INTER PLANT STANDARD – STEEL INDUSTRY		
IPSS	**STANDARD INFORMATION FOR ENQUIRY AND ORDER FOR LT INDUCTION MOTORS** *(THIRD REVISION)*	**IPSS: 1-03-016-14**
		Formerly: IPSS:1-03-016-09
	BASED ON IS/ IEC 60034-1	

0. FOREWORD

0.1 This Interplant Standard (Third Revision) was prepared by the Standards Committee on Rotating Electrical Machinery, IPSS 1:3 with the active participation of the representatives of the steel plants and major reputed consultancy organizations and was adopted in July, 2014.

0.2 Interplant Standards for steel industry primarily aim at achieving rationalization and unification of parts and assemblies used in steel plant equipment and accessories, and provide guidance in indenting stores or equipment (or while placing orders for additional requirements) by individual steel plants. For exercising effective control on inventories, it is advisable to select a fewer number of sizes (or types) from among those mentioned in this standard, for the purpose of company standards of individual steel plants. It is not desirable to make deviations in technical requirements.

0.3 This Interplant Standard was originally published in 1992. Subsequent revision has been carried out in 2003 to take care of some more information pertaining to LT induction motors & to make a user-friendly format for giving information..

0.4 This Interplant Standard should be read in conjunction with the published Interplant standards on electric motors.

0.5 Scope of this standard is LT induction motors only. For HT induction motors, a separate standard IPSS:1-03-024-14 is there.

INFORMATION TO BE GIVEN WITH ENQUIRY AND ORDER FOR LT INDUCTION MOTORS	INFORMATION
1. Frame size	
2. Site and operating conditions a) Ambient temperature b) Maximum humidity c) Altitude d) Environment condition e) Rated voltage & permissible variation f) Frequency and permissible variation	
3. Reference to relevant Interplant Standard, i.e. IPSS....	
3(a) Energy efficient motors specified as per IS 12615:2011 or not	YES / NO
4. Type of enclosure	"IP___as per IS/IEC 60034-5(2000)"
5(a) Type of duty 5(b) No. of starts 5(c) Duty factor and CDF	(cold __, hot ___)
6. Method of cooling 6(a) Rated output in kW at 50°C.	IC ____ as per IS 6362 :1995
7. Type of construction 7(a) Type of mounting (as per IS 2253:1974)	

8. Number of phases	
9. Power factor & efficiency at 50%, 75% & 100% load	To be furnished by the manufacturer
10(a) Class of insulation	
(b) Permitted temperature rise above the specified ambient temperature.	Temperature-rise limit limited to __^{o}C over the specified ambient ^{o}C.
11. Synchronous speed (rpm)	Manufacturers to furnish rated speed
12. Direction of rotation (looking from D.E.)	clockwise/anti-clockwise/ Bidirectional
13. Location of Main terminal box	LHS as viewed from NDE side / RHS as viewed from NDE side / TOP(for Foot mounted motors only).

14. Maximum temperature of cooling medium 15. Earth connection as per IE Rules and IS 3043:1987. 16. Space heaters (nos.) 17(a) Any VVVF application. “If yes, speed range, minimum speed/maximum speed). If yes, refer IPSS: 1-10-035-12 (b) Particulars of any switching surges to the motor being exposed. 18. Application (crane/mill duty or any other application like fan/pump/conveyor/reciprocating device) 19. Rotor type (squirrel cage, slip ring or any other speciality) 20. Details of rotor like voltage, current & class of insulation w.r.t. slip ring motor & type of connection 21. Details of shaft extension required for example, whether cylindrical or tapered, details of key way, etc 22. Type of slip-ring gear, whether continuously rated or for starting purposes only 23. Method of starting, braking and reversal to be employed	

24. T_{start} / T_{rated} 25. $T_{pull-up}$ / T_{rated} 26. I_{start} / I_{rated} (load torque characteristic, load torque GD^2, to be furnished if available). 27. Starting Time 28. Following data/drawing to be furnished : a) Speed Vs torque characteristics curve b) Current vs time curve 29 Tests at manufacturer's works as per IS 4029:2010. a) Routine b) Type tests (to be specified by purchaser) 30. Any specific requirement	