IPSS	**STANDARD INFORMATION FOR ENQUIRY AND ORDER FOR H V SQUIRREL CAGE INDUCTION MOTORS** *(SECOND REVISION)*	**IPSS: 1-03-024-14**
		Formerly: IPSS:1-03-024-09
	BASED ON IS/IEC 60034-1	

0. FOREWORD

0.1 This Interplant Standard has been prepared by the Standards Committee on Rotating Electrical Machinery, IPSS 1:3 with the active participation of the representatives of the steel plants and 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 should be read in conjunction with the published Interplant standards on electric motors.

0.4 This Interplant Standard was originally published in 1995. This revision has been carried out to take care of some more information pertaining to H V squirrel cage induction motors & to make a user-friendly format for giving information.

INFORMATION TO BE GIVEN WITH ENQUIRY AND ORDER FOR H V SQUIRREL CAGE INDUCTION MOTORS	**INFORMATION**
1. Reference to IPSS	
2. Site and operating conditions	
a) Ambient temperature	
b) Maximum humidity	
c) Altitude of installation	
d) Environment condition	
e) Rated voltage & permissible variation	±10%.
f) Frequency and permissible variation	+3, -6%.
g) Power supply system – earthed/unearthed	
h) System fault level.	
3. Degree of protection	IP ___ as per IS/IEC 60034-5(2000) [superseding 4691:1985]
4. Type of duty as per IS/IEC 60034-1	
5. Method of cooling	IC__ as per IS 6362:1995
6. Type of mounting	
7. Rated output in kW at 50 deg C	
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INFORMATION TO BE GIVEN WITH ENQUIRY AND ORDER FOR H V SQUIRREL CAGE INDUCTION MOTORS	**INFORMATION**
8(a) Class of insulation (Material of insulation preferences, if applicable to be specified).	
(b) Permitted temperature rise above the specified ambient temperature.	
9. Synchronous speed (rpm) (Rated speed to be furnished by the manufacturer)	
10. Direction of rotation, viewing from driving end	Clockwise / anti-clockwise
11. Direction of rotation	Uni-directional / Bi-directional
12. Tests at manufacturer's works a) Routine (As recommended in IS 325) b) Type tests (to be specified)	
13. Basic dimensional drawing giving H, B, A, C, E, D, F (*Letter symbols used conform to IS 8223:1999*)	
14. Maximum temperature of inlet cooling medium	

INFORMATION TO BE GIVEN WITH ENQUIRY AND ORDER FOR H V SQUIRREL CAGE INDUCTION MOTORS	**INFORMATION**
15. Details of Shaft extension required, details of keyway etc 16. Method of starting to be employed 17. T_{start} / T_{rated} 18. T_{max} / T_{rated} 19. $T_{pull-up} / T_{rated}$ 20. I_{start} / I_{rated}	

INFORMATION TO BE GIVEN WITH ENQUIRY AND ORDER FOR H V SQUIRREL CAGE INDUCTION MOTORS	**INFORMATION**
21. No. of starts a) No of cold consecutive starts b) No of hot consecutive Starts c) No of equally spread Starts per hour.	
23. Rotor type	
a) Any VVVF application	YES/NO
b) Special design considered for IGBT based inverter feeding	YES/NO
c) Any switching surges due to vacuum contactor/VCB starting	YES/NO
d) Lowest speed, if applicable and duty cycle	
24. Locked rotor withstand time at 100% voltage ; cold/hot. Thermal withstand time (to be furnished by the manufacturer)	
25. Surge withstand capacity	
26 Terminal box as per IS 1231:1974	
- Designated fault level (…… kA) - Phase segregated stator terminal box position as viewed from drive end (left/right/top) - Neutral & main terminal box position (shall be interchangeable) - Auxiliary terminal box position	

- CT terminal box (If applicable) position - Degree of protection (IP____) - Other requirements (silica gel desiccators) 27. Noise level as per IS 12065:1987 28. Earthing as per IS 3043:1987 29. Weight of stator (to be furnished by the manufacturer) Weight of rotor (to be furnished by the manufacturer) 30. Greasing provision shall be there for non-pedestal anti-friction bearings 31. Type of load and its description 32. a) RTD for winding or bearing b) thermistor c) space heater d) vibration monitor e) CT for differential protection. 33. G.A. drawing for motors & terminal boxes (to be furnished by the manufacturer) 34. GD^2 value of load referred to the motor shaft 35. Acceleration time with drive attached (to be furnished by the manufacturer) 36. Mode of power transmission & type of coupling 37. Efficiency at 50%, 75%, 100% of load. (to be furnished by the manufacturer)	

38. Power factor at 50%, 75%, 100% of load. (to be furnished by the manufacturer) 39. Type of Bearing i) Pedestal ii) Antifriction Bearing 40. Following data/drawing to be furnished : • Speed Vs torque characteristics curve • Current vs time curve • CT characteristics, if applicable • Torque speed curve • Thermal withstand curve 41. Any other specific requirement	