

To,

**The Inspector General of Forest / Scientist C,**

Integrated Regional Office (IRO),

Ministry of Environment, Forest and Climate Change,

Karmayogi Bhawan,

Block-3, F-2 Wing, 5<sup>th</sup> Floor,

Near CH-3 Circle, Sector – 10A

Gandhinagar – 382010.

E-mail: [ecompliance-guj@gov.in](mailto:ecompliance-guj@gov.in), [iro.gandhingr-mefcc@gov.in](mailto:iro.gandhingr-mefcc@gov.in)

Sub : Half yearly Compliance report of CRZ Clearance for "Development of 18m 66 KV Transmission Corridor at Mundra, Kachchh District, Gujarat" by M/s MPSEZ Utilities Ltd (MUL) issued vide letter no. 11-1/2023-IA.III, dated 7<sup>th</sup> March 2023.

Ref : CRZ clearance vide letter no. 11-1/2023-IA.III, dated 7<sup>th</sup> March 2023 for "Development of 18m 66 KV Transmission Corridor at Mundra, Kachchh District, Gujarat" by M/s MPSEZ Utilities Ltd (MUL). (Copy of CRZ clearance was submitted during the compliance period Apr'23 to Sep'23)

Dear Sir,

Please refer to the above cited reference for the said subject matter. In connection to the same, it is to state that copy of the compliance report for the CRZ Clearance for the period of April 2025 to September 2025 is being duly uploaded on the Parivesh Portal.

Additionally, a soft copy of the same is being submitted through soft copy (e-mail communication).

Kindly consider the above submission and acknowledge.

Thank you,

Yours Faithfully,

**For, M/s Adani Ports and Special Economic Zone Limited**

**Bhagwat Swaroop Sharma**

**Head – Environment**

**Mundra & Tuna Port**

**Encl: As Above**

**Copy to:**

- 1) The Director (IA Division), Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003.
- 2) The Zonal Officer, Regional Office, CPCB – Western Region, Parivesh Bhawan, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara – 390023.
- 3) The Member Secretary, GPCB – Head Office, Paryavaran Bhavan, Sector 10 A, Gandhi Nagar – 382010.
- 4) The Director, Forests & Environment Department, Block – 14, 8th floor, Sachivalaya, Gandhi Nagar – 382010.
- 5) The Regional Officer, Regional Office GPCB (Kutch-East), Gandhidham – 370201

Adani Ports and Special Economic Zone Ltd  
Adani House,  
PO Box No. 1  
Mundra, Kutch 370 421  
Gujarat, India  
CIN: L63090GJ1998PLC034182

Tel +91 2838 25 5000  
Fax +91 2838 25 51110  
[info@adani.com](mailto:info@adani.com)  
[www.adani.com](http://www.adani.com)

# CRZ Clearance Compliance Report Of



Development of 18m 66 KV  
Transmission Corridor at Mundra,  
Kachchh District, Gujarat  
of

M/s. MPSEZ Utilities Limited (MUL)

for  
Period:

April-2025 to September-2025

	MPSEZ Utilities Ltd., Mundra.	From : Apr'25 To : Sep'25
Status of the conditions stipulated in CRZ Clearance		

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	M/s. MPSEZ Utilities Ltd., Mundra	From : Apr'25 To : Sep'25
<b>Status of the Conditions Stipulated in CRZ Clearance</b>		

M/s MPSEZ Utilities Ltd (MUL) has been granted CRZ clearance vide letter no. 11 1/2023 IA.III, dated 7<sup>th</sup> March, 2023 for Development of 18m 66 KV Transmission Corridor at Mundra, Kachchh District, Gujarat. The copy of CRZ Clearance was submitted along with CRZ Clearance Compliance Report for the period Apr23 to Sep23.

Proposed project is based on one time activity and all construction work for transmission line has been fully completed and commissioned and presently in operation since 07012024//.

**Status of the Conditions Stipulated in CRZ Clearance**

**Compliance Report of CRZ  
Clearance**

### Status of the Conditions Stipulated in CRZ Clearance

Half yearly Compliance report of CRZ Clearance for Development of 18m 66 KV Transmission Corridor at Mundra, Kachchh District, Gujarat by M/s MPSEZ Utilities Ltd (MUL) issued vide letter no. 11 1/2023 IA.III, dated 7<sup>th</sup> March, 2023.

Sr. No.	Conditions	Compliance Status as on 30/09/2025
<b><u>PART A SPECIFIC CONDITIONS:</u></b>		
(i)	All construction shall be strictly in accordance with the provisions of CRZ Notification, 2011 and as amended from time to time.	<p>Complied.</p> <p>All construction activities has been completed in accordance with the provisions of CRZ Notification, 2011 and as amended from time to time.</p> <p>Project is fully completed and in operation since on 07012024//.</p>
(ii)	Prior Forest Clearance under Forest (Conservation) Act, 1980 shall be obtained, as applicable.	<p>Point noted and Complied.</p> <p>In the overhead transmission corridor project, total 31 pylons have been fully constructed. only 01 pylon out of 31 pylons falls in forest area and others (30 pylons) falls in approved area of APSEZ. MUL has been granted Stage 1 forest clearance for diversion of 0.4 Ha area vide F. No. 6GJB0802020 BHO dated 12072021// from MoEF&amp;CC and working permission vide letter No. C/JMN/T.9/52 55, dated 29042023// from Forest department, Bhuj Kutch (East division). The copy of the Stage 1 Forest clearance and working permission were submitted during the compliance period Apr23 to Sep23.</p>
(iii)	No mangroves will be cut for the purpose of developing transmission corridor.	<p>Complied</p> <p>In the overhead transmission corridor project, total 31 pylons have been fully constructed. only 01 pylon (4 Sqm) out of 31 pylons falls in CRZ IA (Mangrove buffer area) and others (30 pylons) falls in approved area of APSEZ. Hence, there is no impact on mangroves due to developed transmission corridor.</p>
(iv)	The construction of the Pylon	Complied.

**Status of the Conditions Stipulated in CRZ Clearance**

Sr. No.	Conditions	Compliance Status as on 30/09/2025
	shouldn't cause significant disturbance in CRZ 1A area and footprint of construction should be minimum.	<p>Please refer compliance of condition no. (iii) for further details.</p> <p>MUL has constructed the pylon and developed the overhead transmission corridor with minimum area disturbance. MUL has also ensured that there is no any significant disturbance in CRZ area and footprint of the construction with minimum disturbances on ground level as far as possible.</p>
(v)	Bird diverters should be installed in transmission line, in the identified stretches, so as to avoid accidental collision of birds through systematic monitoring of bird movement with support of reputed institutions such as GUIDE.	<p>Will be complied.</p> <p>MUL is in process to install the bird flight diverters on entire 66 KV transmission line to avoid the accidental collision of birds during its flying and monitoring of bird movement. For that, MUL has already coordinated with various agencies and collected the commercial offers. The vendor finalization is under process and will be completed. The details of the same is attached as <b>Annexure - 1</b>.</p>
(vi)	No excavated material during the construction shall be dumped in water bodies or adjacent areas to avoid blockage. The site shall be restored to its near original condition after completion of construction of work by removing all debris to facilitate free flow of water.	<p>Complied.</p> <p>All project activities has been completed and there was no excavated material disposed off in water bodies during the construction work. All the construction debris excavated soil wastes generated during construction of pylon have been collected as per the applicable environmental guidelines and reused for restoration to maintain the original condition after completion of construction of work.</p>
(vii)	No groundwater shall be extracted within CRZ area to meet the water requirements during the construction and / or operation phase of the project.	<p>Complied.</p> <p>MUL does not draw any ground water for the water requirement during construction as well as operation phase. The source of water for project activities was desalination plant</p>

**Status of the Conditions Stipulated in CRZ Clearance**

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance Status as on 30/09/2025</b>
		of APSEZ and/or water through Gujarat Water Infrastructure Limited (GWIL).
(viii)	Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.	<p>Complied.</p> <p>No permanent labour camp required as the local manpower was being utilized during construction phase.</p> <p>All the construction activities has been completed in accordance with the provisions of the CRZ Notification, 2011, as amended from time to time.</p>
(ix)	Any temporary physical infrastructure setup during construction period shall be removed simultaneously with completion of laying of each segment of the project.	<p>Complied.</p> <p>At present construction work for the project is completed.</p> <p>There was no requirement of temporary physical infrastructure setup as the local manpower was being utilized during construction phase.</p> <p>The construction debris excavated soil wastes generated during construction of pylon have been collected as per the applicable environmental guidelines and reused for restoration to maintain the original condition after completion of construction of work.</p>
(x)	All the conditions stipulated by the Gujarat Coastal Zone Management Authority for CRZ clearance vide its letter No. ENV 10 2020 125 T dated 20/10/2022, and commitments made by the PP before the CZMA and EAC shall be followed in letter and spirit.	<p>Point noted and agreed.</p> <p>GCZMA has recommended for CRZ clearance to M/s. MPSEZ Utilities Ltd (MUL) vide letter no. ENV 10 2020 125 T dated 20/10/2022 for Development of 18m 66 KV Transmission Corridor at Mundra, Kachchh. The copy of GCZMA recommendation was submitted during the compliance report submission for the period Apr23 to Sep23. There is no any specific conditions imposed in CRZ recommendations letter by GCZMA.</p>
(xi)	All necessary clearance from the concerned authority, as may be	Point Noted and compiled.



**Status of the Conditions Stipulated in CRZ Clearance**

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance Status as on 30/09/2025</b>
	applicable should be obtained prior to commencement of the project or activity.	All the requisite permissions / clearances obtained from the concerned authorities for Development of 18m 66 KV Transmission Corridor.
<b>PART B GENERAL CONDITIONS:</b>		
(i)	Management of solid waste in accordance with the Solid Waste Management Rules, 2016 shall be strictly implemented.	<p>Complied.</p> <p>Solid waste was collected regular basis during construction. Collected dry waste was transported to APSEZ Material Recovery Facility (MRF) and sorted out in different streams e.g. paints, lubricants, diesel oil containers or any other non-biodegradable etc. and disposed off as per Solid Wastes Management (Management and Handling) Rules, 2016.</p>
(ii)	Consent to Establish and /or Consent to Operate shall be obtained from State Pollution Control Board under the provisions of Air (Prevention and Control of Pollution) Act, 1981 and / or the Water (Prevention and Control of Pollution) Act, 1974, as may be applicable.	<p>Not applicable.</p> <p>Consent to Establish and /or Consent is not required for this project activity as per GPCB notification for project/industrial categorization.</p>
(iii)	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of Competent Authority.	<p>Complied</p> <p>No excavated muck has been generated and disposed off. Construction waste, if any, is utilized for area development within the project site.</p>
(iv)	All liquid waste arising from the proposed development will be disposed of as per the norms prescribed by Central / State Pollution Control Board. There shall not be any disposal of untreated effluent into the sea / coastal water bodies. It shall be ensured that the wastewater generated is treated in the STP as committed by the project proponent. The treated waste water shall be	<p>Complied</p> <p>The generated domestic sewage during construction phase of 18m 66 KV transmission line was treated in to centralized STP of APSEZ and disposed on land for horticulture purpose after confirming the GPCB norms and no additional domestic wastewater will be generated during operational phase because operation of said transmission</p>

**Status of the Conditions Stipulated in CRZ Clearance**

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance Status as on 30/09/2025</b>
	reused for landscaping, flushing and / or HVAC cooling purposes etc. within the development. The project proponent should also make alternate arrangement for situation arising due to malfunctioning of STP. There shall be regular monitoring of standard parameters of the effluent discharge from STP under intimation to the SPCB.	corridor will be carried out by existing manpower of MUL only.
(v)	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	Complied  The hazardous waste was collected in centralized waste management facility at APSEZ premises and disposed to the authorized vendors as per Hazardous and Other Wastes (Management and Handling) Rules, 2016.
(vi)	A copy of the clearance letter shall be uploaded on the website of the concerned State Coastal Zone Management Authority/State Pollution Control Board. The Clearance letter shall also be displayed at the Regional Office, District Industries Centre and Collectors Office/ Tehsildars office for 30 days.	Complied  The copy of CRZ clearance letter has been submitted to the respective concerned authorities the District Collector Office, Bhuj, the Deputy Chief Conservator of Forest office, Bhuj, District Industries Centre office, Bhuj, Range Forest Office, Mundra, GPCB Reginal Office, Gandhidham, Sub District Magistrate office, Mundra, Mamlatdar Office, Mundra, and Taluka Vikas Adhikari office, Mundra. with the request for display at least for 30 days. The acknowledgements copy was submitted along with compliance report for the period Apr23 to Sep23.
(vii)	A six monthly monitoring report shall need to be submitted by the project proponent to the concerned Regional Office of this Ministry regarding the implementation of the stipulated conditions.	Point noted and being complied.  Compliance report of CRZ clearance conditions is uploaded regularly. A soft copy of last compliance report for the period of Oct'24 to Mar'25 was submitted through e mail to Integrated Regional Office (IRO), MoEF&CC Gandhinagar, Zonal Office of CPCB Baroda, GPCB Gandhinagar and Gandhidham and Dept. of Forests and Env.,

**Status of the Conditions Stipulated in CRZ Clearance**

Sr. No.	Conditions	Compliance Status as on 30/09/2025
		<p>Gandhinagar vide our letter dated 24/05/2025. The copy of the same is also available on our web site <a href="https://www.adaniports.com/ports-downloads">https://www.adaniports.com/ports-downloads</a> as well as also uploaded on MoEF&amp;CC Parivesh Portal on dated 17/06/2025</p> <p>As this transmission line corridor project is completed and is one time project activity the further environmental monitoring does not required to carried out.</p>
(viii)	The Ministry of Environment, Forest and Climate Change or any other Competent Authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.	Point noted and agreed
(ix)	Full co operation shall be extended to the officials from the Regional Office of MoEF&CC, during monitoring of implementation of environmental safeguards stipulated. It shall be ensured that documents/data sought pertinent is made available to the monitoring team. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the concerned Regional Office of MoEF&CC.	Point noted and agreed
(x)	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.	Point noted and agreed
(xi)	The Ministry reserves the right to add additional safeguard measures subsequently, if considered necessary, and to take action to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner, including revoking of the environment	Point noted and agreed

**Status of the Conditions Stipulated in CRZ Clearance**


<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance Status as on 30/09/2025</b>
	clearance under the provisions of the Environmental (Protection) Act, 1986, for non compliance.	
(xii)	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponent from the respective Competent Authorities.	Point noted and complied.  MUL has been granted Stage 1 forest clearance for diversion of 0.4 Ha area vide F. No. 6GJB0802020 BHO dated 12072021// from MoEF&CC and working permission vide letter No. C/JMN/T.9/52 55, dated 29042023// from Forest department, Bhuj Kutch (East division). Copy of the Stage 1 Forest clearance and working permission was submitted along with compliance report for the period Apr23 to Sep23.
(xiii)	The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board (SPCB) and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at <a href="https://parivesh.nic.in/">https://parivesh.nic.in/</a> . The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the concerned Regional Office of this Ministry.	Complied.  The original copy of the CRZ clearance was obtained on 07032023// and advertisement (containing informing that the CRZ clearance is accorded to the proposed project and a copy of clearance letter is available with the SPCB and may also be seen at the website of MoEF&CC) was given in local Newspaper Kutch Uday and Divya Bhaskar in Gujarati (local) language and in The Indian Express (English) newspaper dated 14032023//. Copy of the newspapers was submitted along with compliance report for the period Apr23 to Sep23.  Also intimated to IRO, Gandhinagar for newspaper advertisement of granted CRZ order of the same. Copy of acknowledgement of the same was submitted along with compliance report for the period Apr23 to Sep23.
(xiv)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any,	Complied  The copy of CRZ clearance letter has been submitted to the respective concerned authorities the District Collector Office, Bhuj; the Deputy Chief Conservator of

**Status of the Conditions Stipulated in CRZ Clearance**

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance Status as on 30/09/2025</b>
	were received while processing the proposal.	Forest office, Bhuj; District Industries Centre office, Bhuj; Range Forest Office, Mundra; GPCB Regional Office, Gandhidham; Sub District Magistrate office, Mundra; Mamlatdar Office, Mundra; and Taluka Vikas Adhikari office, Mundra. with the request for display at least for 30 days. The acknowledgements copy was submitted along with compliance report for the period Apr23 to Sep23.
(xv)	The proponent shall upload the status of compliance of the stipulated conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.	Point noted and being complied.  Compliance report of CRZ clearance conditions is uploaded regularly. A soft copy of last compliance report for the period of Oct'24 to Mar'25 was submitted through e mail to Integrated Regional Office (IRO), MoEF&CC Gandhinagar, Zonal Office of CPCB Baroda, GPCB Gandhinagar and Gandhidham and Dept. of Forests and Env., Gandhinagar vide our letter dated 24/05/2025.  As this transmission line corridor project is completed and is one time project activity the further environmental monitoring does not required to carried out.
(xvi)	The environmental statement for each financial year ending 31st March in Form V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the project proponent along with the status of compliance of clearance conditions and shall also be sent to the respective Regional Office of the Ministry by e mail.	Not applicable.  The submission of environmental statement is not required for this project activity as SPCB CtE and CtO not applicable for this project.
6.	This Clearance is subject to final order of the Hon'ble Supreme Court of India	Point noted and agreed

**Status of the Conditions Stipulated in CRZ Clearance**

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance Status as on 30/09/2025</b>
	in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.	
7.	The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the CRZ clearance, if implementation of any of the above conditions is not found satisfactory.	Point noted and agreed
8.	Concealing factual data or submission of false / fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	Point noted and agreed
9.	Any appeal against this CRZ clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Point noted and agreed
10.	The above conditions shall be enforced, inter alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Point noted and agreed

	<b>M/s. MPSEZ Utilities Ltd., Mundra</b>	<b>From : Apr'25 To : Sep'25</b>
<b>Status of the Conditions Stipulated in CRZ Clearance</b>		

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance Status as on 30/09/2025</b>
11.	This issues with approval of the Competent Authority.	Point noted and agreed

# **Annexure – 1**



Technical Data Sheet of Bird Flight Diverter

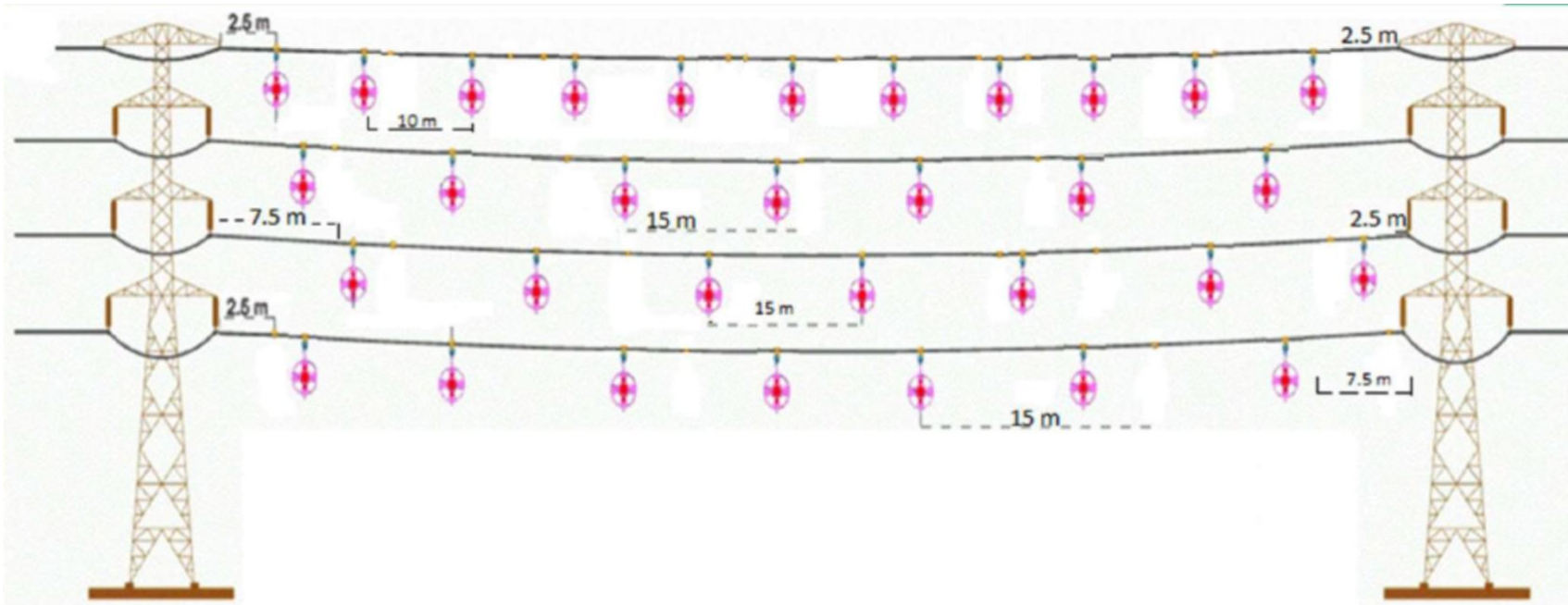
Sr No.	Details	Description	As per CEA Specification	JJEnterprise Technical Data Sheet
A	General Technical Requirement			
1		Warning Disc	Dynamic Type	Dynamic Type
2		performance	Good Mechanical Characteristics across all-weather condition	Good Mechanical Characteristics across all-weather condition
3		Expected Service Life	15 Years	15 Years- Refer Type Test Report. As per CEA guidelines the design life of the product is 15 years and the product is warranted for 5 years.
4		Installation Feasibility	Suitable for installation on Live Line	Refer Methodology of installation – Refer Page no 3 of this document
B	WARNING DISC			
1	Design Parameters	Type OF Disc	Glow in Dark Feature retro reflective surface with Sun and Moon light reflectors on both faces	Glow in Dark Feature along with retro reflective surface with Sun and Moon light reflectors on both faces for more visibility. Refer GA Drawing
2		Movement	Swing, sway and Rotate	Swing, sway and Rotate
3		Weather effect	Resistant to all weather condition	Resistant to all weather condition
4		shape	Aerodynamically stable	Aerodynamically stable
5		Type of material	UV stabilized Plastic	UV stabilized Plastic
		Bearing	Shall be of stainless steel & must be able to spin under 1km/hr wind speed	Stainless steel & able to spin under 1km/hr wind speed
6		Size of Disc	Diameter not less than 150 mm for round disk Shortest arm not less than 90 mm for quadrilateral disk	153 mm diameter round disk (Non LED) 141 mm quadrilateral square disk (LED)
7		Total Surface Area	Total surface Area not be less than 15000 sq.mm	18376 sq. mm (Non LED), 17697 sq. mm (LED)
8		Thickness	Thickness not less than 3 mm	3.3 mm (Non LED), 4.0 mm (LED)
9		Area of Glow in Dark	Reflective surface with sun and Moon light reflectors not less than 3500 sq. mm for both LED and Non LED diverters. Glow in Dark area should not be less than 3500 sq. mm (for LED BFD) and not less tha 7500 sq. mm (for Non LED)	3650 sq.mm retro reflective area, 9273 sq. mm GID area (Non LED) 3650 sq.mm retro reflective area, 5719 sq mm GID area (LED)
10		Weight	Not more than 800 gms (Non LED) & 1000 gms (LED)	220 gms (Non LED), 470 gms (LED)
11		Length	Not more than 430 mm from center of conductor	303 mm (Non LED), 297 mm (LED)

Sr No	Details	Description	As per CEA Specification	JJEnterprise product
C	Clamps and Hardware			
1			UV Stabilized engineered composite plastic	UV Stabilized engineered composite plastic
2			All metal hardware including bearing must be made of corrosion free material	All metal hardware including bearing are corrosion free material
3			All plastic part must be UV stabilized	All plastic part are UV stabilized
4			Clamps must be suitable for gripping the conductor/OPGC/earth wire strongly	Clamps. Are suitable for gripping the conductor /OPGC/earth wire strongly
5			More than 50% of clamp gripping area shall be in contact with earth wire/OPGW/Conductor	More than 80% of clamp gripping area shall be in contact with earth wire/OPGW/Conductor. Refer GA Drawing
6			Clamps must be free from sharp and edges	Clamp is free from sharp and edges
7			Parts of the clamp touching conductor must be able to withstand temperature range-15 Deg to 85 Deg	<u>NABL Accredited Lab Report</u>
8			The clamp must be able to bear pulling load of at least 50 kg and it to be tested in NABL lab	<u>NABL Accredited Lab Report</u>
9			Grip retaining strength as per annexure of CEATS	<u>NABL Accredited Lab Report</u>
10			Metallic Bird Diverter	NA
E	Tests and Certification			
1		Type Test	Mechanical Strength Test as per CEA guideline	<u>NABL Accredited Lab Report</u>
2			Vibration Test as per CEA guideline	<u>NABL Accredited Lab Report</u>
3			Temperature Cycle Test as per CEA guideline	<u>NABL Accredited Lab Report</u>
4			Heating Cycle Test as per CEA guideline	<u>NABL Accredited Lab Report</u>
5			Radio interference Test and visual Corona Test	<u>Refer Type Test Report.</u>
6			Corrosion Resistance Test as per CEA guideline	<u>NABL Accredited Lab Report</u>
7			Ageing Test	<u>Attached</u>
E 2				
1		Acceptance Test	Visual Examination Test	Please refer Drawing
2			Verification of Dimension Test	Please refer Drawing
3			Mechanical Strength Test	<u>Attached</u>
F	Warranty Period		5 Year	5 Year; for all mechanical parts of the product

## Methodology of Installation

- Bird Flight Diverter should be installed on all conductors and earth wire/OPGW in identified stretches as per the requirement stipulated by Forest authority or other appropriate authority to avoid the chances of collision of birds with transmission lines (single/multi-circuits).
- For Great Indian Bustard habitats and potential areas, as identified by WII/MoEF&CC, one bird flight diverter shall be installed at every 10 m on the earthwire/OPGW and one bird flight diverter shall be installed at every 15 m on phase conductors in a staggered way such that as a whole, the power line will have effectively one diverter at every 5m to 6m. **(Refer Diagram No.A.)**
- In case of bundled conductors, bird flight diverters may be installed on the lower conductor of the bundle in staggered manner

Diagram no A



- This installation drawing is for reference purpose only appropriate authority may be consulted before installation of Bird Diverter

## Installation technique



Installation by tool



Installation done by trolley



### Adjustable Clamp

Material- UV Stabilized and  
Glass filled Nylon with  
temperature resistance of  
Min 100DegC Temp

### Conductor

(min 5MM to  
Max 38MM)

**Rubber grip** on point  
Of connection to the  
conductor

Warning Disc rotates  
on a smooth bearing  
with a weather  
resistant rubber seal

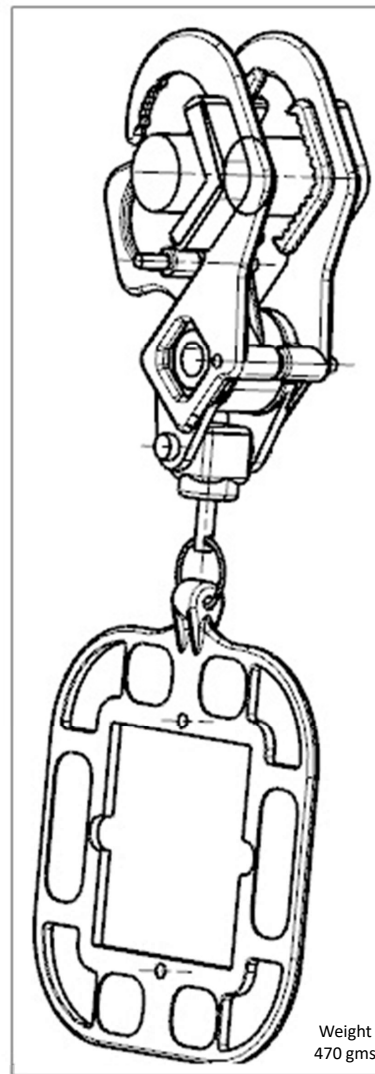
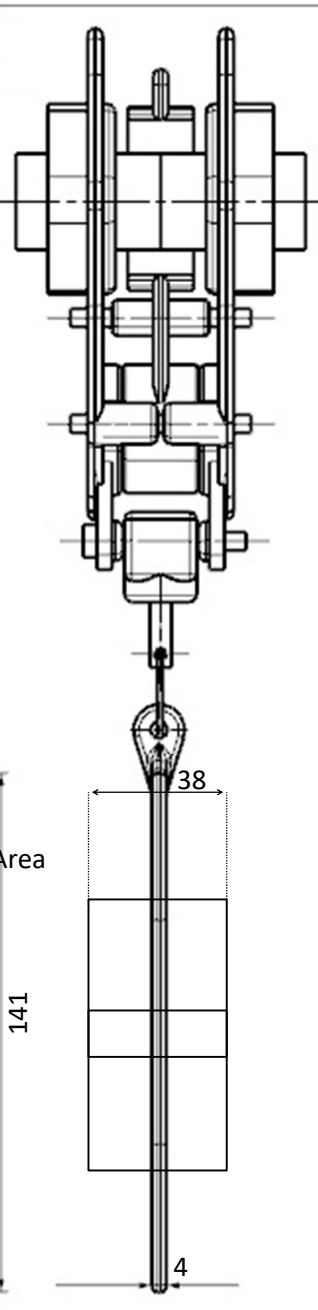
All springs  
and hardware  
(rings, shafts,  
Nuts and  
Bolts) are  
made of  
corrosion free  
SS 304

Glow In Dark Area

Retro  
Reflective  
Sticker Area

#### LED AREA

Details	White	Orange
Nos	2	2
LM	3055LM	20000 ~ 22000 MCD
VF	3.0 TO 3.3V	3.0 TO 3.3V
CCT	495 ~ 500NM	8000 TO 10000K

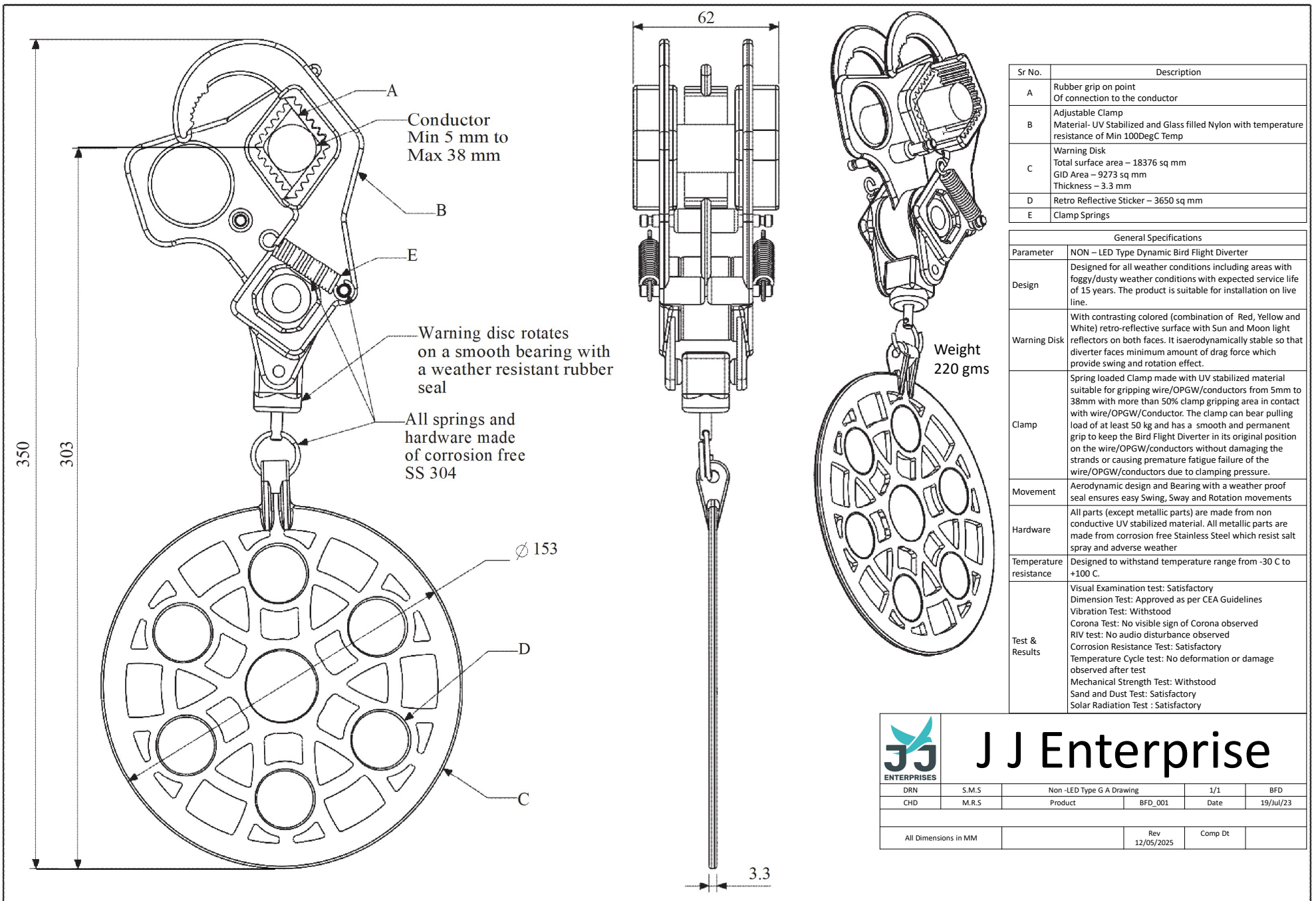



General Specifications	
Parameter	LED Type Dynamic Bird Flight Diverter
Design	Designed for all weather conditions including areas with foggy/dusty weather conditions with expected service life of 15 years. The product is suitable for installation on live line.
Warning Disk	With contrasting colored (combination of Red, Yellow and White) retro-reflective surface with Sun and Moon light reflectors on both faces. It is aerodynamically stable so that diverter faces minimum amount of drag force which provide swing and rotation effect.  Warning Disk Total surface area ~ 17697 sq mm GID Area ~ 5719 sq mm Thickness ~ 3.3 mm Retro Reflective Sticker ~ 3650 sq mm
Clamp	Spring loaded Clamp made with UV stabilized material suitable for gripping wire/OPGW/conductors from 5mm to 38mm with more than 50% clamp gripping area in contact with wire/OPGW/Conductor. The clamp can bear pulling load of at least 50 kg and has a smooth and permanent grip to keep the Bird Flight Diverter in its original position on the wire/OPGW/conductors without damaging the strands or causing premature fatigue failure of the wire/OPGW/conductors due to clamping pressure.
Movement	Aerodynamic design and Bearing with a weather proof seal ensures easy Swing, Sway and Rotation movements
Hardware	All parts (except metallic parts) are made from non conductive UV stabilized material. All metallic parts are made from corrosion free Stainless Steel which resist salt spray and adverse weather
Temperature resistance	Designed to withstand temperature range from -30 C to +100 C.
LED	Orange and White color LED with adequate light intensity so that it is clearly visible from a distance (>300 m) even during foggy/dusty weather/under the low intensity of light.
Battery	The battery with a service life of 5 years and be suitable for at least 100 hrs of flashing operation by a single charge. An automatic power cut-off electronics circuit is provided to improve battery life.
Solar Cells	The position of the solar cells is such that it gets sunlight irrespective of the direction of the diverter face, and the dust & snow does not decrease its efficiency.
Test & Results	Visual Examination test: Satisfactory Dimension Test: Approved as per CEA Guidelines Vibration Test: Withstood Corona Test: No visible sign of Corona observed RIV test: No audio disturbance observed Corrosion Resistance Test: Satisfactory Temperature Cycle test: No deformation or damage observed after test Mechanical Strength Test: Withstood Sand and Dust Test: Satisfactory Solar Radiation Test : Satisfactory

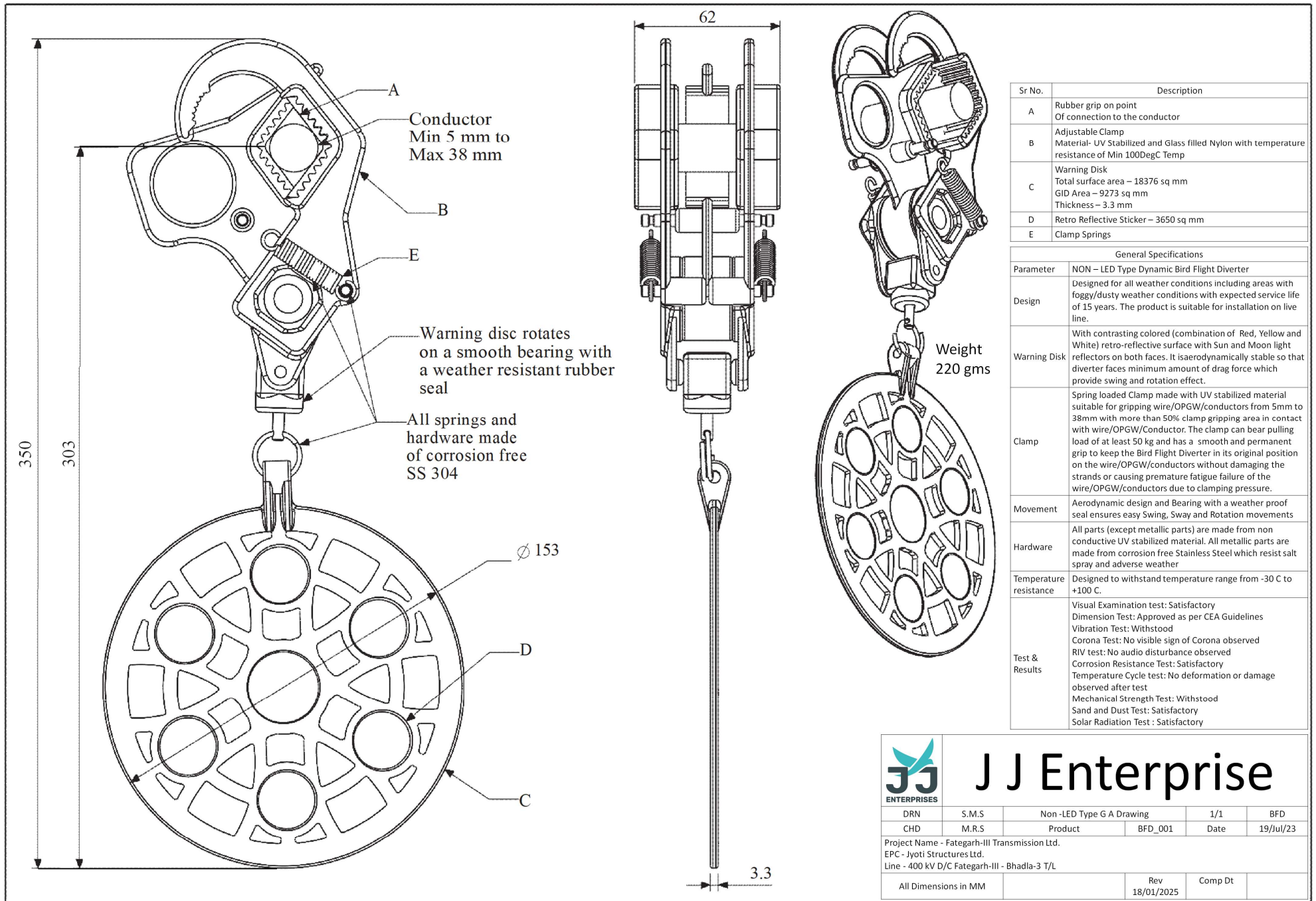


# J J Enterprise

DRN	S.M.S	LED Type G A Drawing	1/1	BFD
CHD	M.R.S	Product	BFD_002	Date 19/Jul/23
All Dimensions in MM		Rev	Comp Dt	



<div>  <b>J J Enterprise</b> </div>					
DRN	S.M.S	Non-LED Type G A Drawing		1/1	BFD
CHD	M.R.S	Product	BFD_001	Date	19/Jul/23
All Dimensions in MM					
			Rev 12/05/2025	Comp Dt	



ENTERPRISES

# J J Enterprise

DRN	S.M.S	Non -LED Type G A Drawing	1/1	BFD
CHD	M.R.S	Product	BFD_001	Date
Project Name - Fategarh-III Transmission Ltd. EPC - Jyoti Structures Ltd. Line - 400 kV D/C Fategarh-III - Bhadla-3 T/L				
All Dimensions in MM			Rev 18/01/2025	Comp Dt