



Information sheet ref UL2200 code as it relates to custom packaging.

UL2200 is a widely recognized standard whose intent is to promote a level playing field with respect to machine integrity up to 600 volts of output. Comprehensive testing for UL2200, covers cooling systems including both engine and alternator by winding resistance test, short circuit survivability and much more.

UL2200 does not cover generating sets with voltages above 600. Consequently, specifying UL2200 above 600 volts will not provide any assurance to the customer that critical temperatures in alternator windings for example, have been unaffected by the addition of an enclosure since no prior UL testing will have been undertaken.

A UL2200 listing, unless certified as a package, is for an open generating set. The positioning of any enclosure on a UL2200 generating set, listed as an open generating set, will void the original open generating set UL2200 label. (See 3.0 below)

1.0 Current UL2200 position with respect to packaging.

1. There are no non-factory OEM custom packaging organizations listed with UL and authorized to classify enclosures or completed packages to UL2200. E.g. Factory OEM's include CAT, mtu, Kohler, etc
2. Custom packagers that are UL listed are classified to UL code QRNZ, this code is limited to Commercial and Industrial Buildings. There are 5 listed organizations in North America.
3. UL have advised that UL are removing the QRNZ code at the end of 2009 to be replaced with Code FTTP available for use with Stationary Engine Generator Enclosures, also to be known as "Weather Housings".
4. UL will inspect the FTTP enclosure assembly for construction only. The investigation will cover aspects such those aspects detailed for enclosures within UL2200, enclosure material thickness, NEC Code compliance, use of UL listed electrical fittings, gasketing, and insulation etc. Lastly, the enclosures will be marked either rainproof or rain tight as determined in UL2200.

2.0 Meeting requirements of UL2200.

Currently the only possible avenue to comply with UL2200 for a custom enclosed unit is to adopt a UL Filed Inspection upon project completion, which will involve in the majority of cases, subject to local authority having jurisdiction, load testing. Naturally this can conveniently occur as part of startup activities.

3.0 UL2200 voided with the addition of a QRNZ Classified or any non UL2200 including a FTTP enclosure

To achieve UL2200 the machine has to pass certain temperature related tests, alternator winding temp (resistance method), cooling system, hot surfaces etc. The positioning of anything that has the potential to influence the original test results (principally airflow) will render these results invalid. Adding an enclosure which has the potential for a significant impact to air movement and hence cooling effectiveness will of course invalidate those test results.