



Bharat Heavy Electricals Limited

(A GOVERNMENT OF INDIA UNDERTAKING)

SOLAR BUSINESS DIVISION

Prof. C.N.R. Rao Circle, Science Institute Post,
Malleswaram, BANGALORE – 560012 INDIA

Website: www.bhel.com

To,
M/s. _____
Address: - _____

E-mail: - _____
Contact No: - _____

REQUEST FOR QUOTATION

Date: - 01.04.2026

CONTACT PERSON: ANKUR VERMA

PHONE :080-22182221/+91-9035204982

EMAIL ID: ankurverma@bhel.in

RFQ Number: 12304651 dtd. 01.04.2026

QUOTATION DEADLINE: 04.04.2026 by (14.00hrs)

OPENING OF TENDER: 04.04.2026 after (14.30hrs)

PLEASE SUBMIT WITHOUT ANY OBLIGATION YOUR LOWEST QUOTATION QUOTING THE RFQ NO. AND DATE BY MAIL FOR THE FOLLOWING ITEMS SUBJECT TO CONDITIONS NOTED BELOW, SO AS TO REACH US ON AND BEFORE DUE DATE.

Name of the Item: As given below:

S. NO	Item Code	Item Description	Qty	Unit	UNIT RATE In Figures To be entered by the Bidder incl. of packing & forwarding & Freight & Insurance on FOR, BHEL SBD basis & without GST.	TOTAL AMOUNT In Figures To be entered by the Bidder incl. of packing & forwarding & Freight & Insurance on FOR, BHEL SBD basis & without GST.	GST%	GST AMOUNT	TOTAL AMOUNT In Figures To be entered by the Bidder incl. of packing & forwarding & Freight & Insurance on FOR, BHEL SBD basis and with GST.
A	B	C	D	E	F	G=FXD	H	I=GXH	J=G+I
1	EL7470300326	Stationary KAVACH Enclosures	2	SET					
Total without GST								Total With GST	

(BIDDER SIGN & SEAL WITH DATE)



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BHEL Terms and conditions applicable:

- Offer to be submitted by bidder (in SINGLE PART BID) by email to Email id: pricebid-epd@bhel.in along with a sealed and signed as a token of acceptance of RFQ terms.
- PRICE: FIRM.
- Scope is applicable as per RFQ.
- Delivery Period: Delivery shall be within 04 weeks from the date of PO
- WARRANTY SHALL BE AS PER SPECIFICATION.
- TERMS OF PAYMENT: (a) 100 % of basic price of material supplied, as per PO, along with 100% taxes & duties (as applicable) & freight charges, shall be paid on pro-rata basis within:
 - 45 days for (MSEs)
 - 60 days for Medium Enterprise
 - 90 days for Non-MSME from the date of receipt of goods & receipt of complete documents as per order/contract subject to acceptance of materials.
 (b) 2% of basic value shall be deducted from payment as TDS & TDS Certificate shall be issued by BHEL, as per amendment in GST Law. GOI has amended GST Law - Section 51 of the CGST Act 2017 wherein Government Agencies (PSU) has to deduct 2% GST TDS w.e.f. 01.10.2018. Kindly go through the latest amendment in GST Law.
 GST: Applicable GST rate shall be quoted with HSN code. BHEL GSTIN No. shall be printed during invoice generation.
- Consignee address: MM Store, BHEL- SBD, Malleswaram, Bangalore.
- Liquidated Damages / Penalty Clause: Purchaser reserves the right to recover from the Seller/Contractor, as agreed, liquidated damages and not by way of penalty, a sum equivalent to half (½) percent of undelivered portion per week or part thereof, subject to a maximum of ten (10) percent of the total contract price excluding elements of taxes, duties and freight, if the Seller/ Contractor fails to deliver any part of the ordered stores within the period stipulated in the Order/Contract.
 Note: LR / RR date will be considered for calculation of LD.
- Breach of contract, Remedies and Termination: In case of breach of contract, wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is at least 10% of the contract value, the same will be encashed. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the contractor, retention amount, any other amount payable to vendor from any units of BHEL, etc. with BHEL) or legal remedies shall be pursued. The balance scope shall be got done independently without Risk & Cost of the failed supplier/ contractor. Further, levy of liquidated damages, debarment, termination, descoping, short-closure, etc., shall be applied as per provisions of the contract. In any case of Breach of contract amount equivalent to 10% of the contract value in shall be recovered from the contractor.
- Acceptance of tender will rest with Purchaser and does not bind him to accept the lowest or any tender and reserves to itself full rights for the reject/cancel any or all the tenders without assigning any reasons whatsoever at any stage.
- VALIDITY OF OFFER:60 days from due date of this enquiry.

12	Provisions for MSE vendors-Category	<p>Any Bidder falling under MSE category shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer.</p> <table border="1" data-bbox="798 941 1929 1120"> <tr> <td>Udyam no if available-</td> <td></td> </tr> <tr> <td>Type under MSE</td> <td>Please specify Yes or No (If applicable)</td> </tr> <tr> <td>SC/ST Owned</td> <td></td> </tr> <tr> <td>Women Owned</td> <td></td> </tr> <tr> <td>Others (excluding SC/ST & Women Owned)</td> <td></td> </tr> <tr> <td>Micro</td> <td></td> </tr> <tr> <td>Small</td> <td></td> </tr> </table> <p>Note: If the bidder does not furnish the above in the tender, offer shall be processed construing that the bidder is not falling under MSE category.</p>	Udyam no if available-		Type under MSE	Please specify Yes or No (If applicable)	SC/ST Owned		Women Owned		Others (excluding SC/ST & Women Owned)		Micro		Small	
Udyam no if available-																
Type under MSE	Please specify Yes or No (If applicable)															
SC/ST Owned																
Women Owned																
Others (excluding SC/ST & Women Owned)																
Micro																
Small																
13	No Interest Payable to Contractor	Notwithstanding anything to the contrary contained in any other document comprising in the Contract, no interest shall be payable by BHEL to Contractor on any moneys or balances including but not limited to the Security Deposit, Performance Security, EMD, Retention Money or the Final Bill, or any amount withheld and/or appropriated by BHEL etc., which becomes or as the case may be, is adjudged to be due from BHEL to Contractor whether under the Contract or otherwise.														
14	Closing of Contracts	The Contract shall be considered completed and closed upon completion of contractual obligations and settlement of Final Bill or completion of Guarantee period whichever is later. Upon closing of Contract, BHEL shall issue a performance/ experience certificate as per standard format, based on specific request of Contractor as per extant BHEL guidelines through the online portal available at https://siddhi.bhel.in only.														

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(Conflict of Interest)

15.The bidder notes that a conflict of interest would said to have occurred in the tender process and execution of the resultant contract, in case of any of the following situations:
i) If its personnel have a close personal, financial, or business relationship with any personnel of BHEL who are directly or indirectly related to the procurement or execution process of the contract, which can affect the decision of BHEL directly or indirectly;
ii)The bidder (or his allied firm) provided services for the need assessment/ procurement planning of the Tender process in which it is participating;
iii)Procurement of goods directly from the manufacturers/ suppliers shall be preferred. However, if the OEM/ Principal insists on engaging the services of an agent, such agent shall not be allowed to represent more than one manufacturer/ supplier in the same tender. Moreover, either the agent could bid on behalf of the manufacturer/ supplier or the manufacturer/ supplier could bid directly but not both. In case bids are received from both the manufacturer/ supplier and the agent, bid received from the agent shall be ignored. However, this shall not debar more than one Authorized distributor (with/ or without the OEM). from quoting equipment manufactured by an Original Equipment Manufacturer (OEM) in procurements under a Proprietary Article Certificate.
iv)A bidder participates in more than one bid in this tender process. Participation in any capacity by a Bidder (including the participation of a Bidder as a partner/ JV member or sub-contractor in another bid or vice-versa) in more than one bid shall result in the disqualification of all bids in which he is a party. However, this does not limit the participation of an entity as a sub-contractor in more than one bid if he is not bidding independently in his own name or as a member of a JV.
16.The Bidder declares that they have read and understood the above aspects, and the bidder confirms that such conflict of interest does not exist and undertakes that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s), in this regard. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the Bidder is found having indulged in above activities, the same will be considered as a violation of the tender conditions, and suitable action shall be taken by BHEL as per extant policies/ guidelines
17. RA is not applicable as it is a low value tender.
18. Buyer reserves complete right, he/she may cancel this tender at any stage without any communication.
19. Provisions for MSE vendors: Applicable. Maximum Percentage of Bid quantity for MSE Purchase preference as 100%
20. Preference to Make in India: Applicable. Maximum Percentage of Bid quantity for MII Purchase preference as 100%
21. Suvidha Portal: The facility for Online Invoice Registration and Document Upload has been enabled in the SUVIDHA Portal https://suvidha.bhel.in/suvidha/ for all BHEL Suppliers and Contractors. With effect from 01-October-2025, it will be mandatory for all Suppliers/Contractors to register their invoices exclusively through the SUVIDHA Portal along with the required documents. For net invoice amount exceeding 5 lakhs inclusive of taxes, uploading of a Class 3 digitally signed tax invoice is mandatory. For invoices up to ₹5 lakhs inclusive of taxes, a scanned copy may be uploaded however, submission of the hard copy is mandatory if a Class 3 digitally signed tax invoice is not uploaded. All Suppliers/Contractors are therefore requested to register on the SUVIDHA Portal and ensure compliance from 01-October-2025 onwards.

(BIDDER SIGN & SEAL WITH DATE)

Bharat Heavy Electricals Limited – Solar Business Division, Bangalore
Technical Specification of Stationary Enclosures for LC Gate Kavach Application in
Railways

Ref: SBD/TCAS/TECH SPEC/2026/LC Kavach ENC/REV-0

TECHNICAL SPECIFICATION – STATION KAVACH ENCLOSURES

1. Scope

The scope includes design, engineering, fabrication, assembly, inspection, testing, packing, and supply of Station KAVACH Enclosures suitable for railway signalling applications.

2. Quantity

- Total Quantity: 2 No's.

(As per the enclosed tentative drawing, actual drawing will be finalized with successful bidder. Bidder to manufacture after drawing approval is provided).

3. Application

Enclosures shall be used for **KAVACH station equipment** in railway signalling environment.

4. Dimensional Requirements

Clause No.	Parameter	Requirement
4.1	Height	1656 mm
4.2	Width	744 mm
4.3	Depth	532 mm
4.4	Tolerance	±2 mm

5. Material & Construction

Clause No.	Component	Requirement
5.1	Material	CRCA (IS 513 or equivalent)

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Clause No.	Component	Requirement
5.2	Outer Frame	3 mm thickness
5.3	Doors	2 mm thickness
5.4	Internal Frame	2 mm thickness
5.5	C Channel	6 mm thickness
5.6	Construction	Fully welded, rigid
5.7	Electroplating	Not permitted

6. Fabrication Requirements

Clause No.	Parameter	Requirement
6.1	Manufacturing	CNC bending preferred
6.2	Welding	Continuous welds (MIG/MAG)
6.3	Weld Quality	No cracks/porosity
6.4	Finishing	Deburring mandatory

7. Surface Treatment & Coating

Clause No.	Parameter	Requirement
7.1	Pre-treatment	Degreasing, pickling, phosphating
7.2	Coating Type	Epoxy/Polyester powder coating
7.3	Thickness	70–100 microns
7.4	Colour	RAL 7035
7.5	Finish	Smooth, corrosion-resistant

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8. Gland Plates

Clause No.	Parameter	Requirement
8.1	Material	CRCA (IS 513 or equivalent)
8.2	Location	Top & Bottom
8.3	Type	Removable
8.4	Thickness	2–3 mm
8.5	Sealing	Maintain IP54

9. Door & Sealing

Clause No.	Parameter	Requirement
9.1	Door Type	Hinged front door
9.2	EMI Gasket	DIRAK make
9.3	Sealing	Continuous EMI shielding
9.4	Operation	Smooth & aligned

10. Locking Arrangement

Clause No.	Parameter	Requirement
10.1	Lock Type	Quarter-turn
10.2	Make	DIRAK
10.3	Locking	Multi-point preferred
10.4	Padlocking	Provision required

11. Internal Arrangement

Clause No.	Parameter	Requirement
11.1	Mounting	Internal frame/plate

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Clause No.	Parameter	Requirement
11.2	DIN Rails	As required
11.3	Cable Routing	Adequate space
11.4	Accessibility	Maintenance-friendly

12. Ventilation

Clause No.	Parameter	Requirement
12.1	Type	Natural/louver
12.2	Protection	Dust controlled

13. Earthing

Clause No.	Parameter	Requirement
13.1	Earthing Studs	Body & door
13.2	Bonding	Copper braid
13.3	Continuity	Verified

14. Mounting Arrangement

Clause No.	Parameter	Requirement
14.1	Type	Floor-mounted
14.2	Base Frame	Anchor provision

15. Environmental & Mechanical Compliance

Clause No.	Parameter	Requirement
15.1	Shock & Vibration	EN 61373
15.2	Environmental	RDSO/SPN/144/2006

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Clause No.	Parameter	Requirement
15.3	IP Rating	IP54 (IS/IEC 60529)
15.4	Suitability	Railway conditions

16. Quality Assurance

Clause No.	Parameter	Requirement
16.1	QMS	ISO 9001 preferred
16.2	Compliance	IS/IEC standards

17. Inspection

Clause No.	Parameter	Requirement
17.1	Raw Material	MTC verification
17.2	In-process	Welding & dimensions
17.3	Final Inspection	Complete verification

18. Testing

Clause No.	Parameter	Requirement
18.1	Visual Inspection	No defects
18.2	Mechanical Check	Structural integrity
18.3	Functional Test	Door & locks
18.4	Coating Test	Thickness check

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19. Compliance Requirements

A. Mechanical & Structural Compliance

Sl. No.	Parameter	Standard	Requirement
A1	Structural Strength	Good Engineering Practice	Enclosure shall withstand equipment load, cable load, and handling stresses
A2	Fabrication Quality	IS standards	Welded construction, no cracks/porosity
A3	Dimensional Accuracy	GA Drawing	As per approved drawings
A4	Door Alignment	Internal spec	Proper alignment and sealing

B. Shock & Vibration Compliance

Sl. No.	Parameter	Standard	Requirement
B1	Shock Resistance	EN 61373	Withstand specified shock levels
B2	Vibration Resistance	EN 61373	Withstand railway vibration levels
B3	Functional Integrity	EN 61373	Maintain enclosure integrity after test

C. Environmental Compliance

Sl. No.	Parameter	Standard	Requirement
C1	Environmental Conditions	RDSO/SPN/144/2006	Suitable for railway environmental conditions
C2	Temperature	RDSO/SPN/144/2006	Operate under specified temp range
C3	Humidity	RDSO/SPN/144/2006	High humidity tolerance
C4	Dust	RDSO/SPN/144/2006	Dust-prone environment suitability
C5	EMI Environment	Railway signalling	Suitable for EMI-sensitive equipment

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D. Degree of Protection (IP)

Sl. No.	Parameter	Standard	Requirement
D1	IP Rating	IS/IEC 60529	Minimum IP54
D2	Dust Protection	IP5X	Limited dust ingress
D3	Water Protection	IPX4	Splash protection from all directions

E. Surface Coating & Corrosion Protection

Sl. No.	Parameter	Standard	Requirement
E1	Coating Thickness	Internal spec	70–100 microns
E2	Adhesion	IS standards	Proper adhesion
E3	Corrosion Resistance	Industrial practice	No rusting/peeling
E4	Finish Quality	Internal spec	Smooth, uniform finish

F. EMI/EMC Compliance

Sl. No.	Parameter	Standard	Requirement
G1	EMI Shielding	Application requirement	EMI gasket on door (DIRAK)
G2	Shield Continuity	Internal spec	Continuous gasket sealing
G3	Compatibility	Railway signalling	Suitable for telecom/signalling equipment

20. Documentation

Clause No.	Parameter	Requirement
20.1	GA Drawing	Approval required
20.2	Fabrication Drawings	Required
20.3	Test Certificates	Mandatory
20.4	Inspection Reports	Required

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Clause No.	Parameter	Requirement
20.5	Warranty Certificate	Required

21. Packing & Dispatch

Clause No.	Parameter	Requirement
21.1	Packing	Protective
21.2	Transport	Palletized if required
21.3	Protection	Moisture & damage

22. Warranty

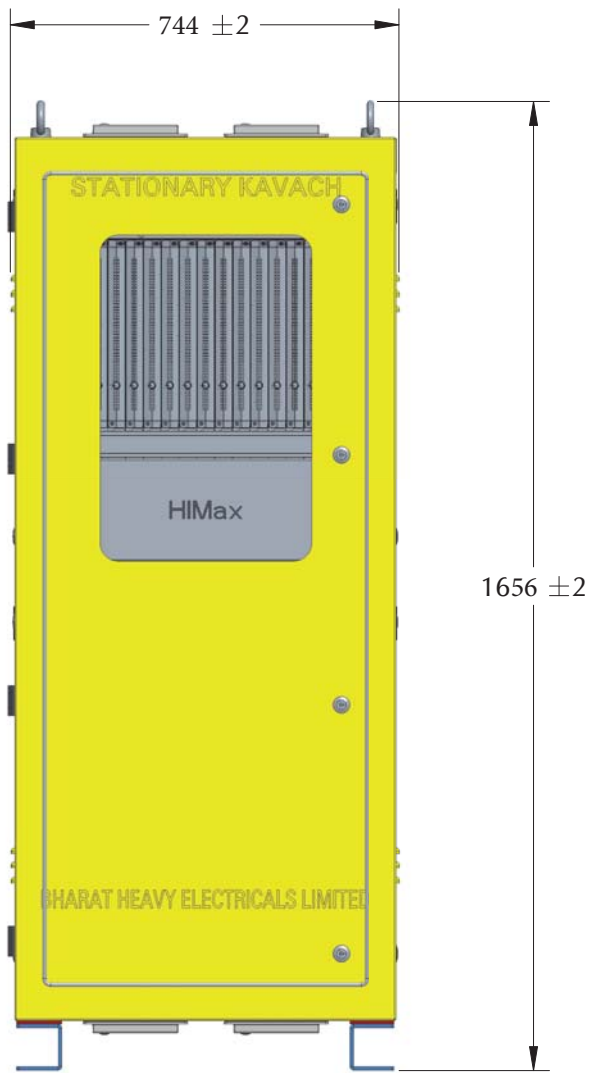
Clause No.	Parameter	Requirement
22.1	Period	12 months from supply
22.2	Coverage	Material, coating, workmanship
22.3	Obligation	Repair/replace free

23. Terms & Conditions

Clause No.	Parameter	Requirement
23.1	Delivery	30 days from PO
23.2	Payment	As per purchaser terms
23.3	Deviation	Must be declared
23.4	Rejection	Non-compliance liable
23.5	Replacement	Supplier responsibility

Prepared by

Approved by



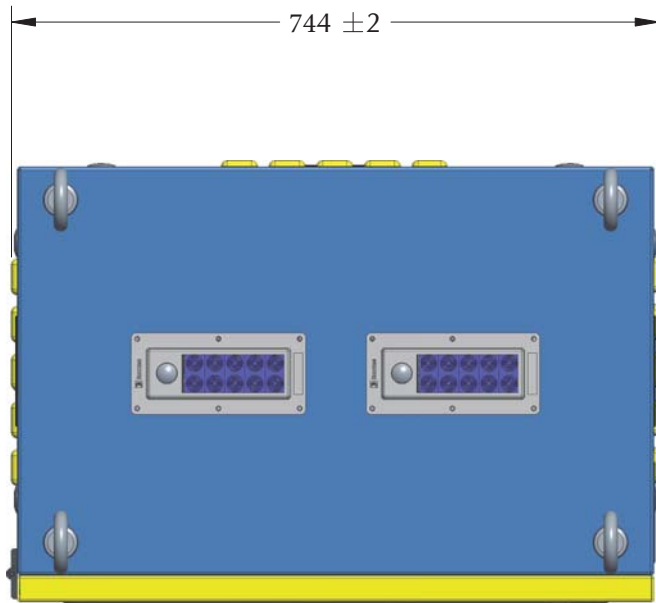
FRONT VIEW



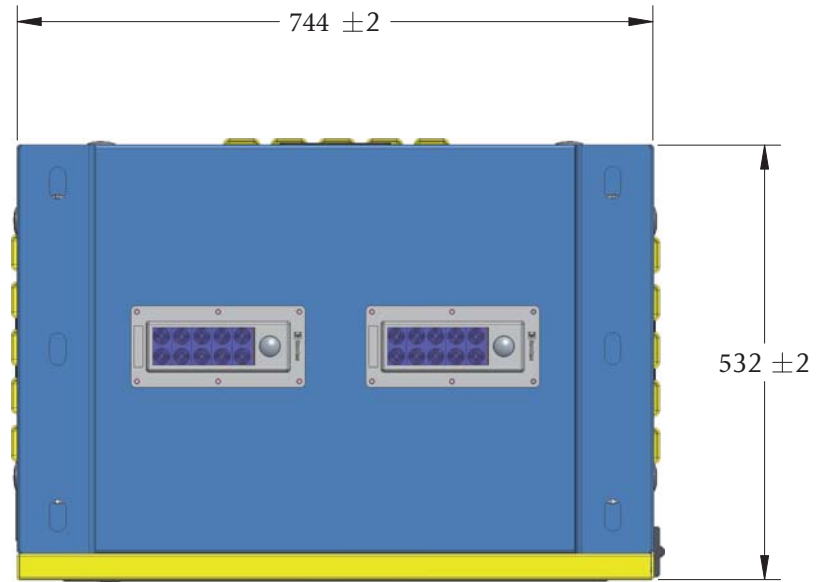
ISOMETRIC VIEW

NOTE :

AS PER BHEL TECHNICAL SPECIFICATION(EN-TS-04-52-302-K-001)
 DIMENSIONS MENTIONED AREAS FOLLOWS : 1600X450X650MM.



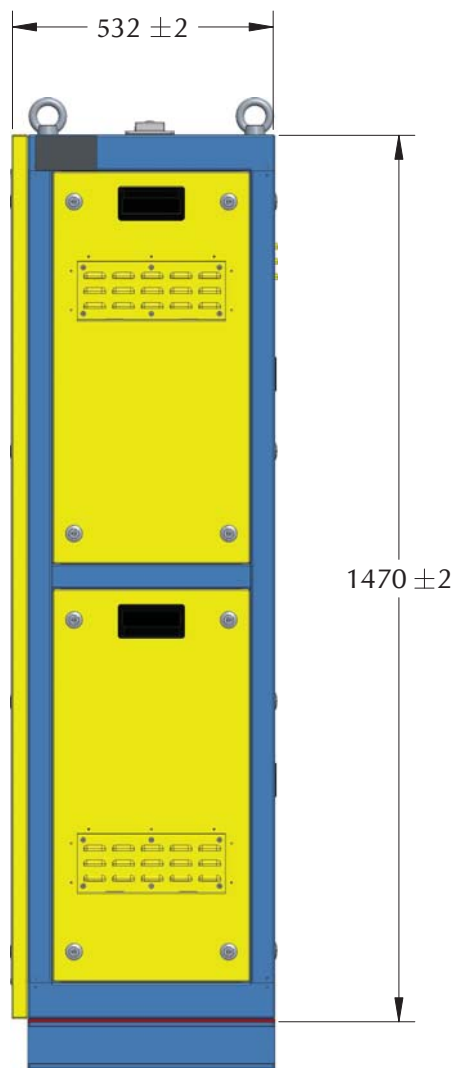
TOP VIEW



BOTTOM VIEW

NOTE :

1. IP 65 CABLE GLAND SEAL WITH 10/10 GLANDS IS PROVIDED FOR CABLE ENTRY/ EXIT.
2. M16 SS316L EYE BOLTS ARE USED FOR LIFTING/PLACEMENT.



SIDE VIEW

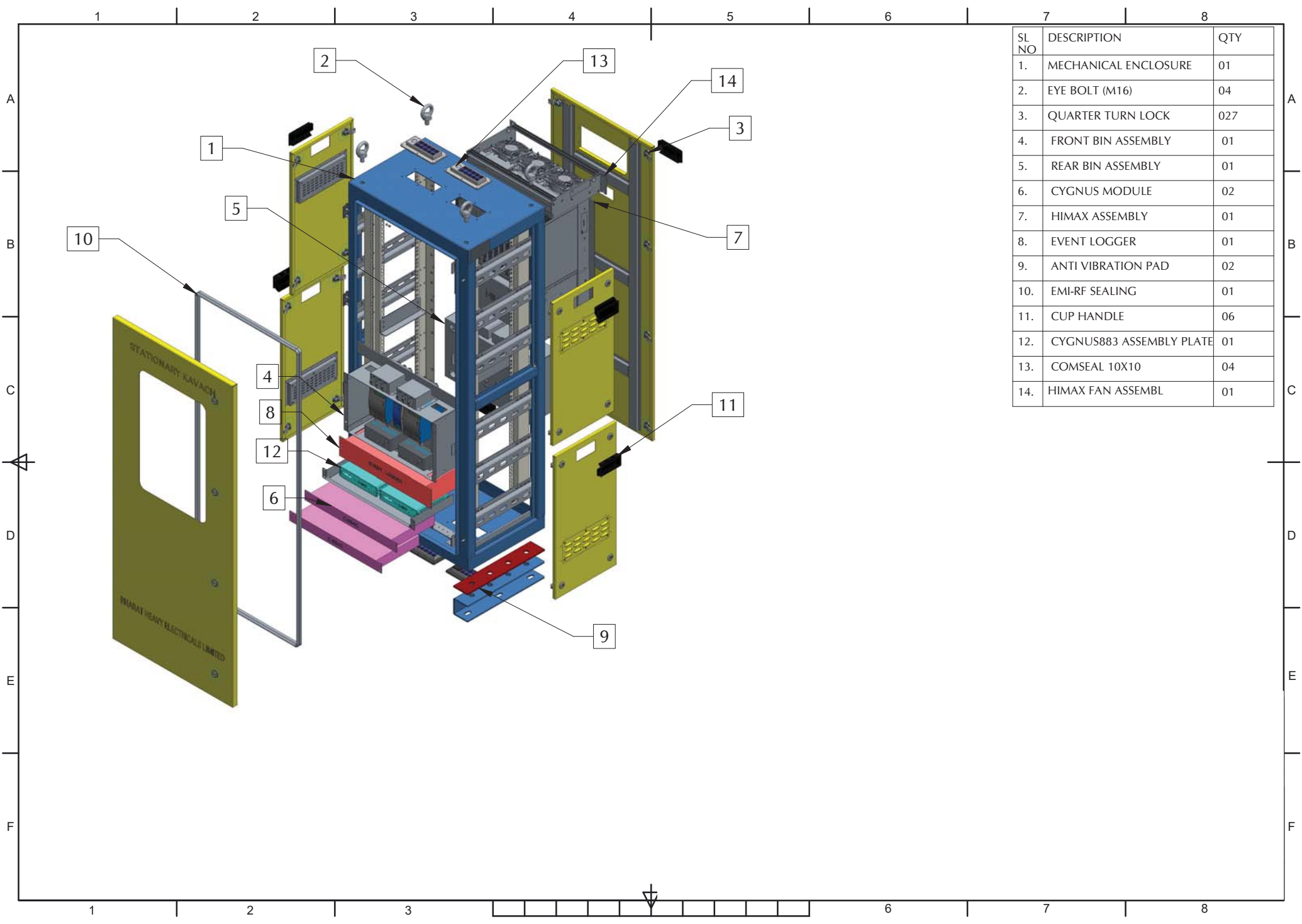


ISOMETRIC VIEW



ISOMETRIC VIEW





SL NO	DESCRIPTION	QTY
1.	MECHANICAL ENCLOSURE	01
2.	EYE BOLT (M16)	04
3.	QUARTER TURN LOCK	027
4.	FRONT BIN ASSEMBLY	01
5.	REAR BIN ASSEMBLY	01
6.	CYGNUS MODULE	02
7.	HIMAX ASSEMBLY	01
8.	EVENT LOGGER	01
9.	ANTI VIBRATION PAD	02
10.	EMI-RF SEALING	01
11.	CUP HANDLE	06
12.	CYGNUS883 ASSEMBLY PLATE	01
13.	COMSEAL 10X10	04
14.	HIMAX FAN ASSEMBL	01

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

B

C

D

E

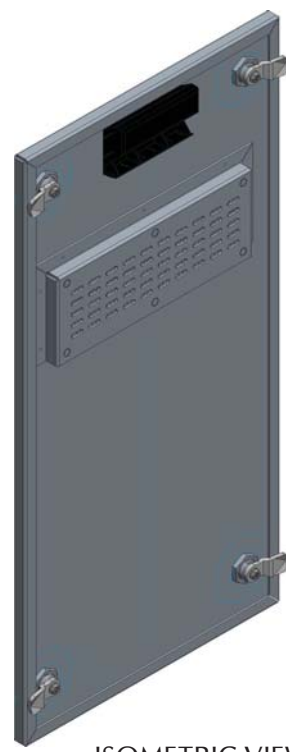
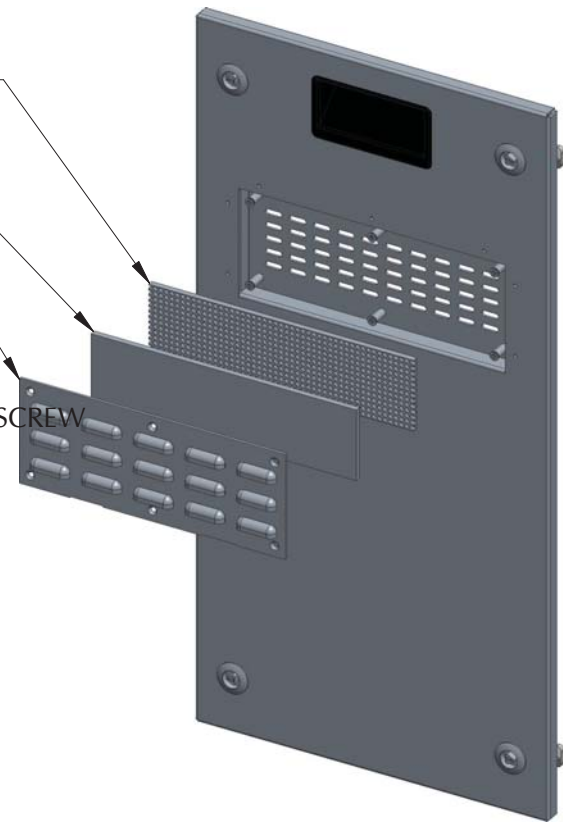
F

HONEYCOMB MESH

DUST FILTER

LOUVER SHEET

CSK SCREW



ISOMETRIC VIEW

1 2 3 4 5 6 7 8