

ABSTRACT

In a factory, hospital or service center or producing goods that cannot be separated from the supply of PLN electricity, it is very important, because if the electricity goes out it can disturb in any case. If there is a blackout, it takes time that is not fast, requires a long time, because the operator is not always stable when a disturbance occurs. Therefore, when a generator set is shut down to back up during a power outage.

Then a device is created that can automatically back up in the event of a PLN power outage, which is an Automatic Transformer Switch device if the loss of supply from the PLN, the genset will open a generator set to supply PLN. There are many Automatic Transfer Switch circuits that soften the relay or PLC type but what is often used is the Zelio type, but for this zelio itself for wiring / installation is quite complicated and not neat and the programming is rather difficult, not monitored, but for PLC types Deep Sea 7320 for wiring is less than the zelio type itself, for the programmer it is also easier and biased also monitored at HMI.

Optimization system of power transfer process between PLN - Generator. can help users in the operation process become more efficient and faster. In this tool, the ATS method uses control through a programable logic control (plc) deep sea 7320 where the control device is compatible with the ATS method which is equipped with system warming up. In its appearance, this tool can provide information in the form of a load detected at the ATS. It is detected that the PLN current in the Deep Sea 7320 PLC is 221V, and the genset is detected on the PLC Deep Sea 7320 screen at 233V.

Keywords: Automation System, ATS, PLC Deep Sea 7320