



Issued By: M.R Approved By: HOD - CPP

SOP for MOTOR VOLTAGE/AMPS/RESISTANCE VALUE CHECKING WORK

Scope : Describe the procedure for checking the motor voltage / Amps /

Resistance Value checking

Responsibility: Electrical Engineer

Accountability: Section In-charge

PPE:

1. Goggles

2. Electrical safety Gloves

3. Safety shoes

4. Safety helmet

Tools:

1. Multimeter

2. Clamp meter

3. Micro ohmmeter / Motor checker.

4. Insulated Screw driver

5. Suitable spanner for opening motor terminal block.

Hazards:

Risk Associated Mitigating Measures

Electrical Shock Electrical Safety Gloves

Minor body injury Safety shoes, gloves, helmet, goggles

Flash over Power Isolation

Equipment damage

Training needs:

1. Electrical shock recovery Training

2. Emergency preparedness

3. Fire fighting

4. First aid training





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Procedure:

- 1. Take the Energy Isolation permit & work permit for the particular Panel as per ELEC/SOP/003.
- 2. Remove the Motor Terminal box with suitable spanner.
- 3. Disconnect the power cable from Motor terminal.
- 4. Remove the Short link for star/delta connection in the terminal block.
- 5. Connect the test probes of Micro ohm meter /Motor checker across the each winding.
- 6. Similar test has to done in other windings.
- 7. After completion of the test remove the test probes & reconnect the power cable.
- 8. Refit the terminal cover...
- 9. Clear the Permits as per ELEC/SOP/004.
- 10. After switch on the motor check the Voltage at out of the Particular module by using volt meter/ multimeter. In case of HT meters Voltage should be measured at the PT output.
- 11. Clamp the Clamp meter in the any of the phase power cable.sililarly check the other two phases.
- 12. If the power cable is more than one run/ High voltage check the current at the CT put By clamp the Lower rating clamp meter
- 13. Record all Check point in the concern Check list.

Emergency / Emergency Shut OFF:

1. If electrical shock injury or body injury are there, give First aid and inform to the Safety department or Call Emergency number 222/9865155288/9865177444.

Records/Annexure:





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1. Refer work permits certificates.

2. JSA as enclosed below.

JOB SAFETY ANALYSIS: (JSA)

Job Safety Analysis	Job: Fixing & relocation of welding PDB	Date:	Analysis by:	Reviewed by:
Title of employee doing job: Electrician	Supervisor: Section Engineer	Department: Electrical	Section:	Approved by:

Req'd/recommended PPE: Nose mask, Goggles, Electrical safety Gloves, Cotton Gloves, Safety shoes,

Safety helmet

Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Put on PPE, Take Permit				
Cleaning of Panels	Eye irritation,	Wear goggles	Damaged goggles/non standard goggles	Periodic replacement
	Respiration problem	Wear Nose mask	Damaged nose mask	Periodic replacement
Removal of the panel & Removal &Termination of the cables	Body injury	Wear safety helmet, safety shoes , hand gloves	Tools and material may fall on human body	Without PPE don't perform the job
	Electrical shock	Use Electrical safety gloves	Damaged Gloves	Periodic replacement.
	Body injury	Use proper tools	Nonstandard /damaged tools	Training for tools handling/ Periodic replacement
Short /open the panel terminals by open the panel door, Check the tightness of terminals		Wear safety helmet, safety shoes , hand gloves	Tools and material may fall on human body	Without PPE don't perform the job
	Body Injury	Wear safety helmet, safety shoes , hand gloves	Nonstandard /damaged tools	Without PPE don't perform the job





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		Tools and material may fall on human body	Training for tools handling/ Periodic replacement
Check the Panel Door earthing, close the door properly			Without PPE don't perform the job
Clear permit			