

GENERATOR 100% STATOR EARTH FAULT CALIBRATION

Swapnil More

[HTTPS://BLOG.SWAPNILMORE.PAGE/](https://blog.swapnilmore.page/)

BEFORE STARTING CALIBRATION:

- Note down original 100% stator earth fault protection settings before starting calibration

SN	Parameters	Relay Settings
1	64S R<1 Alarm Set	
2	64S R<1 Alarm Delay	
3	64S R<2 Trip Set	
4	64S R<2 Trip Delay	
5	64S Angle Compensation	
6	64S R Series	
7	64S Parallel G	

- Also, note down various measurement parameters related to the protection

SN	Parameters	Relay Measurement
1	64S V Magnitude (mV)	
2	64S Magnitude (mA)	
3	64S Angle (°)	
4	64S R Secondary (kΩ)	
5	64S R Primary (kΩ)	

These settings and measurement will be useful for comparing and analyzing changes before and after the calibration.

Calibrated By :

Verified By :

GENERATOR 100% Stator Earth Fault Calibration

MEASUREMENTS AT VARIOUS RESISTANCE VALUES:

SN	Injected Resistance (kΩ)	Measured Resistance (kΩ)	SN	Injected Resistance (kΩ)	Measured Resistance (kΩ)
1			21		
2			22		
3			23		
4			24		
5			25		
6			26		
7			27		
8			28		
9			29		
10			30		
11			31		
12			32		
13			33		
14			34		
15			35		
16			36		
17			37		
18			38		
19			39		
20			40		

Alarm observed at _____ kΩ

Trip Observed at _____ kΩ

Calibrated By :

Verified By :

AFTER CALIBRATION:

- Note down original 100% stator earth fault protection settings after calibration

SN	Parameters	Relay Settings
1	64S Angle Compensation	
2	64S R Series	
3	64S Parallel G	

- Also, note down various measurement parameters related to the protection

SN	Parameters	Relay Measurement
1	64S V Magnitude (mV)	
2	64S Magnitude (mA)	
3	64S Angle (°)	
4	64S R Secondary (kΩ)	
5	64S R Primary (kΩ)	

CONCLUSION:

- 100% Stator earth fault calibration has been carried out successfully.
- Alarm is observed at _____ kΩ and trip is observed at _____ kΩ.

Calibrated By :

Verified By :