



Bid Number/बोली क्रमांक (बिड संख्या)[:] GEM/2023/B/3453309 Dated/दिनांक : 31-05-2023

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण			
Bid End Date/Time/बिड बंद होने की तारीख/समय	10-06-2023 15:00:00		
Bid Opening Date/Time/बिड खुलने की तारीख/समय	10-06-2023 15:30:00		
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	90 (Days)		
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Heavy Industries And Public Enterprises		
Department Name/विभाग का नाम	Department Of Heavy Industry		
Organisation Name/संगठन का नाम	Bharat Heavy Electricals Limited (bhel)		
Office Name/कार्यालय का नाम	10090001-edn Bangalore		
Total Quantity/कुल मात्रा	582		
Item Category/मद केटेगरी	ANTI CONDENSATION HEATER RATING: 230VAC, 1PH, 75W, 50HZ (Q3), SIGNAL CONDITIONING CURRENT TRANSFORMER FOR CONDUCTION MONITORING UNIT (Q3)		
MSE Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से एमएसई छूट	No		
Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट	No		
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Additional Doc 1 (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer		
Bid to RA enabled/बिंड से रिवर्स नीलामी सक्रिय किया	No		
ITC available to buyer,क्रेता के लिए उपलब्ध आईटीसी	Yes		
Type of Bid/बिंड का प्रकार	Two Packet Bid		
Primary product category	ANTI CONDENSATION HEATER RATING: 230VAC, 1PH, 75W, 50HZ		
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	2 Days		

No
Payments shall be made to the Seller within 90 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10 days time as provided in clause 12 of GeM GTC)
Item wise evaluation/

EMD Detail/ईएमडी विवरण

uired/आवश्यकता	No
an cajona (aaitii	

ePBG Detail/ईपीबीजी विवरण

Required/आवश्यकता	No

Splitting/विभाजन

Bid splitting not applied/बोली विभाजन लागू नहीं किया गया.

MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes
--	-----

MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
---	-----

- 1. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and Small Enterprises clause in the bid, the same will get precedence over this clause.
- 2. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as

defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer)of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for %(selected by Buyer) percentage of total QUANTITY.

3. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

Evaluation Method (Item Wise Evaluation Method)

Contract will be awarded schedulewise and the determination of L1 will be done separately for each schedule. The details of item-consignee combination covered under each schedule are as under:

Evaluation Schedules	Item/Category	
Schedule 1	Anti Condensation Heater Rating: 230vac, 1ph, 75w, 50hz	320
Schedule 2	Signal Conditioning Current Transformer For Conduction Monitoring Unit	262

ANTI CONDENSATION HEATER RATING: 230VAC, 1PH, 75W, 50HZ (320 pieces)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<u>Download</u>
---	-----------------

Input Tax Credit(ITC)/इनपुट कर क्रेडिट(आईटीसी) and/ तथा Reverse Charge(RCM)/रिवर्स प्रभार (आरसीएम) Details

ITC on GST/जीएसटी पर इनपुट कर क्रेडिट	ITC on GST Cess/जीएसटी उपकर कर क्रेडिट	
100%	NA	

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Dinesh Kumar Bhagat	560026,MANAGER STORES,- GI Bharat Heavy Electricals Limited Electronics Division, Mysore Road, Bangalore - 560026 Karnataka India	320	30

SIGNAL CONDITIONING CURRENT TRANSFORMER FOR CONDUCTION MONITORING UNIT (262 pieces)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<u>Download</u>	
---	-----------------	--

Input Tax Credit(ITC)/इनपुट कर क्रेडिट(आईटीसी) and/ तथा Reverse Charge(RCM)/रिवर्स प्रभार (आरसीएम) Details

ITC on GST/जीएसटी पर इनपुट कर क्रेडिट	ITC on GST Cess/जीएसटी उपकर कर क्रेडिट
100%	NA

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Dinesh Kumar Bhagat	560026,MANAGER STORES,- GI Bharat Heavy Electricals Limited Electronics Division, Mysore Road, Bangalore - 560026 Karnataka India	262	30

Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

1. Scope of Supply

Scope of supply (Bid price to include all cost components): Only supply of Goods

2. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

3. Generic

Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.

4. Generic

Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.

5. Generic

Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

6. Generic

While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

7. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

A. PRE-QUALIFICATION REQUIREMENT (PQR)

Bidder should submit documentary evidence for PQC, for evaluating the eligibility of Bidder as per **Buyer s pecification document** in this bid.

B. Payment Timelines:

Type of Bidder Payment Terms (Number of days

Micro & Small Enterprises (MSEs) 45 days from CRAC date
Medium Enterprises 60 days from CRAC date
Non MSME 90 days from CRAC date

C. Risk Purchase - In case of failure of supplier, BHEL at its discretion may make purchase of the material s/ services not supplied/ rendered in time at the RISK & COST of the supplier. Under such situation, the sup plier who fails to supply the goods in time shall be wholly liable to make good to BHEL any loss due to risk purchase. In case of invocation of risk purchase, BHEL shall get Balance work/ supply done at supplier risk and cost, which shall be recovered from supplier out of dues of this contract, any other contract with BHEL and balance amount, if any shall be required to be deposited by supplier.

Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses

5/6

on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

- 1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
- 2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
- 3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
- 4. Creating BoQ bid for single item.
- 5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
- 6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
- 7. Floating / creation of work contracts as Custom Bids in Services.
- 8. Seeking sample with bid or approval of samples during bid evaluation process.
- 9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
- 10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
- 11. Creating bid for items from irrelevant categories.
- 12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
- 13. Reference of conditions published on any external site or reference to external documents/clauses.
- 14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो।बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।

---Thank You/धन्यवाद---



PRE-QUALIFICATION CRITERIA FOR Anti condensation heater

PQC:408-002**5**

REV. NO. 00

	,	A4 - 10				Page 1 of 1
ECTLY OR		SI.	CRITERIA		DOCUMENT REQUIRED	
MUST NOT BE USED DIR		1.		The bidder should be a manufacturer (OEM) or their authorized dealer. The bidder shall have valid test certificate complying to relevant standards / tests mentioned in the technical specification ED7415802 Rev.02 for Anti condensation heater on the date of submission of offer against the tender. Self-certification by manufacturers (OEM) / Authorisation letter from OEM in case of dealer Test certificate as per all the tests mentioned in clause 4 of ED7415802 Rev.02 shall be submitted		urers (OEM) / tion letter from
COPY RIGHT AND CONFIDENTIAL OCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUNDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.		2.	certificate complying standards / tests metechnical specificate Rev.02 for Anti cond			tioned in clause 4 of 02 Rev.02 shall be
COPY RIGHT AND IS THE PROPERTY OF BHARA Y IN ANY WAY DETRIMENTAL		3.	The supplier shall further technical specific BHEL specification do	cation as per the	deviation	ce document/ No certificate to BHEL ion shall be
COPY RIGHT 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.		4.	The Bidder shal documents indica condensation heater	ted for Anti	custor b) Purch along invoic chalar c) Perfor	ase order copies with corresponding e and delivery n. mance certificate of st one end user/
	REV 00		APPROVED PRUCESCA R. RUKMANI			elem a seriente en
	garjaminini to casabunda e Atoanet Affrance Affarance Affrance Affrance Affrance Affrance Affarance A	Amenth		ISSUED	and the state of t	DATE
	C. Aswathi 408			18/08/2021		

BHEL Material code: AA7415802012

MATERIAL SPECIFICATION

ANTICONDENSATION HEATER RATING: 230VAC,1PH,75W,50HZ KS INSTRUMENTS' DRG. NO.: KSI-HTR-543 REV NO.03 or equivalent OXFORD ELECTROHITS' DRG. NO.: OE/BHEL/PSH/01-R1or equivalent ENCORE' SPACE HEATER: ESH-01 DRG NO.: 20150224 or equivalent

Material: CRCS sheet steel (as per IS 513)/ Powder coated Aluminium (Grade 63400WP as per IS733)

Cabling: PTFE cable / FRLS PVC cable

For terminal connection: Fiber glass sleeve/ Teflon wire lead to be provided

Earthing terminal shall be brought out for cable termination and should have continuity with the heater body.

Overall dimension of the heater shall be limited to the dimension given in the fig-1 of ED7415802.

Raw material Test certificates shall be provided at the time of supply.

Reference STD: ED7415802 (refer sheets below)

The data provided above supersedes the corresponding information (in the reference standard ED7415802).

MASTER COPY WHEN IN RED

PLANT STANDARD ED 741 58 02

BHEL

ELECTRONICS DIVISION REV NO 02

A4 - 13

PAGE 1 OF 3

ANTI-CONDENSATION HEATER. 75 WATTS. 230V AC

1.0 SCOPE

This standard details out the requirement of the anticondensation heater used inside the cubicle and control panels to prevent condensation of moisture.

2.0 REQUIREMENTS

- 2.1 The dimensions shall be as shown in the figure
- 2.2 The technical characteristic shall be as mentioned in 3.0
- 2.3 The housing of the heater and welded bracket shall be painted with stoving enamel glossy black paint as per IS:151.
- 2.4 An anodised label depicting the name of the supplier, wattage, voltage and the serial number of the heater shall be fixed firmly on the housing of the heater.
- 2.5 Heater ends shall be terminated to a ceramic terminal block, situated outside the housing of the heater as shown in the figure.
- 2.6 Earthing point shall be provided as shown in the figure.
- 2.7 The heater shall be suitably packed to avoid damage during transit.

3.0 TECHNICAL CHARACTERISTICS

3.1 Power Rating 75 watts 10%

3.2 Supply Voltage 230 V ac, 50Hz

REVISION:

APPROVED :

U.RAMACHANDRA SASTRY

PREPARED : ISSUED : DATE : TASK FORCE STDS GROUP 06/06/94

græin.

PLANT STANDARD ED 741 58 02 REV NO 02 ELECTRONICS DIVISION A4 - 14PAGE 2 OF 3 3.3 Insulation resistance Shall not be less than 20 Mega ohms (measured with 500V megger) 2KV rms for 1 minute 3.4 Test voltage Shall not be less than 3.5 Surface temperature 110 degree c after & peeling off paint keeping the heater in an oven at 50 degree. C after 48 hours. At end of 48 hours the paint shall not peel off. 3.6 MATERIALS : CRCS Sheet, Housing and quality as per welded transit IS: 513 : as per drawing 3.7 DIMENSION Tolerance to IS:2102

4.0 TESTS

- 4.1 Continuity test of the heater shall be made on every piece.
- 4.2 H.V test and surface temperature test shall be made only as source approval test.
- 4.3 Power rating and insulation resistance test shall be made on one percent of the pieces supplied by the manufacturer.

FIGURE

MASTER COPY WHEN IN RED



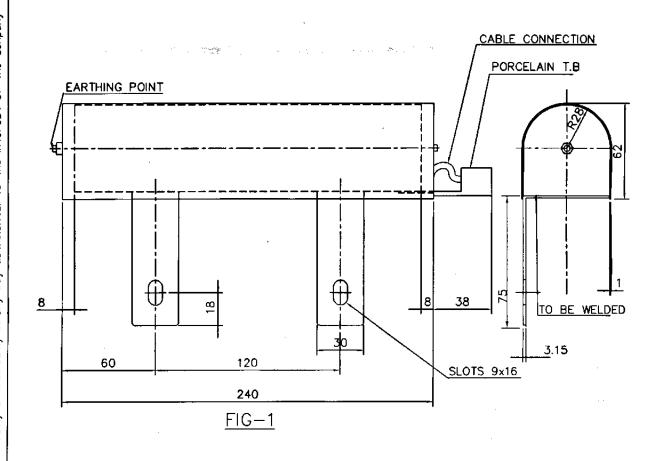
PLANT STANDARD

ELECTRONICS DIVISION

ED 741 58 02

REV NO 02

PAGE 3 OF 3



must not be used alrectly or indirectly in any way detrimental to the interest of the company CDPY RIGHT AND CONFIDENTIAL The information on this document is the property of BHARATHEAVY ELECTRICALS LIMITED



PRE-QUALIFICATION CRITERIA FOR SIGNAL CONDITIONING

PQC:408-0018

REV. NO. 00

Page 1 of 1

CURRENT TRANSFORMER FOR

CMU 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. CRITERIA DOCUMENT REQUIRED Sl. No. Self-certification for 1. The bidder should be a manufacturer/supplier of "LV Current OEM/ OEM Certification transformer" in rectangular shape. for dealers. 2. The bidder shall have valid test Test certificates for certificate complying with relevant similar item may be standard mentioned in the technical submitted. CONFIDENTIAL specification PS/408/064, Clause 16 of 3.0 (Technical specification) on the date of submission of offer against the tender. 3. bidder shall At least one end The submit the COPY RIGHT AND user performance documents indicated for "LV Current certificate from a transformer in rectangular shape" or power plant for 2 should have supplied the item to years satisfactory BHEL against an earlier purchase operation. order. b) Reference list of customers. Purchase order copies along with invoice and delivery challan 4. Conformance for On receipt at purchaser's works, if it is observed that the item requires complying. rework / rectification, supplier shall arrange for the same at EDN works, Bangalore within 6 working days. REV 00 APPROVED ulconer R.RUKMANI **PREPARED ISSUED** DATE R. Rajkumas RAJKUMAR RANGU 408 09/04/2021 BHEL Material Code: SA0653979223

Material Description: CT RESN CAST; BAR PRI RNG TYP; 1600A/500MA

SIGNAL CONDITIONING CURRENT TRANSFORMER FOR CMU.

SINGLE CORE

BAR PRIMARY RECTANGULAR TYPE

RESIN CAST

CT RATIO (RATED): 1600A/500mA

WITH +/- 10% TOLERANCE

BURDEN: 5VA (W.R.TO 3200A/1A)

LOAD RESISTANCE: 5 R

INSULATION CLASS: B

INSULATION LEVEL: 3 KV 50 HZ PER 1 MIN

HIGHEST SYSTEM VOLTAGE: 1.1 KV

CT MOUNTING PLATE AS PER DRAWING NO. 46532111266 TO BE SUPPLIED

REF. STD: IS2705

PURCHASE SPECIFICATION: PS-408-064 REV.02

	बी एच ई एल	PS / 408 /064		/ 408 /064	
500	HHEL	Purchase Sp	ecification	RE	V: 02
4 10 10 19				Pag	ge: 01 of 04
Copy Right 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.	SIGNAL CONDITIONING (FOR CONDUCTIO		ON MONITORING	INSFORMER G UNIT)	man.
	Revision: 02		Reviewed by:	R.Rukmani R	
Yes m	uQq _{isans}	uli. A cyc. insweri ey. Alite	Prepared by Projlumos Rajkumar Rangu	Issued by CE-Engg.(GCE) - 40	Date 09/04/2021

बापचड पल

Purchase Specification

PS / 408 / 064

REV: 02

Page: 02 of 04

1.0 APPLICATION:

This signal conditioning current transformer is required for conduction monitoring of thyristor converters. It senses the flow of current through individual thyristors in the 3 phase full wave Thyristor Bridge by measuring the current flowing during conduction. The current waveform is a square wave in one direction for one third of a cycle. The CT's are mounted on the busbar of the positive and negative branch of the Thyristor Bridge (one no. each arm) and can be mounted directly on the busbar with a mounting plate.

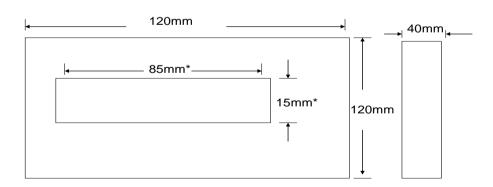
2.0 SPECIFICATION:

a. Electrical:

The design to be considered such that the CT secondary current start saturating beyond 500mA. However, CT rating to be designed for two times the rated current (i.e. in RFQ/PO if rated CT ratio is 1200A/500mA, then CT shall be designed for 2400A/1A). The CT shall be bar primary rectangular type. The percentage error of the current ratio shall be $\pm 10\%$. Linearity is to be ensured at low currents i.e. from primary current about 50A. The secondary leads are to be brought out with a 4 meters screen cable (colour coded for polarity). The entire CT is to be casted in resin along with the terminal lead connection to the secondary winding.

b. Mechanical Dimensions:

As these CT's are to be mounted on the thyristor connecting busbars specific dimensions are to be maintained due to space limitations.



- * :Tolerance ± 2mm
- All other dimensions shall have ± 5mm Tolerance
- CTs shall be provided with necessary clamping / fixing arrangement for direct mounting on Busbars.

Copy Right 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.

	बी एच ई ए		PS / 408 / 064
	BHE	Purchase Specification	REV: 02
			Page: 03 of 04
	3.0 TECH	INICAL SPECIFICATION :	
		oplier shall confirm in writing, the <u>complete clause wise com</u>	npliance with the
	specifica		
	SI.	Description	Compliance
	No.		
a∕		Technical data	
Copy Right And Confidential The Information On This Document Is The Property Of Bharat Heavy ectricals Limited . It Must Not Be Used Directly Or Indirectly In Any Way Detrimental To The Interest Of The Company.	1.	Single core, bar primary, rectangular type & resin cast	
Hea Any	2.	Current transformer Ratio (for rated): As per RFQ / PO	
at l	3.	Current transformer Frequency : 50 HZ	
har :tly '.	4.	Burden : As per RFQ / PO	
of B irec any	5.	Load resistance: 5 ohms	
y O Indi	6.	Insulation class: B	
al Sert Or I	7.	Insulation level: 3 KV 50 HZ per 1 min.	
enti rop tly (8.	8. Highest system voltage: 1.1 KV	
Confidential Is The Prope d Directly Ol est Of The C	9.	Connecting cable: 2 core 0.75 sq.mm. screened color coded	
Son The IDi		(Red & Black) cable with 1100V grade, FRLS PVC sheathed of	
d (nt ls sed ere		reputed make.	
Copy Right And This Document Must Not Be Use ntal To The Inter	10	If terminals shall be identified as S1 (Red) & S2 (Black).	
ght cur ot B	10.		
/ Rig Do No To T	11.		
op) 'his lust tal ⁻		with Tolerance ±2mm	
C On T t M	12.		
on O d. I rrim		40mm (D) with Tolerance ±5mm.	
atic iteo Det		However for 1600A/500mA & 2000A/500mA CT's, overall	
rm. Lim		dimension [Ref clause 2.0 b] can be acceptable up to 140mm (W) X140mm (H) X 40mm (D) with Tolerance ±5mm.	
nfo als	13.		
The Inform Electricals Lim		· ·	
± ect	14.		
Ш	15	supplied as a loose item for each CT.	
	15.		
	16.		
		rating CT	
		i) Temperature rise test	
		ii) Short time current test	
		PLIER DOCUMENT REQUIREMENT SCHEDULE DING STAGE	
	Sur	oplier shall provide the following information along with the o	iffer <i>Bids withou</i>
	•	tailed and noint wise compliance statement / documents real	

i) Compliance to this specification and material description in the Request For Quotation / Purchase Order. List of deviations, if any, clause number-wise with reasons thereof,

considered for further processing.

wherever applicable shall be clearly brought out.

Electricals Limited. It Must Not Be Used Directly Or Indirectly In Any Way The Information On This Document Is The Property Of Bharat Heavy Detrimental To The Interest Of The Company. Copy Right And Confidential

बिएचई एल

Purchase Specification

PS / 408 / 064

REV: 02

Page: 04 of 04

- ii) Copper material & Resin cast material certificates to be provided. This is not required, if the item has already been supplied to BHEL against an earlier purchase order.
- iii) **Type test reports** as mentioned in the Sl.no 16 of clause no. 3.0 (specification) to be submitted for similar item. Type test reports are not required, if the item has already been supplied to BHEL against an earlier purchase order.

5.0 TESTS

Routine tests (conducted on every item to be submitted before dispatch)

- i. Visual Inspection
- ii. Dimensional Check
- iii. High voltage power frequency with stand test
- iv. Polarity test
- v. Inter turn insulation test
- vi. phase angle error test
- vii. Ratio test as follows

Primary	Excepted secondary	Observed secondary
current (A)	current (mA)	current (mA)
0%	0	
25%	125mA	
50%	250mA	
75%	375mA	
100%	500mA	
120%	500mA	

6.0 AFTER PLACEMENT OF PURCHASE ORDER

- a. Final dimensional drawing for BHEL-EDN approval before manufacturing.
- b. Quality assurance plan' for BHEL-EDN approval before manufacturing. Quality Plan is not required, if the item has already been supplied to BHEL against an earlier purchase order.

7.0 PACKING

The item shall be properly packed to ensure that there are no damages / dislocation of parts during transit.

8.0 ACCEPTANCE CRETERIA

- 1. Verification of a) routine test reports b) raw material certificates for copper and resin submitted.
- 2. On receipt of item at BHEL-EDN final acceptance will be by quality services of purchaser, verifying the conformance of item to this purchase specification and Inspection of item as per specification / drawings / documents at purchaser's works.

