


REQUEST FOR QUOTATION

	BHARAT HEAVY ELECTRICALS LIMITED Electronics Division PB No. 2606, Mysore Road Bangalore - 560026 INDIA	RFQ NUMBER: AKSPROP055 RFQ DATE : 22.09.2023	Due Date/Day: 10.10.2023 TUE 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) 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.

Sl No.	Description	Qty	Unit	Delivery qty	Delivery Date
1	TI0668104244 CONTACTOR 2P NO 1700A / 1500A * HSN/SAC : 3921 [REDACTED] [REDACTED] [REDACTED] CONTACTOR 2P NO 1700A / 1500A 110VDC AUX.1NO+ 1NC As per Specification PS4452702 Rev No.00	500	NO	500	[REDACTED]

Total Number of Items - 1

- 1.
- 2.

NOTES:

1. This RFQ is governed by:
 - a) INSTRUCTIONS TO BIDDERS/SELLERS and GENERAL CONDITIONS OF CONTRACT FOR PURCHASE available at <http://edn.bhel.com> (**RFQ-PO Terms & Conditions**)
 - b) Any other specific Terms and Conditions mentioned.

* The HSN/SAC no mentioned against the line items in the RFQ are indicative only.

For and On behalf of BHEL.

ABHISHEK
Control Equipment



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

Ref: 445/PQ_LC/21

Rev. No.: 00

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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. PS4452702 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 PS4452702, Rev. No. 00 for Line Contactor.

REVISION 00

APPROVED

AGOSH CHANDRAN R S

PREPARED

SUNITHA L

ISSUED

TRACTION ENGG

DATE

05.01.2020



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PURCHASE SPECIFICATION
GROUP: TRACTION ENGINEERING

P.S NO. : PS/445/2702

REV. NO: 00

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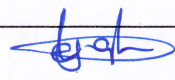
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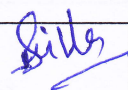
REVISION HISTORY SHEET

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



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SPECIFICATION FOR
LINE CONTACTOR



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PURCHASE SPECIFICATION
GROUP: TRACTION ENGINEERING

P.S NO. : PS/445/2702

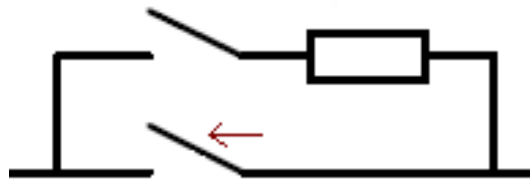
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1.0 INTRODUCTION:

A magnetically operated double pole line contactor isolates the traction cubicle from the transformer, one pole of the contactor is electrically connected to a transformer winding.

2.0 FUNCTION:



The DC link capacitors of the traction converters are initially charged through the precharging circuit. Once the DC link voltage reaches 80% of the rectified input peak value, the line contactor is closed and then the precharge contactor is opened. The line contactor act as the input contactor for the Traction Converter.

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PURCHASE SPECIFICATION
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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	1600 @ 75 °C
Breaking capacity (with cos phi 0.8 min) A	1500 @ 2000Vac
Number of poles	2
Blow Out Circuit Type	Indirect
Mechanical Characteristics	
Mechanical Endurance (cycles)	2x10 ⁶
Shock and Vibrations (IEC61373)	Cat.1 - Class B
Weight [kg]	approx 35
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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6.0 DIMENSIONS

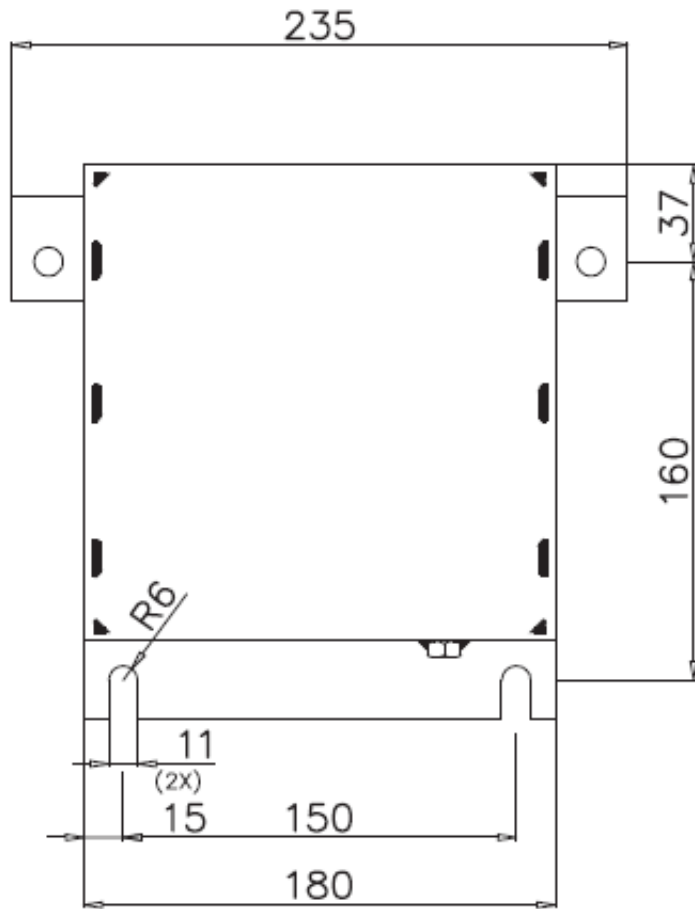


Fig.1- Dimensional details

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