



Annexure J to PY 55182 Rev 00

		TYPICAL MANUFACTURING QUALITY PLAN							MQP. NO.:				
PROJECT ENGINEERING & SYSTEMS DIVISION BHEL, RC PURAM, HYD-502032		PRODUCT: AUTOMATIC AND MANUAL FIRE ALARM SYSTEM							REV NO:		DATE:		
PAGE 1 OF 11													
SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY			REMARKS
										P	W	V	
1.0	RAW MATERIALS & BOUGHT OUT ITEMS												
	Incoming Material like fabricated items, PCBs, Lamps, Push buttons, Fire detectors, temp detectors, UV, IR, Ionisation Type, MCP, Annunciators, battery, battery charger, exit signs, zener batteries, short circuit/fault/isolator etc..	Visual, Dimensional, physical, operational checks, matching of detectors with given specification, statutory body certification, make of item	MAJOR	PHYSICAL & CHEMICAL PROPERTIES	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE/LOG BOOK	√	2		1	
	PCBs,	Burn-in Test of PCBs for 96 hrs at 50 deg C	MAJOR	PHYSICAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE/LOG BOOK	√	2		1	
2.0	INPROCESS INSPECTION												

LEGEND: P: PERFORM, W: WITNESS, V: TEST CERTIFICATE REVIEW. INDICATE 1 FOR BHEL / BHEL NOMINATED INSPECTION AGENCY/END USER/END USER'S REPRESENTATIVE & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED √ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.


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		TYPICAL MANUFACTURING QUALITY PLAN							MQP. NO.:				
		PROJECT ENGINEERING & SYSTEMS DIVISION BHEL, RC PURAM, HYD-502032				PRODUCT: AUTOMATIC AND MANUAL FIRE ALARM SYSTEM			REV NO:		DATE:		
									PAGE 2 OF 11				
SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	*	AGENCY			REMARKS
									D	P	W	V	
	ASSEMBLY	WIRING,EARTHING	MAJOR	VISUAL	100%	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	TEST CERTIFICAT E/LOG BOOK	√	2		1	
	GENERAL ARRANGEMEN T	COMPONENT MOUNTING	MAJOR	VISUAL	100%	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	TEST CERTIFICAT E/LOG BOOK	√	2		1	
3.0	FINAL INSPECTION & TESTING												
	Conventional fire Alarm system	Visual check, including GA, Layout, Tag Plates, paint shade, panel gasketing, identification and location of component, mimic layout, check of specification of all types of detectors w.r.t data sheet ect..	CRITICA L	VISUAL	100%	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	TEST CERTIFICAT E	√	2	1		
		BOM/Make of component	CRITICA L	VISUAL	100%	BHEL SPECIFICATI ON/DATA SHEET	BHEL SPECIFICATI ON/DATA SHEET	TEST CERTIFICAT E	√	2	1		


LEGEND: P: PERFORM, W: WITNESS, V: TEST CERTIFICAT REVIEW. INDICATE 1 FOR BHEL / BHEL NOMINATED INSPECTION AGENCY/END USER/END USER'S REPRESENTATIVE & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.

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		PROJECT ENGINEERING & SYSTEMS DIVISION BHEL, RC PURAM, HYD-502032			PRODUCT: AUTOMATIC AND MANUAL FIRE ALARM SYSTEM			REV NO:		DATE:			
								PAGE 3 OF 11					
SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY			REMARKS
										P	W	V	
		Quality of lacquering and inter changeability of PCBs	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		
		Verification of cable termination arrangement	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		
		Operation check of scheme, mimic lamps by simulating fire, cable fault condition w.r.t different types of detectors	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		

LEGEND: P: PERFORM, W: WITNESS, V: TEST CERTIFICATE REVIEW. INDICATE 1 FOR BHEL / BHEL NOMINATED INSPECTION AGENCY/END USER/END USER'S REPRESENTATIVE & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.

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								PAGE 4 OF 11					
SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY P W V			REMARKS
		Check of detector operation wrt to loop impedence	CRITICAL	ELECTRICAL	ONE	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		
		Operation check of schemes , mimic lamps, wrt to different type of release and inhibit switch thro iutput relays	CRITICAL	ELECTRICAL	ONE	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		
		Simulation of all alarms	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		
		Auto and manual release operation	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		


LEGEND: P: PERFORM, W: WITNESS, V: TEST CERTIFICATE REVIEW. INDICATE 1 FOR BHEL / BHEL NOMINATED INSPECTION AGENCY/END USER/END USER'S REPRESENTATIVE & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.

<div><div>बी एच ई एल</div><div></div></div>		TYPICAL MANUFACTURING QUALITY PLAN						MQP. NO.:					
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								PAGE 5 OF 11					
SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY			REMARKS
										P	W	V	
		Fail safe operation	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		
		Verification of battery type and capacity	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		
		Operation check on break glass assembly	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		
		Operation check on applicable accessories, lamps, siren, switches, beacons etc..	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		
		Provision of cable glands and earthing	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET	BHEL SPECIFICATION/DATA SHEET	TEST CERTIFICATE	√	2	1		

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SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY			REMARKS
										P	W	V	
	Computer aided Fire alarm system consisting of Central Fire alarm panel , MFAP and Repeat panel (Final Inspection)	Visual check, including GA, Layout, Tag Plates, paint shade, panel gasketing, identification and location of component, mimic layout, check of specification of all types of detectors w.r.t data sheet ect..	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2	1		
		BOM/Make of component	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2	1		
		Verification of cable termination arrangement	CRITICAL	VISUAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2	1		


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								PAGE 7 OF 11					
SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY			REMARKS
										P	W	V	
		Operation check of scheme, mimic lamps by simulating fire, cable fault condition w.r.t different types of detectors	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2	1		
		Check of detector operation wrt to loop impedance	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2	1		


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SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY P W V				REMARKS
		Operation check of schemes , mimic lamps, wrt to different type of release and inhibit switch thro iutput relays	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	TEST CERTIFICAT E	√	2	1			
		Simulation of all alarms	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	TEST CERTIFICAT E	√	2	1			
		Auto and manual release operation	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	TEST CERTIFICAT E	√	2	1			
		Fail safe operation	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	TEST CERTIFICAT E	√	2	1			

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SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY P W V			REMARKS
		Redundancy check	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2	1		
		Verification of battery type and capacity	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2	1		
		Operation check on applicable accessories, lamps, siren, switches, beacons etc.	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2	1		
		Operation check on break glass assembly	CRITICAL	ELECTRICAL	100%	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2	1		


LEGEND: P: PERFORM, W: WITNESS, V: TEST CERTIFICATE REVIEW. INDICATE 1 FOR BHEL / BHEL NOMINATED INSPECTION AGENCY/END USER/END USER'S REPRESENTATIVE & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.


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								PAGE 10 OF 11					
SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY P W V			REMARKS
	Fire alarm system & accessories	Certificate of statutory approval authority like CCOE/PESO /DGFASLI as applicable	CRITICAL	VISUAL	ONE	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2		1	
		Valid BIS license as applicable	CRITICAL	VISUAL	ONE	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2		1	
		Certificate of statutory testing authority like FM, UL, BASEEFA, CMRI etc for MFAP , detectors and other accessories		VISUAL	ONE	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	BHEL SPECIFICATION/DATA SHEET/APPROVED DRG.	TEST CERTIFICATE	√	2		1	
4.0	PRESERVATION & PACKING												


LEGEND: P: PERFORM, W: WITNESS, V: TEST CERTIFICATE REVIEW. INDICATE 1 FOR BHEL / BHEL NOMINATED INSPECTION AGENCY/END USER/END USER'S REPRESENTATIVE & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.

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SL NO	COMPONENTS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY			REMARKS
										P	W	V	
	PACKING	FINISH	MAJOR	VISUAL	100%	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	BHEL SPECIFICATI ON/DATA SHEET/APPR D DRG.	TEST CERTIFICAT E/LOG BOOK	√	2	1		

LEGEND: P: PERFORM, W: WITNESS, V: TEST CERTIFICAT REVIEW. INDICATE 1 FOR BHEL / BHEL NOMINATED INSPECTION AGENCY/END USER/END USER'S REPRESENTATIVE & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.

TD-201 Rev No. 00	Form No.	 HYDERABAD	PRODUCT STANDARD PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD	ANNEXURE J to PY 55182
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<div><div><div>COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED, It must not be used directly or indirectly in any way detrimental to the interest of the company.</div></div><div><div><div><h2>QAP GUIDELINES & FORMAT</h2><p>(ANNEXURE -)</p><p>The QAP format and guidelines for filling up the format shall be used by vendor for preparation and submission of QAP after order placement.</p><p>Note :</p><ol style="list-style-type: none">1. Typical /Indicative /Standard QAP(s) for equipment /package attached is reference document and to use by successful bidder in future for preparation and submission of QAP for BHEL /CUSTOMER approval.2. No deviation to reference document is acceptable.</div></div></div></div>				

Form No.	 HYDERABAD	PRODUCT STANDARD PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD	ANNEXURE J to PY 55182
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COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED . It must not be used directly or indirectly in any way detrimental to the interest of the company.	<p style="text-align: center;"><u>GUIDELINES TO VENDORS FOR PREPARATION OF QUALITY ASSURANCE PLAN</u></p> <ol style="list-style-type: none"> 1. QAP shall be made in landscape mode on A4 size paper as per the format enclosed. Font size shall be minimum 10. 2. Each page of QAP shall contain the following information. <ol style="list-style-type: none"> a) Vendor's name & address. b) Customer: BHEL, Hyderabad. c) Project. d) BHEL Product Standard Number/revision number as referred in P.O. e) BHEL Purchase Order Number & Date. f) Product as per P.O. description. g) QAP Number (unique and shall not repeat)/revision number/date. h) Page number and number of pages 3. QAP shall contain four parts / stages as follows. <ol style="list-style-type: none"> a) Raw materials and bought out items. b) In process Control / Inspection. c) Final assembly, Inspection & Testing. d) Painting, preservation & packing. 4. Under 'Component', indicate name of the component (say casing, rotor, pressure gauge, etc). 5. Under 'Characteristics', indicate appropriately (say chemical analysis, mechanical properties, NDT (UT,DP etc.), hydrostatic test, calibration check etc.) 6. Under 'Class', indicate minor, major or critical depending on the importance of characteristic. 7. Under 'Type of check', indicate appropriately (say chemical, mechanical, UT, DP etc.) 8. Under 'Quantum of check', indicate appropriately (say 100%, 10%, sample, per melt, per heat, all pieces etc.) 9. Under 'Reference document' and 'Acceptance norms', appropriate National & International standards, BHEL standards, approved drawing references etc. should be indicated. It is not correct to mention as "Vendor's internal standards or Vendor's standard practice etc.". If vendors' internal standards are referred, same shall be in line with BHEL Spec. indicated in the P.O. These may require review & approval by our Engineering dept. 10. Under 'Format of record', indicate appropriately supplier's test certificate, calibration certificate, lab report, inspection report etc. 11. Please refer 'Agency' in QAP format. Under P: Perform, W: Witness, V: Verify Indicate against each characteristic 1: (BHEL CQS/Nominated inspection agency), OR 2: (Vendor / Sub vendor) 		
	Ref. Doc		

	Form No.	 HYDERABAD	<div style="text-align: center;"> PRODUCT STANDARD PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD </div>	ANNEXURE J to PY 55182 <hr/> Rev No. 00 <hr/> Page 3 of 3
<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED . It must not be used directly or indirectly in any way detrimental to the interest of the company. </div>		<p>Note: Performing agency is normally vendor or his sub vendor (Legend 2). Where witness points are indicated in specification, P.O., Drawing etc., for such operations, under Witness (W) column use 1. Under 'Verify' column, use code1.</p> <p>12. Under 'D' please put (<input type="checkbox"/> Tick) against each characteristic where vendor proposes to submit test certificate/report etc. OR as required as per BHEL Specification.</p> <p>13. Vendor's signature & stamp should be available on each page of QAP.</p> <p>14. Vendor should read the BHEL Product Standard thoroughly and QAP should be made only inline and relevant to the Specification & Approved Drawings.</p> <p>15. The following operations/characteristics/check points may be included (AS APPROPRIATE)</p> <ol style="list-style-type: none"> a) Visual check b) Dimensional check c) Mechanical and Chemical properties. d) Surface preparation before painting (by chemical cleaning, sand blasting, shot blasting etc. as the case may be.) e) Painting check for shade, Dry Film Thickness (DFT), Adhesion/ peel off test etc. f) Check for correctness for all components mounted as per General arrangement Drawing, Bill Of Materials (BOM), etc. for range, rating, make, color, size, location as per GA, quantity, label description including tag nos., annunciator facia, loose components, accessories, spares etc. g) Verification of test certificate for protection class for the enclosures. h) Mechanical functioning of switches. i) Continuity of earthing and provision of earth points. j) Colour coding of wiring, size, tightness & dressing of wiring. k) Review of test certificates of assembled items, raw materials, internal test reports etc. l) Witness of functional checks, which may include mechanical run & electrical run, H.V.test, IR measurement, Electrical and Mechanical tests etc. m) PQR, WPS, Welder Qualification Record, welding records (fit up, DP) etc. n) Material identification (for punch marks of serial numbers, Heat No, Melt No, Inspector's stamp etc.) o) Hydraulic Pressure Test, Pneumatic Pressure Test, Liquid Penetration Examination and other Non Destructive Tests. p) Tests on Galvanised items (Visual, Hammer Test, Knife Test, Thickness, Pierce Test (Copper sulphate test), Hydrogen evaluation test, Stripping test (for Mass of Zinc coating) q) All tests as per BHEL Product Standard & approved drawings including Type tests and Routine tests on individual items and on System as a whole. r) Packing and Preservation. <p>16. QAP Format enclosed.</p> <p>17. Typical Manufacturing QAP is attached.</p>		
	Ref. Doc			

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VENDOR TO NOTE: THIS FORMAT IS IN MICROSOFT WORD. HEADER & FOOTER SHALL BE AVAILABLE IN EACH PAGE OF QP. QP SHALL BE IN LANDSCAPE & A4 SIZE ONLY. FONT SIZE SHALL BE MIN 10. VENDOR SHALL SIGN & STAMP IN EACH PAGE OF QP. LOI REF. & DATE ARE NOT ACCEPTABLE. P.O.NO. & DATE SHALL BE INDICATED. QP NO. SHOULD BE UNIQUE AND SHALL NOT REPEAT. ALL THE TESTS / CHECKS INDICATED IN THE BHEL SPEC. SHALL BE INDICATED IN THE QP.

<p>LEGEND: P: PERFORM, W: WITNESS, V: VERIFICATION. INDICATE 1 FOR BHEL CQS (OR BHEL NOMINATED INSPECTION AGENCY) & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.</p>	PREPARED BY	APPROVED BY	APPROVED BY
	VENDOR'S SIGNATURE & STAMP	BHEL QA SIGNATURE & STAMP	CUSTOMER'S SIGNATURE & STAMP