

In-Process QC Checklist for Stationary Kavach Installation

QC Engineer Name: sushma

v1.1

Station ID	Station Name	Zone	Division	Section Name	Initial Date	Updated Date
342543	dfvgggf	ER	Howrah-COO	Howrah-COO	2026-02-20	2026-02-20

Installation Status	<input type="checkbox"/> Completed	<input checked="" type="checkbox"/> Not Completed
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Total Points	Closed Points	Open Points
179	35	144

4.0 Power Supply

S.No	Aspect	Requirement	Status	Observation	Image
4.3 DC-DC Converter					
4.3	Installation	DC-DC converter Unit shall be installed as per approved floor plan drawing.	Not Applicable		
4.3.1	Installation	Unit shall be mounted on insulators and secured to the floor by grouting.	Not Applicable		
4.3.2	Installation	Segregation of input & output cabling to easy identify.	Not Applicable		
4.3.3	Cabling	All external cables entering the unit shall pass through cable glands and ensure no cable entry opening shall be used without a cable gland.	Not Applicable		
4.3.4	Earthing	Unit shall be connected to the ring earth conductor using a 10 sq.mm green/yellow earthing wire; the connection shall be tightened to a torque of 8 Nm and marked with yellow paint.	Not Applicable		

5.0 Kavach Equipment

S.No	Aspect	Requirement	Status	Observation	Image
5.2 SMOCIP(Station Master's Operation-Cum-Indication Panel)					
5.2	Installation	SMOCIP shall be installed in Station Master's room only and mounted at ergonomic height and easily accessible to SM.	Not Applicable		
5.2.1	Installation	Panel shall be securely fixed and ensure no vibration or loose mounting (Ref: 5 16 76 0049).	Not Applicable		
5.2.2	Termination Unit	Wall-mounted near SMOCIP. Power and OFC cables from Kavach termination unit shall be terminated as per drawings 5 16 49 0559.	Not Applicable		
5.2.3	Termination Unit	Splicing on OFC Termination Box to be done carefully with proper fixing of splices in splice tray.	Not Applicable		
5.2.4	Termination Unit	PVC Cable tray to be used for lead in of power cables and excess cable to be properly folded and kept in tray.	Not Applicable		
5.2.5	Earthing	SMOCIP shall be Connected to earth using a 10 sq.mm green/yellow wire; the connection shall be tightened to a torque of 8 Nm and marked with yellow paint.	Not Applicable		
5.2.6	Earthing	Crimping of lugs on earthing cables shall be carried out, and self-vulcanizing utility tape shall be applied.	Not Applicable		
5.2.7	Functionality	System Health LED shall blink.	Not Applicable		
5.2.8	Functionality	Ensure SYSTEM OK along with the respective station name shall be displayed on the Display.	Not Applicable		
5.2.9	Functionality	Verify that pressing the SOS and Common buttons on the SM-OCIP increments the mechanical counter by one.	Not Applicable		
5.2.10	Checksum	Verify the checksums as per the FAT certificate.	Not Applicable		
5.4 RIU(Remote Interface Unit)					
5.4	Installation	RIU shall be installed as per approved drawing and secured with insulators. Default & standby OFC paths verified.	Not Applicable		

S.No	Aspect	Requirement	Status	Observation	Image
5.4.1	Cabling	All external cables entering into the RIU unit shall pass through cable glands and ensure no cable entry opening shall be used without a cable gland.	Not Applicable		
5.4.2	Cabling	OFC patch cords shall be properly tagged to identify default and standby links.	Not Applicable		
5.4.3	Earthing	RIU unit shall be Connected to ring earth using 10 sq.mm green/yellow wire.	Not Applicable		
5.4.4	Earthing	Bolts shall be tightened to a torque of 8 Nm, and torque marking shall be applied using yellow paint.	Not Applicable		
5.4.5	FDMS Box installation	FDMS Box shall be installed on wall with insulators and OFC cables terminated as per network drawing.	Not Applicable		

8.0 Relay Rack

S.No	Aspect	Requirement	Status	Observation	Image
8.1	Installation	Relay rack shall be installed as per approved Floor Plan drawing.	Not Applicable		
8.1.1	Installation	Relay rack shall be mounted on insulators and secured to the floor by grouting.	Not Applicable		
8.1.2	Installation	Ensure correct rating Fuse is being used as per approved PSD.	Not Applicable		
8.2	Wiring	Labeling sleeve shall be used to identify wiring with rack number, row number, relay number & contact type.	Not Applicable		
8.2.1	Wiring	Labelling shall be provided to relay contact wires at FTC PCBA of Station Kavach.	Not Applicable		
8.2.2	Wiring	Inputs shall be connected from the top and outputs from the bottom.	Not Applicable		
8.2.3	Wiring	Direction of wiring shall be maintained consistently from top to bottom.	Not Applicable		
8.2.4	Wiring	Black wires shall be used for negative supply.	Not Applicable		

S.No	Aspect	Requirement	Status	Observation	Image
8.2.5	Wiring	For EI Stations, verify all connections as per the approved EI Interface Diagrams.	Not Applicable		
8.2.6	Wiring	All wires/Cables shall be proper crimped with suitable lugs and terminated on Modular terminal blocks.	Not Applicable		
8.2.7	Wiring	WAGO terminal details shall be as per interface circuit diagram. (Ref.Drawing: 5 16 49 0685)	Not Applicable		
8.3	Continuity Test / Bell Test	Completed Station Analyser and Bell Test reports shall be available.	Not Applicable		
8.4	Earthing	Relay rack shall be connected to ring earth using a 8 sq.mm green/yellow earthing wire; the connection shall be tightened to a torque of 10 Nm and marked with yellow paint	Not Applicable		

The following are the pending items to be verified during the next inspection

Section Name	Pending Points
Section 1: Serial Number verification	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 1.26, 1.27, 1.28, 1.29, 1.30, 1.31, 1.32, 1.33, 1.34, 1.35, 1.36, 1.37, 1.38, 1.39, 1.40, 1.41, 1.42
Section 2: Building	2.1, 2.2, 2.3, 2.3.1, 2.4, 2.5, 2.6, 2.7, 2.8
Section 3: Tower	3.1, 3.2, 3.3, 3.4, 3.4.1, 3.4.2, 3.5, 3.6
Section 4: Power Supply	4.1, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.2, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7, 4.2.8, 4.2.9, 4.3.5
Section 5: Kavach Equipment	5.1, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 5.1.7, 5.1.8, 5.1.9, 5.1.10, 5.1.11, 5.1.12, 5.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.3.8
Section 6: RF Communication equipment on tower	6.1, 6.1.1, 6.1.2, 6.1.3, 6.1.4, 6.1.5, 6.1.6, 6.1.7, 6.1.8, 6.1.9, 6.1.10, 6.1.11, 6.2, 6.2.1
Section 7: OFC Networking rack	7.1, 7.1.1, 7.1.2, 7.2, 7.2.1, 7.3, 7.3.1, 7.3.2, 7.4, 7.4.1, 7.4.2, 7.5
Section 9: Earthing	9.1, 9.2, 9.3, 9.4, 9.5

Section Name	Pending Points
Section 10: Indoor wiring / cabling	10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8
Section 11: Outdoor cabling	11.1, 11.2, 11.3
Section 12: RFID Tags	12.1, 12.2, 12.3
Section 13: Components Inspection	13.1

Note : This QC report is generated by the system and does not need a physical signature.