



DAKSHINANCHAL VIDYUT VITRAN NIGAM LTD.
UrjaBhawan, 220 K.V. Substation, Bypass Road, Sikandra, Agra – 282007
CIN : U31200UP2003SGC027460(Email – revampdvvn@gmail.com)

No. **4202** /CE(RDSS)/DVVNL/Tech/Revamp/GTP & Drawing

Date **13/10/23**

Sub. :- **Approval of GTP & DRAWING**

Ref. :- **NOA No. 135/CE(REVAMP)/DVVNL/Tech/RDSS/NOA dt. 20.01.2023**

NOA No. 252/CE(REVAMP)/DVVNL/Tech/RDSS/NOA dt. 06.02.2023

M/s Lumino Industries Limited,
Acropolis, 12th Floor,
1858/1, Rajdanga Main Road,
Kolkata (West Bengal) -700107

Email - debraj@luminoindustries.com

Dear Sir,

In reference to above noted subject the GTP & DRAWING of Material, as mentioned below, submitted by M/s Lumino Industries Limited, Kolkata Lt. No. LIL/KOL/23-24/RDSS/DVVNL/ KANPUR & BANDA/APPROVAL/1939 dated 21.09.2023 for work of Development of Distribution Infrastructure for Loss Reduction under Revamp REFORMS-Based and RESULT-Linked Distribution Sector Scheme (RDSS) on Turnkey Basis in Uttar Pradesh under Dakshinanchal Vidyut Vitran Nigam Ltd. against Agreement No. RDSS/LR/11/BANDA & RDSS/LR/12/KANPUR is hereby approved as under.

S.No.	BOQ Item No.	Item	Name of Vender
1.	1.010	11 KV 3x185 Sqmm XLPE Armoured Power Cable	M/s Suyog Electricals Ltd.

Correction wherever required in GTP & DRAWING submitted by the contractor has been done by red ink. However, these GTP & DRAWING shall be subject to the valid type test report and correctness as per technical specification of the tender document and the entire responsibility of the correctness of the GTP & DRAWING as per the specification as well as supply of material according to the technical specification of the contract agreement and these GTP & DRAWING shall be that of the contractor.

In case of any deviation between GTP & DRAWING & Technical Specification the decision of the M.D. DVVNL, Agra shall be final and binding on both the parties. Contractor shall have to replace the material to the entire satisfaction of purchaser in case the material is not found suitable for use in the projects. One copy of approved GTP & DRAWING is enclosed herewith.

Note :- 1. All parameters of above mentioned drawing and GTP must be as per technical specification of RDSS SBD and relevant IS. No deviation will be entertained.

2. If vendor/manufacturer is found debarred/Blacklisted in any discom/Power utilities in India then the approved GTP will deemed to be cancelled.

Encl : As above

No. **4202** /CE(RDSS)/DVVNL/Tech/Revamp/GTP & Drawing

Copy forwarded to the following for information & necessary action :-

1. Managing Director, DVVNL, Agra
2. Director (Technical/Finance), DVVNL, Agra.
3. Chief Engineer (Distribution), DVVNL, Kanpur/Banda
4. Superintending Engineer, EDC, Kanpur Nagar, Kanpur Dehat, Etawah, Auraiya, Farrukhabad, Kannauj, Banda, Chitrakoot, Hamirpur & Mahoba.
5. Team leader, PMA-RDSS, Discom Agra, M/s Wapcos Ltd.

(Rajat Juneja)

Chief Engineer (RDSS)

Date **13/10/23**

(Rajat Juneja)

Chief Engineer (RDSS)



Notwithstanding the aforesaid approval the entire Responsibility of the correctness and Supply of Material according to the Specification/Type test/GTP shall be that of the Contractor which is to be checked during inspection.

APPROVED
 EE (RDSS) SE (RDSS) CE (MODAL) RDSS
 [RDS] [DVVNL AGRA]

Scheme	RDSS	
Project	Development of Distribution Infrastructure at KANPUR and BANDA Zone of Uttar Pradesh State under Revamped Reforms-Based And Results-Linked, Distribution Sector Scheme on Turnkey basis	
Customer	DVVNL, AGRA	
Contractor	M/s. LUMINO INDUSTRIES LIMITED, KOLKATA	
NOA No.	135/ CE(REVAMP)/DVVNL/Tech/RDSS/NOA	Date : 20/01/2023
	252/CE(REVAMP)/DVVNL/Tech/RDSS/NOA	Date : 06/02/2023
Manufacturer	M/s.	
Item Description		
S.No.	Particulars	Description
1	Name of the Manufacturer	Suyog Electricals Limited
2	Address of the Manufacturer	696, Maswad GIDC Panchmahal, Gujarat
3	Contact Person & Contact No.	Abhijeet Chakraborty:- +91-6358843771
4	Email Id	tech.sales8@seplecables.com
5	GENERAL	
	Name of the manufacturer	Suyog Electricals Ltd
	Type of Cable	A2XFY
	Voltage Grade	6.35/11KV
	Applicable standard	IS:7098/P-2/2011
	No of core & Size in Sqmm	3C x 185 mm ²
	Maximum Conductor temperature at continuous operation	90 °C
	Maximum Conductor temperature at short circuit condition	250°C
	Permissible voltage variation	(+10% to -15%)
	Permissible frequency variation	±3%
	Voltage and frequency combined variation	+10%
	Minimum drum length	200/500(+5%)
	Packing Material	Wooden Drum
6	CONDUCTOR	
	Material	H2/H4 Grade Aluminium as per IS:8130/1984
	Shape	Compact Circular
	No of wire (Min)	30 Nos
7	CONDUCTOR SCREENING	
	Material	Semiconducting Material to IS:7098/P-2/2011
	Minimum Thickness	0.3 mm
	Type	Extruded
8	INSULATION	
	Material	XLPE to IS: 7098/P-2/2011
	Type	Extruded
	Nominal Thickness	3.6 mm
	Min Volume resistivity at Ambient temp	1x10 ¹⁴ Ω-cm
	Min Volume resistivity at 90 Deg C	1x10 ¹² Ω-cm
9	INSULATION SCREENING	
(i)	Non Metallic	
	Material	Semiconducting Material to IS:7098/P-2/2011
	Type	Extruded
	Whether thermosetting?	Yes
	Nominal thickness	0.3 mm
(ii)	Metallic	
	Material	Annealed plain copper tape
	Approx thickness	40 x 0.05mm 0.045mm
	Core identifier	Red, Yellow, Blue colour identification strips shall be provided under copper tape
10	LAID-UP	
	Lay Direction	Right hand direction
	Dia over Laid up (Approx)	53.3 mm
11	INNER SHEATH	
	Material	PVC ST-2 as per IS:5831/1984
	Type	Extruded
	Minimum thickness	0.6 mm
	Dia over Innersheath (Approx)	55.1 mm
	Colour	Black
12	ARMOUR	
	Material	Galvanised steel Flat strip to IS:3975/1998
	Type of armouring	Flat strip
	Dimension of armour (nominal)	4 x 0.8
	Coverage	Min 90


Checked BY

WARCUS LTD.
 (PMA-RDSS)



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APPROVED

	Lay Direction	EE(RDS) SE(NDSS) CE(NDBAL) RDSS	Left Hand Direction
	Dia over Armour (Approx)	[RDS - Cell DVVNL/AGRA]	56.7 mm
13	OUTER SHEATH		
	Material	Extruded FRLS PVC ST-2 as per IS.5831/1984	
	Minimum Thickness	2.36 mm	
	Colour	Black	
	Over all Diameter (Approx) +3 mm	62 mm	
14	PRINTING		
	Via ink jet-SEPL FRLS ELECTRIC 6.35/11KV(E) GRADE, SEQ. MARKING, SIZE, 2023	CML-7300112795	
15	FRLS PROPERTIES		
	a) Oxygen Index(test as per ASTM-D2863)	29% (min)	
	b) Temperature Index Test (ASTM-D2863)	250°C (min)	
	c) Smoke Density(test as per ASTM-D2843)	60% (max) (SDAR)	
	d) Acid gas emission(test as per IEC-754(I))	20% (max)	
16	ELECTRICAL PARAMETERS		
	Maximum DC resistance at 20°C	0.164 Ω/Km	
	Short Circuit rating of conductor for the duration of 1 Sec	17.3K.Amps	
17	CURRENT CARRING CAPACITY		
	In Ground at 90°C	275 Amps	
	In Air at 90°C	335 Amps	
Auth. Sign.	<p>Embossing:- RDSS - DVVNL/LR/KANPUR/12/2022/MFD-YR.</p> <p>RDSS - DVVNL/LR/BANDA/11/2022/MFD-YR.</p>		
 <p>Secretary Unit II, Ministry of Electrical Power and Energy, Government of India, New Delhi Director Unit III, Engineering Department, Government of India, New Delhi Director Unit IV, Electrical Engineering, Government of India, New Delhi WAPCOS Ltd, Plot No. 1, Sector 10, Gurgaon, Haryana - 122002 (Ph: 01299250051/0052/0053)</p>			



Dielectric constant at Normal freq for insulation:- 2.4 approx.

Max. continuous current carrying capacity per cable when drawn in duct/pipe at 40° - 240.

1.2/50 μs impulse wave withstand voltage - 75


5 min. power freq. withstand voltage - 21.

Max. dielectric stress @ conductor screen - 1.99

Max. dielectric stress @ insulation screen - 1.35

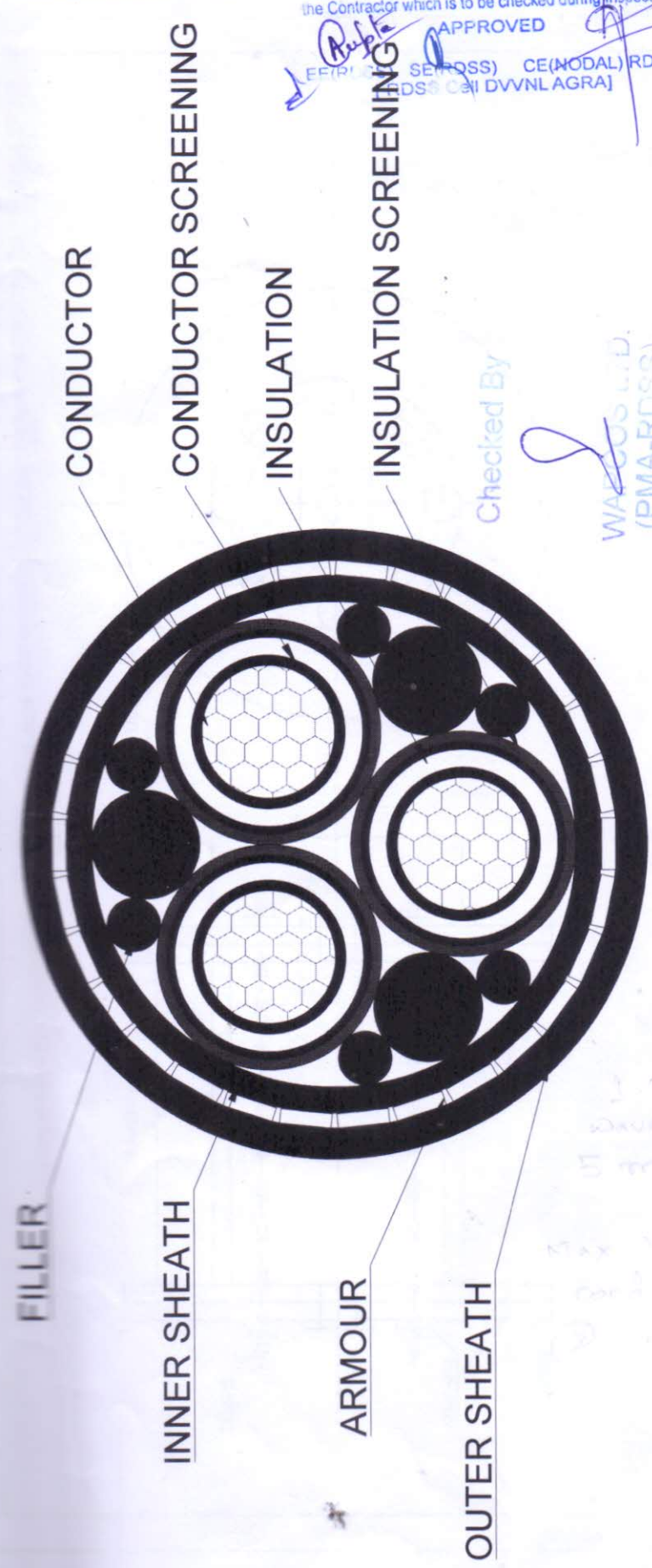
All parameter shall comply IS/TS.

Checked By


 WAPCOS L.D.
 (PMA-RDSS)

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APPROVED
 (SE/ROSS) CE(MODAL) RDSS
 (DSS/CAI DVVNL AGRA)



Checked By
 WAFOOS L.D.
 (PMA-RDSS)

SUYOG ELECTRICALS LTD	DESIGNED	ABHIJEET CHAKRABORTY
	APPROVED	ABHIJEET CHAKRABORTY
	MAKE	SEPL
DRAWING NO. :		SEPL-045
3C X 185MM ² 6.35/11 KV (E) A2XFY		

