

Mandatory Pre-Qualification requirements for Terminal Block
Material Code-HW7433499113 as per Specification TG60576

Description:

The Terminal Block (Screw-less type) is used in generators for terminating the connecting cables for control and power application. The Terminal Block should be of very reliable and proven design to maintain the required electrical connection.

- 1.0 The vendor should be a regular manufacturer/Distributor of such Terminal Block (Screw-less type) with minimum following requirements –

Si No.	Parameter	Value
(i)	Number of Ways	Minimum 16
(ii)	Temperature and RH	0°C to 55°C and 0-95%
(iii)	Terminal	Suitable for 2 conductors each of 4 mm ²
(iv)	Termination	Screw-less (preferably clamp type)
(v)	Insulation material	Nylon or Equivalent (Self-extinguishing)
(vi)	Current carrying parts	Made of electrolytic copper with tin coating
(vii)	Clamp spring Material	High quality austenitic chrome nickel spring steel
(viii)	Mounting rail/Channel Material	Corrosion resistant steel
(ix)	Testing of Terminal unit	3000VAC for 1 min
(x)	Insulation Resistance	Minimum 50 mega Ohm with 500V magger
(xi)	Temperature rise for current carrying parts	Not exceed 45°C when tested at rated current (ref. ambient 40°C)

- 2.0 In support of above serial number-1, vendor shall furnish technical details of Terminal Block (Screw-less type) in below mentioned format for at least one nos. (1) of the P.O. executed in past 10 years (from date of enquiry) along with P.O. copies.

S. No.	Brief technical details	Application	Name & address of customer	Date of supply
1	-Number of ways -Termination			
2	-Insulation, current carrying, clamp spring and mounting rail material			
3	-Electric test -Temperature raise			

Mandatory Pre-Qualification requirements for Terminal Block
Material Code-HW7433499113 as per Specification TG60576

- 3.0 Vendor to furnish correlated test certificates against one of the P.O. submitted as per clause 2.
- 4.0 Vendor to furnish acceptance certificate from the end user of Terminal Block (Screw-less type) against the P.O. submitted as per clause 2. (Original Certificate or through e-mail directly from the customer). Acceptance certificate should contain information like item details and its application or correlation with P.O.
- 5.0 Vendor must provide confirmation to meet all the requirements of drawing & specification for quoted item.


Note: BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.

MANUFACTURER'S NAME AND ADDRESS			STANDARD QUALITY PLAN				TO BE FILLED BY BHEL		TO BE FILLED BY BHEL			
BHEL		ITEM	JUNCTION BOX, TERMINAL BOX		QP. NO.:	QA/BE/QP/008						
				REV. NO.:	02							
		DRG. NO.:	As per PO									
		SPEC. NO.:	As per PO									
		REV. NO.:	As per PO			Page 1 of 1						
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORDS	AGENCY			REMARKS
									M	B	N	
1	2	3	4	5	6	7	8	9	D	10		11

1.0	RAW MATERIAL	CHEMICAL PROPERTIES	MAJOR	REVIEW	100%	BHEL APPD DRG/ BHEL SPEC	BHEL APPD DRG/ BHEL SPEC	T.C.	✓	P	V		
2.0	TYPE TEST	-	-	-	-	BHEL APPD DRG/ BHEL SPEC	BHEL APPD DRG/ BHEL SPEC	T.C.	✓	P	V		NOTE 1
3.0	ROUTINE TEST												
3.1	DIMENSIONAL	BOX SIZE, CABLE GLAND SIZE AND NOS. OF HOLES, NOS. OF T.B.,	MAJOR	MEASURE MENT	100%	BHEL APPD DRG/ BHEL SPEC	BHEL APPD DRG/ BHEL SPEC	I.R.	✓	P	W		
3.2	VISUAL CHECK OF JUNCTION/TERMINAL BOX AND TERMINAL BLOCKS	PHYSICAL VERIFICATION OF BOX, FREE FROM BURS, FINS, BLOW HOLES, DEFECTS, T.B. COLOR, EARTHING BUS BARS	MAJOR	PHYSICAL	100%	BHEL APPD DRG/ BHEL SPEC	BHEL APPD DRG/ BHEL SPEC	I.R.	✓	P	W		
3.3	INSULATION RESISTANCE	BEFORE & AFTER H.V. TEST	MAJOR	ELECTRICAL	100%	BHEL APPD DRG/ BHEL SPEC	BHEL APPD DRG/ BHEL SPEC	I.R.	✓	P	W		
3.4	HIGH VOLTAGE TEST	--	MAJOR	ELECTRICAL	100%	BHEL APPD DRG/ BHEL SPEC	BHEL APPD DRG/ BHEL SPEC	I.R.	✓	P	W		
3.5	PAINT	COLOR, THICKNESS	MAJOR	TYPE TEST	100%	BHEL APPD DRG/ BHEL SPEC	BHEL APPD DRG/ BHEL SPEC	I.R.	✓	P	V		
3.6	IDENTIFICATION AND MARKING	--	MINOR	PHYSICAL	100%	BHEL APPD DRG/ BHEL SPEC	BHEL APPD DRG/ BHEL SPEC	-		P	V		
3.7	PACKING	--	MINOR	PHYSICAL	100%	BHEL APPD DRG/ BHEL SPEC	BHEL APPD DRG/ BHEL SPEC	-		P	-		

NOTE: 1. Type test clearance from BHEL Engineering to be verified by inspection engineer during inspection at vendor's works.

2. Manufacturer to maintain calibrated instruments having better accuracy than the item under the test. Inspection engineer shall check the same.

MANUFACTURER/SUBCONTRACTOR	LEGEND: ! RECORDS IDENTIFIED WITH 'TICK' SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION. M: MANUFACTURER / SUBCONTRACTOR B: BHEL / NOM. INSPECTION AGENCY N: CUSTOMER INDICATE 'P' PERFORM 'W' WITNESS AND 'V' VERIFICATION ALL 'W' INDICATED IN COLUMN 'N' SHALL BE 'CHP' OF CUSTOMER	FOR CUSTOMER USE	APPROVED BY  Digitally signed by Sachin Jain Date: 2021.02.26 10:56:41 +05'30'
----------------------------	--	------------------	--