Residential Standby Backup Power Solutions

Standby Generator Systems

EGENX20A

EGENX27

Contents

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 8000 watts up to 150,000 watts.

Air-Cooled Standby

Eaton's air-cooled generators range from 8 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

Listed Listed

Catalog Number Selection

Air-Cooled Generators

EGENX 22 A

Type	Rated Power (LP/NG)	Enclosure
Eaton generator EGENX Series	**8** = 8/7 kW **11** = 11/10 kW **16** = 16/16 kW **20** = 20/18 kW **22** = 22/19.5 kW	**A** = Aluminum **Blank** = Steel

Liquid-Cooled Generators

EGEN X 27 A N A N

kW Rating EGENX Series		kW Rating EGEN Series	Voltage Required	Fuel Type	Enclosure	SCAQMD Compliance
22	**36**	**70**	**A** = Single-phase 120/240 V	**N** = Natural gas	**A** = Aluminum	**N** = No
25	**38**	**80**	**G** = Three-phase 208 V	**L** = Liquid propane	**S** = Steel	**Y** = Yes
27	**45**	**100**	**J** = Three-phase 240 V			
30	**48**	**130**	**K** = Three-phase 480 V			
32	**60**	**150**				

Product Selection

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	GFI Receptacle	SCAQMD Compliant	Sound Emissions (dB at 7 m)	Limited Warranty (yrs)	Catalog Number ①
8/7	33.3/29.2	35	Steel	410 cc	1	Liquid propane/ natural gas	No	Yes	62	5	**EGENX8**
11/10	45.8/41.7	50	Aluminum	530 cc	2	Liquid propane/ natural gas	No	Yes	63	5	**EGENX11A**
16/16	66.6/66.6	65/55	Aluminum	992 cc	2	Liquid propane/ natural gas	No	Yes	66	5	**EGENX16A**
20/18	83.3/75.0	90	Aluminum	999 cc	2	Liquid propane/ natural gas	Yes	Yes	66	5	**EGENX20A** ②
22/19.5	91.7/81.2	100	Aluminum	999 cc	2	Liquid propane/ natural gas	Yes	Yes	67	5	**EGENX22A** 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.

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 **G**—208 V, three-phase **J**—240 V, three-phase	**N**—NG/LP field convertible (Default set up for NG)	**A**—Aluminum	**N**—No
EGENX25	25	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase	**N**—NG/LP field convertible (Default set up for NG)	**A**—Aluminum **S**—Steel	**Y**—Yes (Default Compliant)
EGENX27	27	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase	**N**—NG/LP field convertible (Default set up for NG)	**A**—Aluminum	**Y**—Yes (Default Compliant)
EGENX30	30	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase	**N**—NG/LP field convertible (Default set up for NG)	**A**—Aluminum **S**—Steel	**Y**—Yes (Default Compliant)
EGENX32	32	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—NG/LP field convertible (Default set up for NG)	**A**—Aluminum	**N**—No
EGENX36	36	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—NG/LP field convertible (Default set up for NG)	**A**—Aluminum **S**—Steel	**Y**—Yes **N**—No
EGENX38	38	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—NG/LP field convertible (Default set up for NG)	**A**—Aluminum	**N**—No
EGENX45	45	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—NG/LP field convertible (Default set up for NG)	**A**—Aluminum **S**—Steel	**Y**—Yes **N**—No
EGENX48	48	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—NG/LP field convertible (Default set up for NG)	**A**—Aluminum	**Y**—Yes **N**—No
EGENX60	60	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—Natural gas **L**—Liquid propane	**A**—Aluminum **S**—Steel	**N**—No
EGEN70	70	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—Natural gas **L**—Liquid propane	**A**—Aluminum	**Y**—Yes **N**—No
EGEN80	80	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—Natural gas **L**—Liquid propane	**A**—Aluminum	**Y**—Yes **N**—No
EGEN100	100	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—Natural gas **L**—Liquid propane	**A**—Aluminum	**Y**—Yes **N**—No
EGEN130	130	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—Natural gas **L**—Liquid propane	**A**—Aluminum	**Y**—Yes **N**—No
EGEN150	150	**A**—120/240 V, single-phase **G**—208 V, three-phase **J**—240 V, three-phase **K**—480 V, three-phase	**N**—Natural gas **L**—Liquid propane	**A**—Aluminum	**Y**—Yes **N**—No

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.

Accessories

Generator Accessories—Air and Liquid-Cooled Generators

EGENMOBILE

Cold Weather Kits

Extreme Cold Weather Kits

Maintenance Kits

Description	Catalog Number
General Accessories	
Air-cooled transportation cart	**EGENCART**
Bisque paint kit for 2009 model lineup	**EGENPAINT**
Display shell—bisque color	**EGENSHELL**
Generator fascia for air-cooled models. Bisque color (included as standard on EGENX20A and EGENX22A models)	**EGENFASCIA**
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 kit for all air-cooled generator models (8–20 kW). Battery and crankcase warmer	**6212CH**
22, 27, 32, 36, 38, 45 and 60 kW (2.4 L) cold weather kit	**5630CH**
25 and 30 kW (1.5 L) cold weather kit	**6175CH**
100 and 130 kW (6.8 L) cold weather kit	**5633CH**
48 (5.4 L), 80 (4.6 L) and 70 and 150 kW (6.8 L) cold weather kit	**5632CH**
25 and 30 kW (1.6 L) cold weather kit for models prior to February 2012	**5629CH**
48 kW (4.2 L) cold weather kit for models prior to February 2012	**5631CH**
Extreme Cold Weather Kits	
25 and 30 kW extreme cold weather kit 1.5 L engine	**6174CH**
25 and 30 kW extreme cold weather kit 1.6 L engine (prior to February 2012)	**5615CH**
22, 27, 32, 36, 38, 45 and 60 kW extreme cold weather kit for 2.4 L engine	**5616CH**
48 kW extreme cold weather kit for 5.4 L engine	**6204CH**
48 kW extreme cold weather kit for 4.2 L engine (prior to February 2012)	**5618CH**
70, 100 and 130 kW generator extreme cold weather kit for 6.8 L engine gear drive	**5620CH**
80 kW extreme cold weather kit for 4.6 L engine	**5619CH**
150 kW generator extreme cold weather kit for 6.8 L engine direct drive	**5667CH**
Extreme cold weather kit (engine warmer) for air-cooled 8–10 kW, 410/530 cc engines (after April 2010)	**5863CH**
Extreme cold weather kit (engine warmer) for air-cooled 14–20 kW, 760/992/999 cc engines (after April 2010)	**5864CH**
Maintenance Kits	
8 kW generator maintenance kit 410 cc engine. For #EGENX8 model only	**6482CH**
11 kW generator maintenance kit 530 cc engine. For #EGENX11A model only	**6483CH**
16 kW generator maintenance kit, 992 cc engine. For #EGENX16A model only	**6484CH**
20 kW generator maintenance kit, 999 cc engine. For #EGENX20A model only	**6485CH**
22 kW generator maintenance kit, 999 cc engine. For #EGENX22A model only	**6485CH**
8 kW generator maintenance kit 410 cc engine. #EGEN8 vintage model only	**5662CH**
10 kW generator maintenance kit 530 cc engine. #EGEN10 vintage model only	**5663CH**
14 and 17 kW generator maintenance kit, 760/990 cc engine. #EGEN14 and #EGEN17-17A vintage models only	**5664CH**
14 and 17 kW generator maintenance kit, 760/990 cc engine. For #EGENX14 and #EGENX17-17A vintage models only	**6484CH**
20 kW generator maintenance kit, 999 cc engine. #EGEN20A vintage model only	**5665CH**
22 and 27 kW generator maintenance kit, 2.4 L engine	**5656CH**
25 and 30 kW generator maintenance kit, 1.5 L engine	**6176CH**
25 and 30 kW generator maintenance kit, 1.6 L engine (prior to February 2012)	**5655CH**
32, 36 and 38 kW generator maintenance kit, 2.4 L engine	**5984CH**
45 kW generator maintenance kit, 2.4 L engine	**6172CH**
48 kW generator maintenance kit, 4.2 L engine	**5658CH**
60 kW generator maintenance kit, 2.4 L engine	**6171CH**
80 kW generator maintenance kit, 4.6 L engine	**5985CH**
70, 100, 130 and 150 kW generator maintenance kit, 6.8 L engine	**5660CH**

Sizing Guidelines

When selecting the essential circuits that will be switched to "Backup Power," it is important that the sum of the combined circuit loads does not exceed the wattage/amperage capacity of the generator. To help you with your selection of essential circuits, please add up the total wattage of all electrical devices to be connected at one time. This total should NOT be greater than the generator's wattage capacity.

Refer to Eaton Generator Sizing Guide Publication Number TD00405018E and consult with a trained professional.

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)
EGENX8	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	360 (163.0)
EGENX11A	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	373 (169.2)
EGENX16A	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	437 (198.2)
EGENX20A	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	451 (204.6)
EGENX22A	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 lights can be taken from light bulbs. The rated wattage of tools, appliances and motors can usually be found on a data plate or 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 Some electric motors (induction types) require about three times more watts of power for starting than for running. This surge lasts for only a few seconds. Be sure you allow for this high starting wattage when selecting electrical devices that will be energized by the backup power system:
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

Contents

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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

UL Listed

Catalog Number Selection

Portable Generators

EGEN P 8000 E X

Eaton generator

Type	Power Output	Startup Method	Model
P = Portable	**5500** = 5.5 kW **6500** = 6.5 kW **7000** = 7.5 kW **8000** = 8 kW **15000** = 15 kW **17500** = 17.5 kW	**Blank** = Manual/recoil only **E** = Electric and/or manual/recoil	**Blank** = General purpose **CA** = General purpose "CARB" compliant (CA only) **X** = XG Series

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**
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**

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
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 120 A 5-20R duplex	2/1 Ltd	**EGENP6500CA**

Notes

① Requires gasoline as fuel to operate.

② California Air Resources Board.

Dimensions

Approximate Dimensions in Inches (mm)

Portable Generators

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)
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)
EGENP7500E	27.25 (692.2)	27.00 (685.8)	25.00 (635.0)	191.5 (86.9)
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)
EGENP7000EX	31.00 (787.4)	25.50 (647.7)	28.00 (711.2)	245.0 (111.2)
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)
EGENP5500CA	27.25 (692.2)	27.00 (685.8)	25.00 (635.0)	170.9 (77.6)
EGENP6500CA	27.25 (692.2)	27.00 (685.8)	25.00 (635.0)	177.0 (80.3)

Residential Automatic Transfer Switches

Contents

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.

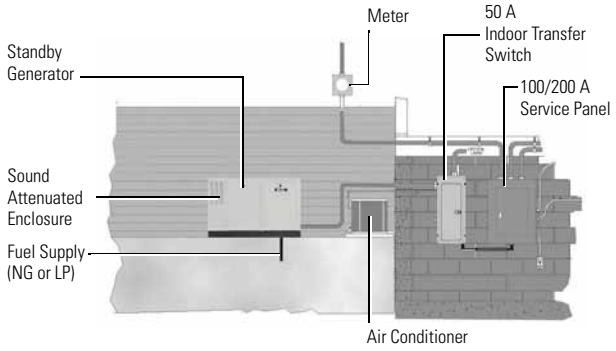
As a part of Eaton's commitment to quality, every Green ATS, at no extra cost, will ship with a CHSPT2ULTRA whole surge protector, which will help prevent potential damage to valued electronics caused by power surges in the utility line.

Application Description

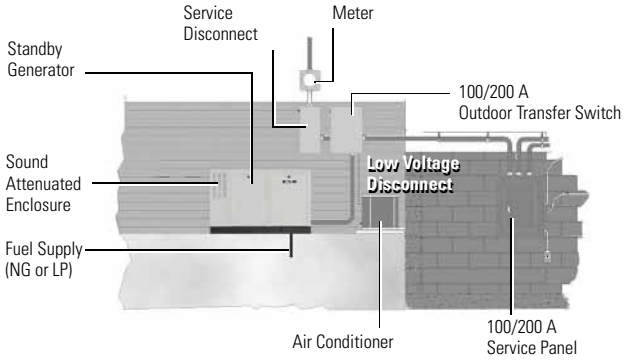
50, 100, 150, 200 and 400 A Switches

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



Standards and Certifications

- UL 1008 listed

Listed

Catalog Number Selection

Standard Automatic Transfer Switches—EGSX Series

E GSX 200 __ NSEA

Manufacturer	Type	Ampere Rating	Loadcenter (CH Type, Integral)	Service Entrance Rated
Eaton	Generator transfer switch EGSX Series	**50** = 50 A **100** = 100 A **150** = 150 A **200** = 200 A **400** = 400 A	**Blank** = None **L12** = 12 circuits N1 **L12R** = 12 circuits N3R **L24R** = 24 circuits N3R	**NSEA** = Service entrance (normal source only) **A** = Non-service entrance

Green Automatic Transfer Switches—EGSU Series

E GSU 200 __ NSE ACA

Manufacturer	Type	Ampere Rating	Loadcenter (CH Type, Integral)	Service Entrance Rated	Load Management
Eaton	Generator universal transfer switch EGSU "Green" Series	**100** = 100 A **150** = 150 A **200** = 200 A **400** = 400 A	**Blank** = None **L24** = 24 circuits	**NSE** = Service entrance (normal source only) **Blank** = Non-service entrance	**ACA** = Active load management

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) ②	Catalog Number
50	120/240	No	2	#14–#6	1	5000	12	50/60	NEMA 1 (indoor)	8, 11	**EGSX50L12**
50	120/240	No	2	#14–#6	1	5000	12	50/60	NEMA 3R (outdoor)	8, 11	**EGSX50L12R**
100	120/240	No	2	#14–#2/0	1	10,000	—	50/60	NEMA 3R (outdoor)	8, 11, 16	**EGSX100A**
100	120/240	Yes	2	#14–#2/0	1	25,000	—	50/60	NEMA 3R (outdoor)	8, 11, 16	**EGSX100NSEA**
100	120/240	No	2	#14–#2/0	1	10,000	24	50/60	NEMA 3R (outdoor)	8, 11, 16	**EGSX100L24RA**
150	120/240	Yes	2	#4–300 kcmil	1	25,000	—	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	25,000	—	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)	8, 11, 16	**EGSU100ACA**
100	120/240	Yes	#14–#2/0	1	25,000	—	50/60	NEMA 3R (outdoor)	8, 11, 16	**EGSU100NSEACA**
100	120/240	No	#14–#2/0	1	10,000	24	50/60	NEMA 3R (outdoor)	8, 11, 16	**EGSU100L24RACA**
150	120/240	Yes	#4–300 kcmil	1	25,000	—	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	25,000	—	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.

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 8 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: 8/7 kW–Catalog #EGENX8 11/10 kW–Catalog #EGENX11A	**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)

All Panels are Manufactured in the USA and Meet UL 1008

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Contents

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

UL 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**	—	—	QO48M30DSGP	—
15,000	8–16	60	**CH816GEN6060**	—	—	QO48M60DSGP	—
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

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

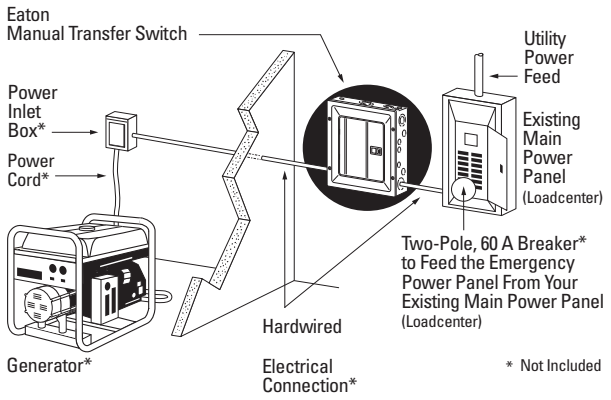
- 15-year loadcenter warranty
- Lifetime branch breaker warranty

Technical Data and Specifications

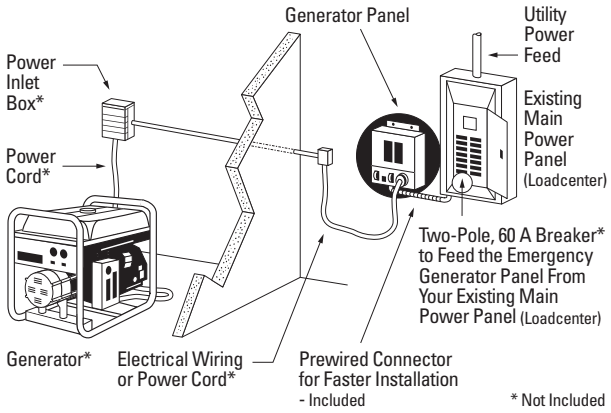
- 10,000 AIC rating
- Switching devices must be circuit breakers
- Manual transfer switch must be supplied with neutral and ground
- Power inlet box must be connected to a circuit breaker for generator protection

Installation Diagrams

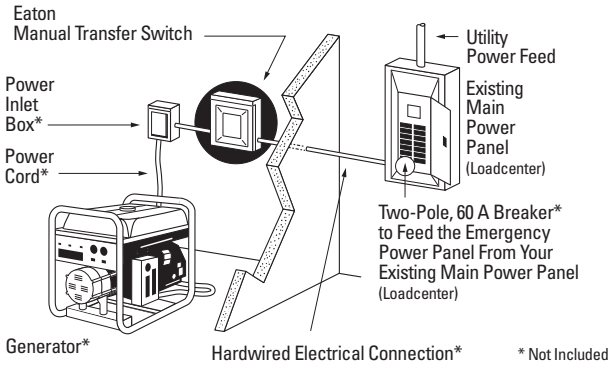
Manual Transfer Switches—Indoor Installation Diagram



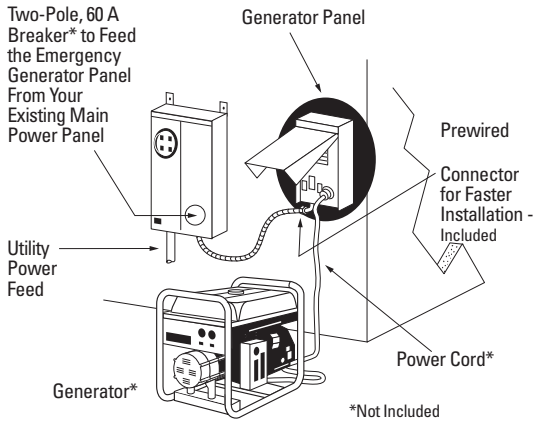
Generator Panels—Indoor Installation Diagram



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)
NEMA 1	16.75 (425.5)	14.31 (363.5)	3.88 (98.5)	25 (11)
NEMA 3R	13.00 (330.2)	11.00 (279.4)	3.56 (90.4)	14 (6)

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)