

1643



# North Bihar Power Distribution Company Limited

Regd. Office-Vidyut Bhawan, Bailey Road, Patna.

CIN No:U40109BR2012SGC018920

(Department of Project II)

Letter No- 307 /

NB/P-II/Kishan/RDSS/ Vaishno Associates/ 22 /2023

dated 27/7/23 /

Contact No – 09264437179

Email – [cerdssnbpdc12@gmail.com](mailto:cerdssnbpdc12@gmail.com)

From,

Pranav Kumar  
Chief Engineer (Project-II)

To,

M/s Vaishno Associates Vidyut Projects LLP,  
H.O-14-15, 3<sup>rd</sup> Floor, Gajraj Tower,  
Motilal Atal Road, Jaipur-302001,

Email – [vaishno-elect@rediffmail.com](mailto:vaishno-elect@rediffmail.com), [rohitkr.elect@gmail.com](mailto:rohitkr.elect@gmail.com), [vaishno.rdsskishanganj@gmail.com](mailto:vaishno.rdsskishanganj@gmail.com)

Sub: - Regarding approval of GTP & Drawing of Dynamic Cable Limited, Jaipur under RDSS Project.

Ref :- 1) NIT No.-35/PR/NBPDCL/2022

2) NOA No.-23 & 24 dated 06.03.2023

3) Your Lt. No.- VAVP/NBPDCL/RDSS/KISH/2023-24/71 dated 21.07.2023

Sir

With reference to the subject noted above, please find enclosed herewith approved GTP & drawing of cable and conductors for Development of Distribution Infrastructure under Revamped Reforms-Based And Results-Linked, Distribution Sector scheme. Details as follows :-

Sl. No.	Name of Firm and address	Name of Material/Equipment
1.	M/s Dynamic Cable Limited, Unit No.-1, F-260, Road No. 13, VKI Area, Jaipur-302013.	a) 11 KV 3Cx95+1Cx95 Sqmm HT AB Cable b) 11 KV 3Cx185+1Cx150 Sqmm HT AB Cable

The Correction wherever required in GTP/Drawing submitted by the manufacturer has been made. However, these drawing 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 specification as well as supply of material according to the technical specification of the contract agreement shall be responsibility of the contractor.

In case of any conflict or contradiction between GTP/ Drawings & Technical Specification, 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.

Please carry out the works immediately under conditions stated above.

**Encl:- As above.**

Your faithfully

*Pranav Kumar*  
27.7.2023  
(Pranav Kumar)

Chief Engineer (Project-II)

Memo no 307 /

dated 27/07/23

Copy forwarded M/s Vindhya Telelinks Limited, Club 125, 6<sup>th</sup> Floor, Tower A, Plot No- 3, 4 & 5, Sector 125, Noida, UP-201301/ M/s Ashoka Buildcon Ltd., S.No.-861, Ashoka House, Ashoka Marg, Vadaḷa, Nashik-422011/M/s Polycab India Ltd., Polycab House, 771, Pandit Satwalekar Marg, Mumbai / M/s NCC Ltd., NCC House, Survey no. 64, Madhapur, Hyderabad, 500081 / M/s JSP Projects Pvt. Ltd., Flat No.-5, IInd Floor, IIIrd B-2, Nehru Nagar, Ghaziabad (UP)-201001 / M/s CABCON India Ltd., 1<sup>st</sup> Floor, The Terminus Building, BG-12, Action Area- 1 B, New Town, Kolkata-700156 / M/s Techno Power Enterprises Pvt., INFINITY "THINK TANK"

Tower II, 10<sup>th</sup> Floor Plot No. A3, Block-GP, Sector V, Salt Lake City, Kolkata-700091 (WB) for information and necessary action.

*Pranav Kumar*  
27.7.2023

**(Pranav Kumar)**

Chief Engineer (Project-II)

dated 27/7/23/

Memo no 307/

Copy forwarded to Chief Engineer, Project-I (Urban), NBPDCCL for information and further needful action.

*Pranav Kumar*  
27.7.2023

**(Pranav Kumar)**

Chief Engineer (Project-II)

dated 27/7/23/

Memo no 307/

Copy forwarded to M/s Rodic Consultant, Hq team for information and further needful.

*Pranav Kumar*  
27.7.2023

**(Pranav Kumar)**

Chief Engineer (Project-II)

dated 27/7/23/

Memo no 307/

Copy forwarded to OSD to MD/ Director (Project), NBPDCCL for kind information.

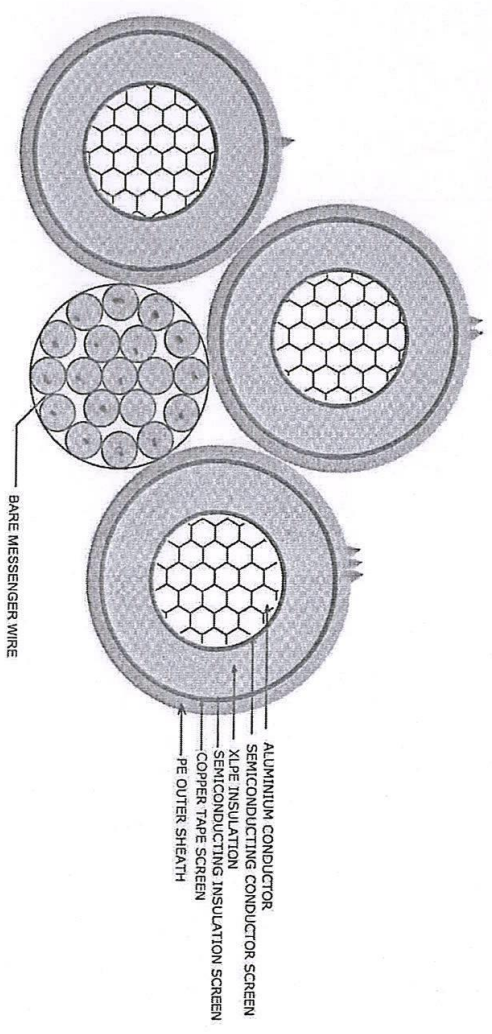
*Pranav Kumar*  
27.7.2023

**(Pranav Kumar)**



Chief Engineer (Project-II)

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# CONSTRUCTIONAL DRAWING OF 11 KV 3CX185+150 SQMM XLPE INSULATED AERIAL BUNCHED CABLE





CUSTOMER NAME : NBPDCI

DESIGN BY	SUBHASH SAINI	 CONSTRUCTIONAL DRAWING OF 11 KV 3CX185+150 SQMM AB CABLE
APPROVED BY	RAJESH CHATURVEDI	
DRAWING NO.	DCL/23-24/005	 DYNAMIC CABLES LTD. JAIPUR
DATE	08.04.2023	
SCALE	N.T.S	




**CHECKED**



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

**APPROVED**

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

  
 Chief Engineer (Project-I)  
 NBPDCI



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**M/S Dynamic Cables Ltd.**  
F-260, Road No.-13, V.K.I. Area, Jaipur-302 013 (Rajasthan)

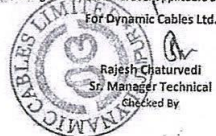
**SCHEDULE OF GUARANTEED TECHNICAL PARTICULAR FOR SUPPLY OF HT AERIAL BUNCHED CABLE**

NAME OF THE MANUFACTURE	Dynamic Cables Ltd.
PLACE OF MANUFACTURE	H-581A To H-592A, Road No.6, VKI Area Jaipur (raj) OR A-129, A 129A, A130, SKS Industrial Area, Reengus, Distt., Sikar-332404, Rajasthan, India
CLIENT	NORTH BIHAR POWER DISTRIBUTION CO.LTD (NBPDCL)
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" at Kishanganj
Contractor	Vaishno Associates Vidyut Projects LLP (EPC Division), Jaipur.
ISO CERTIFICATION	ISO 9001-2015 CERTIFIED & VALID UPTO 03/09/2023
STANDARDS APPLICABLE	Generally conforming to IS 7098 (Part-2) :2011
CABLE DETAILS:-	
TYPE OF CABLE	HT Aerial Bunched Cable
VOLTAGE GRADE	6.35/11 KV

1	General	3C X 185 + 150 SQ.MM
1.1	Brand Name or Trade Mark	Dynamic Cables Ltd
1.2	Name & Address of Manufacturer	Dynamic Cables Ltd, H-581(A)-H-592(A), Road No.6 VKI Area Jaipur-302 013 or A-129, A 129A, A130, SKS Industrial Area, Reengus, Distt., Sikar-332404, Rajasthan, India
1.3	Rated Voltage	6.35/11 KV
2.0	Phase Conductor	
2.1	Material	Aluminium Alloy IS-358 (P+II) (G4)
2.2	Class/Grade	Class 2, 2 <sup>nd</sup> /1st to IS:8130/1984
2.3	Shape of conductor	Standard Compacted Circular
2.4	Nominal cross section area (mm <sup>2</sup> )	185
2.5	Approximate Dia. of Conductor (mm)	15.3
2.6	Maximum DC Resistance at 20°C Ohm/KM	0.164
3	Conductor Screening	
3.1	Material	Extruded Semi Conducting Compound
3.2	Approx. Thickness (mm)	0.5
4	Insulation	
4.1	Material	Extruded Cross Linked Polyethylene XLPE
4.2	Nominal thickness (mm)	3.6
4.3	Tolerance on thickness (Min)	(0.1+0.1xt) where t = Thickness of insulation
5	Insulation Screening	
5.1	Material	Extruded Semi Conducting Compound
5.2	Approx. Thickness (mm)	Plain Copper Tape
(a)	Non-Metallic	
(b)	Metallic	
6	Polyethylene Sheath Over Core	
6.1	Material	Extruded Black Polyethylene
6.2	Nominal thickness (mm)	2.0
7	Bare Messenger Wire	
7.1	Material & its applicable Standard	Aluminium Alloy as per IS:358 (Part-4) 1994
7.2	Shape of Conductor	Standard Compacted Circular
7.3	Nominal Cross section area (mm <sup>2</sup> )	150
7.4	No of Strands and dia of strand (mm)	19/3.18 (Before stranding & Compacting)
7.6	Approximate Cond. Diameter (mm)	15.9
7.7	DC Resistance at 20°C (Ohm/Km)	0.226
7.8	Approximate Breaking Load (KN)	420
8	Cables	
8.1	Continuous Current Carrying Capacity in air at ambient Temp 40°C	370 Amps
8.2	Maximum Short Circuit Current for 1 Sec. (KA)	17.39
8.3	Identification of Power Core	Ridge I, II & III on Phase Cores
8.4	Laying Up of Power Core and with AAAC Messenger Wire	3 Phase Cores twisted around the Bare Messenger Wire
9	Approximate Total Weight of Cable kg/km	2650
9.1	Maximum Conductor Temp. During Short Circuit	250°C
9.2	Bending Radius of the cable	15 X O.D (For installation purpose)
9.3	Standard Drum Length with Tolerance	(500/1000) ± 5%
9.4	Overall quantity tolerance	± 2%
9.5	Non standard drum length	10% of Ordered Quantity. No length less than 250 Mtrs.
9.6	Manufacturer Identification Mark	Dynamic Cable, Voltage Grade, Size of Cable, Year of Manufacture
9.7	Sequential length marking	Provided at every one meter

Note: The above given parameters are only indicative and approximate and can be subjected to usual manufacturing tolerances wherever applicable as per relevant IS.

Date: 08.04.2023  
Place: Jaipur



Prepared By

subject to the condition that you are not absolved of the responsibility of correctness of material



- \* Maxm operating voltage - 12kV
- \* Maxm continuous conductor temp - 90°C
- \* Maxm short time conductor temp - 250°C
- \* No of Power Cores - 3 Nos
- \* No of messenger wire - 1 Nos
- \* Phase conductor - Minm no. of stranded wire - 19 Nos
- \* Messenger wire - minm no. of wires - 19/3.18

Approved  
Rajesh Chaturvedi  
Sr. Manager Technical

Chief Engineer (Project)

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Approved



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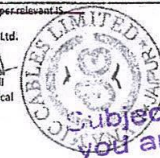
M/S Dynamic Cables Ltd.		
F-260, Road No.-13, V.K.I. Area, Jaipur-302 013 (Rajasthan)		
SCHEDULE OF GUARANTEED TECHNICAL PARTICULAR FOR SUPPLY OF 11 KV HT XLPE AERIAL BUNCHED CABLE		
NAME OF THE MANUFACTURE	Dynamic Cables Ltd.	
PLACE OF MANUFACTURE	H-581A To H-592A, Road No.6, VKI Area Jaipur (raj) OR A-129, A 129A, A130, SKS Industrial Area, Reengus, Distt., Sikar-332404, Rajasthan, India	
CLIENT	NORTH BIHAR POWER DISTRIBUTION CO. LTD (NBPDC)	
PROJECT	"Revamped Reforms-based and Results-linked, Distribution Sector Scheme" at Kishanganj	
Contractor	Vaishno Associates Vidyut Projects LLP (EPC Division), Jaipur.	
ISO CERTIFICATION	ISO 9001:2015 CERTIFIED & VALID UPTO 03/09/2023	
STANDARDS APPLICABLE	Generally conforming to IS: 7058 Pt-II/2011 with latest Amendment.	
CABLE DETAILS:-		
TYPE OF CABLE	HT Aerial Bunched Cable	
VOLTAGE GRADE	6.35/11 KV	
1	General	3CK 95 + 95 SQ.MM
1.1	Brand Name or Trade Mark	Dynamic Cables Ltd
1.2	Name & Address of Manufacturer	Dynamic Cables Ltd, H-581(A)-H-592(A), Road No.6 VKI Area Jaipur-302 013 or A-129, A 129A, A130, SKS Industrial Area, Reengus, Distt., Sikar-332404, Rajasthan, India
1.3	Rated Voltage	6.35/11 KV ✓
2.0	Phase Conductor	
2.1	Material	Aluminium <i>Ally (IS-398/Pt-II/94)</i> ✓
2.2	Class/Grade	Class 2, up to IS:8130/1984 ✓
2.3	Shape of conductor	Standard Compacted Circular ✓
2.4	Nominal cross section area (mm <sup>2</sup> )	95 ✓
2.5	Approximate Dia. of Conductor (mm)	11.0 ✓
2.6	Maximum DC Resistance at 20°C OHM/KM	0.320 ✓ <i>as per relevant IS</i>
3	Conductor Screening	
3.1	Material	Extruded Semi Conducting Cross Linked Polyethylene <i>Compound</i> ✓
3.2	Approx. Thickness (mm)	0.5 ✓
4	Insulation	
4.1	Material	Extruded Cross Linked Polyethylene XLPE <i>as per relevant IS</i> ✓
4.2	Nominal thickness (mm)	3.8 ✓
4.3	Tolerance on thickness (Min)	(0.1+0.1x) where t = Thickness of Insulation ✓
5	Insulation Screening	
5.1	Material	
(a)	Non-Metallic	Extruded Semi Conducting Compound <i>as per relevant IS 7058 (Part-I)</i> ✓
(b)	Metallic	Copper Tape <i>Applied helically on core</i> ✓
5.2	Approx. Thickness (mm)	
(a)	Non-Metallic	0.6 ✓
(b)	Metallic	0.03 ✓
6	Polyethylene Sheath Over Core	
6.1	Material	Extruded Black Polyethylene <i>PVC type ST2 as per relevant IS</i> ✓
6.2	Nominal thickness (mm)	2.0 ✓
7	Bare Messenger Wire	<i>11 Grade Aluminium as per IS:8130</i> ✓
7.1	Material & its applicable standard	Aluminium Alloy as per IS:398 (Part-II)/1994 <i>Aluminium, magnesium, silicon Alloy</i> ✓
7.2	Shape of Conductor	Standard Compacted Circular ✓
7.3	Nominal Cross section area (mm <sup>2</sup> )	95 ✓
7.4	No of Strands and dia of strand (mm)	7/4.16 (Before stranding & Compacting) ✓
7.6	Approximate Cond. Diameter (mm)	12.4 ✓ <i>as per relevant IS</i>
7.7	DC Resistance at 20°C (Ohm/Km)	0.357 ✓
7.8	Approximate Breaking Load (KN)	27.97 ✓
8	Cables	
8.1	Continuous Current Carrying Capacity in air at Ambient Temp 40°C	245 Amps ✓
8.2	Maximum Short Circuit Current for 1 Sec. (KA)	8.9 ✓
8.3	Identification of Power Core	Ridge, II & III on Phase Cores ✓
8.4	Laying Up of Power Core and with AAAC Messenger Wire	3 Phase Cores twisted around the Bare Messenger Wire ✓
8.5	Approximate Total Weight of Cable kg/km	1620 <i>as per relevant IS</i> ✓
8.6	Standard Length of Cable in each drum in meter, Tolerance on drum length	1000 mtr (+/-) 35% <i>shall be as per requirement of DISCOM</i> ✓
8.7	Maximum Conductor Temp. During Short Circuit	250°C ✓
8.8	Bending Radius of the cable	15 X O D (For installation purpose) ✓
8.9	Manufacturer Identification Mark	Dynamic Cable, Voltage Grade, Size of Cable, Year of Manufacture <i>RDX MNPDC</i> ✓

CHECKED  
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Prepared By

For Dynamic Cables Ltd.  
Rajesh Chaturvedi  
Sr. Manager Technical  
Checked By



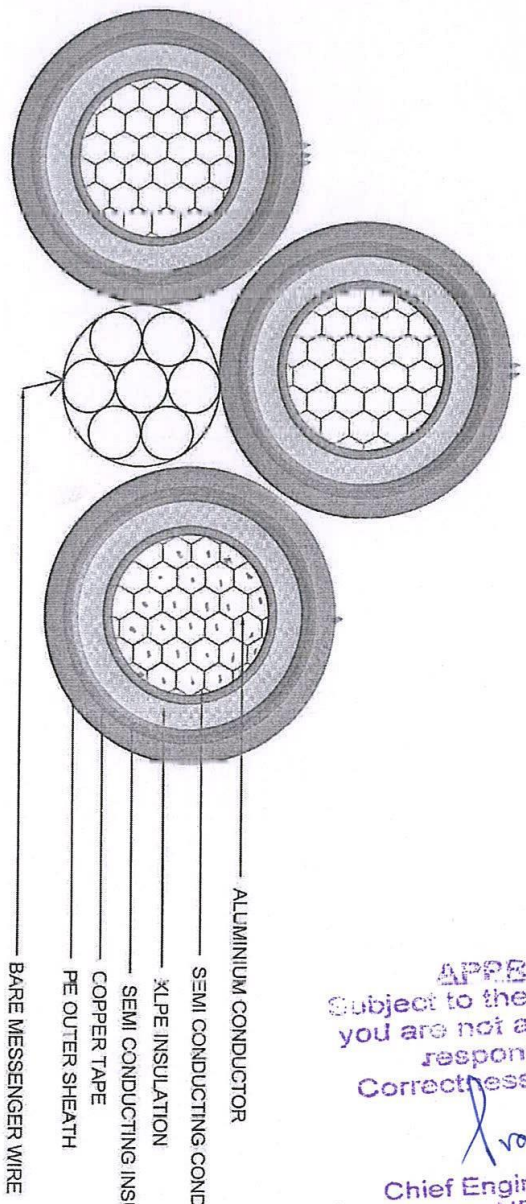
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Subject to the condition that you are not absolved of the responsibility of the correctness of materials

Chief Engineer (Project-II)  
NBPDC

- \* Max<sup>m</sup> operating voltage - 12 KV
- \* Max<sup>m</sup> continuous conductor temp - 90°C
- \* Max<sup>m</sup> short time conductor temp - 250°C
- \* No of power cores - 3 Nos.
- \* No of messengers wire - 1 No.
- \* Phase conductor - Min<sup>m</sup> no. of stranded wire - 15 Nos.
- \* Messenger wire - Min<sup>m</sup> No of wires - 13 Nos.

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CONSTRUCTIONAL DRAWING OF 11 KV 3CX95+95 & 3CX50+50 SOMM XLPE INSULATED AERIAL  
BUNCHED CABLE



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you are not absolved of the  
responsibility of  
Correctness of materials

*[Signature]*  
Chief Engineer (Project-II)  
NBPD

CHECKED

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



CUSTOMER NAME : NBPDCL			CONSTRUCTIONAL DRAWING OF 11 KV 3CX95+95 & 3CX50+50 SOMM AB CABLE
DESIGN BY	SUBHASH SAINI		
APPROVED BY	RAJESH CHATURVEDI		DYNAMIC CABLES LTD. JADPUR
DRAWING NO.	DCI/23-24/004		
DATE	08-04-2023		
SCALE	NTS		