

High Tension Motor (HT Motor) Operation

Essential Checklist

ForumElectrical.Com

MOTOR NO LOAD CHECKLIST

Date: / /

1).	Name of the Equipment	
2).	Code	
3).	Kilo Watt (kW)	
4).	Voltage (v)	
5).	Current (I)	
6).	Speed	
7).	Frequency (Hz)	
8).	Duty	
9).	Connection Type	
10).	Degree of Protection	
11).	Insulation Class	
12).	Frame	
14).	Serial Number	
15).	Make	

CHECKING LIST

S.No	Description	Result	Comments
1).	Proper approach & housekeeping		
2).	Ensure that no PTW (permit to work) is still pending on the equipment.		
3).	Ensure that no one is working on the equipment.		
4).	Ensure the equipment is not running.		
5).	Check whether the Motor is coupled (or) decoupled		
6).	Availability of the main power and control supply		
7).	Type of mounting: Foot/flange & motor foundation bolts are appropriately tightened, and there is no damage to the motor base legs.		
8).	Check that the terminal box & insulated terminal block are not damaged.		
9).	Ensure that the motor is doubly earthed, as well as the LCS (Local Control Stations).		
10).	Determine the each phase winding resistance.		
11).	Determine the individual phase-earth insulation resistance (using a 5000V insulation tester). All three readings must exceed 8.0 MΩ (Mohms). If the IR reading is low, turn on the space heater.		
12).	Check the space heater's ON/OFF status.		
13).	Verify all logics & protections are operational.		
14).	Remove the permit and the "DO NOT OPERATE" board from the feeder.		
15).	Put the LOCAL/OFF/REMOTE selector switch in the LOCAL (or) REMOTE position (As per operation requirements).		

16).	Isolate the Earth switch using the Earth switch handle. Keep it in the 'O' position		
17).	Rack in the breaker/feeder.		
18).	Switch ON - control power MCB.		
19).	Ensure the "OFF" indicator on the feeder is flashing.		
20).	Give clearance to turn "ON" the feeder from DCS/LCS & validate the DOR.		
21).	Verify the current in different phases and record.		
22).	Check for vibration, noise, or any other anomaly.		
23).	Verify the heating/temperature of the motor & record on the enclosed test sheet.		

NO LOAD / LOAD RUN FOR _____ Hrs

Stating Current:

Starting Time:

S.No	Time	Voltage (V)			Current (A)			Remarks
		R-Y (V)	Y-B (V)	R-B (V)	R(A)	Y(A)	B(A)	
1								
2								

TEMPERATURE MEASUREMENT

S. No	Time	Motor Body	Bearing Temperature		Winding Temperature	Remarks
			DE	NDE		

VIBRATION MEASUREMENT

S. No	Time	Permissible Value (mm/sec)	Vibration Value Measured			Remarks
			V	H	A	

Note:

Unauthorized entry should be restricted, and a cautionary sign should be displayed.

Verified By:

Supervisor

Engineer

(Signature with Name)

(Signature with Name)