



NORTH BIHAR POWER DISTRIBUTION CO. LTD., PATNA

[Office of Chief Engineer, Project-II]

(Regd. Office: Vidyut Bhawan, Bailey Road, Patna)

CIN No: U40109BR2012SGC018920

Letter No:-NB/P-II/RDSS/Polycab/GTP approval-151/24 - 590 Contract No. +91-9264440719

Dated: - 30/04/2024

E-mail: cerdssnbpdc12@gmail.com

From,

Pranav Kumar
Chief Engineer, Project-II

To,

M/s Polycab India Ltd.
771, Polycab House, Mogul Lane, Mahim (W),
Mumbai- 400016
Email: umesh.joshi@polycab.com

Sub:- Approval of GTP & Drawings of LTDB deep drawn type and LTCT Metering cubical for 315 KVA DTR of M/s LAN Engineering & Technologies, Noida under RDSS-Loss Reduction scheme of Samastipur circle.

Ref:-

1. NIT No: 29/PR/NBPDCL/2022
2. NOA No.- 248 & 249 dated 06.03.2023.
3. Your L.No- 386 dated 19.04.24.

Sir,

With reference to the subject noted above, kindly find the copy of GTP & drawing of LTDB deep drawn type and LTCT Metering cubical for 315 KVA DTR for Development of Distribution Infrastructure against NIT No: 29/PR/NBPDCL/2022 for Samastipur Circle under Revamped Reforms-Based And Results-Linked, Distribution Sector Scheme.

Sl. No.	Name of Item	Vendor Name
1	LTDB deep drawn type and LTCT Metering cubical for 315 KVA DTR	M/s LAN Engineering and Technologies, Sector-83, Noida-201305

Correction wherever required in GTP/ Drawing submitted by the contractor has been done in ink. However, these Drawings shall be subject to correctness as per technical specifications of the tender document and the entire responsibility of the correctness of the drawing as per the specifications as well as supply of material according to the technical specifications of the contract agreement shall be responsibility of the contractor.

In case of any conflict or contradiction between GTP / Drawings & Technical Specifications, the decision of C.E. (Project-II) shall be final and binding on both the parties. Contractor shall have to replace the material to the entire satisfaction of the owner in case the material is found unsuitable for use in the project at any stage. This approval is up to validity of valid type test certificate. In case any problem/ issue arise with regard to material/ vendor at any stage, NBPDCCL reserves the right to withdraw the approval of vendor as well as ask you to replace the materials at your own cost.

Please carry out the works immediately under conditions stated above.

Encl.:- As above.

Yours faithfully

Pranav Kumar
30/4/2024

(Pranav Kumar)
Chief Engineer, Project-II

Memo No.-

590

Dated-

30/04/2024

Copy forwarded to M/s Techno Power Enterprises Pvt. Ltd., Kolkata for kind information and necessary action.

Pranav Kumar
30.4.2024

(Pranav Kumar)

Chief Engineer, Project-II

Memo No.-

590

Dated-

30/04/2024

Copy forwarded to Chief Engineer, Project-I (Rural) and Chief Engineer, Project-I (Urban), NBPDC for kind information.

Pranav Kumar
30.4.2024

(Pranav Kumar)

Chief Engineer, Project-II

Memo No.-

590

Dated

30/04/2024

Copy forwarded to PMA, M/s Rodic consultant Pvt. Ltd., RDSS for information & necessary action.

Pranav Kumar
30.4.2024

(Pranav Kumar)

Chief Engineer, Project-II

MP



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ENGINEERING & TECHNOLOGIES
An ISO 9001:2015 Certified Company



POLYCAB India Ltd.

POLYCAB House, 771 Pandit Satawalekar Marg, Mahim West, Mumbai- 400016

PROJECT	Development of Distribution Infrastructure at Samastipur Electric Supply Circle (Samastipur & Vaishali districts) of Bihar under the Revamped Reforms-based and Results-linked, Distribution Sector Scheme.
OWNER	North Bihar Power Distribution Company Limited (NBPDC) Vidyut Bhawan, Bailey Road, Patna-21
NOA NO.	N-XIII/P-I(U)/Tender(RDSS)-3050/2022/248 Dated:06/03/2023 N-XIII/P-I(U)/Tender(RDSS)-3050/2022/249 Dated:06/03/2023
MANUFACTURER	M/s. Lan Engineering & Technologies, B-07&17, Sector-83, Noida

GUARANTEED TECHNICAL PARTICULARS OF THREE PHASE LT DISTRIBUTION BOX FOR 315 KVA DTs (Deep Drawn Type)

Sr No.	Particulars	As Approved
	MANUFACTURER NAME	M/s LAN ENGINEERING & TECHNOLOGIES, B-07 & 17, Sector-83, NOIDA
1.	System Details	
	KVA	315 KVA ✓
	Rated Voltage	415/433 V ✓
	Frequency	50Hz ✓
	Full Load Current	440Amp. For 315KVA ✓
	No. of Phase	3 Phase, Solidly grounded neutral ✓
	Degree of Protection	IP-33 ✓
2.	ISOLATOR/Switch Disconnecter	
	Make	HPL/NEW ERA/HB/ELCON/PC Industries/Micron/ RB Commercial /Havells / C&S / L&T/DLV Switchgear/ Approved Make - Type tested make only ✓
	No. of Pole	Three Pole ✓
	Type of Isolator	Front Type operated as per IS 13947 amended up to date ✓
	Mechanism	Manual Quick make & Quick break ✓
	Nominal Current	630A Basic uninterrupted duty - 600 A ✓
	Casing of Isolator	Non tracking, Heat resistant insulating material of Dough Moulding compound (DMC) of D3 grade as per IS: 13411 (amended up to date) ✓
	Material	EC Grade Copper (tin plated) ✓
	Rated Voltage	433 Volt Rated insulation voltage - 660V ✓
	Utilization Category	AC 23A 'A' ✓
	Rated short time withstand Capacity for 2 second in Ka	8 KA 80 KA ✓
3.	HRC Fuse Base	
	Make	HPL/NEW ERA/HB/ELCON/PC Industries/Micron/ RB Commercial /Havells/ L&T/ C&S /Lan/ DLV Switchgear/ Approved Make - Type tested make only ✓
	Material of Base	Non tracking, Heat resistant insulating material of Dough Moulding compound (DMC) of D3 grade as per IS: 13411 (amended up to date) ✓
	Material of Strip	Tin Plated EC Grade Copper ✓
	Nominal Current	630A for 315KVA (3 Nos.) ✓
	Rated Voltage	433 Volt ✓
	Breaking Capacity Fuse	80 KA ✓

APPROVED

Subject to the condition that you are not absolved of the responsibility of Correctness of materials

Chief Engineer (Project-II)
NBPDC

CHECKED

Rakesh Pathak
Team Leader

Rodic Consultant Pvt. Ltd.
BMA & BSS, NBPDC, Noida Gautam Buddha Nagar (Uttar Pradesh)-201305
Plot No.-02, Sector - 138, Noida Gautam Buddha Nagar (Uttar Pradesh)-201305
+91-9711011287 lantchnoida@gmail.com, sales@lanengineering.in
Mfg of : SMC, Deep Drawn, Polycarbonate LT Distribution Boxes & Meter Boxes
LT Cable, Energy Meters & AB Cables Accessories





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MANUFACTURER	M/s. Lan Engineering & Technologies, B-07&17, Sector-83, Noida	
4. HRC Fuse Link	"Dih Type"	
Make	HPL/NEW ERA/HB/ELCON/PC Industries/Micron/ RB Commercial BCH/ Indo-Asian /Havells /L&T/ C&S / DLV Switchgear/ Approved Make - <i>Type tested make only</i>	
Nominal Current	500A for 315KVA (3 Nos.) ✓ <i>x for fault indication & self pop up</i>	
Rated Voltage	415 Volt <i>438 V</i> ✓ <i>indicator should come out instantly on fusing.</i>	
Breaking Capacity Fuse	80 KA ✓	
5. MCCB		
Make of Switchgear	HPL/C&S/ Indo Asian/BCH/ELCON/ HB Control/ABB/ BCH RB Commercial/ L&T/Havells/Micron /Standard/Delton/DLV Switchgear/ Approved Make <i>Type tested make only & conforming</i>	
Rated Insulation	660V ✓ <i>Subject to the contract</i>	
Type	Fixed <i>you are not absolve of a</i>	
No. of Pole	Single ✓ <i>responsibility of</i>	
Nominal Current	120Amp. ✓ (12Nos.) <i>Correctness of materials</i>	
Power factor of Short circuit (Max)	0.4 lag ✓	
Short Circuit Breaking Capacity	10KA(Icu) ✓	
Utilization category	"A" ✓	
6. Link Disconnecter	<i>Chief Engineer (Project-II)</i>	
Make	HPL/NEW ERA/HB/ELCON/PC Industries/Micron/Lan/ RB Commercial /Sancos /Indo-Asian /Havells /C&S / DLV Switchgear/ Approved Make - <i>Type tested make only</i>	
Nominal Current	200A (12 Nos.) ✓	
Rated Voltage	433 Volt ✓	
7. Bus Bar		
Material of Bus Bar	EC Grade Aluminium ✓	
Size of Bus Bar	40 X 15mm or equivalent ✓	
Size of Neutral Bar	40 X 15 x 525mm mm or equivalent ✓	
8. Enclosure		
Size of Box (Lx H x D)	(L)1545 X (H) 1050 X (D) 325 mm <i>CHECKED</i>	
Thickness	2 mm ✓	
Material	MS CRCA Sheet ✓	
Process of Manufacturing	Deep Drawn Process ✓	
Provision of Pad Lock	Provided ✓ <i>AEE(P-II) EEE(P-II) ESE(P-II)</i>	
Locking Arrangement	Panel Lock ✓	
Colour of Box	Light Admiralty Grey Colour with powder coating Provided ✓	
9. Holes for Incoming & Outgoing Cable	For Incoming 60 mm 1nos. hole suitable for 300 sq. mm & For Outgoing 60 mm 4 nos. Holes suitable for 150 sq. mm with rubber Glands	
10. Mounting Arrangement on Pole	4 nos. suitable mounting clamps provided	
11. Air Circulation	2 nos. Louvers both Sides provided. <i>(Total 4 sets, the perforated sheet of 20 cm x 20 cm with 2.5 mm holes shall be welded from inside of the louvers)</i>	
12. Hinges	4 nos. MS. Hinges each side provided ✓	

Rakesh Pathak

Team Leader

Rodic Consultant Pvt. Ltd.
PMA, RDSS, NBPDC

B-07 & B-17, Sector - 83, Noida Gautam Buddha Nagar (Uttar Pradesh)-201305
Plot No.-02, Sector - 138, Noida Gautam Buddha Nagar (Uttar Pradesh)-201305
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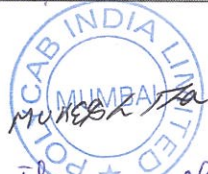


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POLYCAB India Ltd.

POLYCAB House, 771 Pandit Satawalekar Marg, Mahim West, Mumbai- 400016

PROJECT	Development of Distribution Infrastructure at Samastipur Electric Supply Circle (Samastipur & Vaishali districts) of Bihar under the Revamped Reforms-based and Results-linked, Distribution Sector Scheme.	
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MANUFACTURER	M/s. Lan Engineering & Technologies, B-07&17, Sector-83, Noida	
13.	Bus Bar Support Insulator	DMC Insulator for Bus Bar support provide ✓
14.	Gasket	Rubber Gasket provided ✓
15.	Marking Front Door	Danger Marking provided in red colour ✓
16.	Name Plate	Item Name- LT Distribution Box <i>Srno. - - - - -</i> Rating- 315KVA, ✓ <i>Month and year of Manufacturing</i> Manufacturer Name- Lan Engineering & Technologies, Noida <i>duly emb on die</i> Contractor Name- Polycab India Ltd., Mumbai Discom - North Bihar Power Distribution Co. Ltd. (NBPDC) Scheme- RDSS- <i>LR</i> (<i>Thickness of Name plate made of Stainle Steel shou be 1 mm.</i>)
17.	Earthing Bolts	Earthing bolts M10x35 mm on each side provided with nut bolt & washer.
18.	Acceptance Tests H.V. Insulation Resistance	H.V. at 2.5 KV for 1 minute <i>As per TS/IS</i> More than 100 mega ohms
19.	Tolerance	<i>±5% ±3%</i>



NOTE - Any left over parameters, if any shall be as per TS of RDSS.

APPROVED
Subject to the condition that you are not absolved of the responsibility of Correctness of materials

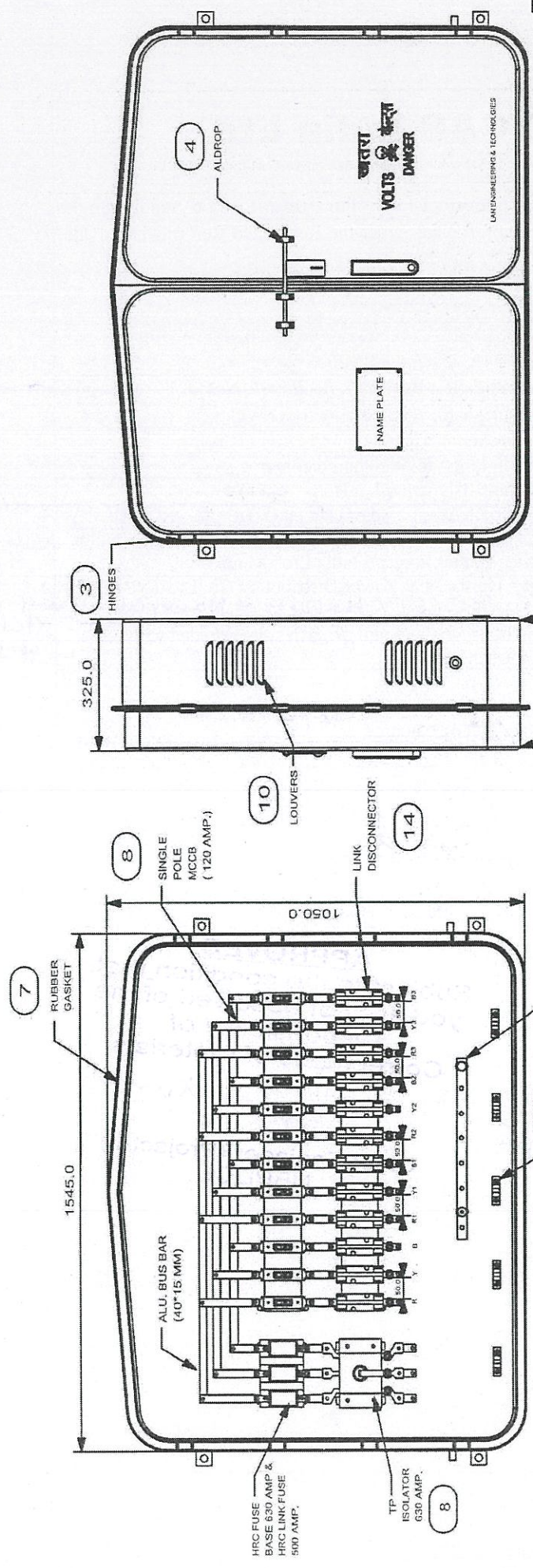
CHECKED

[Signature]
Rakesh Pathak
Team Leader
Rodic Consultant Pvt. Ltd.
PMA, RDSS, NBPDC

[Signature]
AEE(P-II) EEE(P-II) ESE(P-II)

[Signature]
Chief Engineer (Project-II)
NBPDC

1 2 3 4 5 6 7 8



* ALL DIMENSIONS IN MM
 * TOLERANCE IN SIZE / THICKNESS ± 5%

S.NO	DESCRIPTION	QTY.	S.NO	DESCRIPTION	S.NO
1.	BASE DEEP DRAWN	1 NOS.	8.	SINGLE POLE MCCB	12 NOS.
2.	COVER DEEP DRAWN	2 NOS.	9.	TP ISOLATOR	1 NOS.
3.	HINGES	8 NOS.	10.	LOUVERS	4 NOS.
4.	ARRANGEMENT FOR ALDROP	1 NOS.	11.	CABLE CLAMPS	5 NOS.
5.	CABLE HOLE FOR ENTRY /EXIT	5 NOS.	12.	NEUTRAL BUS BAR	1 NOS.
6.	EARTHING NUT BOLT WITH WASHER	2 NOS.	13.	ARRANGEMENT FOR BUS BAR FIXING	1 NOS.
7.	RUBBER GASKET	1 NOS.	14.	LINK DISCONNECTOR	12 NOS.

POLYCAB	POLYCAB India Ltd.
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MANUFACTURER	LAN ENGINEERING & TECHNOLOGIES, B-7&7, SECTOR -83, NOIDA -201395

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 SUBJECT TO THE CONDITION THAT YOU ARE NOT ABSOLVED OF THE RESPONSIBILITY OF MATERIALS

Checked
 CABLE HOLE FOR ENTRY /EXIT
 REMOVABLE HAND PLATE (125*125 MM)
 EARTHING NUT BOLT WITH WASHER
 CABLE HOLEDING CLAMP

Chief Engineer (Project-II) NBPDC
 ARRANGEMENT FOR BOX FIXING
 MUMBAI

LAN ENGINEERING & TECHNOLOGIES B-07 & B-17, SECTOR-83 PLOT NO-2, SECTOR -138 NOIDA, UP-201395	
TITLE	L. T. DISTRIBUTION BOX FOR 315 KVA DTs
DD/MM/YY	
DRAWN BY	VIKAS SHARMA
CHECKED BY	VIKAS SHARMA
APPROVED BY	
MARKETING	
SIZE	
ORG NO.	
SCALE 1:1	
SHEET 1 OF 1	

Checked
 AEE(P-II) EEE(P-II) ESEP-II

Rakesh Pathak
 Team Leader
 Rodic Consultant Pvt. Ltd.
 PMA, RDSS, NBPDC



18

		POLYCAB India Ltd. POLYCAB House, 771 Pandit Satawalekar Marg, Mahim West, Mumbai- 400016	
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MANUFACTURER	M/s. Lan Engineering & Technologies, B-07&17, Sector-83, Noida		
GUARANTEED TECHNICAL PARTICULARS FOR THREE PHASE LT CT METERING CUBICLE FOR 315KVA DISTRIBUTION TRANSFORMERS			
Sr.	Particulars	Values	
1	Material	CRCA MS Sheet ✓	
2	Manufacturing Process	Deep Drawn ✓	
3	Internal Dimension of Box	960mm x 460mm x 210mm ✓	
4	Thickness of Sheet	18 SWG ✓	
5	Number of Compartments	Two ✓	
6	Upper Compartment	For Housing Meter & Modem ✓	
7	Lower Compartment	For Housing 4 nos. Ring Type CTs for, 315 KVA- 600/5A, ✓	
8	Doors	Independent doors for each compartment ✓	
9	Fixing of Door	4 nos. Tamper proof inside hinges on both door of the box ✓	
10	Hinges Details	1.6mm MS Sheet & Hinge pin of dia 3mm ✓	
11	Locking Arrangement	1 No. Hole of 8mm in U-Latch for padlock on both doors ✓	
12	Sealing Arrangement	U-Latch arrangement with hole 2.5mm for sealing wire ✓	
13	Size of Viewing Window	90mm x 100mm ✓	
14	Size of Toughened Glass	110mm x 120mm x 5mm (Thick) ✓	
15	Glass Holder	Single Piece metal frame made by Deep Drawn ✓	
16	Glass Rubber	Single Piece rubber ring with minimum depth of 8 mm ✓	
17	Meter Mounting Arrangement	Min 35mm raised from the base of the box ✓	
18	Mounting Arrangement of CTs	Min 20mm raised from the base of the box ✓	
19	Meter Mounting Screw	M4X12mm (1nos.) and M4x35 (2nos. with nuts) ✓	
20	Cable Rubber Grommet	4 nos. provided on both side of the CTs compartment ✓	
21	Cable Rubber Grommet ID	40mm ✓	
22	Cable Rubber Grommet in Partition Sheet	4 nos with ID=15mm ✓	
23	Rubber Grommet Details	Closed with film of minimum 1mm thickness ✓	
24	Box Mounting on pole	4 nos. holes of 10.5mm provided on back side of the box ✓	
25	Louvers	2 nos. provided on both sides walls of the box with 20SWG perforated CRCA MS Sheet welded from inside of the louvers ✓	
26	Surface Treatment	7-Tank Phosphating Process ✓	
27	Powder Coating	Light Admiralty Grey with 40 Microns thickness approx. (IS:5, 1993) Shade No. 697 ✓	
28	Earthing Arrangement	2 nos. Earthing bolt of dia M8x25mm shall be welded on side wall of the box and shall be provided with 2 nuts and washers ✓	

Received on
24.04.24
PMA/Rodic
Raghav
25.04.24

APPROVED
Subject to the condition that you are not absolved of the responsibility of correctness of materials.
Chief Engineer (Project-II)
NBPDCL

CHECKED
AEE(P-II) EEE(P-II) ESE(P-II)



B-07 & B-17, Sector - 83, Noida Gautam Budha Nagar (Uttar Pradesh) -201305
Plot No.-02, Sector - 138, Noida Gautam Budha Nagar (Uttar Pradesh) -201305
+91-9711011287, lantechnoida@gmail.com, sales@lanengineering.in
Mfg. of: SMC, Deep Drawn, Polycarbonate LT distribution Boxes & Meter Boxes
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GUARANTEED TECHNICAL PARTICULARS FOR THREE PHASE LT CT METERING CUBICLE FOR 315KVA DISTRIBUTION TRANSFORMERS		
Sr.	Particulars	Values
29	Earth Marking	Provided ✓
30	Marking	Manufacturer Name, NBPDC, RDSS, LAN ✓ Danger Marking in Red Colour
31	Degree of Protection	IP-55 ✓
32	Packing	3Ply Corrugated Box ✓
33	Tolerance for Dimension	+ 3% ✓
34	CT Make Ring type (Tape wound / Resin cast)	ADHUNIK/PUSHAR/NIKSON/LAN/PROCOM/ASTAN/ANY Type tested make, CT shall conform to IS 2705/11 with latest amendment
35	Accuracy call of CTs	0.5 ✓
36	Rated output	5VA ✓ of RDSS.



NOTE - left over parameters, if any shall be as per relevant IS/TS & standard practice of DISCOM

CHECKED

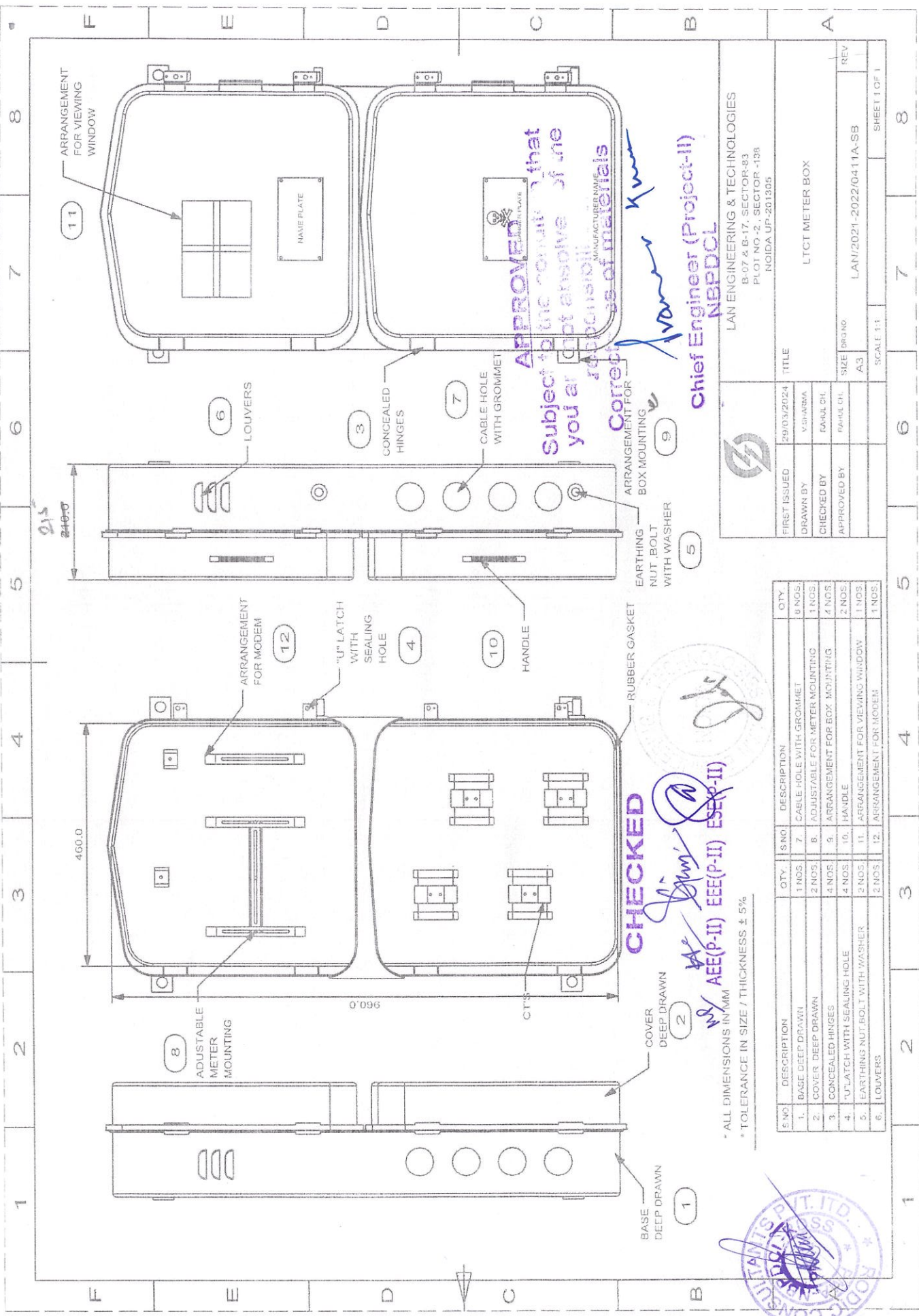
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AEE(P-II) EEE(P-II) ESEP(P-II)

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Chief Engineer (Project-II)
NBPDC



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 Subject to the consultant that you are not responsible for the correctness of materials
 Chief Engineer (Project-II)
 NRPDCL

CHECKED
 Chief Engineer (Project-II)
 NRPDCL

LAN ENGINEERING & TECHNOLOGIES
 B-07 & B-17, SECTOR-83
 PLOT NO-2, SECTOR-138
 NOIDA UP-201305



FIRST ISSUED	29/03/2024	TITLE	LTCT METER BOX
DRAWN BY	V.SHARMA	SIZE	A3
CHECKED BY	RAHUL CH.	SCALE	1:1
APPROVED BY	RAHUL CH.	SHEET NO	LAN/2021-2022/0411A-SB
		REV	

S.NO.	DESCRIPTION	QTY.	S.NO.	DESCRIPTION	QTY.
1.	BASE DEEP DRAWN	1 NOS.	7.	CABLE HOLE WITH GROMMET	8 NOS.
2.	COVER DEEP DRAWN	2 NOS.	8.	ADJUSTABLE FOR METER MOUNTING	1 NOS.
3.	CONCEALED HINGES	4 NOS.	9.	ARRANGEMENT FOR BOX MOUNTING	4 NOS.
4.	"U" LATCH WITH SEALING HOLE	4 NOS.	10.	HANDLE	2 NOS.
5.	EARTHING NUT, BOLT WITH WASHER	2 NOS.	11.	ARRANGEMENT FOR VIEWING WINDOW	1 NOS.
6.	LOUVERS	2 NOS.	12.	ARRANGEMENT FOR MODER	1 NOS.

* ALL DIMENSIONS IN MM
 * TOLERANCE IN SIZE / THICKNESS ± 5%

