



NORTH BIHAR POWER DISTRIBUTION CO. LTD.

[Office of Chief Engineer, Project-I/Urban]

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

CIN No: U40109BR2012SGC018920

Letter No: 702

[File No:-N-XIII/RDSS/VA/Muzaffarpur Circle - 3063/2023-

Dated: 03/7/23

E-mail: cerdssnbpdc@gmail.com

From,

Shriram Singh
Chief Engineer, Project-I (Urban)

To,

M/s Ashoka Buildcon Ltd
S.No.-861, Ashoka House,
Ashoka Marg, Vadala, Nashik-422011
E-mail:-ajay.kankariya@ashokabuildcon.com

Sub:-

Regarding approval of GTP & Drawing of Lightning Arrester of make M/s New Aquaria Electech Pvt. Ltd., Telangana for Loss Reduction Component works under "Revamped Reforms-Based and Results-Linked Distribution Sector Scheme."

Ref:-

(i) NOA No.-250 & 251 dated 06.03.2023
(ii) Your letter no.-165 dated 26.06.2023

Sir,

With reference to the above, please find the copy of approved GTP & Drawing of following item for Loss Reduction Component works under "Revamped Reforms-Based and Results-Linked Distribution Sector Scheme":-

S.N.	Material Description	Vendor Name
1	9 KV 5 KA Distribution Class Lightning Arrester	M/s New Aquaria Electech Pvt. Ltd., Plot No-30, Kucharam Industrial Area, Toopran Mandal, Medak, Dist- Telangana.
2	9 KV 10 KA Station Class Lightning Arrester	

Correction where required in GTP & Drawing submitted by you has been done. However, these drawings shall be subject to correctness as per technical specifications of the tender document and the entire responsibility of 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 that of the contractor.

In case of any conflict or contradiction between GTP/Drawing & Technical Specifications, the decision of Chief Engineer, Project-I (Urban) shall be final and binding on both parties. Contractor shall have to replace the material to the entire satisfaction of the purchaser in case the material is found unsuitable for use in the project, at any stage.

Please carry out the works immediately under the conditions stated above.

Encl:- As above

Yours faithfully

(Shriram Singh)

Chief Engineer, Project-I (Urban)

Memo No.-

702

Dated-

03/7/23

Copy forwarded M/s Vindhya Telelinks Limited, Club 125, 6th floor, Tower A, Plot No- 3, 4 & 5, Sector 125, Noida, UP-201301 / M/s Polycab India Ltd., Polycab House, 771, Pandit Satwalekar Marg, Mumbai / M/s NCC Ltd., NCC House, Survey no. 64, Madhapur, Hyderabad, 500081 for information and necessary action.

Encl:-As above

(Shriram Singh)

Chief Engineer, Project-I (Urban)

Memo No.-

702

Date-

03/7/23

Copy forwarded to Chief Engineer, Project-II, NBPDC for information and necessary action.

Encl:-As above

(Shriram Singh)

Chief Engineer, Project-I (Urban)

MOVster™

GUARANTEED TECHNICAL PARTICULARS FOR

9kV 5kA DISTRIBUTION CLASS GAPLESS METAL OXIDE POLYMER TYPE LIGHTNING ARRESTER

CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDC)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No.250 dated 06.03.2023
	Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik. (Maharashtra)

SL NO	GTP Parameters	GTP Values
1	Name of the manufacturer	New Aquaria Electech Private Limited
2	Address	Plot no. 30, Kucharam Industrial Area, Toopran Mandal, Medak Dist. Talangana
3	Brand	MOVster™
4	Model No.	DV-OPLA-09
5	Application	Outdoor
6	Type	Distribution Class
7	Housing	Polymer
8	Applicable Standard	IEC 60099-4:2009 / IS 3070 (Part III) ✓
9	Nominal System Voltage (kV)	11
10	Frequency (Hz.)	50
11	Rated voltage (kVrms)	9 ✓
12	Maximum Continuous Operating Voltage (kVrms)	7.65 ✓
13	Long Duration Discharge Class	Distribution Class ✓
14	Nominal Discharge Current (kAp)	5 ✓
15	Reference Current (mA)	1 ✓
16	Reference Voltage (kVrms)	> 9 ✓
17	Maximum Lightning Impulse Residual Voltage at 5kAp (8/20 μs wave) (kVp)	28 ²⁷
18	Maximum Steep Current Impulse Residual Voltage at 5kAp (1/20 μs wave) (kVp)	32
19	High Current Impulse Withstand capability (4/10 μs wave) (kAp)	65 ✓
20	Lightning Impulse withstand Voltage of Arrester Housing (1.2/50 μs wave) (kVp)	75 ✓
21	Power Frequency withstand Voltage of Arrester Housing - Wet (kV rms)	28 ✓
22	Minimum Creepage Distance of Arrester Housing (mm)	300 ✓
23	Partial Discharge at 1.05 times MCOV (pC)	< 10
24	Temporary Over Voltage Capability (kVrms) at	
	a) 0.1 sec	10.6 ^{10.8}
	b) 1.0 sec	10.1
	c) 10.0 sec	9.7
	d) 100.0 sec	9.2
25	Minimum Clearance	7.5A 1000 μs
	a) Between Arresters b) Arresters and Earthing objects	As per standard

Checked
 AFE(P-1) EEE(P-1) ESE(P-1)

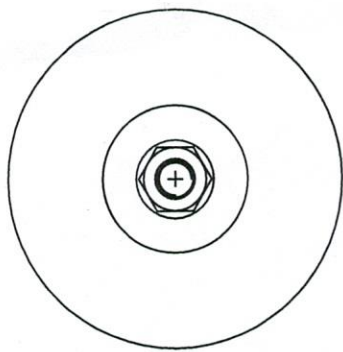
Low current long duration current & duration



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

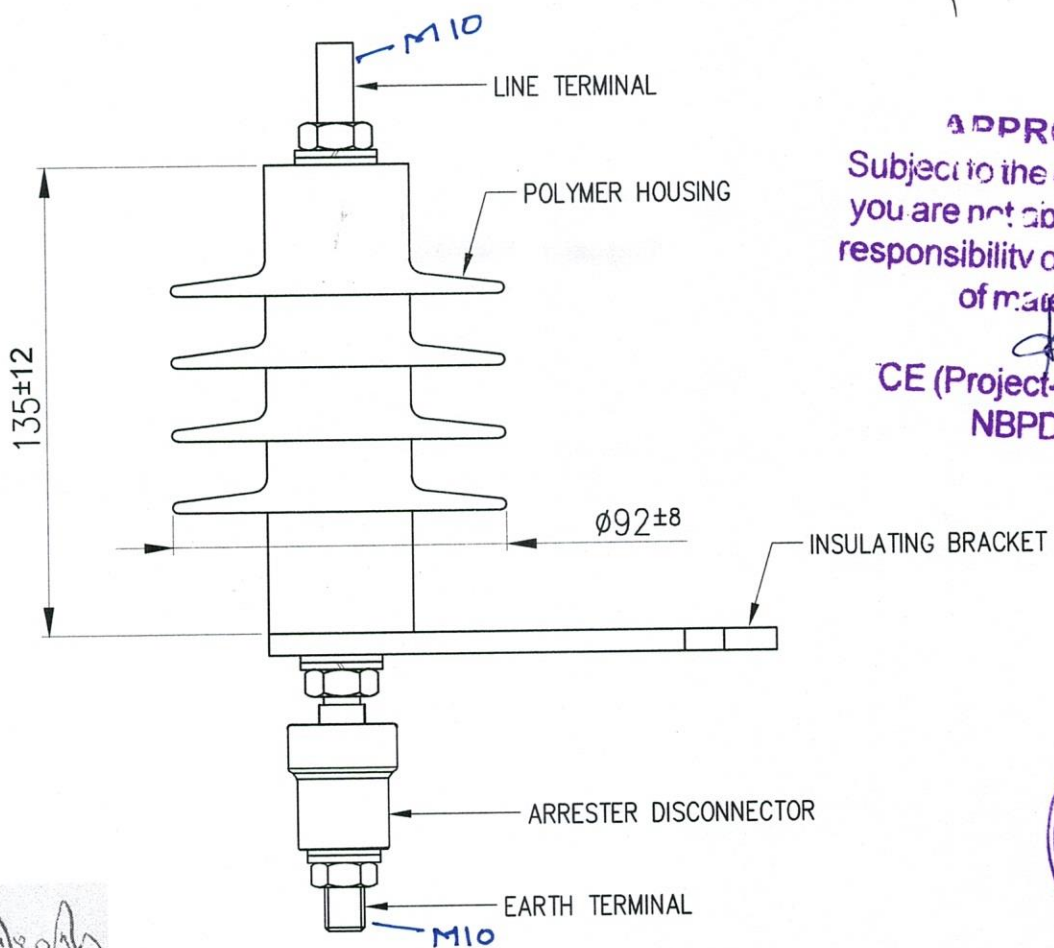


CE (Project-1), Urban
 NBPDC



PLAN

Checked
mb
 AEE(P-1) EEE(P-1) ESE(P-1)



ELEVATION

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 you are not absolved to the
 responsibility of correctness
 of materials
 CE (Project-1), Urban
 NBPDC

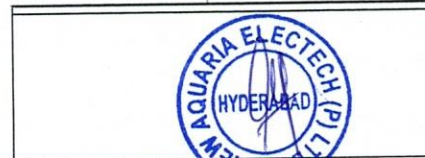


NOTES :

- 1) ALL DIMENSIONS ARE IN "mm"
- 2) GENERAL TOLERANCE : $\pm 15\%$
- 3) APPLICABLE STANDARD - IEC : 60099-4 / IS 3070 (PART 3)
- 4) MINIMUM CREEPAGE : 300 mm
- 5) MOUNTING TYPE : POLE MOUNTING WITH BRACKET (VERTICAL MOUNTING)
- 6) PARTIAL DISCHARGE : 10pC (max.)
- 7) HOUSING MATERIAL : SILICONE POLYMER

CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDC)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No.250 dated 06.03.2023 Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik.(Maharashtra)

9KV-5KA DIST. CLASS POLYMER SURGE ARRESTER



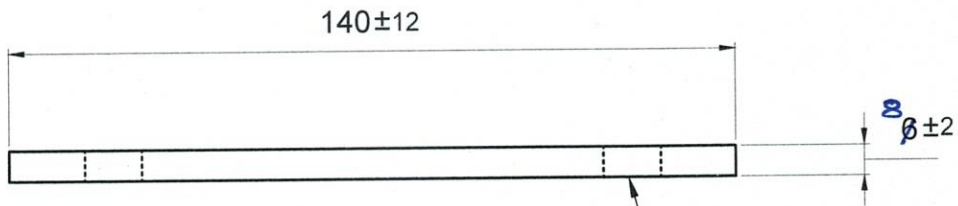
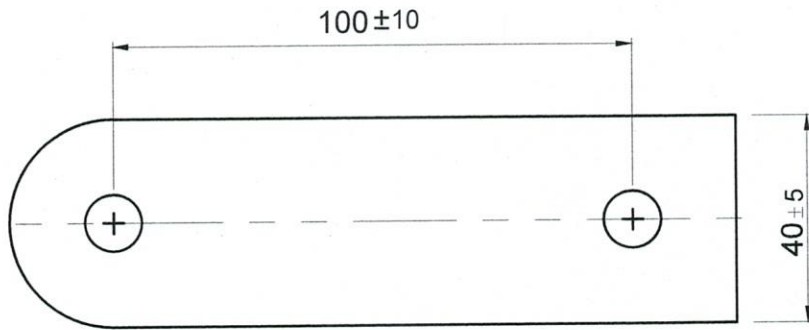
REV. NO.	REVISION	DATE	MADE BY	CHKD BY

New Aquaria Electech Pvt. Ltd.
 Plot no. 30, Kucharam Industrial Park, Kucharam,
 Toopran Mandal, Medak Dist., Telangana - 502 336

THIS DESIGN AND DRAWING IS THE PROPERTY OF M/s. New Aquaria Electech Pvt. Ltd. AND MUST NOT BE COPIED OR REPRODUCED OR USED IN PART OR FULL WITHOUT THEIR PRIOR PERMISSION IN WRITING FOR THE PURPOSE OTHER THAN FOR WHICH IS THE ISSUED.

DRAWING No.:-
NAEPL-OPLA-DV-0905-GA-011

REV:	0	SCALE:	NTS	DRAWN:	RS	29/09/2017
				CHECKED:	KC	29/09/2017
				APPROVED:	KA	29/09/2017



HOLE SUITABLE FOR M10 HARDWARE FOR MOUNTING

Checked
AEE(P-1) EEE(P-1) ESE(P-1)

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

CE (Project-1), Urban
NBPDCL



CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDCL)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No 250 dated 06.03.2023 Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik, (Maharashtra)

NOTES :

- 1) ALL DIMENSIONS ARE IN "mm"
- 2) GENERAL TOLERANCE : ± 5

TITLE : MOUNTING BRACKET FOR 9KV-5KA DIST. CLASS POLYMERIC LA

New Aquaria Electech Pvt. Ltd.

Plot no. 30, Kucharam Industrial Park,
Toopran Mandal, Dist. Medak, Telangana - 502336



FOR REVISION DETAILS, PLEASE REFER FIRST SHEET OF DRAWING. THIS DESIGN AND DRAWING IS THE PROPERTY OF M/s. New Aquaria Electech Pvt. Ltd., AND MUST NOT BE COPIED OR REPRODUCED OR USED IN PART OR FULL WITHOUT THEIR PRIOR PERMISSION IN WRITING FOR THE PURPOSE OTHER THAN FOR WHICH IS THE ISSUED.

DRAWING No.:- NAEPL-OPLA-DV-COMP-0905-002	REV: 0	SCALE NTS	DRAWN RS	RS 29/03/2017
		CHECKED KC	KC	29/03/2017
		APPROVED KA	KA	29/03/2017

NEW AQUARIA ELECTECH PVT. LTD.
 HYDERABAD INDIA
 www.newaquariaelectech.com
SURGE ARRESTER
 MOVster

R. VOLT (Ur) (kVrms)	9	MCOV (Uc) (kVrms)	7.65
NOM. DIS. CUR (KA)	5	LD CLASS	DC
		Month & YEAR OF MFG.	20xx-xx

CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDC)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No.250 dated 06.03.2023 Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik.(Maharashtra)

SL.NO. **XX-XXXX**

Ø 39±5


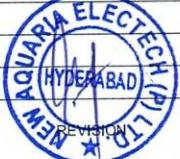

Checked
 AEE(P-1) EEE(P-1) ESE(P-1)

APPROVED
 Subject to the condition that you are not absolved to the responsibility of correctness of materials
 CE (Project-1), Urban NBPDC

CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDC)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No.250 dated 06.03.2023 Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik.(Maharashtra)

NOTES :

1. ALL DIMENSIONS ARE IN "mm"
2. GENERAL TOLERANCE - ± 10%
3. MATERIAL - ALUMINIUM
4. THICKNESS - 0.3mm
5. LETTERS : PRINTED

			<table border="1" style="width: 100%; text-align: center;"> <tr> <th>REV. NO.</th> <th>REVISION</th> <th>DATE</th> <th>MADE BY</th> <th>CHKD BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	REV. NO.	REVISION	DATE	MADE BY	CHKD BY					
REV. NO.	REVISION	DATE	MADE BY	CHKD BY									

TITLE :- NAME PLATE - 9kV 5kA RATED VOLTAGE POLYMER LIGHTNING ARRESTER-DIST. CLASS

New Aquaria Electech Pvt. Ltd.
 Plot no. 30, Kucharam Industrial Park, Kucharam, Toopran Mandal, Medak Dist. Telangana - 502336

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DRAWN	RS	28/03/2022											
CHECKED	KC	29/03/2022											
APPROVED	KA	29/03/2022											

GUARANTEED TECHNICAL PARTICULARS FOR

9KV 10KA STATION CLASS 2 GAPLESS METAL OXIDE POLYMER TYPE LIGHTNING ARRESTER

CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDCCL)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No.250 dated 06.03.2023
	Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik.(Maharashtra)

SL NO	GTP Parameters	GTP Values
1	Name of the manufacturer	New Aquaria Electech Private Limited
2	Address	Plot no. 30, Kucharam Industrial Park, Toopran Mandal, Dist. Medak, Talangana – 502 336
3	Brand	MOVster™
4	Model No.	S2-OPLA
5	Application	Outdoor
6	Type	Station Class
7	Housing	Polymer
8	Applicable Standard	IEC 60099-4:2009 / IS 3070 (Part III)
9	Nominal System Voltage (kV)	11 ✓
10	Frequency (Hz.)	50 ✓
11	Rated voltage (kVrms)	9 ✓
12	Maximum Continuous Operating Voltage (kVrms)	7.65 ✓
13	Long Duration Discharge Class	Class 2 ✓
14	Nominal Discharge Current (kAp)	10 ✓
15	Reference Current (mA)	2 ✓
16	Reference Voltage (kVrms)	> 9 ✓
17	Maximum Lightning Impulse Residual Voltage at 10kAp (8/20 μs wave) (kVp)	32
18	Maximum Switching Impulse Residual Voltage at 500Ap (30/60 μs wave) (kVp)	30
19	Maximum Steep Current Impulse Residual Voltage at 10kAp (1/20 μs wave) (kVp)	36
20	High Current Impulse Withstand capability (4/10 μs wave) (kAp)	100
21	Lightning Impulse withstand Voltage of Arrester Housing (1.2/50 μs wave) (kVp)	75
22	Power Frequency withstand Voltage of Arrester Housing – Wet (kV rms)	28
23	Minimum Creepage Distance of Arrester Housing (mm)	300
24	Partial Discharge at 1.05 times MCOV (pC)	< 10
25	Temporary Over Voltage Capability (kVrms) at	
	a) 0.1 sec	10.6 11.0
	b) 1.0 sec	10.1 10.5
	c) 10.0 sec	9.7
	d) 100.0 sec	9.2
26	Minimum Clearance a) Between Arresters b) Arresters and Earthing objects	As per standard

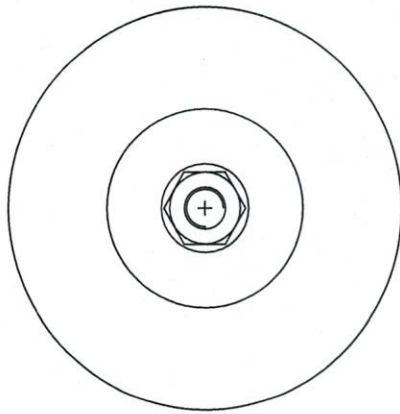
Checked
AEE(P-1) EEE(P-1) ESE(P-1)

APPROVED



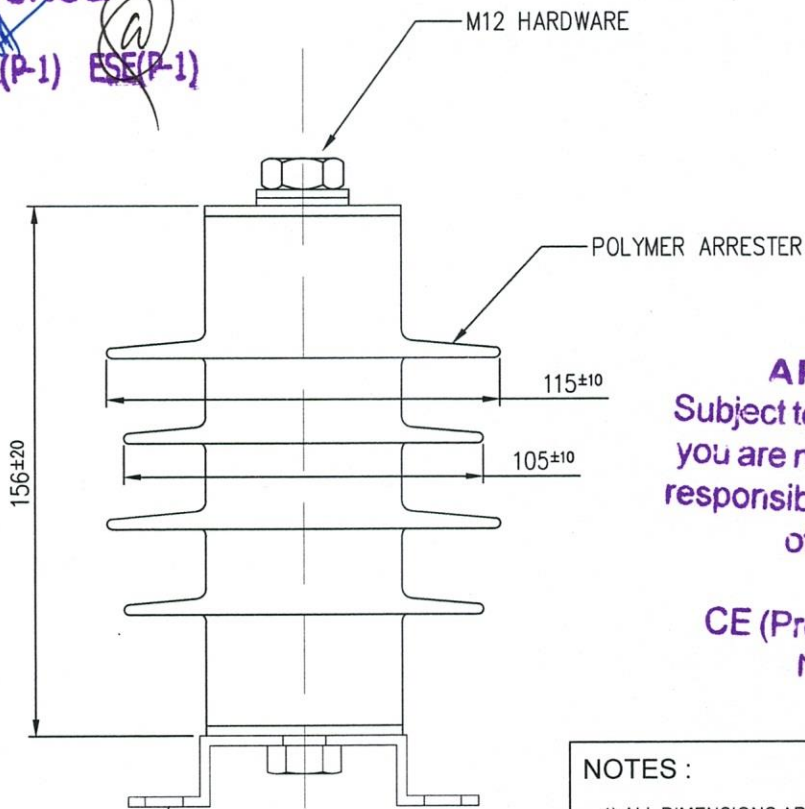
Subject to the condition that you are not absolved to the responsibility of correctness of materials

CE (Project-1), Urban NBPDCCL



PLAN

Checked
 AEE(P-1) EEE(P-1) ESE(P-1)



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 responsibility of correctness
 of materials

CE (Project-1), Urban
 NBPDCCL



PEDESTAL
ELEVATION

NOTES :

- 1) ALL DIMENSIONS ARE IN "mm"
- 2) UNSPECIFIED TOLERANCE : ± 10 mm
- 3) APPLICABLE STANDARD - IEC : 60099-4 / IS 3070 (PART 3)
- 4) MINIMUM CREEPAGE = 300 mm
- 5) MOUNTING TYPE - POLE / PEDESTAL (VERTICAL MOUNTING)
- 6) PARTIAL DISCHARGE = 10pC (max)
- 7) HOUSING MATERIAL - SILICONE POLYMER
- 8) L.D CLASS - 2

TITLE :- 9KV-10KA CLASS 2 POLYMER LIGHTNING ARRESTER

New Aquaria Electech Pvt. Ltd.

Plot no. 30, Kucharam Industrial Park, Kucharam, Toopran Mandal, Medak Dist., Telangana - 502 336

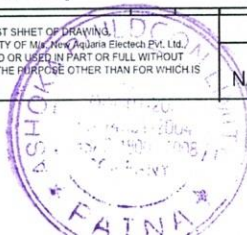
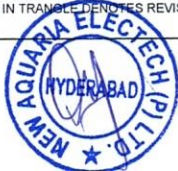
CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDCCL)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No.250 dated 06.03.2023 Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik.(Maharashtra)

IF IN DOUBT PLEASE ASK.
 # ALL DIMENSIONS ARE IN mm OTHERWISE SPECIFIED.
 # NUMBER IN TRIANGLE DENOTES REVISION.

FOR REVISION DETAILS, PLEASE REFER FIRST SHEET OF DRAWING.
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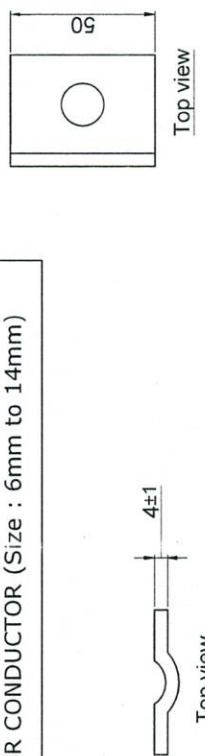
DRAWING No:-
 NAEPL-OPLA-S2-09-011

REV:	SCALE	DRAWN	RS	30/06/2018
0	NTS	CHECKED	KC	30/06/2018
		APPROVED	KA	30/06/2018



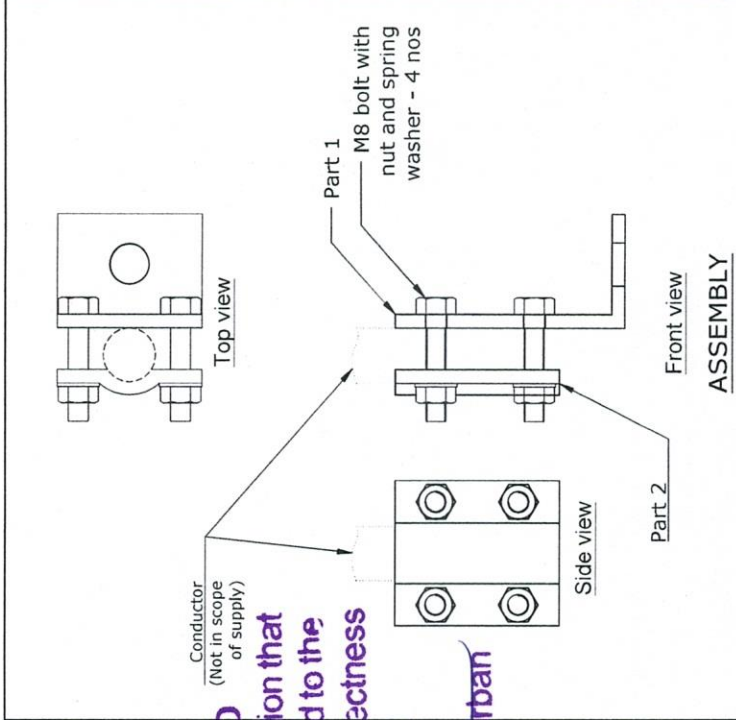
NOTES :

1. ALL DIMENSIONS ARE IN "mm"
2. GENERAL UNSPECIFIED TOLERANCE - ± 10%
3. MATERIAL - ALUMINIUM
4. LINE TERMINAL IS SUITABLE FOR ACSR CONDUCTOR (Size : 6mm to 14mm)



APPROVED
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CE (Project-1), Urban NBPDC



ASSEMBLY

LINE TERMINAL FOR STATION TYPE POLYMER LIGHTNING ARRESTER

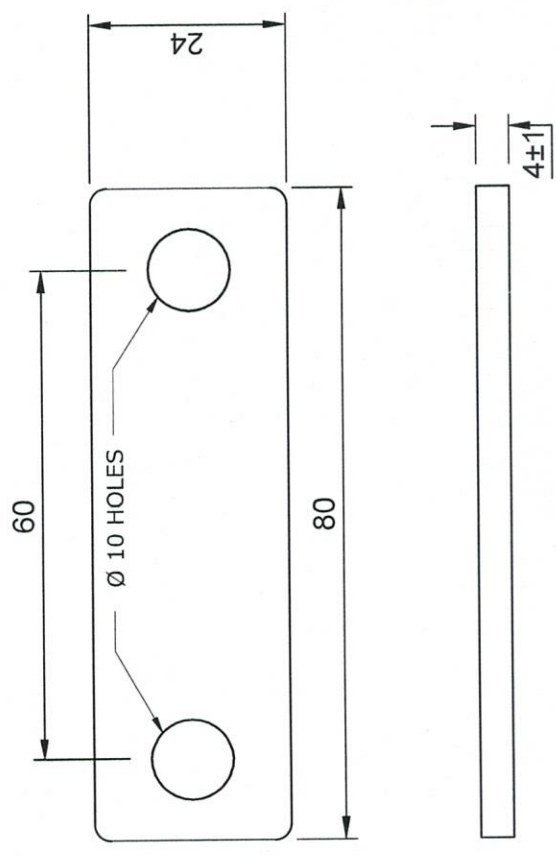
New Aquaria Electech Pvt. Ltd.
 Plot no. 30, Kucharam Industrial Area, Kucharam, Toopran Mandal, Medak Dist., Telangana - 502 336

CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDC)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No.250 dated 06.03.2023 Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik. (Maharashtra)

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DRAWING No. : NAEPL-OPLA-S2-COM-014	REV. : 0 SCALE : NTS APPROVED : CHECKED : DRAWN :
CHKD BY:	RS : 30/06/2018 KC : 30/06/2018 KA : 30/06/2018

Checked
 AEE(P-1) EEE(P-1) ESEP(P-1)





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CE (Project-1), Urban NBPDCI

NOTES :

1. ALL DIMENSIONS ARE IN "mm"
2. GENERAL TOLERANCE - ± 5%
3. MATERIAL - ALUMINIUM, THICKNESS : 4 ±1 mm

Checked
 AEE(P-1) EEE(P-1) ESE(P-1)

CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDCI)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No.250 dated 06.03.2023 Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik. (Maharashtra)

GROUND TERMINAL FOR STATION TYPE POLYMER LIGHTNING ARRESTER

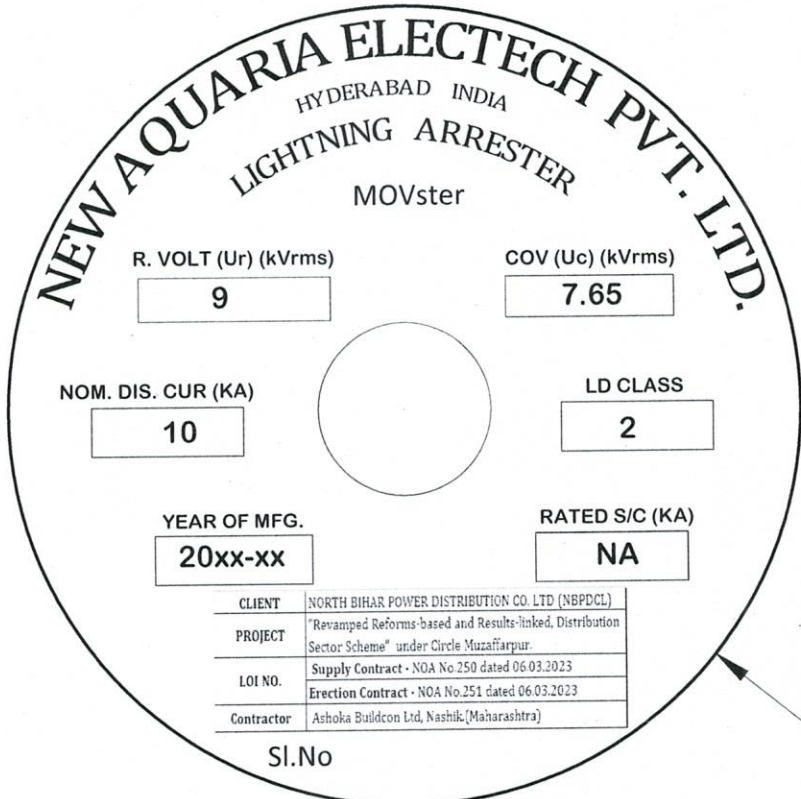
New Aquaria Electech Pvt. Ltd.
 Plot no. 30, Kucharam Industrial Area, Kucharam, Toopran Mandal, Medak Dist., Telangana - 502 336.



REV:	SCALE	DRAWN	RS
0	NTS	CHECKED	KC
		APPROVED	KA

DRAWING No. :
NAEPL-OPLA-S2-COM-015

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Checked
AEE(P-1) EEE(P-1) ESE(P-1)

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CE (Project-1), Urban NBPDC



NOTES :

1. ALL DIMENSIONS ARE IN "mm"
2. GENERAL TOLERANCE - ±15%
3. MATERIAL - ALUMINIUM, 0.3mm THICK
4. PRINTING : BLACK

CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDC)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" under Circle Muzaffarpur.
LOI NO.	Supply Contract - NOA No.250 dated 06.03.2023 Erection Contract - NOA No.251 dated 06.03.2023
Contractor	Ashoka Buildcon Ltd, Nashik.(Maharashtra)

TITLE :- NAME PLATE - 9KV 10KA POLYMER LA

New Aquaria Electech Pvt. Ltd.
 Plot no. 30, Kucharam Industrial Park, Kucharam, Toopran Mandal, Medak Dist. Telangana - 502336

FOR REVISION DETAILS, PLEASE REFER FIRST SHEET OF DRAWING. THIS DESIGN AND DRAWING IS THE PROPERTY OF M/s. New Aquaria Electech Pvt. Ltd. AND MUST NOT BE COPIED OR REPRODUCED OR USED IN PART OR FULL WITHOUT THEIR PRIOR PERMISSION IN WRITING FOR THE PURPOSE OTHER THAN FOR WHICH IT IS ISSUED.



DRAWING No. :-	REV:	SCALE	DRAWN	RS	11/12/2017
NAEPL-OPLA-S2-09-012	0	NTS	CHECKED	KC	11/12/2017
			APPROVED	KA	11/12/2017