Article Side
Easy to Make Yourself Circuit Diagrams for Analogue Wattmeter by Shubhranshu Agarwal

Article published on August 2nd 2012 | Technology

We are living in the world where all the normal living totally depends upon availability if electricity. We can not afford to live normally with all the necessities and amenities working well even for minutes without electrical power. May it be transportation or communication, all the activities are centrally based upon the availability of quality power supply. If power is so important, then we should use it economically. Global awareness makes this issue further important. Analogue Wattmeters are being used since centuries to measure the power in easy way. Perhaps it is the simplest device to measure consumed power.

The small size of Analogue Wattmeter makes them favorite for temporary use at different places. These are being used extensively in commercial or production houses to measure the power consumption of different machineries and segments. Although nowadays, we are living in digital age and thus digital power meters are also being used but the importance of Analogue Wattmeter is same as it used to be decades before. Thanks to development of new circuit diagrams that are designed time to time by then experienced and creative mind technocrats.

Wattmeters measure instantaneous active or reactive power unbalanced or balanced triple-phase or single phase electrical circuit. These comprise one analogue indicator and a converter. The modular converter unit is fitted over DIN rail. Analogue indicator is fit at the front side panel of cabinets, units or equipments. This small size provides satisfactory indication of power consumed or generated if the line voltage is varies because of unstable conditions when we need an indication. This power measuring device uses DC or AC. These are used to measure the power consumed where the electrical load is of resistive nature.

Traditional form of analogue wattmeter can be categorized as an electrodynamic instrument. The circuit diagrams of these consist of two fixed coils also known as current coils apart from one movable coil called potential coil. The current coils are connected in series to the circuit. The potential coil is linked in parallel. Potential coil of analog wattmeters has a needle which moves over a calibrated scale indicating the measurement. Current passing through current coil creates electromagnetic field all around the coil. The intensity of electromagnetic field is proportional to the line current in phase. One high-value resistor is connected in series with potential coil to reduce the passing current. The deflection of needle in dc circuit is proportional to current and voltage conforming the results of equation or P=VI or W=VA. On ac circuits, the needle deflection is proportionate to the multiple of voltage and passing current that is equal to true power indicated by equation P=VI cos f. The term cosf is used to represents power factor.

Article Source:
http://www.articleside.com/technology-articles/easy-to-make-yourself-circuit-diagrams-for-analogue-wattmeter.htm - Article Side

Shubhranshu Agarwal - About Author:
Kavita is an eminent and amateur writer primarily focusing on do it yourself projects, Electronic Circuits, a target_new Analogue Wattmeter, Electronics Design, Clap-Based Digital Volume Control, a target_new Circuit Diagrams, Relay Circuit, DIY projects related topics and working with one of the reputable Electronic and electrical company since 4 years.

Article Keywords:
analogue wattmeter, circuit diagrams, electronics circuits, electronics design, clap-based digital volume control, relay circuit

You can find more free articles on Article Side. Sign up today and share your knowledge to the community! It is completely FREE!