

Bharat Heavy Electricals Limited

HIGH PRESSURE BOILER PLANT, TIRUCHIRAPPALLI 620 014.

CONTROLS AND INSTRUMENTATION / FB



TECHNICAL SPECIFICATION FOR FIELD AMPLIFIER BOX

SPEC. REF:- CI:BS10: EMC:FAB:01

REV	DATE	DESCRIPTION	PREPARED MVR	CHECKED MVR	APPROVED AKP
00	28/03/2014	Initial Release	-sd/MVR	-sd/MVR	-sd/AKP
01	28/03/2017	Revised to indicate name plates in the drawing	<i>Romanap.</i>	<i>Romanap.</i>	<i>Apank</i>

CONTENTS

1. GENERAL INSTRUCTIONS TO VENDORS
2. TECHNICAL SPECIFICATION
3. DOCUMENTATION
4. QUALITY PLAN & INSPECTION
5. PACKING
6. SPECIAL INSTRUCTIONS TO VENDORS

Drawing No: 3-97-585-22765/01

1.0 General Instructions to Vendor:

1.1 Vendor shall check receipt of complete documents referred to in the 'Contents'. In the event of order, the entire specification will form part of purchase order for compliance during execution.

1.2 Deviation if any shall be clearly brought out in the "Deviation schedule". else it will be construed that the vendor is fully complying with the specification.

2.0 Technical Specification (Field Amplifier Junction Box)

1.1 General Requirement

- a) Junction Box shall be suitable for field mounting
- b) Degree of Protection of the enclosure: IP-65.

1.2 Size and Material:

- a) Box size: approx. 200(H) mm x 300(B) mm x 155(D) mm.
- b) Type of material: Cold Rolled Close Annealed (CRCA)
- c) EMC seal

2.3 Colour & Painting:

- a) As per RFQ/NIT.
- b) Pre-treatment and painting (powder coating): The sheet steel used shall be pretreated to remove scales, rust etc., and the detailed procedure of painting process shall be furnished.

1.3 Accessories:

- a) Necessary Accessories to be provided for mounting Printed Circuit Board of size 100mm (D) x 140mm (W).
- b) Earth stud shall be provided inside the field amplifier box.

2.4 Special Requirements:

- a) Cable entry shall be suitable for terminating 4 pair shielded, armoured type of approx. OD of 16mm.
- b) EMC seal for complete box.
- c) The remote panel and the panel accessories as included in the BOM shall be designed in such a way that it shall pass the following type tests,
 - i. Electrostatic discharge test as per IEC 61000-4-2 or equivalent
 - ii. Radio frequency immunity test as per IEC 61000-4-6 or equivalent
 - iii. Electromagnetic immunity as per IEC 61000-4-3 or equivalent

3.0 Documentation

3.1 Details required along with the offer:

- a) Supplier shall send detailed GA drawing along with offer.
- b) List of various accessories included along with unit price.
- c) List of deviations / comments on the specification.

3.2 Details required After PO:

- a) Complete catalogue and drawing for the cabinet offered with ordering information.
- b) The box shall be manufactured after getting approval from C&I/PE, BHEL, Trichy.
- c) Detailed catalogues, dimensional drawings shall be furnished as O&M manuals in 2 sets of CDs.

4.0 Quality Plan & Inspection:

- a) Vendor shall submit vendor's quality plan in BHEL's QP format along with offer for C&I-QA's review and approval.
- b) Inspection will be carried out by BHEL engineer at vendor works. Advance information shall be given to BHEL before 15 days for inspection.

5.0 Packing:

- a) Materials shall be packed as per packing procedure ref. No. QA:CI:STD:PR:02 Rev 03 shall be followed.

6.0 Special Instructions to Vendor

- a) Warranty: 12 months from the date of supply for any manufacturing defects/ shortcomings.
- b) Nothing in this specification shall be construed to relieve the vendor from his responsibility. This specification covers briefly the requirements of the system. It is the responsibility of the vendor to take care of other basis and essential requirements to manufacture a quality product.