Re³-inforced - DC/DC converters

Isolation redefined: Now available with up to 10kVDC isolation.

Features:
- Reinforced isolated transformers
- Up to 10kVDC isolation
- CSA/UL certified
- 2:1 input range
- Standard output voltages
- Continuous short-circuit protection
- Control pin (optional)
- Efficiencies of up to 86%
- Operating temperature range up to +85°C
- Ultra compact

Applications:
- IGBT Controllers (Pump/Motor controllers, Wind/Sea turbins)
- Medical applications
- High Voltage Circuits (X-Ray generators, Mass spectrosopes)
- Power Metering Systems

The REC series.
Revolutionary Re³-inforced technology guarantees insulation voltages up to 10kVDC and 20 percent higher nominal current.
IGBT controllers - Reference design:

IGBT controllers are used to efficiently convert high voltage DC supplies to single or three phase AC outputs and find applications in many fields from motor and pump controllers, wind and sea turbines, photovoltaic panels to almost all high power converters. The IGBT high side drivers run at the high voltage DC input which is typically a few hundred volts. The power supply for these drivers is commonly generated by a DC/DC converter. A 2kVDC rated DC/DC converter would seem adequate as it can withstand up to 550VAC continuous. However, IGBT drivers do not work at the mains frequency of 50Hz. At this low frequency they would be too inefficient. Instead, frequencies of 10kHz or more are common. This high AC frequency and in particular the very fast slew rate or rate of change of voltage over time, dv/dt, puts enormous strain on the DC/DC transformer isolation, which can lead in time to isolation failure.

Medical applications - 60601-1 certified

- High isolation voltage - up to 10kVDC
- High isolation grade
- Functional & reinforced isolation
- Wide creepage /clearance
- Potted & molded parts
- Approvals (CSA/UL-60601-1)
  UL listed and test reports available