

Local Emergency Planning Committee



Generators: Selection, Operation & Safety

Generators: Selection



Generators: Portable

Any generator that can be easily transported is considered Portable.



These type of generators are used for temporary power for special events or to plug very limited loads when structures lose power or have no power. Typically, the sizes of these generators are under 5KW.

Generators: Portable

Typical Applications for the use of a portable generator



- Power Failure – Use to run select appliances and apparatus such as a refrigerator, freezer, sump pump and furnace.

- Temporary Power - While on construction sites or remodeling jobs where electricity is not readily available for use of lighting, fans and power tools

- Special Events – These types of generators are used by vendors and coordinators when power is not available to energize such equipment as lights, sound systems, refrigerators, freezers, etc.



Generators: Tag Along

Any generator that needs to be transported with a vehicle and is attached by a hitch or connected to a trailer is considered a Tag Along Generator



These generators are generally used for temporary power at building sites, special events and emergency power situations when larger amounts of power is required. These generators can range from 15 kw to upwards of 10, 000 KW

Generators: Tag Along

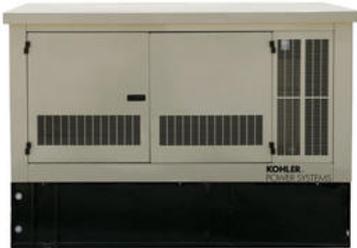
Typical Applications for the use of a tag-along generator

- Temporary power for construction sites where larger amounts of power is required to run power tools, temporary lighting, security systems, construction elevators and cranes.
- Temporary power for special events to energize lighting, stage and sound systems, carnival rides and vendor needs for cooking and selling their wares.
- Emergency Temporary Power when catastrophic events such as blizzards, tornados, tropical storms, hurricanes and severe thunderstorms causes interruption from electrical service from the utilities to customers, residences and businesses.



Generators: Backup

Generators that are permanently mounted to a fixed location and wired to a transfer switch is considered a Backup Generator



These generators are used in businesses, hospitals, public safety facilities and homes and are generally fueled by natural gas but can also use diesel and gasoline. These are connected to a transfer switch that either turns on automatically or manually when a power outage takes place.

Generators: Backup

Typical Applications for the use of a tag-along generator

- Hospitals – These are used to provide automatic emergency electricity in the event of a power outage. The power transfer is practically simultaneous with an automatic transfer switch to keep life support systems running.
Businesses – These are used in the event of a power outage to keep operations continuous for lighting, computers, registers, restaurant equipment, HVAC systems, etc. to keep commerce running and employees/customers safe.
- Public Safety Facilities – These are used in the event of a power outage to allow the police, fire department and emergency medical technicians operating during emergencies.
- Home – These are used in the event of a power outage to keep the home owner comfortable, safe and inconvenienced.



Transfer Switches

The transfer switch allows safely switching from utility power to emergency generator power while maintaining isolation of each source from the other.



Generator Load Rating

Generator Set Ratings

Natural Gas LP Gas

| Alternator Voltage | Ph | Hz | kW/kVA | Amps | kW/kVA | Amps | kW/kVA | Amps | kW/kVA | Amps |
|--------------------|----|----|--------|------|--------|------|--------|------|--------|------|
| • 120/208 | 3 | 60 | 50/63 | 173 | 46/58 | 160 | 55/69 | 191 | 50/63 | 173 |
| • 120/240 | 3 | 60 | 50/63 | 150 | 46/58 | 138 | 55/69 | 165 | 50/63 | 150 |
| • 120/240 | 1 | 60 | 48/48 | 200 | 44/44 | 183 | 49/49 | 204 | 45/45 | 188 |
| • 277/480 | 3 | 60 | 50/63 | 75 | 46/58 | 69 | 55/69 | 83 | 50/63 | 75 |
| • 120/208 | 3 | 50 | 40/50 | 139 | 35/44 | 122 | 40/50 | 139 | 35/44 | 122 |
| • 110/220 | 3 | 50 | 40/50 | 131 | 38/47 | 123 | 45/56 | 147 | 41/51 | 134 |
| • 110/220 | 1 | 50 | 39/39 | 177 | 36/36 | 164 | 40/40 | 182 | 38/38 | 173 |
| • 120/240 | 1 | 60 | 48/48 | 200 | 44/44 | 183 | 54/54 | 225 | 49/49 | 204 |
| • 110/220 | 1 | 50 | 41/41 | 186 | 37/37 | 168 | 45/45 | 205 | 41/41 | 186 |

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Street Lighting