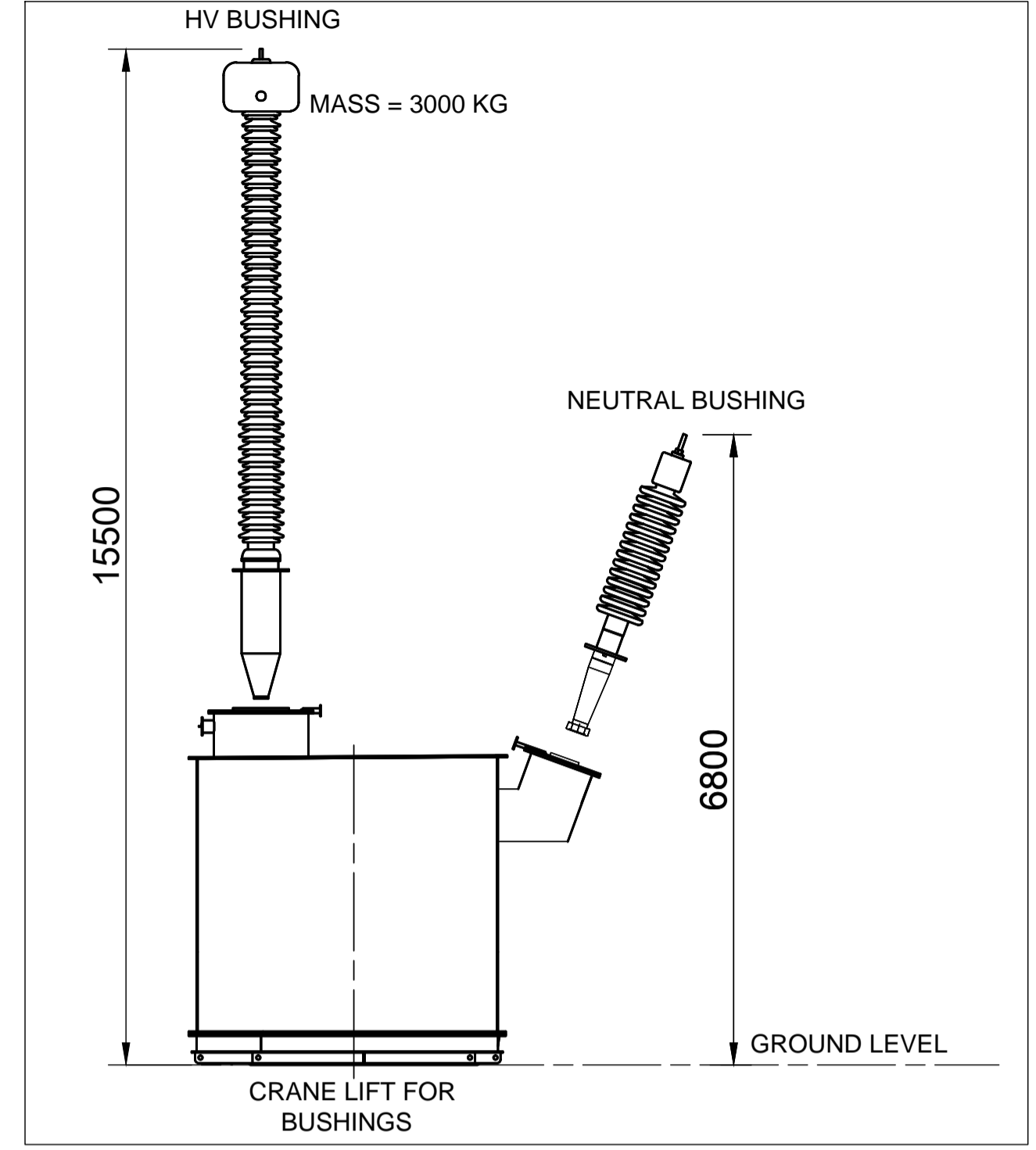
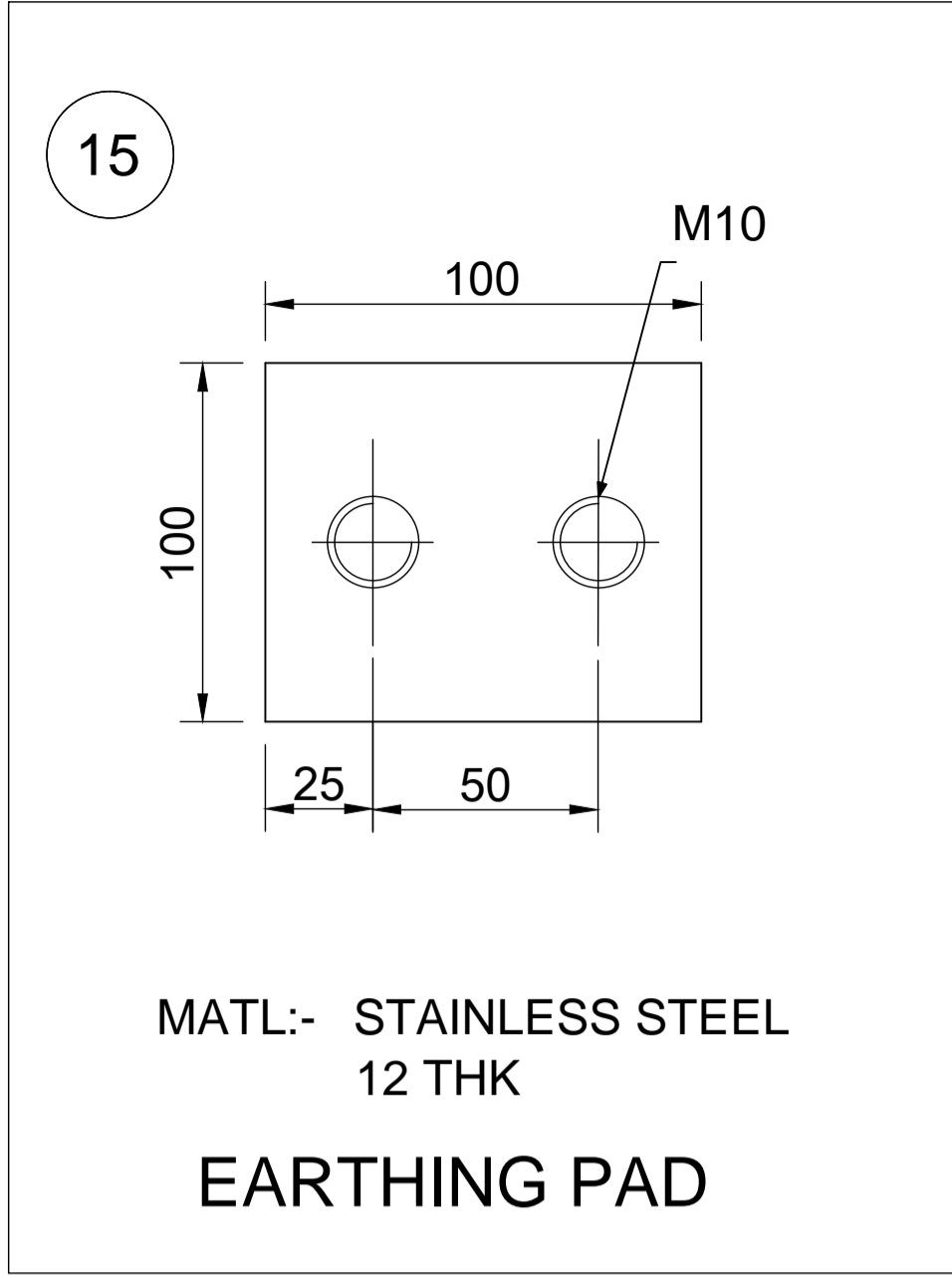
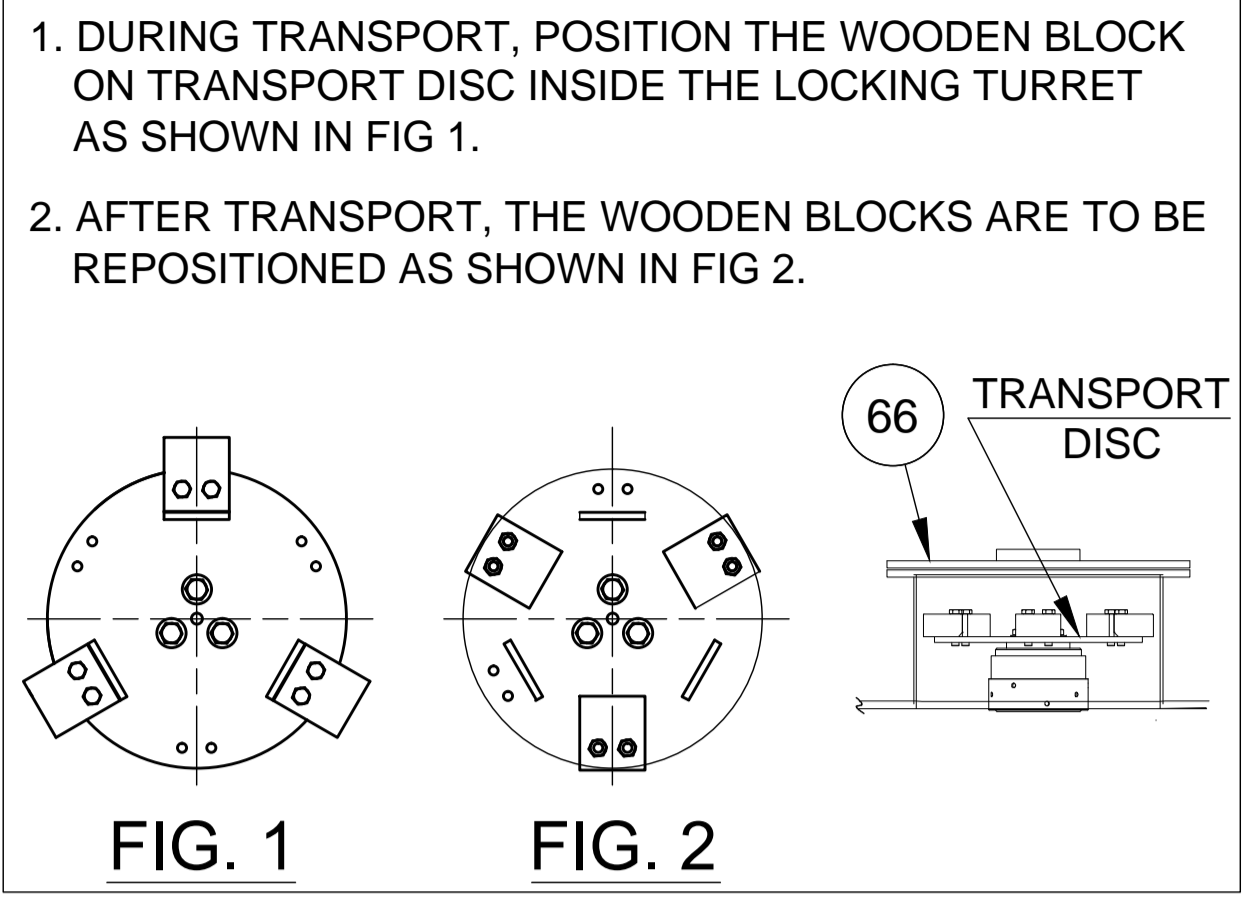
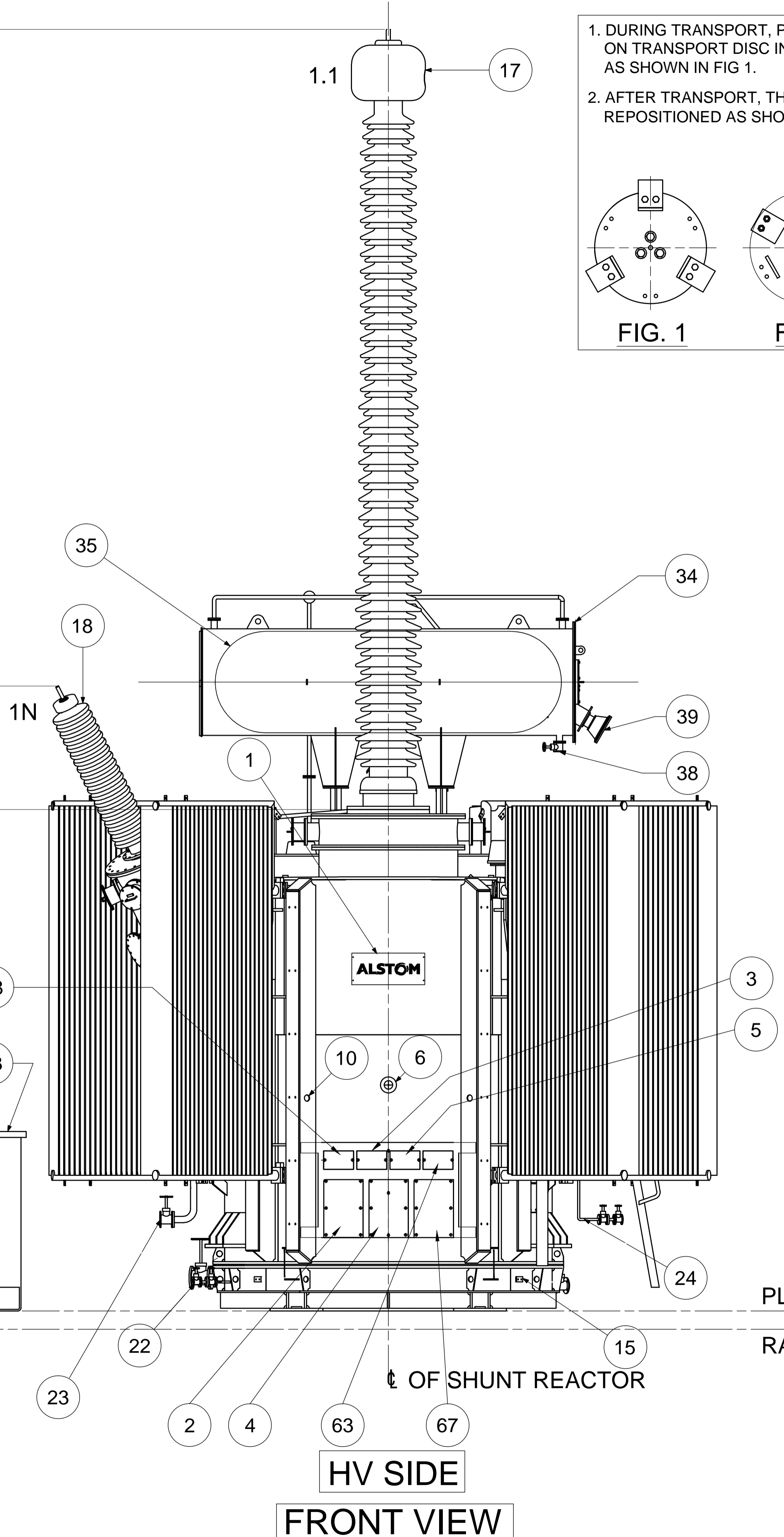


| REV. No   | REVISED DATE | DESCRIPTION  | DESIGNED                                      | DRAWN | CHECKED         | APPROVED |
|---|--------------|--|---|-------|-----------------|----------|
| 00  | 17.10.2012   | ORIGINAL ISSUE   | JS  | JS    | AZAD            | ABM      |
| REVISIONS   |              |  |   |       |                 |          |
| CLIENT :  |              |  | CONSULTANT :                                  |       |                 |          |
| <b>POWER GRID CORPORATION OF INDIA LIMITED</b><br>(A GOVERNMENT OF INDIA ENTERPRISE)  |              |  |   |       |                 |          |
| SUPPLIER / CONTRACTOR :   |              |  | PROJECT 1 :- POWERGRID - GAYA - T-21133       |       |                 |          |
| <b>ALSTOM T&amp;D INDIA LTD.</b><br><small>TRANSFORMERS &amp; ELECTRICAL Power Transformers, High Voltage Products 117/118/119/120/121/122/123/124/125/126/127/128/129/130/131/132/133/134/135/136/137/138/139/140/141/142/143/144/145/146/147/148/149/150/151/152/153/154/155/156/157/158/159/160/161/162/163/164/165/166/167/168/169/170/171/172/173/174/175/176/177/178/179/180/181/182/183/184/185/186/187/188/189/190/191/192/193/194/195/196/197/198/199/200/201/202/203/204/205/206/207/208/209/210/211/212/213/214/215/216/217/218/219/220/221/222/223/224/225/226/227/228/229/230/231/232/233/234/235/236/237/238/239/240/241/242/243/244/245/246/247/248/249/250/251/252/253/254/255/256/257/258/259/260/261/262/263/264/265/266/267/268/269/270/271/272/273/274/275/276/277/278/279/280/281/282/283/284/285/286/287/288/289/290/291/292/293/294/295/296/297/298/299/300/301/302/303/304/305/306/307/308/309/310/311/312/313/314/315/316/317/318/319/320/321/322/323/324/325/326/327/328/329/330/331/332/333/334/335/336/337/338/339/340/341/342/343/344/345/346/347/348/349/350/351/352/353/354/355/356/357/358/359/360/361/362/363/364/365/366/367/368/369/370/371/372/373/374/375/376/377/378/379/380/381/382/383/384/385/386/387/388/389/390/391/392/393/394/395/396/397/398/399/400/401/402/403/404/405/406/407/408/409/410/411/412/413/414/415/416/417/418/419/420/421/422/423/424/425/426/427/428/429/430/431/432/433/434/435/436/437/438/439/440/441/442/443/444/445/446/447/448/449/450/451/452/453/454/455/456/457/458/459/460/461/462/463/464/465/466/467/468/469/470/471/472/473/474/475/476/477/478/479/480/481/482/483/484/485/486/487/488/489/490/491/492/493/494/495/496/497/498/499/500/501/502/503/504/505/506/507/508/509/510/511/512/513/514/515/516/517/518/519/520/521/522/523/524/525/526/527/528/529/530/531/532/533/534/535/536/537/538/539/540/541/542/543/544/545/546/547/548/549/550/551/552/553/554/555/556/557/558/559/560/561/562/563/564/565/566/567/568/569/570/571/572/573/574/575/576/577/578/579/580/581/582/583/584/585/586/587/588/589/590/591/592/593/594/595/596/597/598/599/600/601/602/603/604/605/606/607/608/609/610/611/612/613/614/615/616/617/618/619/620/621/622/623/624/625/626/627/628/629/630/631/632/633/634/635/636/637/638/639/640/641/642/643/644/645/646/647/648/649/650/651/652/653/654/655/656/657/658/659/660/661/662/663/664/665/666/667/668/669/670/671/672/673/674/675/676/677/678/679/680/681/682/683/684/685/686/687/688/689/690/691/692/693/694/695/696/697/698/699/700/701/702/703/704/705/706/707/708/709/710/711/712/713/714/715/716/717/718/719/720/721/722/723/724/725/726/727/728/729/730/731/732/733/734/735/736/737/738/739/740/741/742/743/744/745/746/747/748/749/750/751/752/753/754/755/756/757/758/759/760/761/762/763/764/765/766/767/768/769/770/771/772/773/774/775/776/777/778/779/780/781/782/783/784/785/786/787/788/789/790/791/792/793/794/795/796/797/798/799/800/801/802/803/804/805/806/807/808/809/810/811/812/813/814/815/816/817/818/819/820/821/822/823/824/825/826/827/828/829/830/831/832/833/834/835/836/837/838/839/840/841/842/843/844/845/846/847/848/849/850/851/852/853/854/855/856/857/858/859/860/861/862/863/864/865/866/867/868/869/870/871/872/873/874/875/876/877/878/879/880/881/882/883/884/885/886/887/888/889/890/891/892/893/894/895/896/897/898/899/900/901/902/903/904/905/906/907/908/909/910/911/912/913/914/915/916/917/918/919/920/921/922/923/924/925/926/927/928/929/930/931/932/933/934/935/936/937/938/939/940/941/942/943/944/945/946/947/948/949/950/951/952/953/954/955/956/957/958/959/960/961/962/963/964/965/966/967/968/969/970/971/972/973/974/975/976/977/978/979/980/981/982/983/984/985/986/987/988/989/990/991/992/993/994/995/996/997/998/999/1000</small> |              |  | PROJECT 2 :- POWERGRID - VARANASI - T-21134   |       |                 |          |
|   |              |  | PROJECT 3 :- POWERGRID - RANCHI - T-21136     |       |                 |          |
|   |              |  | PROJECT 4 :- POWERGRID - PADGHE - T-21137     |       |                 |          |
|   |              |  | PROJECT 5 :- POWERGRID - AURANGABAD - T-21138 |       |                 |          |
| PROJECT :- REACTOR PACKAGE R1 FOR 765/400/220KV GAYA,765/400KV RANCHI,765KV DHARMANJAYGARH EXTN. SUBSTATION AND 765/400KV VARANASI GIS NEW SUBSTATION UNDER TRANSMISSION SYSTEM ASSOCIATED WITH GENERATION PROJECT IN JHARKHAND & WEST BENGAL (PART-A2)<br>PROJECT 1:- $\bar{I} \bar{A} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{A} \bar{I} \bar{I} \bar{D} \bar{H} \bar{A} \bar{X} \bar{E} \bar{S} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{D} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{U} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{E}$<br>PROJECT 2:- $\bar{I} \bar{A} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{A} \bar{I} \bar{I} \bar{D} \bar{H} \bar{A} \bar{X} \bar{E} \bar{S} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{D} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{U} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{E}$<br>PROJECT 3:- $\bar{H} \bar{V} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{A} \bar{I} \bar{I} \bar{D} \bar{H} \bar{A} \bar{X} \bar{E} \bar{S} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{D} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{U} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{E}$<br>NOA REF :- CC-CS/161-NR1/RT-1340/3/G8/NOA-I/4207, DATED - 16/03/2012<br><br>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)<br>PROJECT 4:- $\bar{F} \bar{E} \bar{V} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{A} \bar{I} \bar{I} \bar{D} \bar{H} \bar{A} \bar{X} \bar{E} \bar{S} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{D} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{U} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{E}$<br>PROJECT 5:- $\bar{I} \bar{A} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{A} \bar{I} \bar{I} \bar{D} \bar{H} \bar{A} \bar{X} \bar{E} \bar{S} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{D} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{U} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{E}$<br>NOA REF :- CC-CS/143-WR1/RT-1289/3/G7/NOA-I/4245, DATED - 24/03/2012  |              |  |   |       |                 |          |
| TITLE :   |              | SCALE 1:1  |   |       | PROJECTION      |          |
| 80 MVAR (765/3), SINGLE PHASE SHUNT REACTOR   |              |  |   |       |                 |          |
| GENERAL ARRANGEMENT DRAWING   |              |  |   |       |                 |          |
| DRGN  | JS           | SIGN   | DATE  |       |                 |          |
| DRWN  | JS           |  | 17.10.2012                                    |       |                 |          |
| CHKD  | AZAD         |  | 17.10.2012                                    |       |                 |          |
| APPD  | A.B.M.       |  | 17.10.2012                                    |       |                 |          |
| DRG. No. L01-0466   |              | SHEET 02 OF 06   |   |       | SIZE A1 REV. 00 |          |
| RELEASED FOR  |              | <input type="checkbox"/> PRELIMINARY <input type="checkbox"/> TENDER <input type="checkbox"/> INFORMATION <input checked="" type="checkbox"/> APPROVAL <input type="checkbox"/> CONSTRUCTION |   |       |                 |          |

12500 OVERALL HEIGHT APPROX

5920 HEIGHT OF NEUTRAL BHUSHING

4800



| 00  | 17.10.2012   | ORIGINAL ISSUE | JS  | JS    | AZAD    | ABM        |
|---|--------------|----------------|---|-------|---------|------------|
| REV. No   | REVISED DATE | DESCRIPTION    | DESIGNED                                      | DRAWN | CHECKED | APPROVED   |
| REVISIONS   |              |                |   |       |         |            |
| CLIENT :  |              |                | CONSULTANT :                                  |       |         |            |
| <b>POWER GRID CORPORATION OF INDIA LIMITED</b><br>(A GOVERNMENT OF INDIA ENTERPRISE)  |              |                |   |       |         |            |
| SUPPLIER / CONTRACTOR :   |              |                | PROJECT 1 :- POWERGRID - GAYA - T-21133       |       |         |            |
| <b>ALSTOM T&amp;D INDIA LTD.</b><br><small>TRANSFORMERS &amp; ELECTRICALS<br/>Power Transformers, High Voltage Products<br/>12/17, Wazirpur, NEW DELHI (INDIA)</small>  |              |                | PROJECT 2 :- POWERGRID - VARANASI - T-21134   |       |         |            |
|   |              |                | PROJECT 3 :- POWERGRID - RANCHI - T-21136     |       |         |            |
|   |              |                | PROJECT 4 :- POWERGRID - PADGHE - T-21137     |       |         |            |
|   |              |                | PROJECT 5 :- POWERGRID - AURANGABAD - T-21138 |       |         |            |
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| PROJECT 1 :- <i>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)</i>                          |              |                |   |       |         |            |
| PROJECT 2 :- <i>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)</i>                          |              |                |   |       |         |            |
| PROJECT 3 :- <i>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)</i>                          |              |                |   |       |         |            |
| PROJECT 4 :- <i>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)</i>                          |              |                |   |       |         |            |
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| NOA REF :- CC-CS/161-NR1/RT-1340/3/G8/NOA-I/4207, DATED - 16/03/2012  |              |                |   |       |         |            |
| NOA REF :- CC-CS/143-WR1/RT-1289/3/G7/NOA-I/4245, DATED - 24/03/2012  |              |                |   |       |         |            |
| TITLE :   |              |                |   |       |         | SCALE      |
| 80 MVAR (765/3), SINGLE PHASE SHUNT REACTOR   |              |                |   |       |         | 1:1        |
| GENERAL ARRANGEMENT DRAWING   |              |                |   |       |         | PROJECTION |
|   |              |                |   |       |         |            |
| DRG. No. L01-0466   |              |                |   |       |         | SIZE       |
|   |              |                |   |       |         | A1         |
|   |              |                |   |       |         | REV.       |
|   |              |                |   |       |         | 00         |
| SHEET 03 OF 06  |              |                |   |       |         |            |
| RELEASED FOR <input type="checkbox"/> PRELIMINARY <input type="checkbox"/> TENDER <input type="checkbox"/> INFORMATION <input checked="" type="checkbox"/> APPROVAL <input type="checkbox"/> CONSTRUCTION   |              |                |   |       |         |            |

HV SIDE  
FRONT VIEW

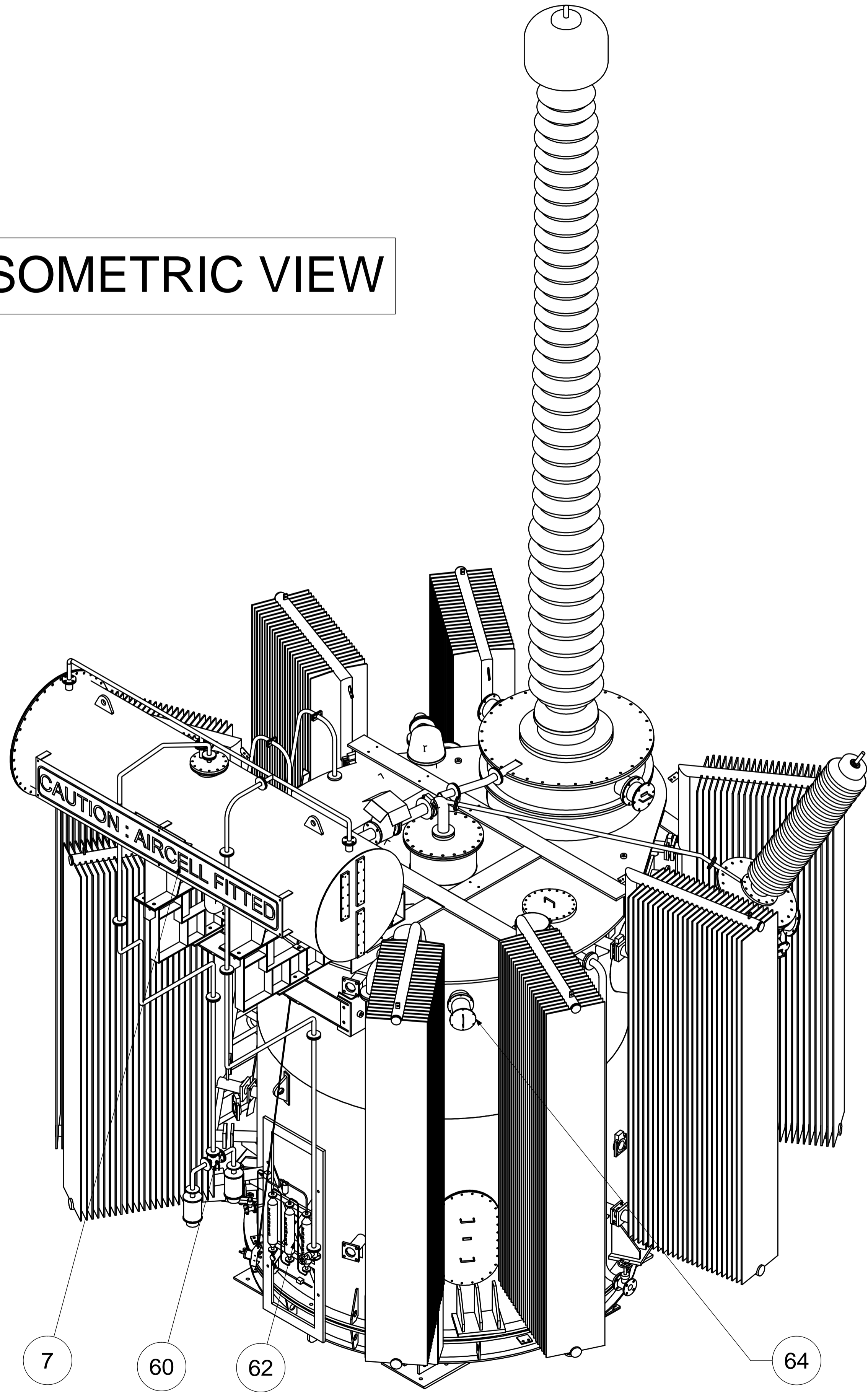
PLINTH LEVEL

RAIL LEVEL

OF SHUNT REACTOR



ISOMETRIC VIEW



NOTES :

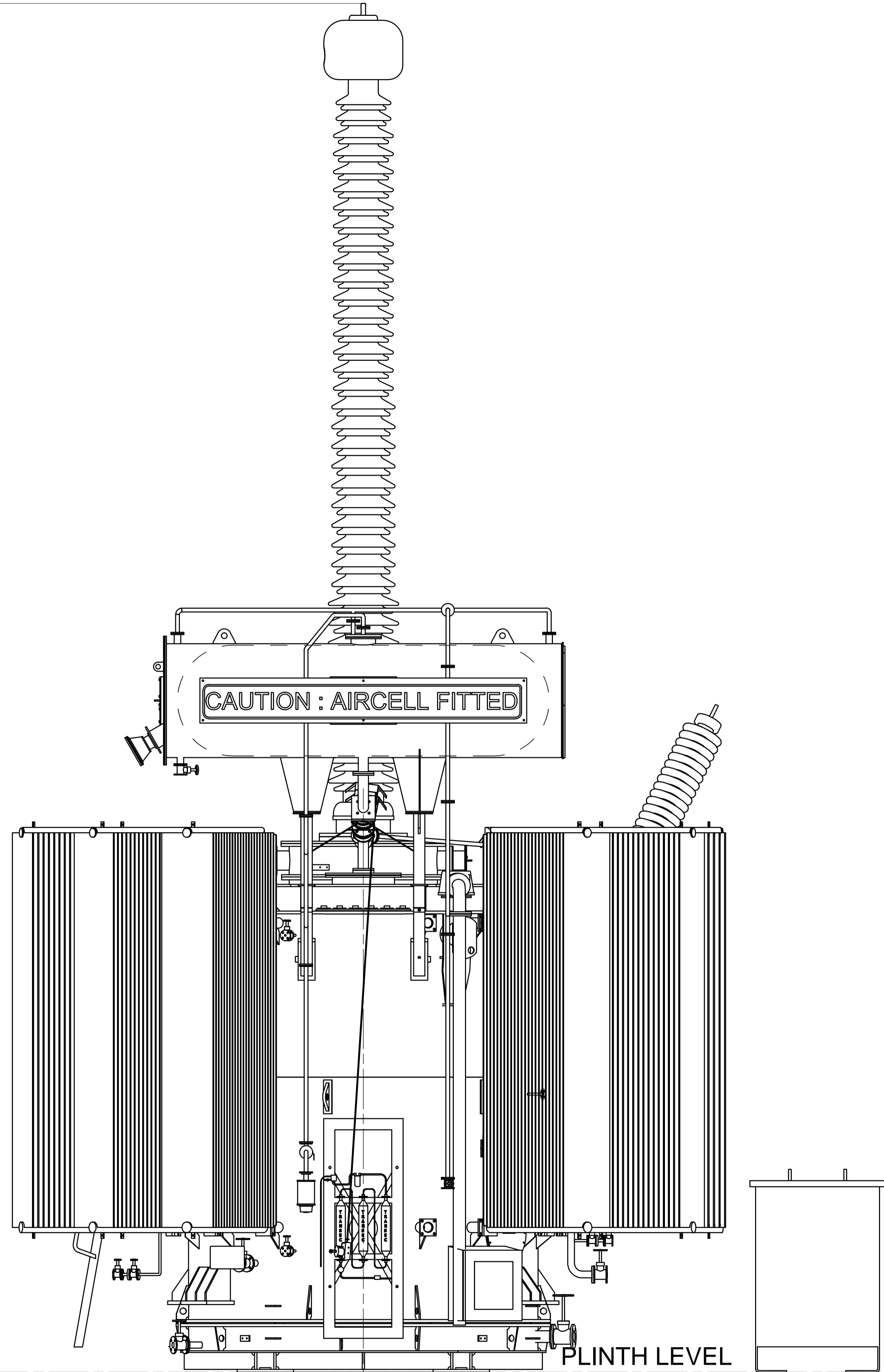
1. PAINT SHADE IS RAL-7035,PU.
2. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
3. REFER DRAWING NO. L01-0467 FOR LIST OF FITTINGS.
4. BELL TYPE BOLTED TANK
5. IMPACT RECORDER SHALL BE SUPPLIED ON RETURNABLE BASIS DURING TRANSPORTATION OF TRANSFORMER.
6. FOR THE DETAILS OF RAIL LEVEL REFER FOUNDATION DRG. NO:-L01-0468
7. PURPOSE OF RAIL IS ONLY FOR THE MOVEMENT UPTO THE PLINTH.
8. FINALLY THE REACTOR HAS TO BE PLACED ON THE PLINTH
9. 25mm RAIL LEVEL LOWER THAN THE PLINTH IS ONLY TO ENSURE TO AVOID METAL TO METAL CONTACT BETWEEN RAIL & REACTOR BASE PLATE.
10. IMPORTANT THE PLINTH SURFACE HAS TO BE LEVELLED, FLAT & UNIFORM INORDER TO PROVIDED PROPER SITTING TO REACTOR BASE.

| SR. NO. | MASS AND CAPACITIES                       |         |            |
|---------|---|---------|------------|
| 1       | CORE AND WINDINGS MASS                    |         | 53000 Kg.  |
| 2       | TANK AND FITTINGS                         |         | 30000 Kg.  |
| 3       | APPROXIMATE TOTAL OIL IN COMPLETE REACTOR | 27500,L | 24500 Kg.  |
| 4       | TOTAL MASS OF REACTOR (WITH OIL)          |         | 105500 Kg. |
| 5       | TRANSPORT MASS OF REACTOR (WITH OIL)      |         | 91300 Kg.  |

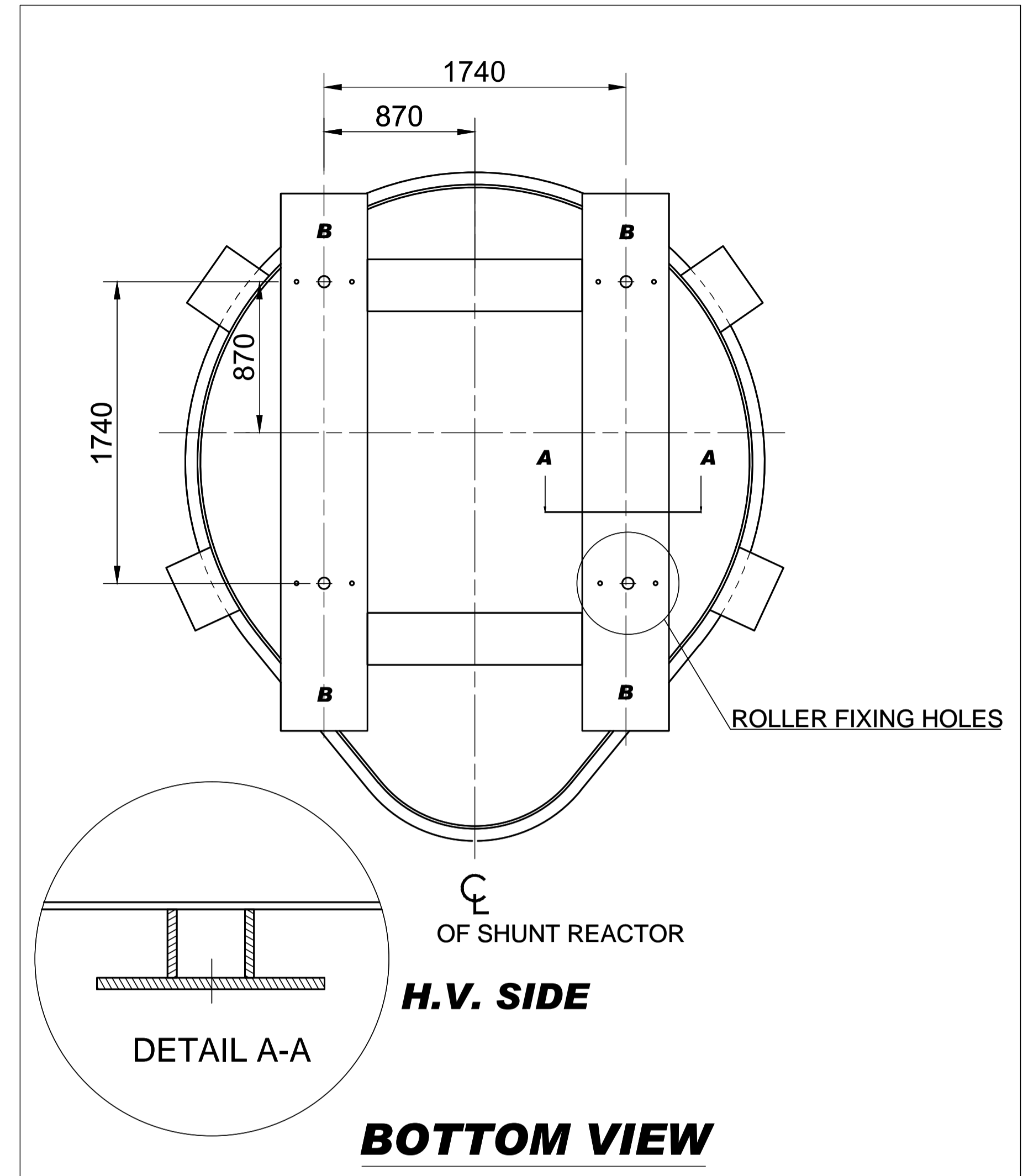
| MINIMUM CLEARANCE IN AIR AS PER CUSTOMER SPECIFICATION |                |                |
|--|----------------|----------------|
|  | PHASE TO PHASE | PHASE TO EARTH |
| HV   | -              | 5800 mm        |
| HVN  | -              | 1250 mm        |

| 00  | 17.10.2012   | ORIGINAL ISSUE | JS  | JS    | AZAD       | ABM      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
|---|--------------|----------------|---|-------|------------|----------|----|----|--|------------|------|----|--|------------|------|------|--|------------|------|--------|--|------------|---|--|--------------------------------|--|
| REV. No   | REVISED DATE | DESCRIPTION    | DESIGNED  | DRAWN | CHECKED    | APPROVED |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| REVISIONS   |              |                |   |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| <b>CLIENT :</b><br>POWER GRID CORPORATION OF INDIA LIMITED<br>(A GOVERNMENT OF INDIA ENTERPRISE)  |              |                | <b>CONSULTANT :</b>   |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| <b>SUPPLIER / CONTRACTOR :</b><br>ALSTOM T&D INDIA LTD.<br><small>TRANSFORMERS &amp; ELECTRICAL Power Transformers, High Voltage Products 117/1,Indraprastha Estate, New Delhi-110002</small>   |              |                | PROJECT 1 :- POWERGRID - GAYA - T-21133<br>PROJECT 2 :- POWERGRID - VARANASI - T-21134<br>PROJECT 3 :- POWERGRID - RANCHI - T-21136<br>PROJECT 4 :- POWERGRID - PADGHE - T-21137<br>PROJECT 5 :- POWERGRID - AURANGABAD - T-21138 |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| <b>PROJECT :</b> REACTOR PACKAGE R1 FOR 765/400/220KV GAYA,765/400KV RANCHI,765KV DHARMANJAYGARH EXTN. SUBSTATION AND 765/400KV VARANASI GIS NEW SUBSTATION UNDER TRANSMISSION SYSTEM ASSOCIATED WITH GENERATION PROJECT IN JHARKHAND & WEST BENGAL (PART-A2)   |              |                |   |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| PROJECT 1:- $\bar{I} \bar{A} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{I} \bar{I} \bar{E} \bar{H} \bar{A} \bar{X} \bar{E} \bar{D} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{O} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{C} \bar{O} \bar{E} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{I} \bar{E}$<br>PROJECT 2:- $\bar{I} \bar{A} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{I} \bar{I} \bar{E} \bar{H} \bar{A} \bar{X} \bar{E} \bar{D} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{O} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{C} \bar{O} \bar{E} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{I} \bar{E}$<br>PROJECT 3:- $\bar{H} \bar{V} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{I} \bar{I} \bar{E} \bar{H} \bar{A} \bar{X} \bar{E} \bar{D} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{O} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{C} \bar{O} \bar{E} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{I} \bar{E}$<br>NOA REF :- CC-CS/161-NR1/RT-1340/3/G8/NOA-I/4207, DATED - 16/03/2012 |              |                |   |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)  |              |                |   |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| PROJECT 4:- $\bar{F} \bar{E} \bar{A} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{I} \bar{I} \bar{E} \bar{H} \bar{A} \bar{X} \bar{E} \bar{D} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{O} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{C} \bar{O} \bar{E} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{I} \bar{E}$<br>PROJECT 5:- $\bar{I} \bar{A} \bar{A} \bar{E} \bar{T} \bar{X} \bar{O} \bar{E} \bar{E} \bar{E} \bar{G} \bar{I} \bar{I} \bar{E} \bar{H} \bar{A} \bar{X} \bar{E} \bar{D} \bar{O} \bar{U} \bar{O} \bar{C} \bar{C} \bar{O} \bar{V} \bar{U} \bar{U} \bar{A} \bar{E} \bar{S} \bar{A} \bar{C} \bar{O} \bar{E} \bar{O} \bar{P} \bar{O} \bar{Y} \bar{V} \bar{B} \bar{U} \bar{B} \bar{I} \bar{E}$<br>NOA REF :- CC-CS/143-WR1/RT-1289/3/G7/NOA-I/4245, DATED - 24/03/2012  |              |                |   |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| <table border="1"> <tr> <th>DSGN</th> <th>NAME</th> <th>SIGN</th> <th>DATE</th> </tr> <tr> <td>JS</td> <td>JS</td> <td></td> <td>17.10.2012</td> </tr> <tr> <td>DRWN</td> <td>JS</td> <td></td> <td>17.10.2012</td> </tr> <tr> <td>CHKD</td> <td>AZAD</td> <td></td> <td>17.10.2012</td> </tr> <tr> <td>APPD</td> <td>A.B.M.</td> <td></td> <td>17.10.2012</td> </tr> </table>  |              |                | DSGN  | NAME  | SIGN       | DATE     | JS | JS |  | 17.10.2012 | DRWN | JS |  | 17.10.2012 | CHKD | AZAD |  | 17.10.2012 | APPD | A.B.M. |  | 17.10.2012 | <b>TITLE :</b><br>80 MVAR (765/3), SINGLE PHASE SHUNT REACTOR<br><b>GENERAL ARRANGEMENT DRAWING</b> |  | SCALE<br>1:1<br>PROJECTION<br> |  |
| DSGN  | NAME         | SIGN           | DATE  |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| JS  | JS           |                | 17.10.2012  |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| DRWN  | JS           |                | 17.10.2012  |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| CHKD  | AZAD         |                | 17.10.2012  |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| APPD  | A.B.M.       |                | 17.10.2012  |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| DRG. No. L01-0466<br>SHEET 05 OF 06   |              |                | SIZE<br>A1  |       | REV.<br>00 |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |
| RELEASED FOR <input type="checkbox"/> PRELIMINARY <input type="checkbox"/> TENDER <input type="checkbox"/> INFORMATION <input checked="" type="checkbox"/> APPROVAL <input type="checkbox"/> CONSTRUCTION   |              |                |   |       |            |          |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |   |  |                                |  |

12500 OVERALL HEIGHT APPROX



BACK VIEW  
CONSERVATOR SIDE



| REV. No   | REVISED DATE | DESCRIPTION    | DESIGNED                                      | DRAWN | CHECKED   | APPROVED |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
|---|--------------|----------------|---|-------|---|----------|------|------|----|----|--|------------|------|----|--|------------|------|------|--|------------|------|--------|--|------------|----------------|--|
| 00  | 17.10.2012   | ORIGINAL ISSUE | JS  | JS    | AZAD  | ABM      |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| REVISIONS   |              |                |   |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| CLIENT :  |              |                | CONSULTANT :                                  |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| <b>POWER GRID CORPORATION OF INDIA LIMITED</b><br>(A GOVERNMENT OF INDIA ENTERPRISE)  |              |                |   |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| SUPPLIER / CONTRACTOR :   |              |                | PROJECT 1 :- POWERGRID - GAYA - T-21133       |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| <b>ALSTOM T&amp;D INDIA LTD.</b><br><small>TRANSFORMERS &amp; ELECTRICAL Power Transformers, High Voltage Products 137, Wabeswar, 800015 (INDIA)</small>  |              |                | PROJECT 2 :- POWERGRID - VARANASI - T-21134   |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
|   |              |                | PROJECT 3 :- POWERGRID - RANCHI - T-21136     |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
|   |              |                | PROJECT 4 :- POWERGRID - PADGHE - T-21137     |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
|   |              |                | PROJECT 5 :- POWERGRID - AURANGABAD - T-21138 |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| PROJECT :- REACTOR PACKAGE R1 FOR 765/400/220KV GAYA, 765/400KV RANCHI, 765KV DHARMANJAYGARH EXTN. SUBSTATION AND 765/400KV VARANASI GIS NEW SUBSTATION UNDER TRANSMISSION SYSTEM ASSOCIATED WITH GENERATION PROJECT IN JHARKHAND & WEST BENGAL (PART-A2)<br>PROJECT 1:- $\bar{I} \bar{A} \bar{A}$ ET XOEIEE @I I DHA XOE OAUOEDVUUUE/OCOPDYVPE<br>PROJECT 2:- $\bar{I} \bar{A} \bar{A}$ ET XOEIEE @I I DHA XOE OAUOEDVUUUE/OCOPDYVPE<br>PROJECT 3:- $\bar{H} \bar{V} \bar{A}$ ET XOEIEE @I I DHA XOE OAUOEDVUUUE/OCOPDYVPE<br>NOA REF :- CC-CS/161-NR1/RT-1340/3/G8/NOA-I/4207, DATED - 16/03/2012<br><br>REACTOR PACKAGE SR01 FOR 10X80 MVAR REACTORS AT PADGHE GIS AND 6X80 MVAR, REACTORS AT AURANGABAD S/S UNDER SYSTEM STRENGTHENING IN NORTH/WEST PART OF WR FOR IPP PROJECTS IN PROJECT IN CHHATTISGARH(PART-E)<br>PROJECT 4:- $\bar{F} \bar{E} \bar{V} \bar{A}$ ET XOEIEE @I I DHA XOE OAUOEDVUUUE/OCOPDYVPE<br>PROJECT 5:- $\bar{I} \bar{A} \bar{A}$ ET XOEIEE @I I DHA XOE OAUOEDVUUUE/OCOPDYVPE<br>NOA REF :- CC-CS/143-WR1/RT-1289/3/G7/NOA-I/4245, DATED - 24/03/2012 |              |                |   |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| TITLE :<br><b>80 MVAR (765/3), SINGLE PHASE SHUNT REACTOR</b><br><b>GENERAL ARRANGEMENT DRAWING</b>   |              |                |   |       | SCALE<br>1:1                                    |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
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| DSGN  | NAME         | SIGN           | DATE  |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| JS  | JS           |                | 17.10.2012                                    |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| DRWN  | JS           |                | 17.10.2012                                    |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| CHKD  | AZAD         |                | 17.10.2012                                    |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| APPD  | A.B.M.       |                | 17.10.2012                                    |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| DRG. No. L01-0466   |              |                |   |       | SHEET <b>06</b> OF <b>06</b><br>SIZE A1 REV. 00 |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |
| RELEASED FOR <input type="checkbox"/> PRELIMINARY <input type="checkbox"/> TENDER <input type="checkbox"/> INFORMATION <input checked="" type="checkbox"/> APPROVAL <input type="checkbox"/> CONSTRUCTION   |              |                |   |       |   |          |      |      |    |    |  |            |      |    |  |            |      |      |  |            |      |        |  |            |                |  |