

PSGSG2015-16/009	Product Specifications for Terminal-32	Drg. No.	RD DG 435 0617 0222A
		Date:	30.09.2015
		Product:	GSM 420
	BHEL Specifications:	Vendor Compliance (Yes/No)	
1.0	APPLICATION: Terminal-32 for Gas Insulated Switchgear Equipment.		
2.0	Configuration: 1. Sintered W-Cu (70-30 %), welded (by electron beam welding process) to the high conductivity copper-chromium alloy. 2. Machined to drawing dimensions.		
3.0	SPECIFICATIONS: 1. Dimension of Drawings : Refer Drg No. RDDG 4 35 0617 0222A 2. Materials: (a) Tungsten-Copper (b) Copper-Chromium Alloy (a) W-Cu: A sintered matrix of W-Cu (70-30 %) shall be produced by PM technique. The sintering shall be carried out in neutral or reducing atmosphere. The ingredient (powders) shall have high purity. (b) Cu-Cr Alloy Copper : 99 %, Chromium : 1 %. This alloy shall be made using fine alloying practices so as to minimise occlusion of gases. The oxygen content shall not exceed 100 ppm. Vacuum metallurgy for alloying is preferred. The copper used for alloying shall be 99.97 % pure. Electrolytic grade is preferred. Electrical conductivity of Cu-Cr Stem shall be greater than 82 %. (IACS).		
4.0	Silver Plating: The component shall be finished to final dimensions prior to silver plating. Silver plating to a thickness of 10-12 microns shall be done on the marking area. An initial flash of 2 micron nickel is advised.		
5.0	Qualifying Requirements: The supplier shall be of national / International repute with proven record and should have supplied arcing / current carrying contacts for electrical applications at least for last three years. The supplier must submit along with the quotation a few references to whom the supplier has supplied a similar materials.		
6.0	Tests: (a) Dimensional : All dimensions shall comply to drawing measures. (b) The component shall be subjected to micro-ohm measurement test, using 100 A DC source and shall measure less than one micro-ohm at the welding interface.		
7.0	Packing : The contacts shall be packed in high density cardboard boxes, with a primary wrapped in polyethylene and packed individually in dust free boxes after degreasing. The component shall be guaranteed against all manufacturing defects.		
8.0	General : 1. Surface finish of the components shall be at least RA 1.6. 2. The component shall be free from dirt, grease and loose particles. In case of doubts in drawings or specifications the supplier shall contact BHEL for clarifications.		
9.0	Warranty: All supplied items to be provided with warranty for 12 months from the date of receipt and acceptance.		
10.0	Manufacturer's Test Certificate: Manufacturer's Test Certificate required and shall be provided along with dispatch.		
Page 1/1	PSGSG2015-16/009.doc	Signature	