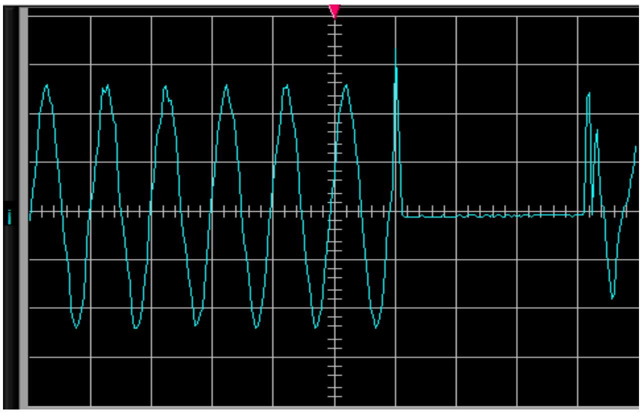

Fig.14 Terminal Voltage under severe disturbance under fault time 60 msec.

Error curve for these results is under 1% for the entire range (Fig.15). Error occurs due to digitization noise and precision of measurement method but also from timer nonlinearity. There is an efficient way to experimental fault test for a specific time of fault. This method dramatically increase required precision time control of fault and the type of fault with safety for device under test is enough for a given application.

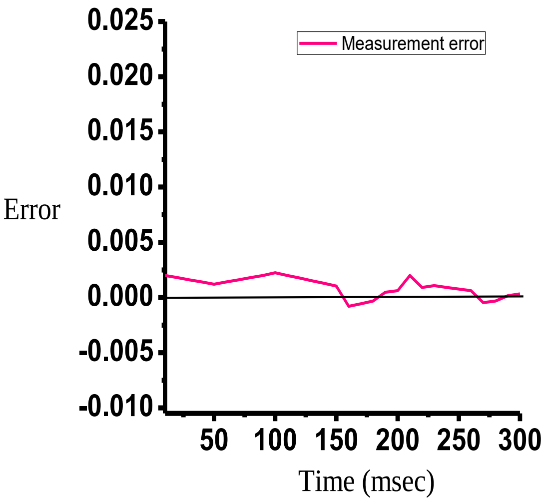

Fig.15 Measurement error curves a novel Fault breaker test device.

5 Conclusions

A novel Fault breaker test device is can be easily modelled and simulated using standard software tools. Modern 16 bit microcontrollers integrate all required peripherals required for industrial control and allow the implementation of time fault using timer programmable as well as and types fault. So that, a novel Fault breaker test device is well suited for fault type and time control applications for test the winding machines due to safety for measuring test and higher precision. The Microcontroller based adjustable closed-loop relays controller system has been developed the speed control of on/off relays circuit with timer. The results showed that the microcontroller is a reliable instrument to control the Fault breaker test device. This system is applicable to different sizes of machines test and capable of controlling the time of fault with very high precision.

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