



दिनांक एवं हस्ताक्षर SIGN & DATE		उत्पाद मानक PRODUCT STANDARD		TG 60606	
				पृष्ठ का Page 1 of 5	
सामग्री सूची संख्या INVENTORY NO. सामग्री सूची संख्या को अधिकृत करता है।	<u>SPECIFICATION FOR 12 MW INVERTER FED SYNCHRONOUS MOTOR</u>				
	<p>1. SCOPE</p> <p>This standard specifies the requirement of 12 MW, 3000 RPM, LCI Inverter fed, Variable Frequency Synchronous Motor.</p> <p>2. BASED ON</p> <p>This standard is based on BHEL experience.</p> <p>3. TECHNICAL REQUIREMENTS :</p> <p>The synchronous motor is required to run at various speeds continuously for testing large capacity turbogenerators. The motor shall be suitable for operation with variable voltage variable frequency Load Commuted Inverter (LCI). Two identical windings in stator shall be provided to make it suitable for operation with 2x6-pulse supply from LCI system. These windings shall be isolated from each other and shall be phase shifted by 30 degrees. Sufficient margin shall be taken in motor design to take care of additional losses caused by inverter operation.</p> <p>The motor shall be suitable to run at 3000 rpm (50 Hz) and 3600 rpm (60 Hz) continuously for testing 50Hz and 60Hz generators.</p> <p>Excitation shall be brushless type and shall be integral part of the motor.</p> <p>The detailed technical specification and requirements of synchronous motor are listed in Table-1</p> <p>The motor shall be Bidirectional. In case the vendor is not in a position to offer the motor with both direction of rotation, motor shall be provided with double shaft extension, each designed for full load and having identical dimensions.</p>				
COPYRIGHT AND CONFIDENTIAL <small>The information on this document is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company</small>		स्वत्वाधिकार एवं गोपनीय <small>इस प्रलेख में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की संपत्ति है इसका प्रत्यक्ष एवं अप्रत्यक्ष रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।</small>			
हस्ताक्षर एवं दिनांक SIGN & DATE				नाम NAME	दिनांक एवं हस्ताक्षर SIGN. & DATE
				अनुवादक TRANSLATED BY	
				निर्माणकर्ता WORKED BY	S.D.Nagar (-sd-) 27.10.05
				जांचकर्ता CHECKED BY	KR Gupta (-sd-) 27.10.05
	सहमत विभाग AGREED DEPTT.	नाम NAME	दिनांक एवं हस्ताक्षर DATE & SIGNATURE	पर्यवेक्षणकर्ता SUPERVISED BY	KR Gupta (-sd-) 27.10.05
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स्वत्वाधिकार एवं गोपनीय

इस प्रलेख में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की सम्पत्ति है इसका प्रयोग एवं अप्रत्यक्ष रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।

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सामग्री सूची संख्या INVENTORY NO.			SUPERSEDES INVENTORY NO.											
स्वत्वाधिकार एवं गोपनीय 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		20. Critical speed Only one critical speed below 40% rated speed is allowed.												
		21. Noise Level 85 dB(A)												
		22. Accessories a) 15 Nos., 3 wire, simplex PT-100 RTDs in Motor stator winding for winding temperature measurement. b) 6 Nos., 3 wire, simplex PT-100 RTDs in Exciter stator winding for winding temperature measurement. c) 1 set Dial type Thermometer for each bearing for bearing temperature measurement d) 1 set, 3 wire, duplex PT-100 RTDs in each bearing for bearing temperature measurement. e) 1 set, 3 wire, duplex PT-100 RTDs in cooling circuit of motor/exciter for inlet / outlet water and cold / hot air temperature measurement. f) 1 set, Pressure switch for oil for each bearing. g) 1 set, Flow switch for oil for each bearing h) 1 No., Water leakage detector with contacts. i) Space Heaters for Motor & Exciter j) Common base frame for motor & exciter Assembly k) Jig for mounting for Stator & Rotor l) Terminal Boxes shall be provided with double compression cable glands and tinned type copper cable lugs. Gland plates shall be removable type. For single core cables non-magnetic gland plates shall be provided												
		23. Spares a) Exciter rotor complete with diodes 1 nos Item wise prices for spares b) Bearing shell for Exciter & Main motor to be given) 4 sets c) Parts of water cooled Heat exchanger 2 sets d) Pressure switches 4 nos e) Flow switch 4 nos f) Dial indicators 4 nos g) Adequate Commissioning spares shall be provided. h) Additional spares required shall be quoted along with the offer as optional. Vendor shall ensure availability of spare parts and maintenance support services for the offered equipment for at least 15 years from date of supply.												
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