



Application Alley

Alternative Energy Reed Relays, Sensors, & Magnetics

*Reliable And Energy Efficient Electro-Magnetic Components
For Isolation Control and Smart Grid Applications*

Standex Electronics, a leading manufacturer of precise, reliable, and long-lasting sensors and magnetic components worldwide, provides a range of products for use in the Alternative Energy market. Standex Electronics offers reed relays and switches that are ideal for high voltage and isolation applications for photovoltaics and solar power. They also serve in efforts for the smart grid and smart metering functions related to measuring utility usage, custom power supply, and distribution magnetic products.



Reed relays designed by Standex Electronics meet the requirements for proper isolation control within photovoltaic systems. They are especially ideal for measuring isolation resistance across several components within a power system for solar market applications and/or products prior to grid connection. They also assist in identifying current leaks, which can save power, and even potentially help prevent injuries.

The integrated isolation control system in most

modern inverters, monitors all components for potential failures. This can be a challenge for some reed relay manufacturers, but not for Standex Electronics. Despite its small size, their relay has an isolation resistance of up to $>10G$ Ohm and contact of ≥ 7 kVDC. These are offered in both surface mount and thru-hole designs, the relays are hermetically sealed in a rugged thermal shock resistant package.



Standex Electronics reed relays have the added advantage of low power consumption, only requiring energy during the switching process. This has a positive influence on the overall efficiency of the inverter. Because of the high number of switching cycles, their reed relays are particularly suitable for long life applications and can be counted on for millions of reliable, operational cycles.

Component Corner (Expert Insights)
Mark Faulhaber, Director of Engineering
Standex Electronics

“ Within the scope of alternative energy, there are opportunities for planars and other transformers in the solar inverter sector. Our team is ready to partner with customers, and leverage our capabilities to serve the Alternative Energy market. ”



Another key offering is Standex Electronics robust, optimal and custom design solutions through an array of power supply and distribution products including:

- Planar Transformer and Planar Inductor designs
- Low and high frequency components
- 3 phase and potting
- Epoxy cast products
- Fitting for, but not limited to these markets: mil-aero, aviation, transportation, automotive, medical, industrial, communications, test & measurement, smart grid, solar, and wind power applications
- Diverse focus and intricacy of designs with both ferrite core assemblies and lower frequency

- Wide range of product solutions available to customers for reliable high-quality components

Standex Electronics reed switches and reed position/proximity sensors can also be used in smart grid systems that can be automatically shut off in times of peak power usage to decrease load. These systems confirm breaker, or disconnect operations in smart grid systems that include automatic and semi-automatic load shedding functions.

Standex Electronics is available to discuss your custom or standard alternative energy product design needs. To request additional information, please visit us on the web at www.standexelectronics.com.



About Standex Electronics

Standex Electronics is a worldwide market leader in the design, engineering, and manufacture of standard and custom electro-magnetic components, including magnetics products and reed switch-based solutions.

Our magnetics offerings include planar, current sense, and conventional low- and high-frequency transformers and inductors. Reed switch-based solutions include Meder, Kent, and KOFU brand reed switches, as well as a complete portfolio of reed relays, and a comprehensive array of fluid level, proximity, motion, water flow, HVAC condensate, hydraulic pressure differential, capacitive, conductive and inductive sensors.

We offer engineered product solutions for a broad range of product applications in the transportation, automotive, medical, test and measurement, military and aerospace, aviation, HVAC, appliance, security and safety, and general power and industrial markets.

Standex Electronics has a commitment to absolute customer satisfaction through a partner, solve, and deliver approach. With a global organization that offers sales support, engineering capabilities, and technical resources worldwide – we implement customer driven innovation that puts the customer first.

For more information on Standex Electronics, visit us on the web at standexelectronics.com.

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