

Stationary Engine Generator Assemblies to UL2200

Information Sheet # 02

Stationary generator set installations, particularly those for emergency standby power, are frequently being specified to comply with UL2200. Specifying engineers are inclined to use UL2200 as the standard when writing generator set detailed specifications that are being issued. Many states will not consider equipment that is not UL2200 certified. UL is recognized as the organization for health and safety testing.

This information sheet explains what UL2200 covers, why it came about, the benefits to the user, who is specifying UL2200, related codes and sites to access for further information and key tests undertaken.

The diagram below illustrates the generator components covered by UL 2200. Refer to the key over for an explanation of all the components covered by UL 2200.

Typical Features & Tests Covered Under UL2200 Certification



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Typical Features & Tests Covered Under UL2200 Certification (See Diagram for Details)			
Item	Test Description	Item	Features & Benefits of UL2200
1	Neutral to Ground Potential Reading	12	Personnel guards on all rotating components
2	Bonding Conductor	13	Safe temperatures maintained as designed
3	Bus Bar	14	Wiring insulated for safety and to UL1446
4	Grounding Impedance	15	UL certificate ensures health & safety tested
5	Over current Protection Calibration	16	Hot exhaust surfaces guarded to ensure personnel protection during use & service
6	Terminal Strength Insulating Base & Support		
7	Over temperature Protection	17	Guards do not corrode for lasting protection
8	Dielectric Withstand	Item	Sub-components having individual UL listing
9	Harmonic Distortion	18	Block Heaters
10	Output Volts/Frequency Fluctuation	19	Battery Chargers
11	Test of Spacing on Printed-Wiring Boards	20	Mainline Breakers

1.0 - What Does UL2200 Cover?

The purpose of UL is to set standards for health and safety of use and covers stationary generator set installations rated 600 volts or less that would also be subject to the National Electrical Code NFPA-70; installation code NFPA-37 covering stationary combustion engines and gas turbines; Health Care Facilities to NFPA-99; and emergency standby power systems to NFPA-110.

2.0 - Why Have UL2200?

Before the introduction of UL2200, an emergency standby set installation was an assembly of components that individually complied with a variety of codes and standards. However, there was no all embracing standard to cover a complete generator assembly. To ensure manufacturers and specifying engineers could work to a universal standard, UL2200 was developed. Site electrical inspectors now have a standard they can use that has been developed by a third party, independent to that of the manufacturers. Consulting engineers also have a standard they can specify that has met rigorous tests.

3.0 - Who Benefits From UL2200?

The following benefit from UL 2200 -

- Manufacturers have a universally accepted standard to meet, not open to interpretation, which creates a “level field” when bidding for an installation.
- Users know they are buying a certified product that has been tested and approved to meet rigid health and safety standards by a third party.

4.0 - Who Is Specifying UL2200?

As an accepted code, setting minimum requirements for health and safety of use of stationary generator assemblies, the following now specify and use UL2200 certification: -

- State and City Inspectors
- Consulting/Specifying Engineers
- Federal Agencies

5.0 - Related Codes and Sites to Access for Further Information:

UL2200 works closely with the National Fire Protection Association (NFPA); the National Electrical Code (NEC); the American Society of Mechanical Engineers (ASME); the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and the National Electrical Manufacturers Association (NEMA). Visit www.UL.com for more details and links to all aspects of UL2200.

