

## UNDERSTANDING APPROVALS AND CERTIFICATION

For power conversion devices, there is an array of different standards available depending on product, target market, and application. Safety certification is usually handled by an agency such as CSA or UL. EMI compliance is controlled by FCC in North America. CE is a mark that is associated with safety and EMI standards, usually for products outside North America. Agencies such as CSA, UL, ETA, and many others are OSHA–accredited “Nationally Recognized Testing Laboratory” (NRTL).



# 1

### CSA & UL CERTIFICATION

CSA C/US – approved to CSA and UL standards

The C/US mark means that this product has been tested to meet appropriate safety standards for the US and Canada.



# 2

### CSA CLASS 1 DIV 2 – HAZARDOUS LOCATIONS

A number of our DC converters are approved for use in hazardous locations. These products comply with CSA 22.2 No. 213 and UL 1604 standards. These products have been tested for use in Class 1 Div 2 environments. Class I locations are areas where flammable gas or vapour is present in the air. Division 2 indicates that these conditions of Class I are only present under abnormal circumstances (eg. system breakdown).



# 3

### FCC – NOISE AND INTERFERENCE

The FCC mark indicates that the product complies with FCC limits for unintentional radiators. It means that the product complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.