

Residential Standby Backup Power Solutions



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Revision date	Section	Change page(s)	Description
01/24/2017	3.1	V1-T3-3	Content edits
01/24/2017	3.1	V1-T3-4	Content edits
01/24/2017	3.2	V1-T3-13	Content edits



Powering Business Worldwide

3.1

Residential Standby Backup Power Solutions

Standby Generators

Standby Generator Systems



EGENA20



EGENX27

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Product Description

A standby generator system is a package of equipment specifically designed to provide substitute electrical power to a residence in the event of a utility power outage. These systems are comprised of a generator, transfer switch and the connections necessary for installation. Eaton’s standby generator line consists of air-cooled and liquid-cooled models ranging from 9000 watts up to 150,000 watts.

Air-Cooled Standby

Eaton’s air-cooled generators range from 9 to 22 kW and these units are perfect for automatically backing up every circuit within a home such as air conditioner units, refrigerators, lighting, furnace fans, sump pumps and water pumps.

Eaton’s air-cooled standby generators offer fully automatic operation and provide most homeowners with enough power for complete whole house comfort. These units all operate at ultra quiet 66 dB, or less, sound level.

Liquid-Cooled Standby

Eaton’s liquid-cooled generators feature automotive style engines that range from 22 to 150 kW of power output. These units run so quietly that you’ll forget that you own a generator until you need it. These units are available in steel or aluminum enclosures and are available in single- and three-phase in four voltages: 120/240 V, single-phase; 120/208 V, three-phase; 240 V, three-phase; and 277/480 V, three-phase.

Application Description

Standby generator systems are most often used in residential, agricultural and light commercial applications. Comfort and safety are key concerns of many homeowners who are dependent on an uninterrupted supply of electricity.

The increase in our dependence on power is due in part to the popularity of home offices and in-home health care. Many regions of the United States experience periodic power outages due to extreme weather conditions such as ice and snowstorms, heat waves, tornadoes or hurricanes.

Eaton highly recommends that any generator system be installed by a qualified electrician and/or generator installer.

Features, Benefits and Functions

Eaton’s generator systems offer a wide range of features. All systems feature:

- Powerful engines
- Reliable Eaton transfer switches and control systems using switching duty rated circuit breakers
- Weekly exercise function
- Automatic transfer systems feature automatic start/stop

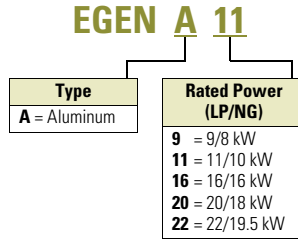
Standards and Certifications

- CSA®, cUL® and UL 2200 listed and approved
- SCAQMD (selected models only)
- All transfer switches are UL® 67 and UL 1008 listed as “Transfer Switches”
- All generators are UL 2200 listed

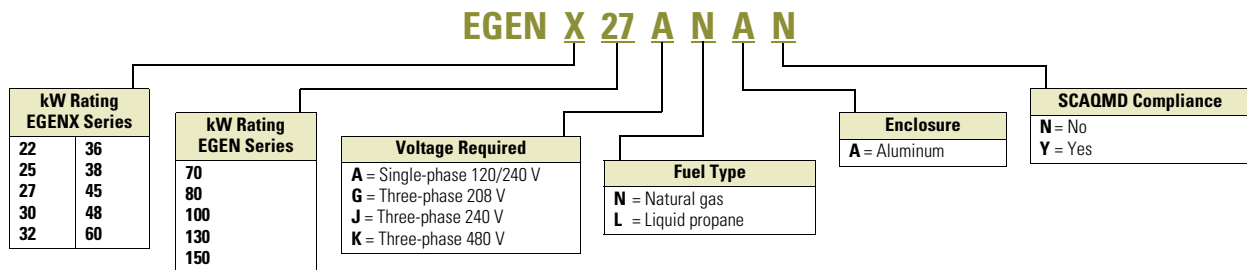


Catalog Number Selection

Air-Cooled Generators



Liquid-Cooled Generators



Product Selection

EGENA

Air-Cooled Generators



Rated Power kW (LP/NG)	Maximum Rated Amperes at 240 Vac (LP/NG)	Main Line Circuit Breaker Amperes	Enclosure Material	Engine Size	Number of Cylinders	Fuel Type	SCAQMD Compliant	Sound Emissions (dB at 7 m)	Limited Warranty (yrs)	Catalog Number ^①
9/8	37.5/33.3	40	Aluminum	426 cc	1	Liquid propane/natural gas	Yes	66	5	EGENA9
11/10	45.8/41.7	50	Aluminum	530 cc	2	Liquid propane/natural gas	Yes	63	5	EGENA11
16/16	66.6/66.6	65/55	Aluminum	999 cc	2	Liquid propane/natural gas	Yes	66	5	EGENA16
20/18	83.3/75.0	90	Aluminum	999 cc	2	Liquid propane/natural gas	Yes	66	5	EGENA20 ^②
22/19.5	91.7/81.2	100	Aluminum	999 cc	2	Liquid propane/natural gas	Yes	67	5	EGENA22 ^②

Notes

- ① Battery to be furnished by others. Recommended size: Group 26R, 12 V, 225 CCA min.
- ② Includes base fascia (No. EGENFASCIA) as standard.

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Residential Standby Backup Power Solutions

Standby Generators

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EGENX27ANAN



Liquid-Cooled Generators ^{①②}




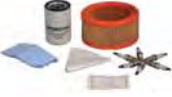
Catalog Number Prefix	kW Rating	Voltages Available	Fuel Type ^③	Enclosure	SCAQMD Compliance ^④
EGENX22	22	A—120/240 V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	N—No
		G—208 V, three-phase			
		J—240 V, three-phase			
EGENX25	25	A—120/240 V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	N—No
		G—208 V, three-phase			
		J—240 V, three-phase			
EGENX27	27	A—120/240 V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	N—No
		G—208 V, three-phase			
		J—240 V, three-phase			
EGENX30	30	A—120/240 V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	N—No
		G—208 V, three-phase			
		J—240 V, three-phase			
EGENX32	32	A—120/240 V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	N—No
		G—208 V, three-phase			
		J—240 V, three-phase			
		K—480 V, three-phase			
EGENX36	36	A—120/240 V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	Y—Yes
		G—208 V, three-phase			N—No
		J—240 V, three-phase			
		K—480 V, three-phase			
EGENX38	38	A—120/240 V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	N—No
		G—208 V, three-phase			
		J—240 V, three-phase			
		K—480 V, three-phase			
EGENX45	45	A—120/240 V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	Y—Yes
		G—208 V, three-phase			N—No
		J—240 V, three-phase			
		K—480 V, three-phase			
EGENX48	48	A—120/240 V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	Y—Yes
		G—208 V, three-phase			N—No
		J—240 V, three-phase			
		K—480 V, three-phase			
EGENX60	60	A—120/240 V, single-phase	N—Natural gas L—Liquid propane	A—Aluminum	N—No
		G—208 V, three-phase			
		J—240 V, three-phase			
		K—480 V, three-phase			
EGEN70	70	A—120/240 V, single-phase	N—Natural gas L—Liquid propane	A—Aluminum	Y—Yes
		G—208 V, three-phase			N—No
		J—240 V, three-phase			
		K—480 V, three-phase			
EGEN80	80	A—120/240 V, single-phase	N—Natural gas L—Liquid propane	A—Aluminum	N—No
		G—208 V, three-phase			
		J—240 V, three-phase			
		K—480 V, three-phase			
EGEN100	100	A—120/240 V, single-phase	N—Natural gas L—Liquid propane	A—Aluminum	Y—Yes
		G—208 V, three-phase			
		J—240 V, three-phase			
		K—480 V, three-phase			
EGEN130	130	A—120/240 V, single-phase	N—Natural gas L—Liquid propane	A—Aluminum	Y—Yes
		G—208 V, three-phase			
		J—240 V, three-phase			
		K—480 V, three-phase			
EGEN150	150	A—120/240 V, single-phase	N—Natural gas L—Liquid propane	A—Aluminum	Y—Yes
		G—208 V, three-phase			
		J—240 V, three-phase			
		K—480 V, three-phase			

Notes

- ① All liquid-cooled models suitable for “optional” standby backup power only, as dictated by NEC Article 702/NFPA 70. Not suitable for neither “emergency” nor “legally required” applications as dictated by NEC Article 700/701 and NFPA 110.
- ② Models 70–150 kW include battery. For all other liquid-cooled models, battery must be furnished by others.
- ③ IMPORTANT: All models 60 to 150 kW are not field convertible. Must be pre-ordered fuel specific.
- ④ South Coast Air Quality Management District (CA and MA). Check your local requirements.
- ⑤ For all three-phase ATS requirements, please contact EatonCare.

Accessories

Generator Accessories—Air and Liquid-Cooled Generators

	Description	Catalog Number
	General Accessories	
	Air-cooled transportation cart	EGENCART
	Bisque paint kit	EGENPAINT
	Display shell—bisque color	EGENSHELL
	Generator fascia for air-cooled models. Bisque color (included as standard on EGENA20 and EGENA22 models)	EGENFASCIA
EGENMOBILE	Wireless Remote Monitoring	
	Advanced wireless remote monitor w/smart device connectivity. Air-cooled/liquid-cooled generators. 2009 models or newer	EGENMOBILE
	Adapter wire harness kit for EGENMOBILE. Required for liquid-cooled generators only 22–150 kW. 2009 models or newer	EGENKIT
	Basic in-house remote wireless monitor. Compatible with air/liquid-cooled models. 2009 models or newer	EGENinHOME
	Adapter wire harness kit for EGENinHOME. Required for liquid-cooled units only 22–150 kW. 2009 models or newer	EGENinHOMEKIT
Cold Weather Kits	Cold Weather Kits	
	9–22 kW air-cooled battery heater kit	7101CH
	9–22 kW air-cooled oil heater kit	7102CH
	9–22 kW air-cooled breather heater kit	7103CH
	22, 27, 32, 36, 38, 45 and 60 kW (2.4 L engine) cold weather kit	5630CH
	25 and 30 kW (1.5 L engine) cold weather kit	6175CH
	100 and 130 kW (6.8 L engine) cold weather kit	5633CH
	48 (5.4 L engine), 80 (4.6 L engine) and 70 and 150 kW (6.8 L engine) cold weather kit	5632CH
Extreme Cold Weather Kits	Extreme Cold Weather Kits	
	25 kW and 30 kW (1.5 L engine)	5615CH
	22 kW, 27 kW, 36 kW, 45 kW and 60 kW (2.4 L engine)	5616CH
	48 kW (5.4 L engine)	5618CH
	80 kW (5.4 L engine)	5619CH
	70 kW, 100 kW and 130 kW (6.8 L engine)	5620CH
	150 kW (6.8 L engine)	5667CH
Maintenance Kits	Maintenance Kits	
	9 kW generator maintenance kit 426 cc engine. For EGENA9 model only	6482CH
	11 kW generator maintenance kit 530 cc engine. For EGENA11 model only	6483CH
	16 kW generator maintenance kit, 999 cc engine. For EGENA16 model only	6484CH
	20 kW and 22 kW generator maintenance kit, 999 cc engine. For EGENA20 and EGENA22 models only	6485CH
	22 kW and 27 kW liquid-cooled generator maintenance kit (2.4 L engine)	5656CH
	25 kW and 30 kW liquid-cooled generator maintenance kit (1.5 L engine)	6176CH
	32 kW, 36 kW and 38 kW liquid-cooled generator maintenance kit (2.4 L engine)	5984CH
	45 kW liquid-cooled generator maintenance kit (2.4 L engine)	6172CH
	48 kW liquid-cooled generator maintenance kit (4.2 L engine)	5658CH
	60 kW liquid-cooled generator maintenance kit (2.4 L engine)	6171CH
	80 kW liquid-cooled generator maintenance kit (4.6 L engine)	5985CH
	70 kW, 100 kW, 130 kW and 150 kW liquid-cooled generator maintenance kit (6.8 L engine)	5660CH

3.1

Residential Standby Backup Power Solutions

Standby Generators

3

Sizing Guidelines

In order to properly size a generator, you must account for each of the essential circuits that will be designated to be switched in the event of a utility power outage by calculating the sum of the wattage of each individual circuit. This sum must NOT exceed the listed wattage capacity of the generator.

For your convenience, a list of commonly used devices has been provided below with the approximate industry-standard for each device's running wattage. Refer to the Eaton Generator Sizing Guide (TD00405018E) and consult with a trained professional before selecting the correct generator for your application.

Circuit Selection ①②③

Device	Common Running Watts
Air conditioner (12,000 btu)	1700
Air conditioner (24,000 btu)	3800
Air Conditioner (40,000 btu)	6000
Battery charger (20 amp)	500
Circular saw (6-1/2-inch)	800–1000
Clothes dryer (electric)	5750
Clothes dryer (gas)	700
Clothes washer	1150
Coffee maker	1750
Compressor (1 hp)	2000
Compressor (1/2 hp)	1400
Compressor (3/4 hp)	1800
Curling iron	700
Dehumidifier	650
Electric blanket	400
Electric range (per element)	1500
Electric skillet	1250
Freezer	700
Furnace fan (3/5 hp)	875
Garage door opener	500–750
Hair dryer	1200
Hand drill	250–1100
Iron	1200
Jet pump	800
Light bulb	100
Microwave oven	700–1000
Milk cooler	1100
Oil burner on furnace	300
Oil fired space heater (140,000 btu)	400
Oil fired space heater (30,000 btu)	150
Oil fired space heater (85,000 btu)	225
Radio	50–200
Refrigerator	700
Slow cooker	200
Submersible pump (1 hp)	2000
Submersible pump (1/2 hp)	1500
Submersible pump (1-1/2 hp)	2800
Sump pump	800–1050
Table saw (10-inch)	1750–2000
Television	200–500
Toaster	1000–1650

Dimensions

Approximate Dimensions in Inches (mm)

Air-Cooled Standby

Catalog Number	Length	Width	Height	Weight in Lbs (kg)
EGENA9	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	340 (154.0)
EGENA11	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	373 (169.2)
EGENA16	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	437 (198.2)
EGENA20	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	451 (204.6)
EGENA22	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	476 (216.0)

Liquid-Cooled Standby

Catalog Number	Length	Width	Height	Weight in Lbs (kg)
EGENX22	62.00 (1574.8)	29.00 (736.6)	34.00 (863.6)	895 (406.3)
EGENX25	63.00 (1600.2)	30.00 (762.0)	35.00 (889.0)	875 (397.3)
EGENX27	64.00 (1625.6)	31.00 (787.4)	36.00 (914.4)	891 (404.5)
EGENX30	60.00 (1651.0)	32.00 (812.8)	37.00 (939.8)	935 (424.5)
EGENX32	76.80 (1950.0)	35.00 (889.0)	46.10 (1171.0)	600 (1333.0)
EGENX36	77.00 (1955.8)	34.00 (863.6)	45.00 (1143.0)	1683 (764.1)
EGENX38	76.80 (1950.0)	35.00 (889.0)	46.10 (1171.0)	600 (1333.0)
EGENX45	78.00 (1981.2)	35.00 (889.0)	46.00 (1168.4)	1414 (642.0)
EGENX48	79.00 (2006.6)	36.00 (914.4)	47.00 (1193.8)	1703 (773.2)
EGENX60 ④	80.00 (2032.0)	37.00 (939.8)	48.00 (1219.2)	1650 (749.1)
EGEN70 ④	97.00 (2463.8)	37.00 (939.8)	48.00 (1219.2)	2185 (992.0)
EGEN80 ④	115.00 (2921.0)	36.80 (934.7)	79.00 (2006.6)	2010 (912.5)
EGEN100 ④	116.00 (2946.4)	36.80 (934.7)	80.00 (2032.0)	2705 (1228.1)
EGEN130 ④	117.00 (2971.8)	36.80 (934.7)	81.00 (2057.4)	2873 (1304.3)
EGEN150 ④	118.00 (2997.2)	36.80 (934.7)	82.00 (2082.8)	2666 (1210.4)

Notes

- ① The rated wattage of a light can be found on the light bulb. The rated wattage of tools, appliances and motors can usually be found on a decal affixed to the device.
- ② If the appliance, tool or motor does not give wattage, multiply 120 volts times the ampere rating to determine watts (volts x amps = watts) for single-phase only.
- ③ Induction motors require about three times more power (in watts) to start up than to run. This surge lasts for only a few seconds. Be sure to take this into account when calculating the total capacity of the load that will be energized by the backup power system. To correctly configure the desired wattage, add the amperage of the inrush of the largest motor to the total running wattage of all other connected loads. Figure the watts required to start the largest motor. Add that to the total running watts of all other connected loads.
- ④ All weights provided for steel enclosures only, if applicable.

EGENP8000EX



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Product Description

Whereas permanently installed standby systems are designed for larger homes, small businesses or secondary residences, portable generators are primarily used for smaller homes, essential loads, construction sites, camping, tailgating and wherever portable temporary power is required.

Application Description

Portable generator systems are primarily used for smaller homes or for construction sites where temporary power is required. Permanently installed standby systems are designed for larger homes, small businesses or secondary residences, such as vacation homes and cabins, that require uninterrupted power for critical loads.

As the name indicates and due to physical size and weight, portable generators can easily be transported from one location to another.

Designed for outdoor use only, common applications vary from homes to camping to construction sites, providing backup power everywhere electrical power is needed.

Standards and Certifications

- UL Listed



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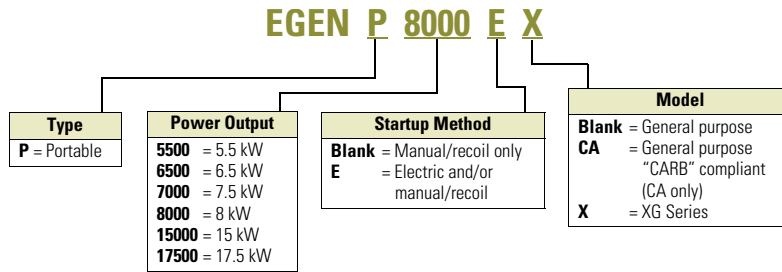
Residential Standby Backup Power Solutions

Portable Generators

Catalog Number Selection





Portable Generators

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Product Selection

Portable Generators

	Running Watts	Starting Watts	Engine Displacement/Type	Startup Method	Fuel Tank Capacity (gal) ①	Approx. Running Time at 1/2 load (hrs)	Battery Included	Outlets Configuration	Warranty Residential/Commercial (yrs)	Catalog Number
General Purpose (49-State)										
 EGENP5500	5500	6875	389 cc/OHV	Manual	7.2	10	No	1 x 30 A L14-30R (twist lock), 2 x 20 A 5-20R duplex	2/1 Ltd	EGENP5500
 EGENP6500	6500	8125	389 cc/OHV	Manual	7.2	10	No	1 x 30 A L14-30R (twist lock), 2 x 20 A 5-20R duplex	2/1 Ltd	EGENP6500
 EGENP6500E	6500	8125	389 cc/OHV	Manual/ electric	7.2	10	Yes	1 x 30 A L14-30R (twist lock), 2 x 120 A 5-20R duplex	2/1 Ltd	EGENP6500E
 EGENP7500E	7500	9375	420 cc/OHV	Manual/ electric	8.0	12	Yes	1 x 30 A L14-30R (twist lock), 2 x 20 A 5-20R duplex	2/1 Ltd	EGENP7500E

Note

① Requires gasoline as fuel to operate.

Portable Generators, continued

	Running Watts	Starting Watts	Engine Displacement/Type	Startup Method	Fuel Tank Capacity (gal) ^①	Approx. Running Time at 1/2 load (hrs)	Battery Included	Outlets Configuration	Warranty Residential/Commercial (yrs)	Catalog Number
General Purpose (49-State), continued										
EGENP15000E 	15000	22500	992 cc/OHVI	Manual/electric	16.0	12	Yes	1 x 50 A 14-50R, 1 x 30 A L14-30R (twist lock), 2 x 30 A L5-30R (twist lock), 1 x 20 A 5-20R duplex, 1 x 20 A GFCI 5-20R duplex	2/1 Ltd	EGENP15000E
EGENP17500E 	17500	26250	992 cc/OHVI	Manual/electric	16.0	10	Yes	1 x 50 A 14-50R, 1 x 30 A L14-30R (twist lock), 1 x 30 A L5-30R (twist lock), 1 x 20 A 5-20R duplex, 1 x 20 A 5-20R GFCI duplex	2/1 Ltd	EGENP17500E
XG Series										
EGENP7000EX 	7000	8750	407 cc/OHVI	Manual/electric	9	10	Yes	1 x 30 A L14-30R (twist lock), 2 x 20 A GFCI 5-20R duplex	2/1 Ltd	EGENP7000EX
EGENP8000EX 	8000	10000	407 cc/OHVI	Manual/electric	10	10	Yes	1 x 30 A L14-30R (twist lock), 2 x 20 A GFCI 5-20R duplex	2/1 Ltd	EGENP8000EX
EGENP10000EX 	10000	12500	530 cc/OHVI	Manual/electric	10	10	Yes	1 x 50 A 14-50R, 1 x 30 A L14-30R (twist lock), 1 x 30 A L5-30R (twist lock), 2 x 20 A GFCI 5-20R duplex	2/1 Ltd	EGENP10000EX
CARB^② Compliant (Required in California Only)										
EGENP5500CA 	5500	6875	389 cc/OHV	Manual	7.2	10	No	1 x 30 A L14-30R (twist lock), 2 x 20 A GFCI 5-20R duplex	2/1 Ltd	EGENP5500CA
EGENP6500CA 	6500	8125	389 cc/OHV	Manual	7.2	10	No	1 x 30 A L14-30R (twist lock), 2 x 20 A 5-20R duplex	2/1 Ltd	EGENP6500CA

Notes

- ① Requires gasoline as fuel to operate.
- ② California Air Resources Board.

3.2

Residential Standby Backup Power Solutions

Portable Generators

Dimensions

Approximate Dimensions in Inches (mm)

Portable Generators

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Catalog Number	Length	Width	Height	Weight Lbs (kg)
EGENP5500	27.25 (692.2)	27.00 (685.8)	25.00 (635.0)	171.0 (77.6)
EGENP5500CA	27.25 (692.2)	27.00 (685.8)	25.00 (635.0)	170.9 (77.6)
EGENP6500	27.25 (692.2)	27.00 (685.8)	25.00 (635.0)	175.0 (79.5)
EGENP6500E	27.25 (692.2)	27.00 (685.8)	25.00 (635.0)	186.0 (84.4)
EGENP6500CA	27.25 (692.2)	27.00 (685.8)	25.00 (635.0)	177.0 (80.3)
EGENP7000EX	31.00 (787.4)	25.50 (647.7)	28.00 (711.2)	245.0 (111.2)
EGENP7500E	27.25 (692.2)	27.00 (685.8)	25.00 (635.0)	191.5 (86.9)
EGENP8000EX	31.00 (787.4)	25.50 (647.7)	28.00 (711.2)	235.0 (106.7)
EGENP10000EX	30.00 (762.0)	29.50 (749.3)	31.00 (787.4)	300.0 (136.2)
EGENP15000E	48.50 (1231.9)	31.00 (787.4)	39.50 (1003.3)	363.0 (164.8)
EGENP17500E	48.50 (1231.9)	31.00 (787.4)	39.50 (1003.3)	390.0 (177.1)

Residential Automatic Transfer Switches



Product Description

50, 100, 150, 200 and 400 A Fully Automatic

All Eaton automatic transfer switches (ATS) monitor utility and generator voltages and will automatically connect to the appropriate source of power. Eaton offers two types of automatic transfer switches to suit your personal backup power needs—the standard ATS EGSX series with load shedding capabilities and the Green ATS EGSU series that provides a truly active load management solution.

Green Line of Automatic Transfer Switches

With the rising cost of commodities and fuel in today's economy, consumers are concerned with maximizing the value of their purchases.

Electrical loads are now intelligently managed with Eaton's Green Line of automatic transfer switches. The active load management inside each Green ATS allows the consumer to use 100% of the power rated output of the generator and/or use a smaller generator, reducing upfront installation costs and saving on ongoing fuel consumption costs.

As a part of Eaton's commitment to quality, every Green ATS, at no extra cost, will ship with a CHSPT2ULTRA whole surge protector, which will help prevent potential damage to valued electronics caused by power surges in the utility line.

Contents

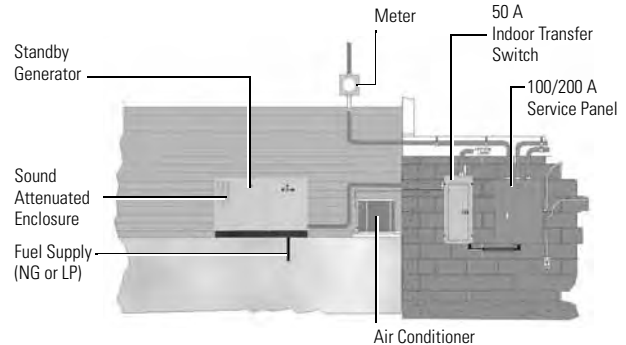
<i>Description</i>	<i>Page</i>
Automatic Transfer Switches	
Standards and Certifications	V1-T3-12
Catalog Number Selection	V1-T3-12
Product Selection	V1-T3-13
ATS Ready Loadcenter	V1-T3-14
Dimensions	V1-T3-15

Application Description

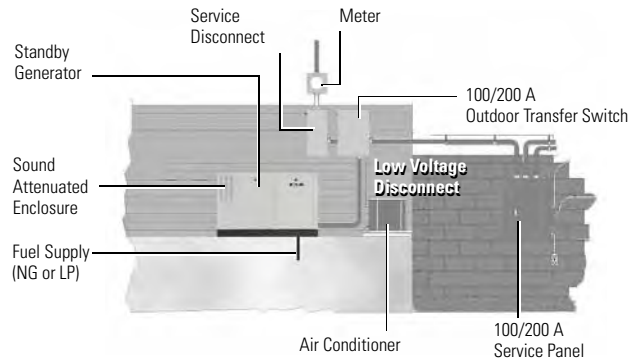
50, 100, 150, 200 and 400 A Switches

100, 200 and 400 A switches are capable of "whole house" power transfer in residential/small business applications.

50 A—Indoor Installation—Selected Load Pre-Wired



100/200 A—Outdoor Installation—Whole House Pre-Wired



3.3

Residential Standby Backup Power Solutions

Automatic Transfer Switches

Standards and Certifications

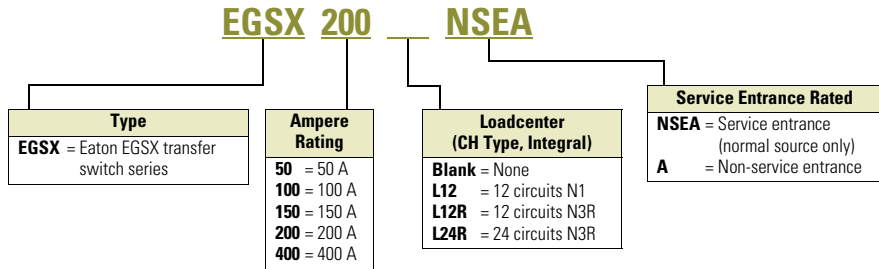
- UL 1008 listed
- UL 67 listed



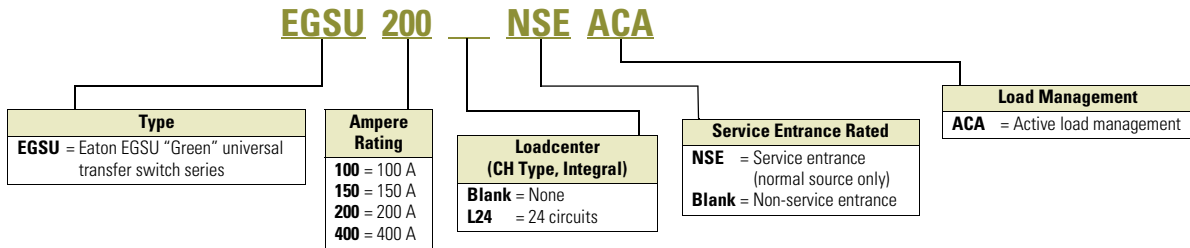
3

Catalog Number Selection

Standard Automatic Transfer Switches—EGSX Series



Green Automatic Transfer Switches—EGSU Series



Product Selection

EGSX50L12R



Standard Automatic Transfer Switches ①

Ampere Rating	Voltage	Service Entrance Rated	No. of Load Shed Contacts	Contactor Wire Size Range(s)	No. of Cables per Phase	Withstand Current (rms) at 240 Vac	No. of Circuits Included ②	Frequency (Hz)	Enclosure Type	Most Common Generator Sizes (kW) ③	Catalog Number
50	120/240	No	2	#14–#6	1	5000	12	50/60	NEMA 1 (indoor)	9, 11	EGSX50L12
50	120/240	No	2	#14–#6	1	5000	12	50/60	NEMA 3R (outdoor)	9, 11	EGSX50L12R
100	120/240	No	2	#14–#2/0	1	10,000	—	50/60	NEMA 3R (outdoor)	9, 11, 16	EGSX100A
100	120/240	Yes	2	#14–#2/0	1	10,000	—	50/60	NEMA 3R (outdoor)	9, 11, 16	EGSX100NSEA
100	120/240	No	2	#14–#2/0	1	10,000	24	50/60	NEMA 3R (outdoor)	9, 11, 16	EGSX100L24RA
150	120/240	Yes	2	#4–300 kcmil	1	10,000	—	50/60	NEMA 3R (outdoor)	16, 20, 22	EGSX150NSEA
200	120/240	No	2	#4–300 kcmil	1	10,000	—	50/60	NEMA 3R (outdoor)	16, 20, 22	EGSX200A
200	120/240	Yes	2	#4–300 kcmil	1	10,000	—	50/60	NEMA 3R (outdoor)	16, 20, 22	EGSX200NSEA
400	120/240	Yes	2	750 kcmil–2 300 kcmil–1/0	1/2	35,000	—	50/60	NEMA 3R (outdoor)	>22	EGSX400NSEA

EGSU200NSEACA



Green Automatic Transfer Switches ④—Featuring Active Load Management Technology

Ampere Rating	Voltage	Service Entrance Rated	Contactor Wire Size Range(s)	No. of Cables per Phase	Withstand Current (rms) at 240 Vac	No. of Circuits Included ②	Frequency (Hz)	Enclosure Type	Most Common Generator Sizes (kW) ③	Catalog Number ⑤
100	120/240	No	#14–#2/0	1	10,000	—	50/60	NEMA 3R (outdoor)	9, 11, 16	EGSU100ACA
100	120/240	Yes	#14–#2/0	1	10,000	—	50/60	NEMA 3R (outdoor)	9, 11, 16	EGSU100NSEACA
100	120/240	No	#14–#2/0	1	10,000	24	50/60	NEMA 3R (outdoor)	9, 11, 16	EGSU100L24RACA
150	120/240	Yes	#4–300 kcmil	1	10,000	—	50/60	NEMA 3R (outdoor)	16, 20, 22	EGSU150NSEACA
200	120/240	No	#4–300 kcmil	1	10,000	—	50/60	NEMA 3R (outdoor)	16, 20, 22	EGSU200ACA
200	120/240	Yes	#4–300 kcmil	1	10,000	—	50/60	NEMA 3R (outdoor)	16, 20, 22	EGSU200NSEACA
400	120/240	Yes	750 kcmil–2 300 kcmil–1/0	1/2	35,000	—	50/60	NEMA 3R (outdoor)	>22	EGSU400NSEACA

Notes

- ① Standard ATS “EGSX” Series compatible with Eaton generators only.
- ② Uses CH type circuit breakers.
- ③ For reference only. Generator size must be determined with proper/actual load calculations.
- ④ UNIVERSAL ATS: compatible with any single-phase, 120/240 V generator brand.
- ⑤ Whole house surge Cat. No. CHSPT2ULTRA included in every Green ATS “EGSU” Series.

3.3

Residential Standby Backup Power Solutions

Automatic Transfer Switches

3

ATS Ready Loadcenter

From the far-reaching power failures brought on by hurricanes and snow/ice storms, to the increasing power outage concerns and an aging electrical infrastructure, backup power is more important than ever. Eaton's ATS Ready loadcenter addresses future backup power needs by enabling a fast, efficient installation of an automatic transfer switch kit to convert from utility power to generator power.

The ATS Ready loadcenter gives homebuilders and electrical contractors the flexibility to install a generator ready system or to install a loadcenter and easily add an ATS in the future. Backup power had never been that versatile before.

ATS Ready Loadcenter Features

- CH Premium Type 200 A single-phase MCB 36-circuit loadcenter
- 50 A ATS "EGSX" type kit for factory or field installation (compatible with Eaton generators only)
- 22 circuits for non-essential loads and 14 circuits for essential backup power loads
- Versatile, space-saving design
- For use with 9 or 11 kW air-cooled generators
- CH cover included
- Lifetime warranty on CH loadcenter and breakers
- NEMA 1 design
- UL Listed

ATS Ready Loadcenter

Description

Catalog Number

CH36B200EGP

ATS Ready loadcenter
Kit CHEGSX50KIT must be ordered separately
Loadcenter only. Includes provision for ATS kit

CH36B200EGP



CHEGSX50KIT

ATS "EGSX" kit for ATS Ready loadcenter
Field-installable automatic transfer switch kit
ATS Ready loadcenter CH36B200EGP must be ordered separately
Intuitive, easy installation
Compatible with Eaton generators only

CHEGSX50KIT



CH36B200EGPK

ATS Ready LC with factory-installed ATS kit
Factory assembled
Compatible with Eaton generator only. Generator needed to complete backup power system
Recommended Eaton generators models:
9/8 kW—Catalog #EGENA9
11/10 kW—Catalog #EGENA11

CH36B200EGPK



Dimensions

Approximate Dimensions in Inches (mm)

Automatic Transfer Switches

Catalog Number	Width	Height	Depth	Weight Lbs (kg)
EGSX50L12	14.25 (362.0)	21.00 (533.4)	4.00 (101.6)	25 (11.33)
EGSX50L12R	14.25 (362.0)	21.00 (533.4)	6.00 (152.4)	29 (13.15)
EGSX100A	14.46 (367.3)	16.87 (428.5)	5.32 (135.1)	25 (11.33)
EGSX100NSEA	14.46 (367.3)	16.87 (428.5)	5.32 (135.1)	28 (12.70)
EGSX100L24RA	14.46 (367.3)	29.33 (744.0)	5.32 (135.1)	38 (17.24)
EGSX200A	14.46 (367.3)	25.08 (637.0)	5.25 (133.4)	35 (15.87)
EGSX150NSEA	14.46 (367.3)	29.20 (741.7)	5.32 (135.1)	45 (20.41)
EGSX200NSEA	14.46 (367.3)	29.20 (741.7)	5.32 (135.1)	45 (20.41)
EGSU100L24RACA	14.46 (367.3)	29.33 (745.0)	5.32 (135.1)	38 (17.24)
EGSU100ACA	14.46 (367.3)	16.87 (428.5)	5.32 (135.1)	25 (11.33)
EGSU100NSEACA	14.46 (367.3)	16.87 (428.5)	5.32 (135.1)	28 (12.70)
EGSU150NSEACA	14.46 (367.3)	29.20 (741.7)	5.32 (135.1)	45 (20.41)
EGSU200ACA	14.46 (367.3)	25.08 (637.0)	5.25 (133.4)	35 (15.88)
EGSU200NSEACA	14.46 (367.3)	29.20 (741.7)	5.32 (135.1)	45 (20.41)
EGSU400NSEACA	23.14 (587.8)	35.55 (903.0)	10.00 (254.0)	120 (54.43)
CH36B200EGPK	14.31 (363.5)	47.50 (1206.5)	3.88 (98.6)	40 (18.14)

3.4

Residential Standby Backup Power Solutions

Manual Transfer Switches

All Panels are Manufactured in the USA and Meet UL 1008

3



Contents

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Technical Data and Specifications	V1-T3-19
Dimensions	V1-T3-19



Learn Online

Product Description

A manual transfer switch is a device that is mounted next to the loadcenter (distribution panel) in the home or small business. The manual transfer switch is used in conjunction with a portable backup power generator and serves the purpose of turning selected circuits on and off during a power outage. The transfer switch panel allows the owner to start up a generator to restore power to critical circuits when utility power is not available.

The owner designates which circuits are critical, such as the refrigerator and certain lights. Sometimes called emergency power panels or emergency generator panels, manual transfer switch panels provide the homeowner or small business owner with a safe and easy way to continue using electrical appliances when the utility power is unavailable temporarily.

Application Description

Manual transfer switches are most often used in residential, agricultural and light commercial applications. Comfort and safety are key concerns of many homeowners who are dependent on an uninterrupted supply of electricity.

The increase in our dependence on power is due in part to the popularity of home offices and in-home health care. Various heavily populated regions of the United States experience periodic power outages due to extreme weather conditions, such as ice and snowstorms, heat waves, tornadoes or hurricanes. These regions that include the Pacific Northwest, Atlantic Coast and the Gulf Coast are the strongest markets for portable generators and manual transfer switches.

Features, Benefits and Functions

Eaton offers two manual transfer switch backup power solutions:

- Manual transfer switches
- Generator panels

Manual Transfer Switches

- Panel and components sold separately
- Hardwired generator connection
- Ideal for new construction/larger loads
- Sturdy copper bus construction
- Uses CH and CHT circuit breaker types (sold separately)
- Mechanically interlocked main disconnects to prevent paralleling of normal and emergency power source
- Indoor and outdoor designs available



Manual Transfer Switch Indoor Design



Manual Transfer Switch Indoor/Outdoor Design

Generator Panels

- Mechanically interlocked main disconnects prevent paralleling of normal and emergency power source
- Panel and components sold separately
- Integral plug-in generator connection (power inlet box)
- All circuit breakers are included—switching duty rated
- Includes dual wattmeters for load balancing
- Indoor and outdoor designs available



Generator Panel
Indoor Design



Generator Panel
Outdoor Design

Standards and Certifications

- UL 67 listed
- UL 1008 listed



Reference Information

Cross-Reference

Watts	Number of Circuits	Ampere Rating	Catalog Number Eaton	Gen/Tran ^①	EmerGen ^①	Square D	Generac ^②
5000	4–8	30	CH48GEN3060R	—	—	QQ48M30DSGP	—
15,000	8–16	60	CH816GEN6060	—	—	QQ48M60DSGP	—
5000	6	20	CH6EGEN2060	20216	6-5000	—	—
5000	6	20	CH6EGEN2060R	R20216	6-5000 + RTE657	—	—
5000	6	20	CH6EGEN2060SU	—	—	—	—
5000	6	20	CH6EGEN2060RSU	—	—	—	—
7500	10	30	CH10EGEN3060	302110-20	10-7500	—	—
7500	10	30	CH10EGEN3060R	R30211-20	10-7500 + RTE1075	—	—
7500	10	30	CH10EGEN3060SUR	—	—	—	—
7500	10	30	CH10EGEN3060RSU	—	—	—	—
7500	10	30	CH10GEN5030SN	—	—	—	—
7500	10	30	CH10GEN5030RSN	—	—	—	—
12,000	10	50	CH10GEN5050SN	—	—	—	—
12,000	10	50	CH10GEN5050RSN	—	—	—	—

Notes

- ① Gen/Trans device is not supplied with a power cord.
- ② Generac device is 7200 maximum watts on six-circuit device and 12,000 maximum watts on 10-circuit device.

Product Selection

3



Manual Transfer Switches and Generator Panels Selection

Enclosure Type	Watts	Number of Circuits	Ampere Rating	Main/Emergency Ampere Rating	Feeder Breakers	Included Accessories	Catalog Number
Standard Manual Transfer Switch							
NEMA 3R	5000	4–8	30	Provision	Provision	None	CH48GEN3060R
NEMA 1	10,000	8–16	60	Provision	Provision	None	CH816GEN6060
Generator Panel							
NEMA 1	5000	6	20	60/20	5–1P151–1P20	None	CH6EGEN2060
NEMA 3R	5000	6	20	60/20	5–1P151–1P20	None	CH6EGEN2060R
NEMA 1	5000	6	20	60/20	5–1P151–1P20	Two-pole surge protector	CH6EGEN2060SUR
NEMA 3R	5000	6	20	60/20	5–1P151–1P20	Two-pole surge protector	CH6EGEN2060RSU
NEMA 1	7500	10	30	60/30	6–1P152–1P2012P30	None	CH10EGEN3060
NEMA 3R	7500	10	30	60/30	6–1P152–1P2012P30	None	CH10EGEN3060R
NEMA 1	7500	10	30	60/30	7–1P152–1P2012P30	Two-pole surge protector	CH10EGEN3060SUR
NEMA 3R	7500	10	30	60/30	7–1P152–1P2012P30	Two-pole surge protector	CH10EGEN3060RSU
Switched Neutral Manual Transfer Switch							
NEMA 1	7500	10	30	50/30	6–1P15, 2–1P20, 1–2P30	None	CH10GEN5030SN
NEMA 3R	7500	10	30	50/30	6–1P15, 2–1P20, 1–2P30	None	CH10GEN5030RSN
NEMA 1	12,000	10	50	50/50	6–1P15, 2–1P20, 1–2P30	None	CH10GEN5050SN
NEMA 3R	12,000	10	50	50/50	6–1P15, 2–1P20, 1–2P30	None	CH10GEN5050RSN



Power Inlet Boxes

Description	Ampere Rating	Voltage	Catalog Number
Flush flange kit (for use with generator panel only)	—	120/240 V	CHEGENFKIT
Power inlet box	20	120/240 V	EGSPIB20
Power inlet box	30	120/240 V	EGSPIB30
Power inlet box	50	120/240 V	EGSPIB50

Warranty

Manual Transfer Switch

- 15-year loadcenter warranty
- Lifetime branch breaker warranty

Generator Panel

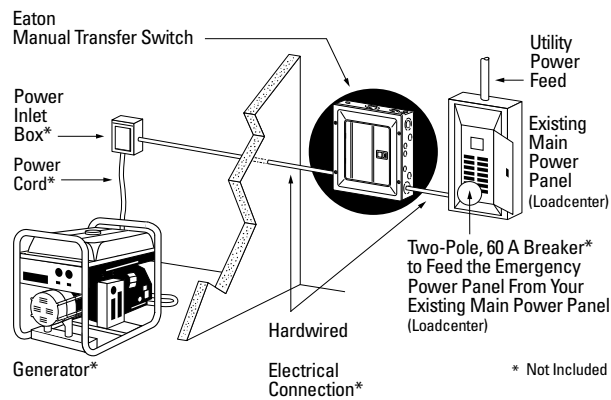
- 15-year loadcenter warranty
- Lifetime branch breaker warranty

Technical Data and Specifications

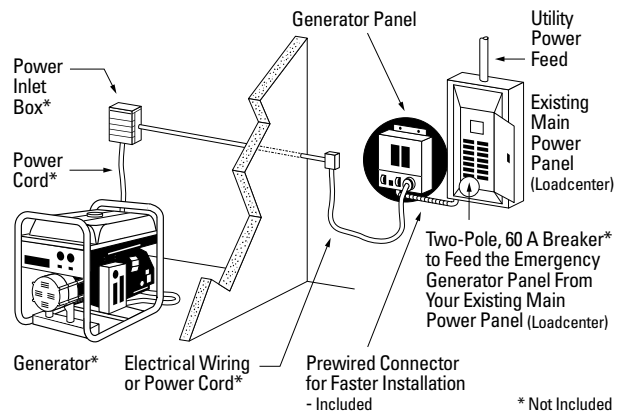
- 10,000 AIC rating
- Switching devices must be circuit breakers
- Manual transfer switch must be supplied with neutral and ground
- Power inlet box must be connected to a circuit breaker for generator protection

Installation Diagrams

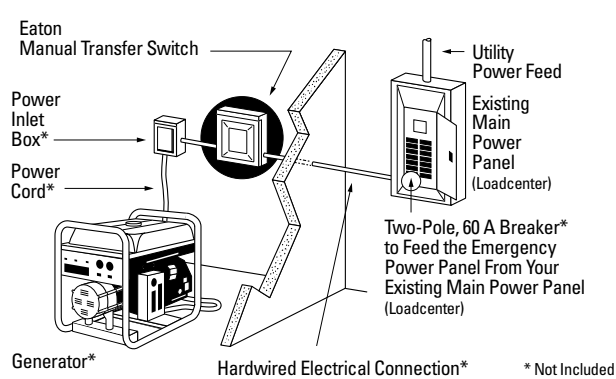
Manual Transfer Switches—Indoor Installation Diagram



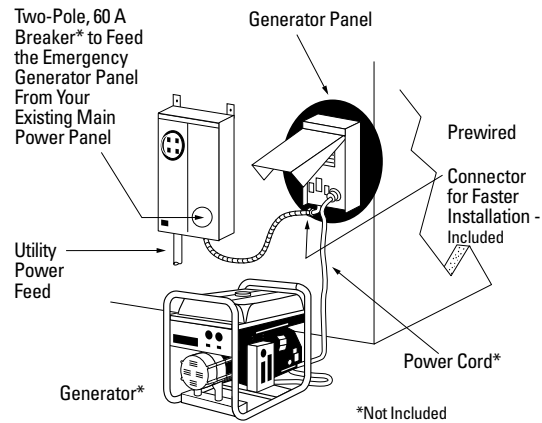
Generator Panels—Indoor Installation Diagram



Manual Transfer Switches—Outdoor Installation Diagram



Generator Panels—Outdoor Installation Diagram



Dimensions

Approximate Dimensions in Inches (mm)

Manual Transfer Switch

Enclosure Type	Height	Width	Depth	Weight Lbs (kg)	
				6-Circuit	10-Circuit
NEMA 1	16.75 (425.5)	14.31 (363.5)	3.88 (98.5)	24 (11)	26 (12)
NEMA 3R	13.00 (330.2)	11.00 (279.4)	3.56 (90.4)	29 (13)	31 (14)

Generator Panel

Enclosure Type	Height	Width	Depth	Weight Lbs (kg)	
				6-Circuit	10-Circuit
NEMA 1	13.23 (336.0)	11.41 (289.8)	4.10 (104.1)	24 (11)	26 (12)
NEMA 3R	17.12 (434.8)	9.45 (240.0)	7.16 (181.9)	29 (13)	31 (14)