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PRODUCT PURCHASING SPECIFICATION
TRANSFORMER ENGINEERING DEPARTMENT
BHEL, JHANSI

Specification No. **JS12398**

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Rev. 00 Dt.: 01.06.18

SPECIFICATION FOR BI-METALLIC TERMINAL CONNECTOR

GENERAL: The equipment offered shall be suitable for connecting the Primary and Secondary terminals of Power transformer and Current transformers.

TYPE AND RANGES:

Specific requirement		Range
1	CURRENT RATING	UP TO 5000 AMP
2	VOLTAGE RATING	UP TO 440 KV
3	PRIMARY CONDUCTOR	STUD/ PALM
4	PRIMARY CONDUCTOR MATERIAL	COPPER
5	SECONDARY CONDUCTOR	ACSR CONDUCTOR OR ALUMINIUM TUBE
6	SECONDARY SUB-CONDUCTOR SPACING IN CASE OF TWIN CONDUCTOR	100 MM TO 500 MM
7	TAKE-OFF	HORIZON/ VERTICAL/ UNIVERSAL
8	HARDWARES(BOLTS, NUTS, PLAIN WASHERS)	STAINLESS STEEL
9	SHORT TIME CURRENT RATING	40 KA
10	BI- METALLIC STRIP LINEAR THICKNESS	2 MM
10	MATERIAL	AS PER IS-617
11	TYPE	RIGID OR EXPANSION TYPE

Supplier should submit the list of terminal connector Short Circuit tested in last 5 years. List contain identification/ drawing number of terminal connector and Test certificate number.

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TRE/POWER/TERM CONN

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Vendors to confirm all the points as mentioned below evaluation purpose.

Cl. No.	Heading	Description	Vendor to confirm in YES or NO.
1	TECHNICAL PARAMETERS		
1.a	Casting	All casting shall be free from blowholes, surface blisters, crakes & cavities. All sharp edges & corners shall be blurred & rounded off. The aluminium alloy casting whenever used shall conform to Alloy 4600M of IS: 617.	.....
1.b	Hardware material	Bolts, nuts & plain washers shall be of stainless steel.	.....
1.c	Contact resistance	All current carrying parts shall be designed & manufactured to have minimum contact resistance.	.....
1.d	Standard and specification	Connectors shall comply with the requirements of IS: 5561 & additional test requirement laid down in this specification.	.....
1.e	Bi-metallic strip	2 mm thick, loose copper- aluminium bi-metallic strip in one piece shall be provided under primary conductor (bushing terminal) clamp.	.....
1.f	Finishing	Bolts & nuts shall not protrude outside the connector surface. Their sharp corners shall be covered (for connectors rated 300 KV and above).	.....
1.g	Minimum thickness	The minimum thickness of any part of the clamp shall be 10 mm.	.....
1.h	Hardware standard	Only metric hardware (Bolts , nuts & washers etc..) shall be used . Bolts should be of sufficient length to accommodate required number of nuts & washers for proper locking.	

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Cl. No.	Heading	Description	Vendor to confirm in YES or NO.
2	DOCUMENTS	During execution of contract following documents to be submitted by bidder for approval by BHEL/ Customer	
2.a	Drawings	Two copies of drawings of terminal connectors.	.....
2.b	Type test certificates:	Two copies of Type test certificates on connectors of similar type to be submitted for BHEL/ Customer acceptance (Type test should be as per relevant IS)	.....
2.c	Vendor approval	It is supplier responsibility to get enrolled in vendor list of end customer, if needed.	.....
3	TEST	AS PER STANDARD IS:5561	.....
4	INSPECTION & DESPATCH	Two copies of test certificates shall be sent along with the dispatch documents. Inspection and dispatch of material to be done as per the remark of individual PI's.	.....
5	Packing and Despatch	Every terminal connector shall be packed in gunny bag and then kept in a proper size wooden box so as to avoid any dent/ scratch mark in transit and handling.	

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01/06/18