

Electrical Monitoring



Modern three-phase electrical systems require continuous visibility and protection to maintain safe, reliable and efficient operation. The below devices can provide a comprehensive electrical protection solution by monitoring critical electrical factors. Used in combination, they deliver real-time electrical monitoring, fault detection, power measurement and energy data for 3-phase electrical systems.

For example, the ELR 11 would continuously monitor earth leakage current through a CBCT, (Core Balance Current Transformer, like a ring-shaped current transformer used specifically to detect earth-leakage/earth-fault current), while displaying the measured leakage value on its 4-digit digital display. It further allows the leakage protection limit to be adjusted as required. The LED indicators would show leakage levels, alarm and trip conditions, while two output relays can initiate protective actions. The Fail Safe and Non-Fail Safe modes provide flexibility across different panel applications.

The panel mount ELR-19N is designed to enhance earth leakage monitoring with a dual digital display showing both actual leakage and the configured limit. Its keypad settings, test/reset function and alarm/trip output enables quick response to developing insulation faults, around an electrical conductor that's damaged, weakened, or deteriorated. This allows electrical current to leak where it shouldn't, often to earth.

The AVF-19T multifunction (VAF) panel meter offers real-time visibility of phase and line voltage, current and frequency, along with average values, phase sequence and load hours. Supporting single and three-phase systems with selectable CT/PT ratios, makes it suitable for applications including LT/HT panels, motors and generators.

Completing the solution, the PM-133 power meter measures three-phase voltage, current, frequency, power factor and kW consumption, all while displaying individual phase, average and total values. By providing real-time visibility of electrical consumption, it helps operators understand how much power the equipment is using. In addition, it identifies changes in load demand and makes informed energy-management decisions. Its load and no-load hour monitoring also helps track equipment operating patterns, making the PM-133 an instrumental tool for improving energy efficiency and controlling electricity costs.

Together, these devices help users to detect leakage in an industrial panel, and identify voltage imbalances on a motor or specifically to track energy consumption in a manufacturing facility, ultimately improving protection, reliability and energy efficiency. Call us for more information on electrical monitoring devices.

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