

**BHARAT HEAVY ELECTRICALS LIMITED**

CORPORATE RESEARCH &amp; DEVELOPMENT DIVISION

VIKASNAGAR, HYDERABAD - 500 093, INDIA

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RD:DP:MPX:F-04

To

-

Enquiry No:	Enq Date:	Due Date:	Delivery By:
730700681	17-MAY-07	31-MAY-07	15-JUL-07

-

PLEASE SUBMIT YOUR QUOTATION IN SEALED COVER SUPERSCRIBED WITH ENQUIRY NO, ENQUIRY DATE AND DUE DATE SUBJECT TO OUR TERMS AND CONDITIONS ENCLOSED, FOR THE FOLLOWING MATERIALS SO AS TO REACH US ON OR BEFORE THE DUE DATE BY 12 NOON. THE TENDERS WILL BE OPENED AT 2 PM ON THE SAME DAY

-

Pin

Email :

Attn. .

PLEASE GIVE REFERENCE OF ENQ NUMBER , ENQ .DATE AND DUE DATE IN ALL YOUR CORRESPONDENCE FOR PROMPT ACTION. IN CASE IF YOU ARE NOT MAKING THE OFFER PLEASE POST A REGRET LETTER AND RETURN THE DOCUMENTS.

SL NO	DESCRIPTION / SPECIFICATION	UNIT	QTY
1	SUPPLY OF ELCTRICAL CABLES AND ACCESSORIES AS PER ENCLOSED SPECIFICATIONS	SET	1

NOTE: PLEASE SUBMIT YOUR OFFER IN TWO PARTS AS PER THE ENCLOSED ANNEXURE "AA" IN SEPARATE SEALED COVERS AS DETAILED BELOW:

1) FIRST COVER SHALLCONTAIN THE FOLLOWING:

a) TECHNICAL COMMERCIAL BID ALONG WITH COMPLIANCE STATEMENT, MENTIONING APPLICABLE DUTIES,TAXES etc.,AND DELIVERY TIME CLEARLY, (TERMS, CONDITIONS AND COMPLIANCE FORM ENCLOSED)

b) A COPY OF THE PRICE BID WITHOUT THE PRICES (UNPRICED PRICE BID)

2) SECOND COVER CONTAINING PRICE BID

3) IF THE PRICE BID IS FOUND TO BE DIFFERENT FROM THE UNPRICED PRICE BID IN ANY WAY, YOUR OFFER WILL BE REJECTED

4. GUARANTEE CERTIFICATE : REQUIRED

5. MANUFACTUERERS TEST CERTIFICATE : REQUIRED

Important:

Taxes & Duties quoted by you will be taken for cost evaluation and order placement and no change will be entertained later except in the case of changes made by the Government. Changes in Taxes and Duties because of the changes in Turnover etc. also be to the supplier's account. In case no tax/duty is included, a self declaration for the exemPtion may be attached along with the offer.

AS WE ARE ENGAGED IN R&D ACTIVITY "C" FORM WILL NOT BE ISSUED

Yours faithfully

for

BHARAT HEAVY ELECTRICALS LTD

PLEASE FILL UP THE ENCLOSED VENDOR REGISTRATION FORM AND SEND IT ALONG WITH YOUR QUOTATION. OTHERWISE YOUR QUOTATION WILL NOT BE CONSIDERED. (IGNORE THIS IF YOU HAVE ALREADY SUBMITTED THIS FORM)

ARC Rao

Manager

**Email: arcr@bhelrnd.co.in**

## ***Technical Specifications for Supply of Electrical Cables and Accessories***

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## **INTRODUCTION**

### **1.1 Objective :**

This Technical Specification document is for tendering for **Supply** of Electrical Cables and Accessories **Only**. The **Erection & Commissioning** for the same is **NOT in Supplier's Scope**.

### **1.2 Information in this document :**

Section I deals with eligibility criteria of Supplier for submitting the Quotation. Bids will NOT be considered if the criteria in this Section are NOT met. Section II deals with the General Terms and Conditions regarding scope of Supply, Testing and Documentation. Detailed Technical specifications for Electrical Cables and Accessories are given in Section III. Bill of Material (BOM) is given in Section IV. Section V gives guidelines for Internal Wiring Schemes for Junction Boxes.

## **SECTION – I**

### **ELIGIBILITY CRITERIA FOR OFFERS / QUOTATIONS**

#### **1.1 Terms & Conditions :**

To qualify for technical bidding given in subsequent sections, the following requirements are to be strictly met by the Supplier failing which their Offer will NOT be considered.

1. **Supplier should quote for the Entire Scope including the items given as optional.** A Part offer will NOT be considered. However, BHEL reserves the right to procure or not to procure the items listed as “Optional”.
2. Suppliers having **experience in executing similar activities** only should quote. Supplier should **enclose a list of such activities executed** in India / abroad.
3. Supplier to quote the **Make of the Non-Fabricated Items as recommended by BHEL in Detailed Technical Specifications (Section III).** Supplier to indicate the Make and Model No. enclosing the Technical Catalogs / Manuals / OEM Documentation for each item.
4. Supplier to **clearly give their compliance / remarks against each clause / item in all sections.** Also supplier should **clearly indicate any deviations.** **Acceptance of these deviations is subject to BHEL approval.**
5. Supplier should have a suitable facility / workshop to fabricate the Junction Boxes and offer for inspection before dispatch.



6. Offer should contain the **complete Bill of Material (Un-priced Price Bid)** as per **Section IV and Detailed Technical Specifications** given in **Section III**. Only **Unit Rates** are to be quoted for all the items **Fabricated item like Junction Box** together with necessary components like **TBs, MCBs etc.** (as a whole) shall be treated as **Single Item**.
7. **Supplier should give the Price Bid in the same format as Un-priced Price Bid.** Further, all **taxes and duties** are to be clearly indicated.

**1.2 Supplier's Remarks :**

## **SECTION – II**

### **GENERAL TERMS AND CONDITIONS**

#### **2.1 GENERAL SCOPE OF SUPPLY**

<b>Sl. No.</b>	<b>Description</b>	<b>Quantity</b>
1.0	Supply of Electrical Cables and Accessories as detailed in Sections II to V of tender document	1 set

##### **2.1.1 SCOPE OF SUPPLY**

1. Supply of Electrical Cables and Accessories shall be as per BOM (Section- IV) and conforming to Technical Specifications given in Section – III. It may be noted that design schemes (for internal wiring of the Junction Boxes) are included in the tender document. DIN Rails, wires, lugs, ferrules, shorting bars, Supports, nuts, bolts etc. as required for the junction boxes shall be taken into account while submitting the offer. For any clarifications, bidders may contact BHEL.
2. All Non-Fabricated Items offered shall be of Make as per the Technical Specifications and Model No. (wherever applicable) as recommended by BHEL. If Make is not mentioned in the Technical Specifications like Cables (Section III, 3.1), the Supplier shall submit sample pieces for approval by BHEL prior to bulk supply.
3. For all Non-Fabricated items, Supplier to indicate recommended spares, tools and tackles as recommended by OEM if any, and quote for them as “**Optional Items (OEM Recommended)**”.

### **2.1.2 SCOPE OF SERVICES:**

1. With their offer, Supplier should provide detailed documentation like Technical Catalogs / Manuals, wherever applicable for technical scrutiny by BHEL.
2. After the placement of order, Supplier to submit the detailed Fabrication Drawings for all Fabricated Equipment for BHEL approval.
3. Prior to fabrication and supply, Supplier should submit the hard / soft copies of the approved documents (as per Section II, 2.6).
4. After successful completion of factory tests for Fabricated Equipment and before the dispatch, Supplier should submit Test / Material Quality / Warranty Certificates wherever applicable.

### **2.2 GUARANTEE / WARRANTY**

1. For all Non-Fabricated Equipment, Supplier to indicate **BHEL Corp. R&D as End User to OEM**. At the time of supply, **Warranty Certificates from OEMs** should be handed over to BHEL.
2. For all Fabricated Equipment, Supplier should include **Minimum One Year Warranty** after delivery at BHEL Corp. R&D, Hyderabad. **During this period, Supplier should provide necessary materials and services at no extra cost for the replacement of any defective components to achieve full functionality of these equipment.**

### 2.3 INSPECTION & TESTING

1. Following tests are to be carried out at BHEL Corp. R&D in the presence of a BHEL representative, as per the BHEL Inspection Test schedule given below. The Test & Material Quality Certificates should be submitted to BHEL along with dispatch.
2. Test Certificates shall consist of details such as S.No. of Equipment, Customer Details etc.

S.No	Test Description	Test / Inspection method	Remarks
1	Material Verification	Quantity of the Items as per BOM of Purchase Order	All Equipment
		Make / Model as per BOM of Purchase Order	All Non- Fabricated Equipment.
2	Visual inspection & Dimensional check ups	Physical inspection & Dimensional check ups as per the drawings approved by BHEL / OEM	All Equipment
3	Functional Test	Continuity Check-ups	For Cables
		Power-On Test	AC to DC Power Converter



## 2.4 DOCUMENTATION

Documents shall be submitted to BHEL for review / information / approval at different stages which should include the following:-

S No.	Description	Form	Qty.	Stage
1.	Detailed Technical Catalogs / Manuals for scrutiny for Non Fabricated Equipment	Original	1	Along with Technical Offer
2.	Drawings (as per BHEL requirements) for approval for Fabricated Equipment	- do -	- do -	After placement of Purchase Order before fabrication
3	Final Approved Drawings and Test / Material Quality / Warranty Certificates for Fabricated Equipment	- do -	- do -	For information along with dispatch
4	Operation & Maintenance Manuals / Warranty Certificates for Non Fabricated Equipment	Hard and Soft Copies	1 + 1	- do -

## 2.5 Supplier's Remarks :

### SECTION – III

#### TECHNICAL SPECIFICATIONS

##### 3.1 Cables :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Single Pair, 1 mm <sup>2</sup> & Individually Shielded Signal Cable (for Analog Signals) - 200 m length (Cu MOC)	Multi-strand, Armoured type, Industrial Grade (Supplier to submit sample pieces for approval by BHEL prior to bulk supply)	
2	16 Pair, 1.5 mm <sup>2</sup> & Overall Shielded Signal Cable - 100 m length (Cu MOC)	-- do --	
3	3 Core or 2 Pair, 1.5 mm <sup>2</sup> & Overall Shielded Signal Cable - 200 m length (Cu MOC)	-- do --	
4	3-Core ,1.5 mm <sup>2</sup> Power Distribution Cable - 200 m length (Cu MOC)	-- do --	
5	3-Core ,2.5 mm <sup>2</sup> Power Distribution Cable -100 m length (Cu MOC)	-- do --	
6	3-Core ,4 mm <sup>2</sup> Power Distribution Cable -200 m length (Cu MOC)	-- do --	
7	3-Core ,6 mm <sup>2</sup> Power Distribution Cable - 20 m length (Cu MOC)	-- do --	
8	3-Core ,10 mm <sup>2</sup> Power Distribution Cable - 40 m length (Cu MOC)	-- do --	
9	3-Core ,25 mm <sup>2</sup> Power Supply	-- do --	

	Cable - 20 m length (Cu MOC)		
--	------------------------------	--	--

**3.2 GI Perforated Cable Trays of Dimensions 2.5 m (L) x 25 mm (H) :**

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	60 mm (W) x 1.6 mm (Thickness) - 50 m length	Supplier to submit sample pieces for approval by BHEL prior to bulk supply. Also the coupler plates (2 Nos. for each tray along with bolts, washers & nuts) are to be supplied	
2	100 mm (W) x 1.6 mm (Thickness) - 50 m length	-- do --	
3	150 mm (W) x 1.6 mm (Thickness) - 50 m length	-- do --	
4	200 mm (W) x 2.0 mm (Thickness) - 10 m length	-- do --	

### 3.3 Junction Boxes :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Tag No.	JB1, JB2, JB3, JB4	
2	Make	Fabricated as per BHEL Specifications given in Sections III and V.	
3	Quantity	4 Nos.	
4	Type	Standard Industrial Grade, IP65	
5	To house		
	a) JB1	1) TBs 2) Wires and necessary accessories	
	b) JB2	1) TBs (Fused & Normal) 2) Breakers (MCBs) 3) Relays as per Specifications given in Section III, 3.3.1 4) Wires and necessary accessories	
	c) JB3	1) TBs 2) Breakers (MCBs) 3) Electrical Power Regulator (BHEL Scope of Supply) 4) Wires and necessary accessories	
	d) JB4 of 600 mm x 400 mm x 250 mm Dimension	1) DIN Rail of 70 mm 2) Wires and necessary accessories	
6	Locking Feature	Required	
7	Provision for Glands (Gland Plates)	Required	
8	Terminal Blocks (TBs)	Spring loaded Type of M/s Wago Make & Suitable Ratings (Curves)	
9	Breakers (MCBs)	M/s Schneider Electric Make & Suitable Ratings	
10	Wires	M/s Finolex Make (Multi-Strand) & Suitable Ratings	
11	Earthing	To be Provided	

### 3.3.1 Relays :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Tag No.	RY1, RY2, RY3, RY4, RY5, RY6, RY7, RY8, RY9, RY10, RY11, RY12, RY13, RY14, RY15, RY16, RY17, RY18, RY19, RY20	
2	Make	M/s OEN or M/s Jyothi (Supplier to indicate Model No. and submit the necessary technical documents like catalogs etc. for scrutiny)	
3	Quantity	20 Nos.	
4	Type	DIN Rail Mounted	
5	Input to coil	24 V DC	
6	Contact Rating	a) 230 V AC @ 6A – 15 Nos. b) 230 V AC @ 10A – 3 Nos. c) 230 V AC @ 20A – 2 Nos.	
7	Contact Type	2 NO + 2 NC	
8	Manual Operation	Required	
9	LED Indication	Required	

### 3.4 AC to DC Power Supply Converter :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Tag No.	FPS1	
2	Make	M/s Phoenix Contact (Supplier to indicate Model No. and submit the necessary technical documents like catalogs etc. for scrutiny)	
3	Quantity	1 No.	
4	Type	DIN Rail Mounted	
5	Nominal Input voltage	100 V AC ... 240 V AC	
6	AC input voltage range	85 V AC ... 264 V AC	
7	DC input voltage range	90 V DC ... 350 V DC	
8	Input fuse	Required	
9	Name of protection (Input side)	Transient surge protection	
10	Nominal output voltage	24 V DC $\pm 1\%$	
11	Setting range of the output voltage	22.5 V DC ... 28.5 V DC	
12	Output current	20 A	
13	Current limitation	Required	
14	Residual ripple	< 10 mV <sub>PP</sub> (with nominal values)	
15	Control deviation	< 1 % (change in load, static 10% ... 90%)	
		< 2 % (change in load, dynamic 10% ... 90%)	
		< 0.1 % (change in input voltage $\pm 10\%$ )	
16	Peak switching voltages nominal load	< 30 mV <sub>PP</sub> (20 MHz)	
17	Operating voltage display	LED	
18	Degree of protection	IP20	
19	Type of connection (Input	Screw Type	

	& Output)		
20	Class of protection	I, with PE connection	
21	Insulation voltage input/output	4 kV AC (type test) 2 kV AC (routine test)	
22	Ambient temperature (operation)	25 °C ... 70 °C (> 60°C derating)	
23	Ambient temperature (storage/transport)	-40 °C ... 85 °C	
24	Max. permissible relative humidity (operation)	95 % (at 25°C, no condensation)	
25	Electromagnetic compatibility	Conformance with EMC directive 89/336/EEC	
26	Emitted interference	EN 50081-2	
27	Immunity to interference	EN 61000-6-2	
28	Standard – Protection against electric shock	DIN 57100-410	
29	Standard – Safety transformers for switched-mode power supply units	EN 61558-2-17	
30	Standard - Electrical safety	EN 60950/VDE 0805 (SELV) , UL rating	

### 3.5 Stainless Steel Tubing :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Process Fluid	Water	
2	Make	Supplier shall submit sample pieces for approval by BHEL prior to bulk supply	
3	Max. Pressure	4 Kgf / cm <sup>2</sup>	
4	Max. Temperature	75 Deg C	
5	Type	Seamless (Stainless) Soft Annealed Cold Drawn	
6	Material	SS304	
7	Quantity & Size	a) 25 m of 1/4" OD & Gauge 1 mm	
		b) 15 m of 1/2" OD & Gauge 1.2 mm	

### 3.6 Solenoid Valve :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Tag No.	TV3	
2	Make	M/s Avcon / M/s Rotex (Supplier to indicate Model No. along with the necessary documents)	
3	Quantity	1 No.	
4	Process Fluid	Water	
5	Max. Pressure	4 Kgf / cm <sup>2</sup>	
6	Max. Temperature	75 Deg C	
7	Type	2-way, power to close	
8	Coil Voltage	230 V AC, Single Phase	
9	Material of Construction	SS304	
10	Enclosure	Weather Proof	
11	Quantity & Size	1 No. of 1" NB	
12	Connection	Screwed Type NPT	
13	Cable Entry	1/2" NPT(F)	



### 3.7 Accessories :

#### 3.7.1 Cable Accessories :

##### 3.7.1.1 Cable Glands :

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	1½" NPT Size – 35 Nos.	Double Compression, Cadmium coated on Brass Type Suitable for Armoured Cables (Section III, 3.1). Supplier to submit sample pieces for approval by BHEL prior to bulk supply.	
2	1½" ET Size – 35 Nos.	-- do --	
3	32 Core, 1.5 mm <sup>2</sup> – 6 Nos.	-- do --	
4	3 Core, 1.5 mm <sup>2</sup> – 11 Nos.	-- do --	
5	3 Core, 2.5 mm <sup>2</sup> – 10 Nos.	-- do --	
6	3 Core, 4 mm <sup>2</sup> – 6 Nos.	-- do --	
7	3 Core, 6 mm <sup>2</sup> – 6 Nos.	-- do --	
8	3 Core, 10 mm <sup>2</sup> – 6 Nos.	-- do --	
9	3 Core, 25 mm <sup>2</sup> – 2 Nos.	-- do --	

**3.7.2 Cable Tray Accessories :**

**3.7.2.1 Structural Material (Tray Supports) :**

S.No.	Description	Acceptance Criteria	Supplier Remarks
1	Angle of 50mm x 50mm x 6mm dimensions & MS MOC - 300 kg	Supplier to submit sample pieces for approval by BHEL prior to bulk supply.	

**3.8 Supplier's Remarks :**



**SECTION – IV**

**BILL OF MATERIAL**

**4.1 Mandatory Items:**

S.No	Equipment	Qty	Unit Rate	Total Cost
1	Cable Trays (GI Perforated Tray)			
	a) 2.5 m (L) x 25 mm (H) x 60 mm (W) x 1.6 mm (Thickness) Dimension	50 m		
	b) 2.5 m (L) x 25 mm (H) x 100 mm (W) x 1.6 mm (Thickness) Dimension	50 m		
	c) 2.5 m (L) x 25 mm (H) x 150 mm (W) x 1.6 mm (Thickness) Dimension	50 m		
	d) 2.5 m (L) x 25 mm (H) x 200 mm (W) x 2.0 mm (Thickness) Dimension	10 m		
2	Junction Boxes	4 Nos.		
3	Ac to DC Power Supply Converter	1 No.		
4	Stainless Steel (Seamless) Tubing			
	a) 1/4" OD Gauge 1.0 mm	25 m		
	b) 1/2" OD Gauge 1.2 mm	15 m		
5	Solenoid Valve (1" NB)	1 No.		



#### 4.2 Optional Items :

S.No	Equipment	Qty	Unit Rate	Total Cost
1	Cables			
	a) Signal Cable of 1 mm <sup>2</sup> , Single Pair, Individually Shielded, Multi-strand, Armoured Type (Cu MOC)	200 m		
	b) Signal Cable of 1.5 mm <sup>2</sup> , 32 Pair, Overall Shielded, Multi-strand, Armoured Type (Cu MOC)	100 m		
	c) Signal Cable of 1.5 mm <sup>2</sup> , 3 Core, Overall Shielded, Multi-strand, Armoured Type (Cu MOC)	200 m		
	d) Power Distribution Cable of 1.5 mm <sup>2</sup> , 3-Core, Multi-strand, Armoured Type (Cu MOC)	200 m		
	e) Power Distribution / Supply Cable of 2.5 mm <sup>2</sup> , 3-Core, Multi-strand, Armoured Type (Cu MOC)	100 m		
	f) Power Distribution / Supply Cable of 4 mm <sup>2</sup> , 3-Core, Multi-strand, Armoured Type (Cu MOC)	200 m		
	g) Power Distribution / Supply Cable of 6 mm <sup>2</sup> , 3-Core, Multi-strand, Armoured Type (Cu MOC)	20 m		
	h) Power Supply Cable of 10 mm <sup>2</sup> , 3-Core, Multi-strand, Armoured Type (Cu MOC)	40 m		



	i) Power Supply Cable of 25 mm <sup>2</sup> , 3-Core, Multi-strand, Armoured Type (Cu MOC)	20 m		
2	Cable Glands			
	a) ½" NPT Size	35 Nos.		
	b) ½" ET Size	35 Nos.		
	c) 32 Core, 1.5 mm <sup>2</sup>	6 Nos.		
	d) 3 Core, 1.5 mm <sup>2</sup>	11 Nos.		
	e) 3 Core, 2.5 mm <sup>2</sup>	10 Nos.		
	f) 3 Core, 4 mm <sup>2</sup>	6 Nos.		
	g) 3 Core, 6 mm <sup>2</sup>	6 Nos.		
	h) 3 Core, 10 mm <sup>2</sup>	6 Nos.		
	i) 3 Core, 25 mm <sup>2</sup>	2 Nos.		
3	Angle of 50mm x 50mm x 6mm dimensions & MS MOC for Cable Trays	300 kg		

#### 4.3 Note :

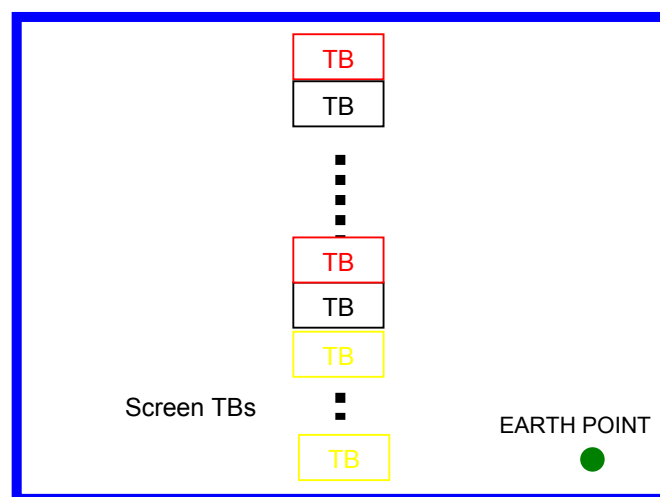
1. Supplier **to quote for Optional Items** along with the Mandatory Items (Refer Clause 1 of sub-Section 1.1 in Section I).
2. Quantity of material mentioned in the Sections III & V under each category, is an indicative minimum requirement. Any other material including hardware / software / firmware, not mentioned above, but needed for the system to meet the functional requirements shall be provided by the supplier at no extra cost to BHEL. **The Final BOM shall include these materials also** (Refer Point 1 in Section II, 2.1.1).

#### 4.4 Supplier's Remarks :

## SECTION – V

### INTERNAL WIRING SCHEMES FOR JUNCTION BOXES

#### 5.1 TYPICAL INTERNAL WIRING SCHEME FOR JUNCTION BOX JB1



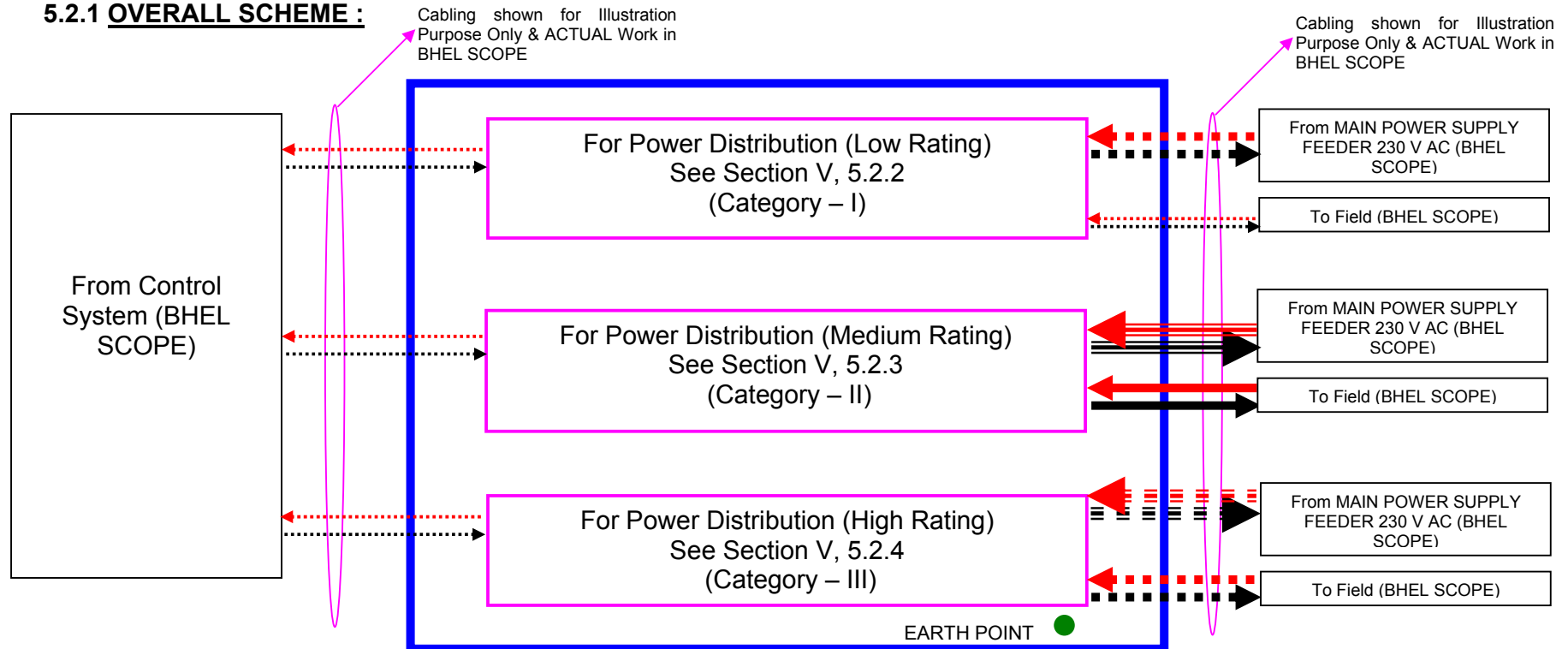
##### 5.1.1 Note:

1. Total requirement of the TBs of **1.5 Sqmm rating** are 48 Nos. (Red Colour for Odd & Black Colour for Even Pin Numbers) plus 16 Nos. TBs for Screen Wires (Yellow Colour).
2. Wire(s) for Earthing shall be min **4.0 Sqmm**.



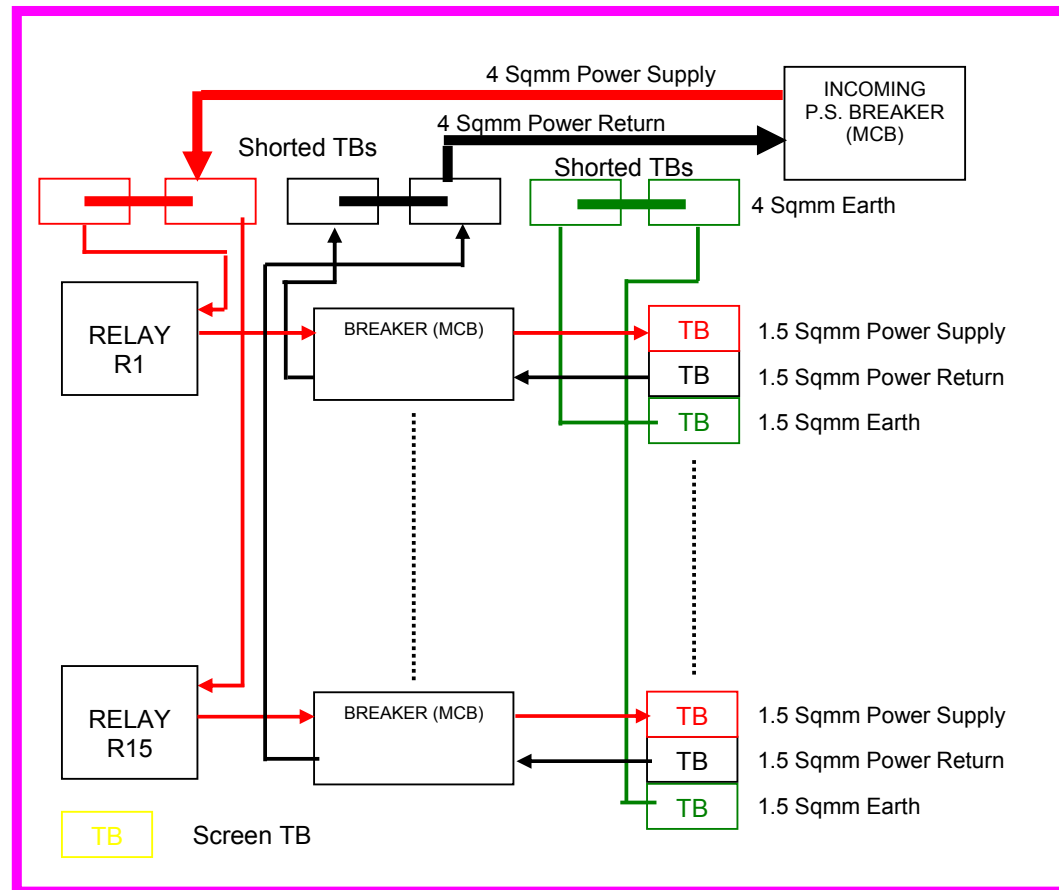
## 5.2 TYPICAL INTERNAL WIRING SCHEME FOR JUNCTION BOX JB2

### 5.2.1 OVERALL SCHEME :





**5.2.2 POWER SUPPLY DISTRIBUTION (LOW RATING) IN JUNCTION BOX JB2 :**





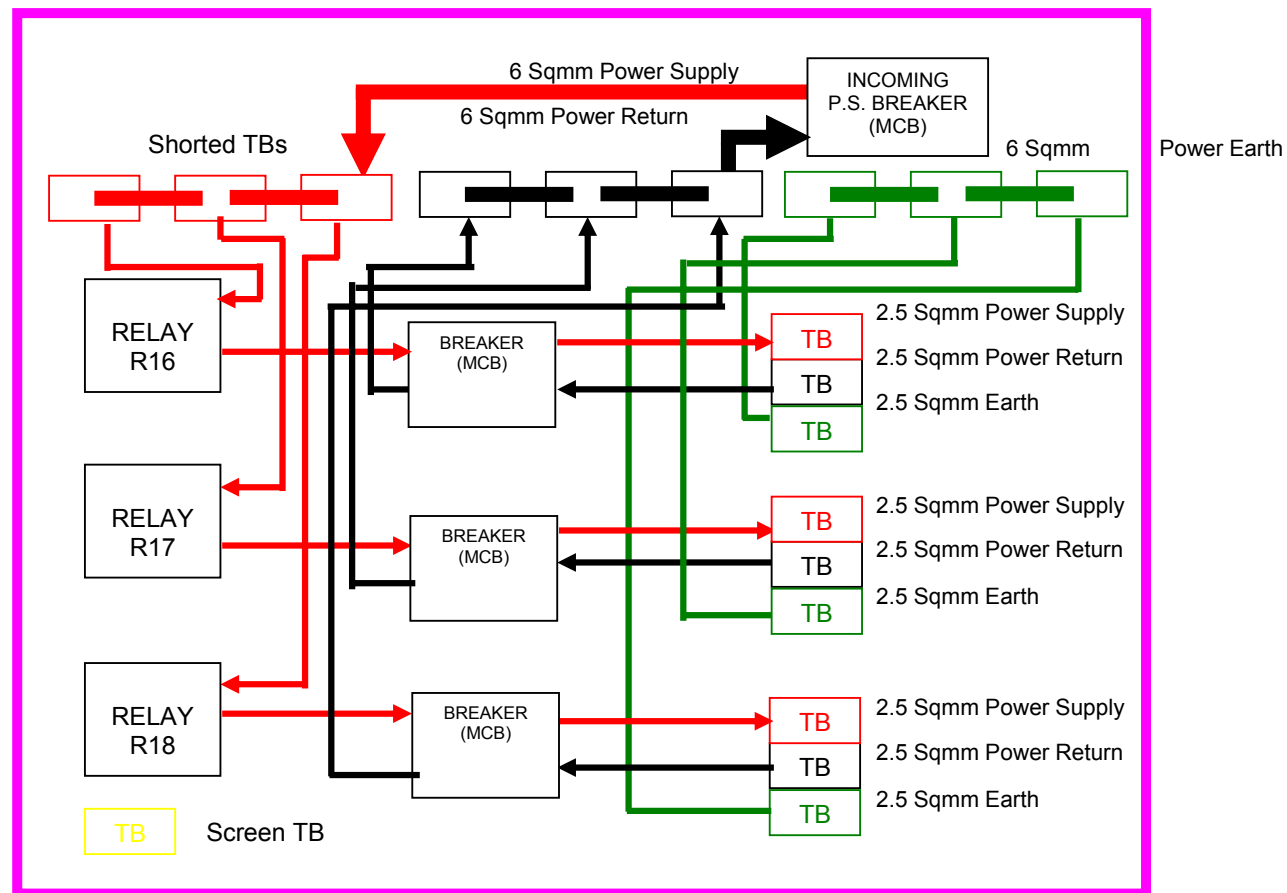


**5.2.2.1 Notes:**

1. Voltage and Current Ratings for the Incoming P.S. MCB (1 No. & Double Pole Type) used for Power Distribution are 230 V AC (Single Phase) and **20 A** respectively.
2. Wires (incoming i.e. up-to Shorted TBs) and Shorted TBs for above requirement are shall be of **4 Sqmm rating**.
3. Total requirement of the TBs of above rating (S. No. 2) is 45 Nos. (15 Nos. **Shorted TBs** each for Phase, Neutral and Earth).
4. Voltage and Current Ratings for the MCBs (Double Pole Type) used for Power Distribution to field (outgoing i.e. after Shorted TBs) are 230 V AC (Single Phase) and **6 A** respectively (**Category - I**).
5. Total requirement of the MCBs of above rating (S. No. 4) are 15 Nos.
6. Wires (outgoing i.e. after Shorted TBs) and TBs for above requirement are should be **1.5 Sqmm rating**.
7. Total requirement of the TBs of above rating (S. No. 6) are 45 Nos. (15 Nos. Fused TBs each for Phase & Neutral and Normal TBs for Earth).
8. Fuses shall be of **0.5 A rating**.
9. Screen TB (1 No. & Yellow Colour) shall be of **1.5 Sqmm rating**.
10. For AC (Power) Circuit, wires & TBs shall be of Red Colour for Phase, Black Colour for Neural and Green Colour for Earth respectively.



### 5.2.3 POWER SUPPLY DISTRIBUTION (MEDIUM RATING) IN JUNCTION BOX JB2 :



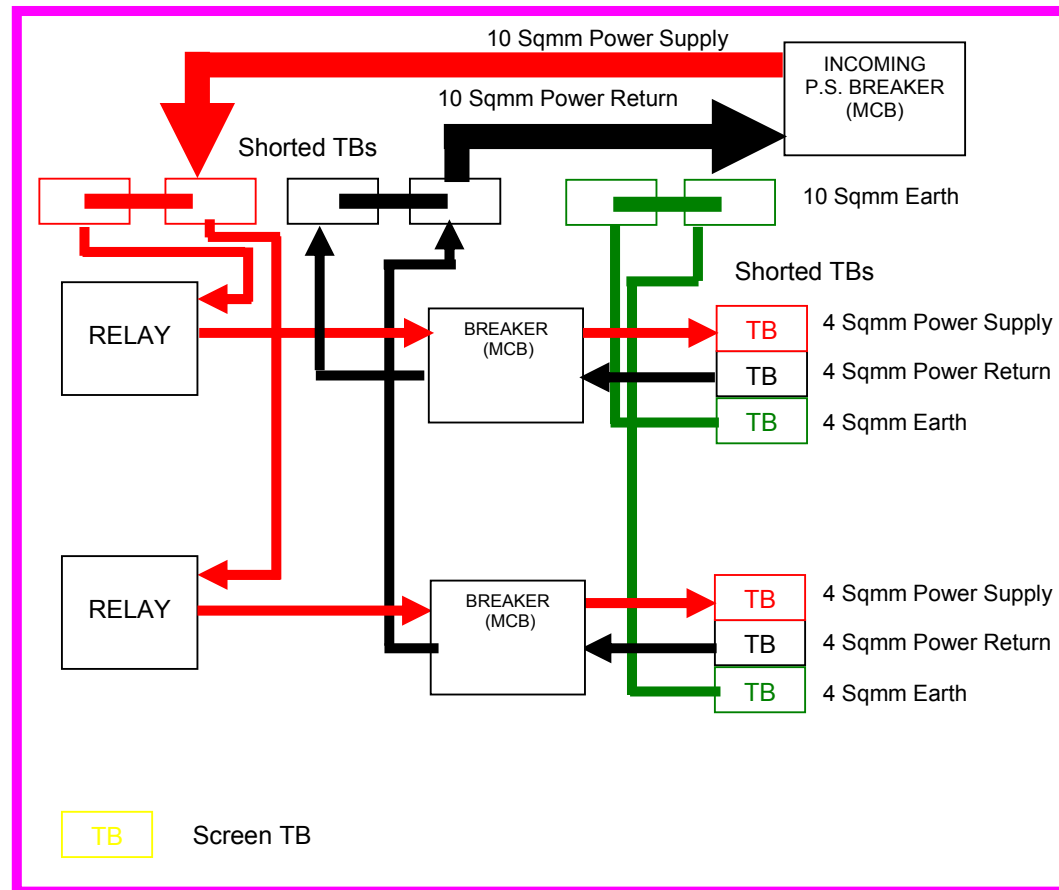


**5.2.3.1 Notes:**

1. Voltage and Current Ratings for the Incoming P.S. MCB (1 No. & Double Pole Type) used for Power Distribution are 230 V AC (Single Phase) and **32 A** respectively.
2. Wires (incoming i.e. up-to Shorted TBs) and Shorted TBs for above requirement are shall be of **6 Sqmm rating**.
3. Total requirement of the TBs of above rating (S. No. 2) is 9 Nos. (3 Nos. **Shorted TBs** each for Phase, Neutral and Earth).
4. Voltage and Current Ratings for the MCBs (Double Pole Type) used for Power Distribution to field (outgoing i.e. after Shorted TBs) are 230 V AC (Single Phase) and **10 A** respectively (**Category - II**).
5. Total requirement of the MCBs of above rating (S. No. 4) are 3 Nos.
6. Wires (outgoing i.e. after Shorted TBs) and TBs for above requirement are should be **2.5 Sqmm rating**.
7. Total requirement of the TBs of above rating (S. No. 6) are 9 Nos. (3 Nos. TBs each for Phase, Neutral and Earth).
8. Screen TB (1 No. & Yellow Colour) shall be of **1.5 Sqmm rating**.
9. For AC (Power) Circuit, wires & TBs shall be of Red Colour for Phase, Black Colour for Neural and Green Colour for Earth respectively.



**5.2.4 POWER SUPPLY DISTRIBUTION (HIGH RATING) IN JUNCTION BOX JB2 :**



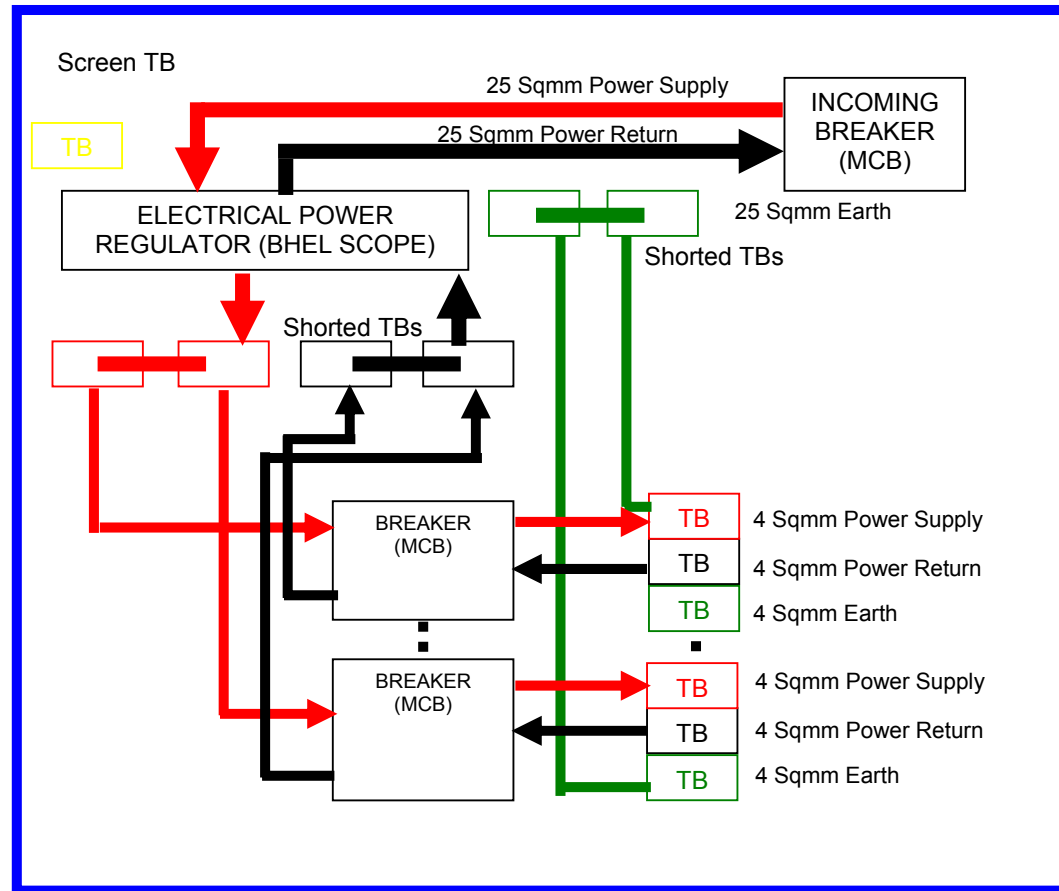


**5.2.4.1 Notes:**

1. Voltage and Current Ratings for the Incoming P.S. MCB (1 No. & Double Pole Type) used for Power Distribution are 230 V AC (Single Phase) and **40 A** respectively.
2. Wires (incoming i.e. up-to Shorted TBs) and Shorted TBs for above requirement are shall be of **10 Sqmm rating**.
3. Total requirement of the TBs of above rating (S. No. 2) is 6 Nos. (2 Nos. **Shorted TBs** each for Phase, Neutral and Earth).
4. Voltage and Current Ratings for the MCBs (Double Pole Type) used for Power Distribution to field (outgoing i.e. after Shorted TBs) are 230 V AC (Single Phase) and **20 A** respectively (**Category - III**).
5. Total requirement of the MCBs of above rating (S. No. 4) are 2 Nos.
6. Wires (outgoing i.e. after Shorted TBs) and TBs for above requirement are should be **4 Sqmm rating**.
7. Total requirement of the TBs of above rating (S. No. 6) are 6 Nos. (2 Nos. TBs each for Phase, Neutral and Earth).
8. Screen TB (1 No. & Yellow Colour) shall be of **1.5 Sqmm rating**.
9. For AC (Power) Circuit, wires & TBs shall be of Red Colour for Phase, Black Colour for Neural and Green Colour for Earth respectively.



### 5.3 TYPICAL WIRING SCHEME FOR JUNCTION BOX JB3



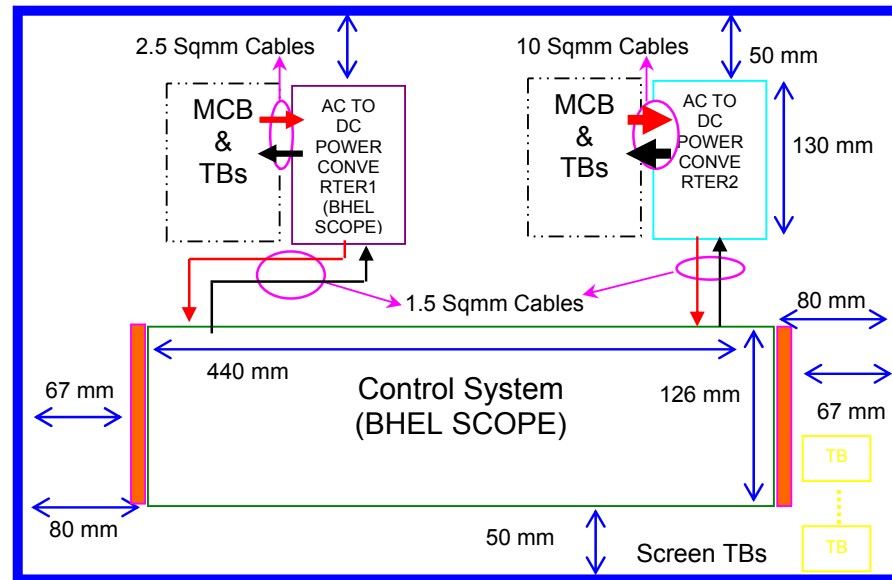


**5.3.1 Notes:**

1. Voltage and Current Ratings for the Incoming P.S. MCB (1 No. & Double Pole Type) used for Power Distribution are 230 V AC (Single Phase) and **125 A** respectively.
2. Wires (incoming i.e. up-to Shorted TBs) and Shorted TBs for above requirement are shall be of **25 Sqmm rating**.
3. Total requirement of the TBs of above rating (S. No. 2) is 36 Nos. (12 Nos. **Shorted TBs** each for Phase, Neutral and Earth).
4. Voltage and Current Ratings for the MCBs (Double Pole Type) used for Power Distribution to field (outgoing i.e. after Shorted TBs) are 230 V AC (Single Phase) and **20 A** respectively.
5. Total requirement of the MCBs of above rating (S. No. 4) are 6 Nos.
6. Wires (outgoing i.e. after Shorted TBs) and TBs for above requirement are should be **4 Sqmm rating**.
7. Total requirement of the TBs of above rating (S. No. 6) are 36 Nos. (12 Nos. TBs each for Phase, Neutral and Earth).
8. Screen TB (1 No. & Yellow Colour) shall be of **1.5 Sqmm rating**.
9. For AC (Power) Circuit, wires & TBs shall be of Red Colour for Phase, Black Colour for Neural and Green Colour for Earth respectively.
10. Dimension of Electrical Power Regulator (BHEL Scope) is 156 mm (H) x 70 mm (W) x 237 mm (D) and is DIN rail mountable.



#### 5.4 TYPICAL WIRING SCHEME FOR JUNCTION BOX JB4







#### 5.4.1 Notes:

1. Voltage and Current Ratings for the Input Power Supply MCB for AC to DC Power Converter1 is 230 V AC (Single Phase) and **10 A** respectively.
2. TBs for above requirement are shall be of **2.5 Sqmm rating**.
3. Total requirement of the TBs and MCB of above rating are 3 Nos. (1 No. TB each for, Phase, Neutral and Earth) and 1 No. respectively.
4. Voltage and Current Ratings for the Input Power Supply MCB for AC to DC Power Converter2 is 230 V AC (Single Phase) and **32 A** respectively.
5. TBs for above requirement are shall be of **10 Sqmm rating**.
6. Total requirement of the TBs and MCB of above rating are 3 Nos. (1 No. TB each for, Phase, Neutral and Earth) and 1 No. respectively.
7. For AC wiring, TBs shall be of Red Colour for Phase, Black Colour for Neural and Green Colour for Earth wires respectively.
8. For DC wiring, **1.5 Sqmm rating** wires of Red Colour for Positive, Black Colour for Negative (or Ground) shall be used.
9. Total requirement of the Screen TBs of **1.5 Sqmm rating** are 10 Nos. (Yellow Colour).
10. Dimension of Control system (BHEL Scope) is 440 mm (L) x 126 mm (H) x 116 mm (D). It has wall mounting plates extending about 17 mm from both sides of control system (shown in filled colour).
11. Dimension of AC to DC Power Converter1 (BHEL Scope) is 54 mm (L) x 132 mm (D) x 130 mm (H). Mounting Arrangement shall be similar to AC to DC Power Converter2.



### **5.5 Common Notes :**

1. The above wiring schemes are meant for showing the layout of Relays, Breakers (MCBs), Electrical Power Regulator and TBs in Junction Boxes (See Point 1 of Section II, 2.1.1). Successful Bidder to provide the Detailed Electrical Wiring Diagrams for Junction Boxes (including earthing) for the scrutiny of BHEL before fabrication. For any clarifications, bidders may contact BHEL.
2. Cables (for internal wiring) should be as per Specifications given in Section III, 3.3 and colours matching the TBs.
3. Cable Entries to the Junction Boxes JB1, JB2 & JB4 are to be from sides and from bottom for Junction Box JB4 as shown in the above diagrams.

### **5.6 Supplier's Remarks :**



## BHARAT HEAVY ELECTRICALS LIMITED

CORPORATE R&D DIVISION, VIKAS NAGAR, HYDERABAD – 500 093, AP, India

Ph: 0091-40 – 23778474, FAX: 0091-40 – 23770698

### General Terms and Conditions of Enquiry & Contract for the Purchase of Goods/ Services

1. The quotation and any order resulting from this enquiry shall be governed by these General Terms and Conditions of enquiry and contract for the supply of goods and the supplier quoting against this enquiry shall, unless specifically stipulates any different terms or conditions, be deemed to have read and agreed to the same.
2. Sealed quotations in double cover with tenderer's distinctive seal, superscribing enquiry number, date and due date are to be submitted so as to reach on or before due date & time, addressed to **Additional General Manager(MM), Bharat Heavy Electricals Limited, Corporate Research & Development Division, Vikasnagar, Hyderabad, Andhra Pradesh, India – PIN-500 093, India.**

In the case of **Two-part bid**, each inner cover shall clearly be labeled as a) **Technical & Commercial Bid** containing technical data/ drawings/ catalogues/ quality plans along with commercial terms and conditions & copy of the price bid with the price columns left blank (unpriced price bid), b) **Price bid** containing prices quotes. Installation and/or Commissioning charges shall be spelt out in absolutely lucid terms, taking into account total charges, rather than quoting vaguely, such as charges per man-day or charges per engineer per day etc. **If the price bid was found later to be different from the unpriced price bid in any way, the offer will be rejected summarily.**

3. **Tender/ Technical bid Opening:** Unless specified otherwise, tenders/ technical bids will be opened on appointed date and time as mentioned in the enquiry or as communicated changed date/time, if any, in the presence of such of those tenderers who may be present.
4. **Delayed/ Late Tender:** Tenders, which have been posted by registered post through the postal department in time before opening date but received after tender opening, shall be treated as regular tenders. Other tenders received after tender opening time shall be treated as late tenders and normally they may be rejected.
5. The Quotation should be free from overwriting and erasures. Corrections and additions, if any, must be attested. Supplier should indicate in the quotation dimensions (Size), weight, rate etc., in the metric system unless the enquiry calls for different unit.
6. **Validity of Quotation:** All quotations shall be kept open for acceptance for a period of ninety days from the date of opening of Tenders/ Technical bid and this shall be deemed to be an express condition of all quotations. The rate shall be quoted in both figures and in words.
7. In the case of Two-part bid, the vendor should furnish technical clarifications, if any, within stipulated time mentioned, failing which, it will be construed that the vendor is not interested in the tender and BHEL shall not consider the offer for further evaluation.
8. **Revision of Pricebid:** In the event of any bidder, after finalizing the technical specifications and scope of supply, opting to revise and submit their latest price bid, then BHEL reserves the right to open their original / previous price bid also while evaluating revised bid.
9. **Pricebid Opening:** Unless specified otherwise in the enquiry, the Price bids of technically qualified vendors shall be opened with prior intimation in the presence of such of those tenderers who may be present.
10. **Conformity to Specifications:** The material should be of the best quality and shall be conforming to our specification given in our enquiry. Unless otherwise agreed upon by BHEL, no payment shall be due by BHEL in respect of any sample. Offers without details of specifications/ applicable catalogues will not be considered and are liable to be rejected.
11. **Terms of Delivery:** All suppliers shall quote the lowest prices on ex-works and FOB/FCA basis. Foreign suppliers will also indicate their Indian agent's name and address with percentage of agency commission out of the quoted price, if any. Name and Address of the supplier's Bankers address should also be given. Indian suppliers for the indigenously manufactured/ imported stock shall quote on Ex-works /Free-on-Rail/Road /FOR-destination basis, indicating packing & forwarding charges, if any, separately.
12. **Taxes and Duties:** Unless specified otherwise in the enquiry, BHEL do not provide "C" or "D" Form as it is engaged in R&D. All Indian suppliers shall clearly mention Sales Tax/ VAT, Excise Duty, and Service Tax etc, if any, payable in addition to the quoted price and indicate applicable rates/ percentage, item-wise. It will be paid

only if Registration Number under State(TIN)/ Central Sales Tax or Service Tax is specifically mentioned in the Bill/Invoice. Vendors without a Sales Tax/VAT registration and applicable Service Tax registration will not be considered.

13. **Insurance:** Insurance will be arranged by BHEL in case of Ex-Works as well as FOB basis supplies.
14. **Terms of Payment:** Full payment will be made within 30 days after receipt, inspection and acceptance of the material (and where involved, Erection and commissioning of the material/ equipment at BHEL/Destination) by Crossed cheque and no Bank commission charges are admissible. The Cheque will be sent by registered post and BHEL is in no way responsible if loss occurs due to delay by postal authorities and cheques falling into improper hands or through forgery or fraud. Suppliers having RBI-SEFT-enabled accounts can seek payment through Electronic Fund transfer. For foreign suppliers, the preferred payment term will be on Sight Draft basis and bank charges inside India will be to BHEL account and outside India will be to supplier's account.
15. Suppliers shall quote competitive price and best delivery for all the items mentioned in the enquiry. BHEL reserves the right to reject partial quotations and to place order on overall landed cost basis. Correct date of effecting supplies in the event of an order should be indicated in the offer. If the supplier's quoted terms are different from BHEL standard payment terms, interest @10.5% per annum (or as indicated in the enquiry) will be loaded to the quoted prices for difference of payment period.
16. **Packing:** The supplier shall be responsible for the goods being properly and adequately packed so as to prevent any loss, damage or deterioration during transit and indicate packing charges, if any, separately.
17. **Part/ Split Ordering:** BHEL reserves right to Order part of the item/ quantity of the enquiry and split the order among qualified vendors.
18. In case the goods enquired are on Rate Contract basis with any other unit of BHEL, such fact should be clearly indicated in the quotation giving full particulars of Rate Contract number, validity and price and also your willingness to comply with order if placed against such Rate Contract. A true copy of Rate contract signed by the supplier should be sent with the quotation.
19. **Inspection:** On receipt, the goods shall be subjected to inspection and also test, if necessary, and our decision regarding the acceptability of the goods shall be final and binding on the suppliers.
20. **Consequences of Failure To Deliver:** The time stipulated for delivery of goods shall be deemed to be the essence of the contract and delivery must be completed within the stipulated date/s. In the event of supplier's failure to supply the goods by the stipulated date/s, BHEL shall be entitled to levy a penalty of ½% per week for the delayed no of weeks or part thereof for the undelivered portion of PO subject to a maximum of 10% total order value.
21. **Withdrawal from the Contract:** In case the supplier withdraws the quotation after its acceptance by BHEL or fails to supply the goods as per the terms and conditions of contract, or at any time repudiated the contract wholly or in part, BHEL shall be at liberty to cancel the Purchase Order and to recover from the supplier the extra cost and other loss incidental to the breach of contract on the part of the supplier.
22. **Guarantee/ Warranty certificate and Manufacturer's Test report:** Invariably in all cases where it is so stipulated, the supplier should furnish Guarantee/ Warranty certificate valid for a period of 18 months from date of supply or 1 year from the date of receipt, acceptance and commissioning(or more, if provide by oem) whichever earlier and manufacturer's Test report along with the goods, failing which, BHEL shall have the right to reject the goods.
23. All ferrous/ non-ferrous items shall be colour coded as per bureau of Indian standards/ or IS standards/ BHEL Standards.
24. **Recovery of Dues:** BHEL shall recover any amount due from the supplier or any amount outstanding to the credit of the supplier with BHEL R&D unit or any other BHEL unit(s) and/or by legal action.
25. **Arbitration & Forum for Legal Proceedings:** All disputes arising in connection with indigenous/ foreign supplies shall be settled through arbitration held at Hyderabad, AP, India and arbitration shall be appointed by Arbitration Tribunal of the Federation of Andhra Pradesh Chambers of Commerce and Industry, Hyderabad, AP, India. The Courts at Secunderabad/ Hyderabad, AP, India shall have jurisdiction in respect of any suit or other legal proceeding arising from or relating to this contract

The rights and remedies of BHEL stated in these General terms and conditions shall be in addition and supplemental to its rights and remedies under law and custom or usage of trade or business and shall in no way be deemed to limit, curtail, supercede or derogate from its said rights and remedies.



**ANNEXURE “AA**  
**BHARAT HEAVY ELECTRICALS LIMITED**  
**CORPORATE RESEARCH & DEVELOPMENT DIVISION**  
**VIKASNAGAR, HYDERABAD – 500 093. INDIA**

**MATERIALS MANAGEMENT DEPARTMENT**  
**(Information for Technical & Commercial bids with general terms)**

**ENCLOSURE TO ENQ No:**

**DATE:**

- a) Please indicate( \_/ ) for applicable or ( X ) for not applicable against each clause of the enquiry
- b) Vendor shall confirm their compliance for applicable clauses ( \_/ ) in their offer without deviation.

**1) Technical offer:-**

- a) Vendors to confirm compliance to all points of specifications, attached if any. Deviations if any should be specified in the offer.
- b) Vendors shall furnish relevant technical Documents / Catalogues. Drawings and Quality plan duly taking care of Purchase Specification and Quality requirements along with their offer in duplicate for Purchaser’s review / Verification.

**2) Two Part Bid:-**

Vendor shall submit their offer in 2 parts.

**2.1 Technical Bid:-** Containing relevant technical data, drawings, catalogues, Quality Plan etc, along with Commercial Terms and Conditions and a copy of the price bid with the price columns left blank (unpriced price bid). If the price bid was found later to be different from the unpriced price bid in any way, the offer will be rejected.

**2.2 Price Bid:-** Containing the Price(s) quoted. Installation and or commissioning charges shall be spelt out in absolutely lucid terms taking into account the total charges rather than quoting vaguely such as charges as per man day or charges per Engineer per day etc.,

Technical bids will be opened on the due date of the enquiry or any other date fixed by BHEL. Further, vendor should furnish clarifications, if any, required within seven days after the same is sought by Purchaser. If no clarifications/reply received within 7 days, it will be construed that vendor is not interested in the tender and Purchaser will finalise tender accordingly. Price bids received on due date along with technical offers will be recorded and opened subsequently with due intimation to vendors after finalising of technical scope of supply.

These bids shall be submitted in separate sealed covers superscribing the nature of the offer (technical bid or price bid). BHEL Enq No. Due date etc.

**Note: In case of non-compliance with the TWO\_-PART-BID ie.. clause number 2 and subclauses 2.1 and 2.2. Purchaser reserves the right to summarily reject all such offers.**

**3) Delivery:-**

**Vendor shall confirm supply of materials as per the delivery schedule indicated in the enquiry.**

**4) Negotiations:-**

**Vendor shall quote competitive price and best delivery to avoid negotiations.**

**5) Commercial Terms & Conditions:-**

**Terms of Delivery:**

- a) **Vendors shall clearly indicate terms of delivery Viz: Ex-Works/FOR Despatching station/FOR Despatching station FOR Destination/FOB port of loading/FAS Port of loading in their offer. If the terms of delivery is Ex-Works, then vendors shall clearly indicate the following:**
  - 1. Packing and forwarding charges.**
  - 2. Documentation / Handling charges if any**
  - 3. FOB FAS charges (Inland Freight & Insurance charges from vendor works to port of Loading).**
- b) **All Indian Vendors shall clearly specify the Excise Duty in percentage applicable for their supplies. Offers containing expressions such as “Extra as applicable” or “As applicable at the time of Delivery” will be summarily rejected.**
- c) **CST/Local Sales Tax in percentage shall be clearly indicated.**

**6) Validity of Quotation:-**

**Validity of offer should be 90 days after the opening of price bid.**

**7) Part or split ordering:-**

**Purchaser reserves the right to order part of item / quantity of the enquiry.**

**8) For clauses not mentioned in this document see the enclosed “GENERAL TERMS AND CONDITIONS OF ENQUIRY AND CONTRACT FOR THE PURCHASE OF GOODS”**

- 9) In case your terms of payment are different from our standard payment terms, interest at the rate of 10.5% per annum (or BHEL’s standard rate of interest) will be loaded to your prices for the difference of period of payment.**



**BHARAT HEAVY ELECTRICALS LIMITED**  
**CORPORATE R&D Division**  
**Vikasnagar, Hyderabad – 500093, India.**

**Suppliers' compliance statement to basic conditions of enquiry**

**(In case Order to be placed on Indian supplier in Indian currency)**

<b>Condition</b>	<b>BHEL R&amp; D's terms</b>	<b>Supplier's compliance</b> (indicate Yes/No. if 'No', state terms desired)
1) Validity of offer	90 days from the tender opening date	
2) Delivery requirements	Free delivery at our stores or FOR destination (as indicated in the enquiry)	
3) Warranty	Unless specifically mentioned in the enquiry, all supplied items to be provided with warrantee for one year (or more, if provided by the OEM) from the date of acceptance/commissioning. In case of equipment involving erection and commissioning, warrantee shall be for 18 months from the date of dispatch or 12 months from the date of commissioning, whichever is earlier	
4) Terms of payment	Full payment will be made within thirty days after receipt, inspection and acceptance of the material at BHEL R&D (and where involved, erection and commissioning of the material/equipment at BHEL/destination), by Crossed Cheque and no Bank commission charges are admissible.	
5) Taxes & Duties	Unless specifically mentioned in the enquiry, we do not provide 'C' or 'D' form. Supplier to specify rates of taxes and duties element wise and related percentages.	
6) Penalty for late delivery	0.5% per week beyond the delivery date as mentioned in the Purchase order on undelivered portion subject to a maximum of 10% of the total order value	

\* BHEL R&D reserves the right to reject any offer due to non-compliance with the above conditions and/or non-receipt of this form in duly filled condition

\* Any other elements of cost in addition to the above may please be specified in detail

**(Signature and Stamp/Seal of Vendor)**



**BHARAT HEAVY ELECTRICALS LIMITED**  
**CORPORATE R&D Division**  
**Vikasnagar, Hyderabad – 500093.**

**IMPORTED**

**Suppliers' compliance statement to basic conditions of enquiry**

**(In case Order to be placed on the Principal and foreign currency)**

<b>Condition</b>	<b>BHEL R&amp;D's terms</b>	<b>Supplier's compliance</b> <b>(indicate Yes/No. if 'No', state terms desired)</b>
01) Validity of offer	90 days from the tender opening date ( or as per enquiry)	
02) Delivery requirements	FCA – Nearest International Airport (or as indicated in the enquiry)	
03) Warranty	Unless specifically mentioned in the enquiry, all supplied items to be provided with warrantee for one year (or more, if provided by the OEM) from the date of acceptance/ commissioning. In case of equipment involving erection and commissioning, warrantee shall be for 18 months from the date of dispatch or 12 months from the date of commissioning, whichever is earlier	
04) Terms of payment	Sight draft. All bank charges inside India will be to BHEL R&D account and out side India will be to suppliers account. Documents through State Bank of India, HAL Complex, Balanagar, Hyderabad, AP, India-500 042.	
05) Agency commission	Pl specify percentage charges, if any. Indian agency/agent commission will be in Indian Currency only.	
06) Erection/ Commission	As per enquiry	
07) Documentation	As per enquiry	
08) Insurance	BHEL will arrange Insurance based on intimation to our Insurance agency, United India Insurance Co., DO-2, Secunderabad, AP, India.	
09) Penalty for late delivery	0.5% per week beyond the delivery date as mentioned in the Purchase order on undelivered portion subject to a maximum of 10% of the total order value	

\* BHEL R&D reserves the right to reject any offer due to non-compliance with the above conditions and/or non-receipt of this form in duly filled condition

\* Any other elements of cost in addition to the above may please be specified in detail

**(Signature and Stamp/ Seal of Vendor)**





BHARAT HEAVY ELECTRICALS LTD.  
Corp. R&D DIVISION  
VIKAS NAGAR,  
HYDERABAD-500 093 (INDIA)

## VENDOR REGISTRATION FORM

[FORM TO BE SUBMITTED\* BY THE BIDDER ALONG WITH TECHNICAL-BID]

Before filling please refer to instructions on page-4

### 1.0 VENDOR PROFILE:

1.1 & 1.2 Name and address of the vender:

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Phone Nos.:

Fax No.:

Email:

1.4 Local representative of the vender in India/ Hyderabad:

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Phone Nos.:

Fax No.:

Email:

Contact person:

Mobile No.:

2.0 & 2.1 Type of Organisation:

PROPRIETORSHIP	COMPANY	SISTER CONCERN	ANY OTHER (Please specify)
PARTNERSHIP	CORPORATION	Small Scale Industry	

3.0 Annual Turn Over:

Name and address of the Banker:

Sr.No.	Bank	Address

4.0 REGISTRATION PARTICULARS

4.1 IT Permanent Account No.(PAN):

4.2 & 4.3 State and central sales tax Registration No.:

4.4 ED/ Service Tax Registration No.:

PF Account No.:

Labour Licence No.:

ESI Account No.:

5.2 Contact person:

Mobile No. :

5.3 Total Number of employees:

Graduates (Engr./Scientists/Mgmt/Fin.)	Consultants	Workers		
		Sup./Skilled	Semiskilled	Unskilled

6.0 Wish to register for supplies/ services other than one bidding for :

<u>Sr.No.</u>	<u>Service/Supplies</u>	<u>Capacity</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		
<u>5</u>		
<u>6</u>		
<u>7</u>		

6.1 Reference list :

(Only recognized public and private sector companies, attach if printed copy available)

<u>Sr.No.</u>	<u>Customer</u>	<u>Volume / Year</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		
<u>5</u>		
<u>6</u>		
<u>7</u>		

7.0 & 8.0 Infrastructure / facilities :

<u>Sr.No.</u>	<u>Facility (with specifications)</u>	<u>Age/ Year procured</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		
<u>5</u>		
<u>6</u>		
<u>7</u>		
<u>8</u>		
<u>9</u>		
<u>10</u>		

9.0 Registration with other BHEL Unit/Units:

<u>Sr.No.</u>	<u>9.1.1 Unit</u>	<u>9.1.2 Registration No.</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		

Any Other information :

Declaration:

The information furnished above is true and authentic.

**(CEO / Proprietor)**

**SEAL:**

**Date:**

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The competent authority reserves the right to accept or reject the registration. Registered vendors will be informed by mail / email, as convenient. Contact Sr.DGM (MM) for clarification/ additional information on registration.  
A separate communication will be sent to you in case of non-registration, citing reasons thereof.

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### **Instructions**

1. Answer all items, use NA for items not applicable.
2. BHEL units do not require this registration.
3. Submit the form in duplicate.
4. Use additional sheets for want of space if required.
5. Attach copies of latest documents in respect of items 4.0 (Registration no.s)
6. Photographs of registered office and the chief executive/proprietor shall be furnished.
7. Use A4 sheets for this document and the enclosures.

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\* REGISTERED BIDDERS, HAVING BHEL (R&D) REGISTRATION NO./ HAVE SUBMITTED THIS FORMAT EARLIER, NEED NOT FURNISH THIS INFORMATION SECOND TIME (UNLESS DESIRE TO UPDATE IT).



**BHEL CORPORATE R & D**  
**VIKAS NAGAR- HYDERABAD - 500 093**  
**ANDHRA PRADESH – INDIA**  
**SUPPLIER REGISTRATION FORM**

(FOREIGN SUPPLIER)

ALL COLUMNS SHOULD BE PROPERLY FILLED IN THE SPACE PROVIDED FOR. WHEREVER IT IS NOT APPLICABLE PLEASE WRITE “NOT APPLICABLE”. INCOMPLETE OR INCORRECT FORMS MAY NOT BE CONSIDERED.

**1.0 GENERAL INFORMATION:**

1.1....NAME OF COMPANY

1.2....DETAILS OF HEAD OFFICE:

ADDRESS :  
TELEPHONE :  
FAX :  
.EMAIL :  
.WEB SITE :

1.3....DETAILS OF FACTORY/WORKS:

ADDRESS :  
TELEPHONE :  
FAX :  
.EMAIL :  
.WEB SITE :

1.4....DETAILS OF MARKETING AGENT

ADDRESS :  
TELEPHONE :  
.FAX :  
.EMAIL :  
.WEB SITE :

1.5 CHIEF EXECUTIVE

NOTE: PLEASE ATTACH SEPARATE SHEETS, IF SPACE FOUND IS INADEQUATE

AUTHORISED SIGNATORY



**BHEL CORPORATE R & D**  
**VIKAS NAGAR – HYDERABAD – 500 093**  
**ANDHRA PRADESH – INDIA**

**SUPPLIER REGISTRATION FORM**

(FOREIGN SUPPLIER)

- 1.6 CONTACT PERSON(S)  
FOR PRODUCT OFFERED  
NAME(S)  
OFFICIAL CAPACITY  
ADDRESS:  
TELEPHONE  
FAX  
E-MAIL
- 1.7 YEAR OF ESTABLISHMENT
- 1.8 PRODUCTION CAPACITY PER ANNUM
- 1.9 PARTICULARS OF PRODUCT INCLUDING  
SPECIFICATION AND RANGE OFFERED  
FOR REGISTRATION  
( ATTACH BROCHERS AND CATALOGUE)
- 1.10 NAME(S) OF BANKERS
- 1.11 BANKER'S CERTIFICATE
- 1.12 PORT OF LOADING
- 1.13 NEAREST AIRPORT
- 1.14 NAME OF THE INDIAN AGENT, IF ANY  
WITH AUTHORISATION LETTER
- 1.15 ANY OTHER INFORMATION:

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AUTHORISED SIGNATORY

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**BHEL CORPORATE R & D**  
**VIKAS NAGAR – HYDERABAD – 500 093**  
**ANDHRA PRADESH – INDIA**

**SUPPLIER REGISTRATION FORM**

(FOREIGN SUPPLIER)

**2.0 FINANCIAL INFORMATION**

2.1...TOTAL CAPACITY

2.2...ANNUAL TURN OVER FOR LAST 3 YEARS

2.3...WHEHER CREDIT LICENSE ACCEPTABLE      YES/NO

**3.0    QUALITY MANAGEMENT SYSTEMS**  
**ENCLOSED FORMAT PART-B**

3.1    EXPERIENCE LIST FOR SAME/SIMILAR ITEMS  
TO BE ENCLOSED

**4.0.....FUTURE EXPANSION PLANS:**  
(GIVE DETAILS)

**5.0    LIST OF ENCLOSURES:**  
INCLUDING BROUCHERS, CATALOGUES, TECHNICAL  
LITERATURE etc...

**6.0    ANY OTHER INFORMATION**

SIGNATURE OF SUPPLIER  
NAME  
DESIGNATION  
DATE  
.....OFFICIAL SEAL

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AUTHORISED SIGNATORY

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