

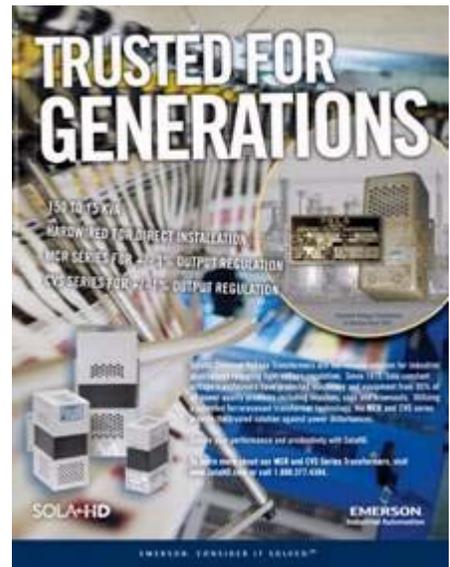
The Ultimate Power Quality Solution... SolaHD Ferrorescant Power Conditioners

Electronic systems are designed to run on clean, well regulated, distortion free power. Heavy machinery, storms, harmonic generating electronics, etc. will add voltage distortion to a power system. A minor power disturbance, lasting only a fraction of a second, can contaminate or completely ruin data that might take days or weeks to replace. You may ask "How does one prevent these power line disturbances from affecting and sometimes destroying electronic systems?" SolaHD offers customers a complete range of power regulating and conditioning products to help reduce and often times eliminate these power disturbances.

The term "Power Conditioner" in common usage, refers to a voltage regulator that has capabilities other than simple voltage regulation. Frequently, power conditioners also provide varying degrees of line isolation, noise attenuation, surge suppression, harmonic filtering, etc.

The SolaHD CVS and MCR Constant Voltage Transformers represent a ferroresonant regulator design topology solution. This class of power conditioner uses a saturating transformer with a resonant circuit. The CVS and MCR maintain a nearly constant voltage on the output for input swings of 20-40%.

One unusual operating characteristic of the CVS and MCR is that its design can limit the amount of current to the load. The power conditioner will protect both itself and its load against damage from excessive fault current. When the load current exceeds about 150-200% of rated current of the regulator, the output voltage collapses to a very small value and the current is thereby limited. In some applications, this characteristic is intentionally used to protect loads from high currents. This design will work indefinitely at a short circuit condition.



Another important advantage of the CVS/MCR power conditioner is its exceedingly fast response time, compared with other types of voltage regulators. Transient changes in supply voltage are corrected within 1-1/2 cycles or less. The output voltage will not fluctuate more than a few percent, even during this interval.

By nature of design, this product is a true, ultra isolation device. They are built with a shield and provide good isolation of load equipment from line noise and surges. They can be used as a separately derived source for local power grounding.