

ALTERNATOR - GENERAL FAULT FINDING CHART

SL. NO	FAULT	CAUSE	REMEDY
1	No Voltage from the Generator	Defective voltmeter/fuse blown/loss of residual magnetism/wrong excitor field connection/wrong or loose connection to the voltage regulator/voltage regulator fuse is blown/voltage regulator faulty/rotating rectifier faulty/main rotor/stator winding failure.	Check & replace if the residual magnetism between phase & neutral is <10V. Charge it by a 12V battery/ Check field connection polarity/ Checkup the connection/replace fuses/replace the voltage regulator/check the rating of the diodes/fuses/surge suppressor/Rewind rotor/stator to original specification.
2	Voltage level incorrect on no load	Vitrim POT is incorrectly set/Vitrim POT may be of different value/prime mover speed is low.	Adjust it/Check POT ratings/Check prime mover speed.
3	The output voltage is not correctly being maintained at load.	Prime mover speed is not correct/ Generator may be over loaded/voltage regulator may be faulty/wrong application/low load PF/rotating rectifier faulty.	Adjust it to rated value/check the load/replace the voltage regulator/check type & rating of different special loads/improve PF/check rectifier assembly.
4	Overheating of Generator	Excessive ambient temperature & altitude/overloading of the machine/blocking of ventilation passage/interturn short in main rotor/stator/low load PF.	Reduce the load so that the temeprature limit is not crossed/check the load & current with the name plate rating/check ventilation & clean passage/ if required rewind the rotor/stator to original specification/improve PF.
5	Generator doesn't share KW load proportionately	Prime mover speed improperly set.	Set it properly.
6	Generator doesn't share KVAr load proportionately	QDC adjustment is incorrect/QDC-CT polarity reversed/QDC-CT are not in B phase of generator.	Adjust the QDC setting/inter change CT secondary/check & rectify.
7	Ammeter reads more than the actual load current.	There may be circulating current.	Check that only one neutral is connected to the ground.
8	Voltage is unstable.	Stability POT is wrongly set/leading load PF/wrong application.	Damping may be set properly by adjusting the stability POT/correct the PF/check different type & rating of special loads.
9	Voltage regulation unsatisfactory.	Incorrect speed of the prime mover/load current are not balanced/regulator faulty/generator overloaded.	Adjust the speed of the prime mover/balance the loads/replace the regulator/reduce the load.