



A Review of Transformer Protection by Using PLC System

Satya Kumar Behera
P.G. Student,
(Instrumentation & Control
Engineering),
Bhilai Institute of,
Technology, Durg, India
satyakumarbehera@gmail.com

Ravi Masand
Assistant Professor,
(Instrumentation & Control
Engineering),
Bhilai Institute of,
Technology, Durg, India
rmasand90@gmail.com

Dr. S. P. Shukla
Professor, (Electrical
Engineering),
Bhilai Institute of,
Technology, Durg, India
sps_bit@rediffmail.com

Abstract— Distribution transformers of substation are one of the most important equipment in power system network. Because of, the large number of transformers and various components over a wide area in power systems, the data acquisition, condition monitoring, automatic controlling are the important issues. This paper presents design and implementation of automatic control circuits which is used in PLC automation to monitor as well as diagnose condition of transformers, like load currents, transformer temperatures and voltages. The proposed on-line monitoring system integrates a solid state device named PLC (programmable logic controllers) and sensor packages. The suggested plc monitoring system will help to detect the internal fault as well as external fault of transformer and also diagnose these faults with the help of desired range of parameters which is setting by programmer.

Keywords— Monitoring, Distribution Transformers, PLC Automation, Relays, Sensors, Transducers, Ladder Logic.