Simulation over Load Protection 1-Phase on-Load Household with a Microcontroller

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 180
Number 4

Year of Publication: 2017

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Abstract

Rapid development of technology today has penetrated into various fields. Technology it is present and developing continuously along with the increasing human needs, one of the technologies developed, namely the microcontroller.

A microcontroller is a device control on the be used as a main control on a system that is both simple and complex. In the Final project with the title “System Overcurrent Protection Single Phase Using a Microcontroller Atmega 8535”. As the main control on the system are made. This system acts as a protection on the electrical system where if the load current has exceeded the limit then the system will decide contact the supply automatically.

On the protection system are made, the detection of current using a current transformer to convert the magnitude of the current into a voltage and the magnitude of the voltage will be measured by the microcontroller as a reference for control contacts supply power to the load,
the magnitude of the load that is supplied is set using the input set point to the microcontroller if the current detected exceeds the set point of the supply is decided automatically.

References

4. Budiharto, Widodo, Kontrol Cerdas, Elexmedia Komputindo,2005
programming, proceedings of AAAI 2000

Index Terms

Computer Science
Circuits and Systems

Keywords

Current transformer, Over Load, Protection System