



PREQUALIFICATION CRITERIA (PQC)
FOR PRECHARGE CONTACTOR
GROUP: TRACTION ENGINEERING

Ref: 445/PQ_PC/21

Rev. No.: 00

Page 1 of 1

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1.0 PRE QUALIFICATION CRITERIA (PQC)

1. The Bidder should be Supplier of Contactors used in Traction applications.
2. BHEL shall approach and submit credentials/details furnished by vendor with their offers to customer and await customer's decision for a maximum of one month from the date of tender opening. If approval is not received within the above period, BHEL shall treat the offer as "Not meeting" Pre-qualification criteria and offer shall be rejected.
3. It is preferred that the bidder is the manufacturer of this item. If the bidder is importing some portion of the components, then minimum value addition shall be 20%. Bidder to confirm this in the offer. Value addition less than 20% is not acceptable

2.0 DOCUMENTS SUBMISSION

1. Bidder to submit clause by clause compliance to complete technical specification (Technical specification no. PS4452703 Rev. No.00, dated 05-01-2021) along with copy of type test report.
2. Should possess a valid type test report, not older than five years, conducted at a NABL accredited laboratory as per relevant standards mentioned in the specification with respect to time during the bid submission.
3. Proof of supply of Contactors used in traction applications directly or through any agency to Indian Railways during the last 5 years to be submitted.

3.0 REFERENCE DOCUMENTS

- a) Purchase Specification No PS4452703, Rev. No. 00 for Line Contactor.

REVISION 00

APPROVED

AGOSH CHANDRAN R S

PREPARED

SUNITHA L

ISSUED

TRACTION ENGG

DATE

05.01.2020



A4 - 12

PURCHASE SPECIFICATION
GROUP: TRACTION ENGINEERING

P.S NO. : PS/445/2703

REV. NO: 00

PAGE 00 OF 04

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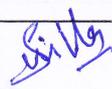
REVISION HISTORY SHEET

REV. NO	DATE	NATURE OF CHANGE	REASONS	PREPARED BY	APPROVED BY
00	05.01.2021	FIRST ISSUE	--	L Sunitha	R S Agosh Chandran

THIS DOCUMENT IS A SPECIFICATION CUM DATA SHEET. VENDOR TO FILL UP ALL CONFIRMATIONS AND DATA AS REQUIRED AND SUBMIT THE SAME TO BHEL / EDN, BANGALORE. ANY DEVIATIONS TO THIS DOCUMENT TO BE BROUGHT OUT CLEARLY BY VENDOR.

REVISIONS 00 DT: 05.01.2021

APPROVED BY: 
Agosh Chandran R S, Manager/TE

PREPARED BY:	ISSUED BY	DATE
L Sunitha Dy Manager/TE 	TE	05.01.2021



A4 – 10

PURCHASE SPECIFICATION
GROUP: TRACTION ENGINEERING

P.S NO. : PS/445/2703

REV. NO: 00

PAGE 01 OF 04

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SPECIFICATION FOR
PRECHARGE CONTACTOR



A4 – 11

PURCHASE SPECIFICATION
GROUP: TRACTION ENGINEERING

P.S NO. : PS/445/2703

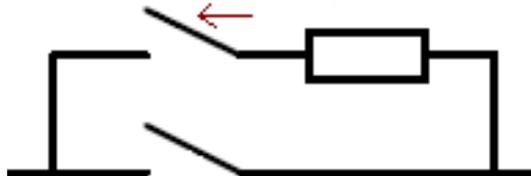
REV. NO: 00

PAGE 02 OF 04

1.0 INTRODUCTION:

A charge circuit is used to pre-charge the HV-capacitors before the main contactor is closed to avoid high inrush peak-currents. Normally the magnetically operated charge switch will only make current, only in abnormal situations (short circuit in the traction converter) the switch has to break current.

2.0 FUNCTION:



The maximum current to be switched off during abnormal situations at 3000V is 60A, the current is limited by the 50 Ohm resistor. For voltage sharing, the two contacts of the charge switch shall be put in series. The charge switch shall be operated electromagnetically.

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A4 – 11

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GROUP: TRACTION ENGINEERING

P.S NO. : PS/445/2703

REV. NO: 00

PAGE 03 OF 04

3.0 CHARACTERISTICS

Electrical Characteristics	
Rated Operational Voltage [Vac/Vdc]	1500
Max Operational Voltage [Vac/Vdc]	2000
Rated Insulation Voltage [V]	2000
Maximum current (rated thermal current) A	100
Breaking capacity A	100
Number of poles	2
Blow Out Circuit Type	Permanent Magnet
Mechanical Characteristics	
Mechanical Endurance (cycles)	2x10 ⁶
Shock and Vibrations (IEC61373)	Cat.1 - Class B
Weight [kg]	approx 3 - 3.5
Environmental Conditions	
Stock Temperature Range	50°C ÷ +85°C
Operational Temperature Range	-40°C ÷ +75°C
Pollution Degree - Overvoltage Category (EN 50124-1)	PD3 / OV3
Max Altitude without Performance Derating [m]	1500

4.0 INSPECTION

The type test reports from a NABL accredited laboratory to be provided along with the technical offer. For series supplies, Routine test reports are to be provided.

5.0 APPLICABLE NORMATIVE STANDARD

The offered system shall generally conform to the following normative standards

- IEC 60529 for IP68 protection
- EN 50121-2 EMC: Emissions to external environments
- IEC60077 Rules for equipment for onboard rail vehicles
- IEC 61287 Power Converters on board rolling stock
- IEC-61373 Electric Railway Equipment-Rolling Stock-Shock & Vibrations Requirements

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A4 - 11

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P.S NO. : PS/445/2703

REV. NO: 00

PAGE 04 OF 04

6.0 DIMENSIONS

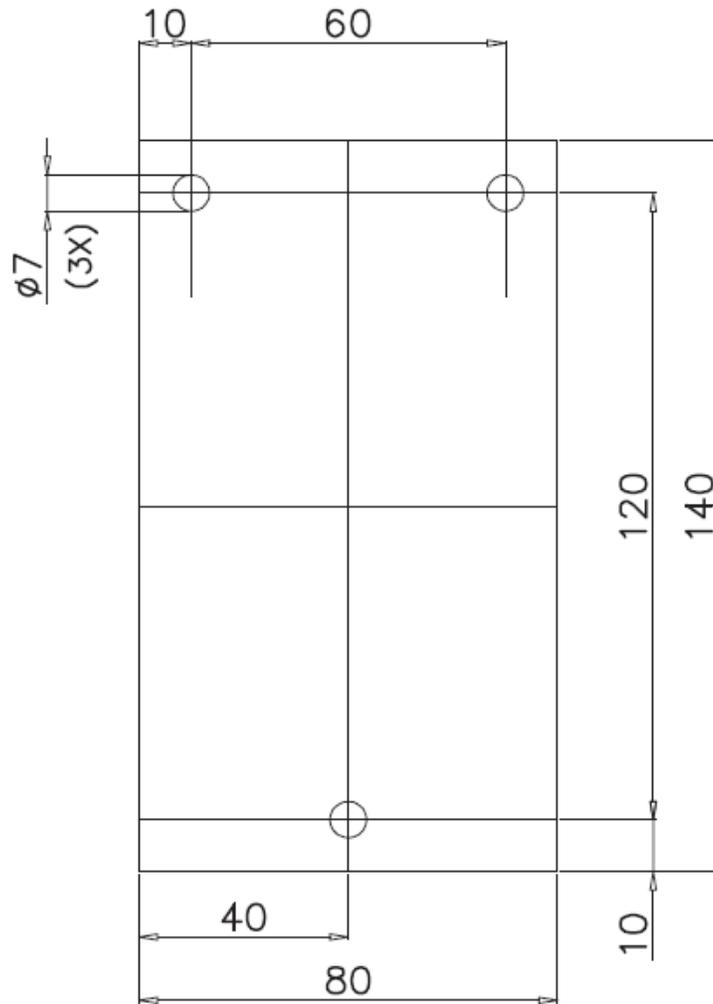


Fig.1- Dimensional details

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REQUEST FOR QUOTATION

	BHARAT HEAVY ELECTRICALS LIMITED Electronics Division PB No. 2606, Mysore Road Bangalore - 560026 INDIA	RFQ NUMBER: AKSPROP002 RFQ DATE : 12.04.2022	Due Date/Day: 25.04.2022 MON Time : 13:00 HRS [REDACTED]
MMI:PU:RF:003			
(address for communication) :		(for all correspondence)	
		Purchase Executive : ABHISHEK Phone : 26998102 Fax : 00918026989215 E-mail: singh.abhishek@bhel.in	

1) This RFQ is for entering into Rate contract (RC) with BHEL for the tendered item. Validity of the RC will be 1 year from the award of rate contract. Firm orders will be placed during the tenure of rate contract. Prices will remain firm till the validity of RC or till the completion of supplies against the Purchase Orders placed against this rate contract whichever is later. Please note that these quantities are projections based on the current business scenario and expected orders from customers. In the eventuality of business not coming through, BHEL is not obligated to exhaust the ordering of RC quantities.

2) Quantity distribution shall be applicable for the tendered item in the following manner:

L1 will be decided by considering total cost to BHEL and

- a. L1 bidder shall be awarded 60 % of tender quantity.
- b. L2 bidder shall be offered 40% of tender quantity.

NOTE: 40 % quantity shall be offered to L2 bidder at L1 unit rate. If L2 bidder do not agree to supply at L1 unit rate, BHEL may consider offering entire tender quantity to L1 bidder.

3) Reverse Auction Clause: BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among all the techno-commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered as initial bids of bidders in RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.

SI No.	Description	Qty	Unit	Delivery qty	Delivery Date
1	TI0668104236 CONTACTOR 2P 250A 110VDC * HSN/SAC : 3921 [REDACTED] [REDACTED] [REDACTED] CONTACTOR 2P 250A 110VDC	500	NO	500	[REDACTED]

Total Number of Items - 1

- 1.
- 2.

<p>NOTES:</p> <p>1. This RFQ is governed by:</p> <p>a) INSTRUCTIONS TO BIDDERS/SELLERS and GENERAL CONDITIONS OF CONTRACT FOR PURCHASE available at http://edn.bhel.com (RFQ-PO Terms & Conditions)</p> <p>b) Any other specific Terms and Conditions mentioned.</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>* The HSN/SAC no mentioned against the line items in the RFQ are indicative only.</p>	For and On behalf of BHEL. ABHISHEK Control Equipment 1 OF 1
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COMMERCIAL BID				
Tender department: CE- MM, EDN, BHEL, BANGALORE			RFQ/NIT/Enquiry no.	AKSPROP002
		Bidder Name:		
Item: CONTACTOR 2P 250A 110VDC				
Tender floated through NIC e-Procurement system Website - https://eprocurebhel.co.in/nicgep/app . Vendor to submit offer only through NIC e-Procurement system.				
Sr. No	DESCRIPTION	Details	Bidder's Acceptance / Response	Remarks if any
1	Price Basis	The quoted prices will be firm till supply completion of the tendered quantity.		
2	Terms of Delivery	Indigenous vendors -DDL, BHEL EDN, Bangalore (Free delivery to EDN/BHEL Bangalore including packing & forwarding charges) Foreign Vendors - FCA to International Airport(Airport Name to be indicated).		
3	Delivery Period	Total quantity requirement is for 1 year, indicate the best possible delivery schedule from the date of issue of Purchase order with Best possible quantity per Month. BHEL will consider the production program and release order accordingly.		
4	Payment Term	Indigenous vendors - 100% within 45 days from the date of receipt of material at BHEL EDN Stores. Foreign Vendors - 100% against Sight draft with 45 days credit.(45 days from the receipt of documents at our Bank will be considered)		
5	Evaluation of L1 vendor	Evaluation will be done on item wise, lowest bidder will be considered for ordering.		
6	Penalty for delay in delivery	Penalty of 0.5% per week at the basic price of the good for undelivered quantity of supply portion, subject to a maximum of 10%.If PSI is indicated in PO, then date of call letter with the test reports will be considered as the delivery date for penalty . If no PSI(Foreign vendors), then date will be as per NIT terms for supply of material.(i.e., Invoice date or date of intimation to freight forwarder which ever is earlier)		
7	Loading towards Penalty for delay in delivery	For any deviation in penalty term, the offer will be liable for loading as per Clause No. G, Point No.(b) of ITB.		
8	Pre shipment inspection	Not applicable.		
9	Other terms & conditions	For detailed Terms and Conditions, kindly refer to the following:A: INSTRUCTIONS TO BIDDERS/SELLERS(Doc No :BHEL:EDN:ITB-SHOP) available at www.edn.bhel.com (RFQ-PO Terms & Conditions)B: GENERAL CONDITIONS OF CONTRACT FOR PURCHASE(Doc no :BHEL:EDN:GCC-SHOP)available at www.edn.bhel.com (RFQ-PO Terms & Conditions)		
10	Validity	Quotation should remain valid for a period of 90 days from the due date.		
11	Reverse Auction	Applicable.		
12	Declaration for GFR 2017 Rule 144(Xi)	Declaration to be uploaded (Format attached)		
13	Declaration for Make in India (MII)	Declaration to be uploaded (Format attached).		
14	Declaration	The bidder declares that they will not enter into any illegal or undisclosed agreement of understanding, whether formal or informal with other bidder(s). This applies in particular to prices, specifications, 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, suitable action shall be taken by BHEL as per extent policies/guidelines.		
15	Warranty	12months from date of commissioning or 18 months from the date of supply whichever is earlier		
16	No Deviation	We hereby confirm that all the terms & conditions of tender are accepted without any deviation and any . Any additional commercial term or deviation in commercial term mentioned anywhere else shall be ignored and not be considered for evaluation		
17	Rate Contract	This RFQ is for entering into Rate contract (RC) with BHEL for the tendered item . Validity of the RC will be 1 year from the award of rate contract. Firm orders will be placed during the tenure of rate contract. Prices will remain firm till the validity of RC or till the completion of supplies against the purchase orders placed against this rate contract whichever later. Please note that these quantities are projections based on the current business scenario and expected orders from customers. In the eventuality of business not coming through, BHEL is not obligated to exhaust the ordering of RC quantities.		
18	Non acceptance of RC	Offer will be liable for commercial rejection for non acceptance of RC.		
19	Authorisation letter	Valid authorisation letter from OEM to be provided if dealer.		

Sr. No	DESCRIPTION	Details	Bidder's Acceptance / Response	Remarks if any
20	Documents for bill processing	<p>Complete set of despatch documents (original + 1 photocopy set) as per Purchase Order shall be submitted as below:</p> <p>1. For Indigenous vendors documents to be sent to the purchase Officer directly on below address for bill processing - Mr. Abhishek, Dy. MANAGER /CE-MM, NEB , 2ND FLOOR, BHEL-EDN, BANGALORE - 560026, KARNATAKA Telephone: 080-26998102</p> <p>If documents are Digitally Signed by Authorized Signatory, submission of Hard copy of document is not required. However digitally signed soft copy of complete set of documents to be sent to below email IDs, singh.abhishek@bhel.in</p> <p>Depending upon the PO, despatch documents may include one or more documents from the following:</p> <ol style="list-style-type: none"> 1. Invoice for payment (original) 2. Invoice for payment (extra copy) 3. Packing list 4. LR Copy 5. Warranty certificate 6. PBG if applicable as per PO 7. Copy of UDYAM certificate for considering MSE, if applicable. 8. Copy of First Inspection call letter along with TC if applicable. 		
21	Note -			
	<p>(1) Any tender condition does not prohibit any bidder to submit their offer along with clause wise deviation from the specification/commercial terms of tender. Changes, if any, in technical specification / Scope etc shall be informed to participating bidders only.</p> <p>(2) Any additional commercial term or deviation in commercial term, if sought by vendor, should be clearly brought out in this commercial bid document. Any additional commercial term or deviation in commercial term mentioned anywhere else shall be ignored and not be considered for evaluation</p> <p>(3) Any technical or commercial clarification for this tender can be raised within one week of floating tender. No clarification will be entertained by BHEL after given cutoff date. Clarifications with regard to the tender shall be addressed to purchase officers whose e-mail IDs are given below: singh.abhishek@bhel.in</p> <p>(4) The evaluation currency for this tender shall be INR.</p> <p>(5) Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 are eligible to bid in this tender. Minimum 50% Local content required for qualifying as Class I Local Supplier and Minimum 20% Local content required for qualifying as Class II Local Supplier.</p>			