V-MARC INDIA
Powering Progress Sustainably

V-MARC India Limited
CIN - L31908UR2014LC001066

The Manager
Listing Department
The National Stock Exchange of India Limited
'Exchange Plaza', C-1 Block G,
Bandra Kurla complex,
Bandra (E), Mumbai 400051.

Date:**14.03.2024**

NSE Symbol: **VMARCIND**
ISIN: **INE0GXK01018**

Subject: Disclosure-Updates

In reference to above captioned subject, we are pleased to inform you that the Company has entered into new product in the electrical domain. **We are going to introduce the new product MVCC Accessories that has excellent features that will be fitted with the MVCC**.

The **MVCC Accessories** have been tested by our specialties and volunteers. We have received the grateful positive feedback from the all. Our aim at producing products to enhance efficiency and convenience of electric supply, this is what this product does. Our products are highly recommended by our users and customers. It is because the base of product developments are the feedback and suggestions of the current users of other available products.

We have been assured by our products feedback of an excellent result from this product. This product will boost up the growth of the Company and will result into an profitable product.

We are proud to announce that V-Marc India Ltd is the Single point solution of MVCC + MVCC Accessories in India.

We "**V-Marc India Ltd**" is among the global leaders in providing reliable and consistent quality of products. By supplying our optimally priced high-quality products we enable our clients to achieve more and outperform their competitors and stay ahead of the innovation curve. Customers' satisfaction is our prime objective as it is the foundation stone of our strategic Vision & Mission.

We have earned trust and reputation by winning the customers' confidence. A very huge quantity of our cables has been in operation across India.

The Organization is also committed to comply with all applicable environment, health & safety legislations and all other requirements of existing & prospective buyers.

We believe that our deeply ingrained value system has helped us to achieve a respectable position amongst our global peers. Making products that are reliable and intuitive is not our only goal, in addition to usability; We strive to create MVCC Accessories: -

Easily accessible: - We V-Marc India Ltd has 1500 ++ strong dealer network of HT/LT cable and cable accessories in India, our dealers are easily accessible in each corner of the "India". An automatic

centralised stock maintenance system is being managing the stock availability of all accessories at all dealers.

Easily Fixable: - V-Marc India Ltd Covered Conductor Accessories are Unique, Compact, Proprietary designed as Per IEC: -50397-2-2022 and certified by the India's Highest Authority "Central Power Research Institute" (CPRI) Bangalore. While designing of the products we taken extra care about bolt free and tightening system in accessories, due to this fitter will not get irritate while fitting of accessories at 30ft or above heights.

Error Proof Fitting: - V-Marc India Ltd has tried to identify all of the possible errors that can be generated by an action while fitting of the accessories and accordingly we tried to designed the error proof accessories.

Even & Safe (steady & safe): - V-Marc India Ltd has been recognized by earning trust of the customers through safe & steady designed products. The designed & developed products safety and steadiness approval given by the India's top most certifying agency "CPRI" (Central Power and Research Institute of India). The step wise self-check process with calibrated production process and further E-beam passing technology make the products steady & safe.

Environmental proof: - V-Marc India Ltd designed and developed accessories are well capable for all weather like 70 Degree stream hot, 50~70 CM heavy rain & (-)13 Degree highest chilled atmosphere. The such steadiness products has been made for protect wild & wild life and accident free transmission of electricity.

Energy-Efficiency: - To make sustainable energy infrastructure V-Marc India Ltd decided to building MVCC accessories along with MVCC sustainable energy infrastructure with energy efficient solutions. Higher efficient quality power transmission and lower distribution losses are the basic of the energy efficiency.

We believe that Sustainability and efficiency can be achieved, home-grown expertise and own manufacturing. V-Marc India Ltd explore the improvement of efficiency of power transmission quality and save the cost, time, energy by unique sustainable solutions.

You are requested to take the above information on the record.

Thanking You,

Yours Faithfully,

For **V-Marc India Limited**

ANUJ AHLUWALIA
Digitally signed by ANUJ AHLUWALIA
Date: 2024.03.14 17:28:54 +05'30'

Anuj Ahluwalia
Company Secretary

Encl: MVCC PRODUCT DETAIL

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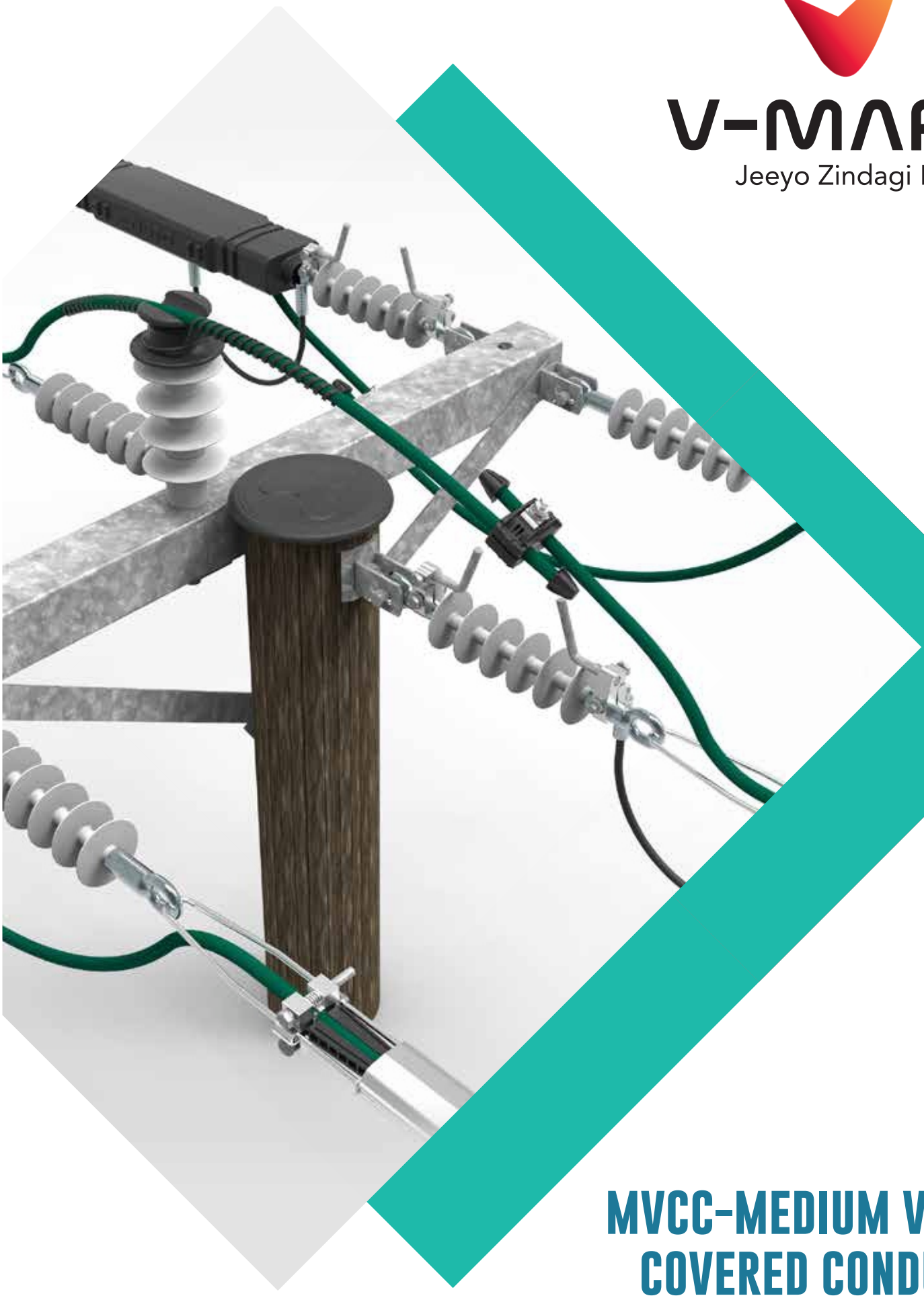

MVCC-MEDIUM VOLTAGE COVERED CONDUCTOR

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MVCC: Medium Voltage Covered Conductors Reduce Losses & Enhance Safety

1300 wild animals killed by electrocution in India within a decade: Reports NGO Wild Life Protection Society of India

The Aggregate Technical & Commercial (AT&C) losses suffered by India is roughly estimated to be 27% or Rs.40k Crore of all the generated electrical power. Power pilferage has a considerable share in it hence the need to secure from losses. Indian state utilities are making focused efforts for upgrading & strengthening medium voltage distribution system. Medium voltage distribution lines passing through forests and wildlife sanctuaries damage wild life and big birds when they come in accidental contact with the bare live conductors and get electrocuted. Data compiled by Wild Life Protection Society of India (WPSI) has reported a huge loss of wildlife due to electrocution by the bare transmission lines passing through the forests of Odisha, Kerala, Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Assam, Tamil Nadu, Chhattisgarh, Jharkhand, Uttar Pradesh, Uttarakhand etc.

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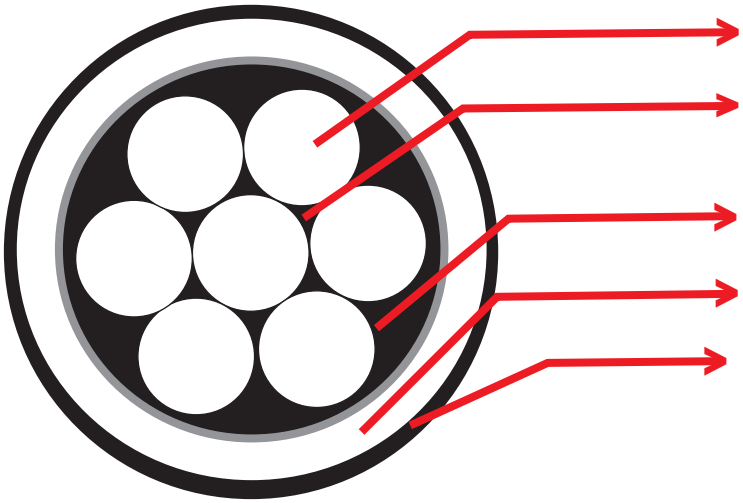
The main concerns to the electrical utilities are:-

- Power interruptions due to conductor slashing during high winds and stormy weather.
- Tree branches & creeper coming in contact with bare live transmission lines create power interruptions.
- Saving wildlife from getting electrocuted.
- High maintenance & operational costs of bare conductors.
- High electrical losses due to corrosion and oxidation of bare conductors.
- Power transmission though densely populated areas like slum clusters, mega cities, housing societies, forests.

At V-Marc India Limited, we have identified the need of Covered Conductors for the transmission of high voltage electrical power and taken the initiative to minimize the electrical losses. This also offers protection from accidental electrocution of wild life in their natural habitat.

Technology

Covered conductor consists of multi-strand round /compacted hard drawn aluminium alloy (AAAC) or aluminium conductor steel reinforced (ACSR) longitudinally water blocked & covered with special grades of materials which provide insulation & protection from UV rays. Like HT cables these conductors are provided with triple extrusion.



1. Stranded Aluminium Alloy Conductor
2. Extruded longitudinal Water Blocking Compound
3. Extruded Semi-Conductive Layer
4. Inner XLPE Insulation
5. Outer Insulation with UV & Track resistant XLPE

Covered Conductors:
Specifications Applicable standards:

IS: 398 (Part-II), IS: 398(Part-1V), IEC: 61089, EN 50397-1:2020, BS EN 50182 Nominal Thickness

S.No	Description	Unit	Normal Thickness		
			11kV	22kV	33kV
1	AAAC/ACSR	sqmm	As per Power Demand		
2	Longitudinal Water Blocking Compound	mm	Providing with Pressure		
3	Extruded Semi-Conducting Layer	mm	0.3	0.3	0.3
4	Inner Insulation of XLPE	mm	1.2	1.32	2.43
5	Outer Insulation with Carbon Black, UV & Track Resistant XLPE	mm	1.1	1.1	1.2

MEDIUM VOLTAGE COVERED CONDUCTOR

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CONSTRUCTION: MEDIUM VOLTAGE COVERED CONDUCTOR (MVCC)

1 .Conductor

Wires used in the construction of stranded conductor are either of aluminium alloy (AAAC) or aluminium alloy steel reinforced (ACSR) or aluminium clad steel (AL 59 ACS) and are rendered longitudinally water tight by means of a unique water blocking inert compound.

2 .Water Blocking Compound

The Stranded Conductor is longitudinally water blocked by means of a unique water blocking material incorporated during the extrusion process in the interstices of the conductor strands. Water swellable tape or powder or grease are not allowed for water blocking purpose in MVCC. The water blocking compound should be stable at max operating conductor temp of 90°C. It should be compatible and non-reactive with the conductor metal and the semicon screen. The compound will not adversely impact electrical & mechanical properties of the MVCC.

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3 .Conductor Screen

A semiconducting polymer screen is kept over the conductor to minimize the stresses of the conductor by smoothening its surface. This semiconducting layer is kept under the extruded insulation.

4 .Insulation

The Insulation is dual layered with the main inner layer being XLPE and the outer layer being of XLPE fused with carbon black to make it UV protected, non-tracking and erosion resistant. All the three layers on the conductor are extruded simultaneously with a triple head extruder so as to bind all the layers and conductor with one another.

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5 .Outer Insulation

On the insulation a black protective layer of UV resistant XLPE/HDPE is applied with anti-tracking properties.

The conductor screen, insulation and the outer insulation with Carbonblack are extruded simultaneously by a triple-head extruder to ensure a permanent bond among the three layers and also with the conductor. MVCC from V-Marc is manufactured with dry-cure process incorporating inert nitrogen gas, it is then dry-cooled to create a high quality product.

The semiconducting screen, inner insulation and outer insulation are extruded in one step i.e. triple extrusion to ensure a good, permanent bond among the three layers and also with the conductor.

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UV RESISTANT

AND ANTI-TRACKING PROPERTIES OF COVERED CONDUCTORS

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It must be designed to have ultra-violet rays protection properties along with anti-tracking properties so that the covered conductor works efficiently under adverse outdoor conditions of distribution lines .The material must also be resistant to oil, salt, arcing, corrosion, humidity and pollution in atmosphere.

Advantages of MVCC

- The installation of MVCC is faster and easy as compared to underground cables & Aerial Bunched Cables.
- It helps in reducing power interruptions as there is no conductor slashing by using covered conductor.
- Negligible accidental electrocution or death of wildlife animals and big birds due to the covering on bare conductors.
- It reduces the operation cost as phase to phase conductor distance is reduced resulting into the reduction of tower related costs.
- It reduces the maintenance cost as the protective layers on the conductor prevent aluminium corrosion & oxidation.
- It prevents bush fires.
- Its usage reduces the possibility of power pilferage.
- It reduces the necessity of tree trimming.
- Medium Voltage Covered Conductor helps in reducing the electrical losses and resolve the safety issues in densely populated areas.
- Overcomes costly right of way issues and line can be commissioned faster.
- its use is more reliable under bad weather conditions like snow fall, windy or stormy conditions.
- Better life span as compared to Aerial Bunched or underground cable hence can be considered as a cheaper and better alternative.
- Offers higher safety while power transmission is carried out over railway lines, road crossings, rivers, lakes etc.

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CURRENT CARRYING CAPACITY OF MVCC CONDUCTOR

Stranded circular non compacted AAAC (AL-59 and AL-59 ACS) water tight conductor, Conductor screened with extruded semiconducting layer, inner covering of XLPE applied through CCV line to create dry cured and dry cooled insulation under pressurized inert nitrogen gas followed by outer layer of XLPE with carbon black having UV resistant and anti tracking properties as per BS-EN-50397-1:2020, SS-4240813 & SS-4240814 for rated voltage 11 kV & 33 kV Grade.

11 kV MVCC

Size sq.mm	Current carrying Capacity (Amp) At 40°C with continuous conductor temperature 90°C	
	AAAC-AL-59	AAAC-AL-59(ACS)
31	160	176
62	246	273
70	260	289
78	275	306
99	326	361
100	330	366
105	339	378
120	368	418
160	435	496
232	546	619
241	560	636

33 kV MVCC

Size sq.mm	Current carrying Capacity (Amp) At 40°C with continuous conductor temperature 90°C	
	AAAC-AL-59	AAAC-AL-59(ACS)
160	427	485
232	537	610
241	551	627

V-Marc India trust & reliability has its foundation in strong product development performed in cooperation with our customer.

V-MARC INDIA LIMITED

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