

Residential Standby Backup Power Solutions



3.1 Standby Generators

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Residential Standby Backup Power Solutions

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Standby Generator Systems



EGENX20A



EGEN70

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 20 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 14, 17 and 20 kW 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: 120/240V, single-phase; 120/208V, three-phase; 240V, three-phase; and 277/480V, three-phase.

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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

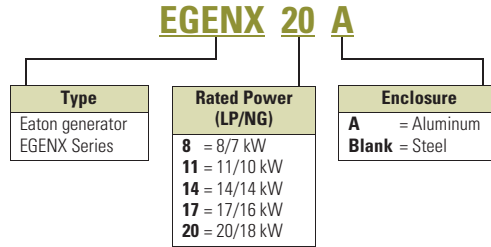
Standards and Certifications

- CSA, cUL® and UL 2200 listed and approved
- All transfer switches are UL 67 and UL 1008 listed as "Transfer Switches"
- All generators are UL 2200 listed

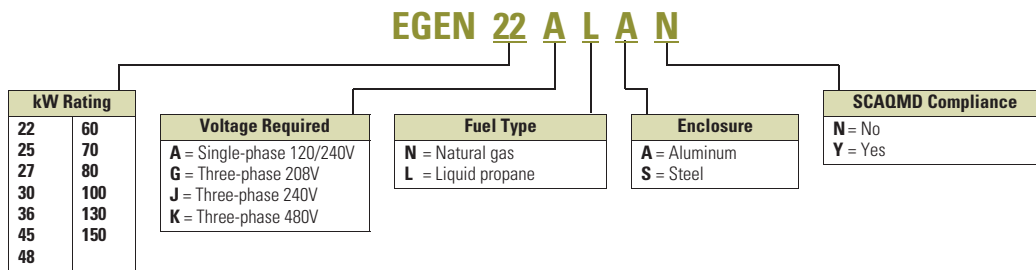


Catalog Number Selection

Air-Cooled Generators



Liquid-Cooled Generators



Product Selection

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 7m)	Limited Warranty (yrs)	Catalog Number
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	Steel	530 cc	2	Liquid propane/ natural gas	No	Yes	63	5	EGENX11
14/14	58.3/58.3	60	Steel	990 cc	2	Liquid propane/ natural gas	No	Yes	66	5	EGENX14
17/16	70.8/66.6	65	Steel	990 cc	2	Liquid propane/ natural gas	Yes	Yes	66	5	EGENX17
17/16	70.8/66.6	65	Aluminum	990 cc	2	Liquid propane/ natural gas	Yes	Yes	66	5	EGENX17A
20/18	83.3/75.0	90	Aluminum	990 cc	2	Liquid propane/ natural gas	Yes	Yes	66	5	EGENX20A ①

Note

① Includes No. EGENFASCIA as standard.

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EGEN48ANAN



Liquid-Cooled Generators ^{①②}

Catalog Number Prefix	kW Rating	Voltages Available	Fuel Type	Enclosure	SCAQMD Compliance		
EGEN22	22	A—120/240V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	Y—Yes (Default Compliant)		
		G—208V, three-phase					
		J—240V, three-phase					
EGEN25	25	A—120/240V, single-phase	N—NG/LP field convertible (Default set up for NG)	S—Steel	Y—Yes (Default Compliant)		
		G—208V, three-phase					
		J—240V, three-phase					
EGEN27	27	A—120/240V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	Y—Yes (Default Compliant)		
		G—208V, three-phase					
		J—240V, three-phase					
EGEN30	30	A—120/240V, single-phase	N—NG/LP field convertible (Default set up for NG)	S—Steel	Y—Yes (Default Compliant)		
		G—208V, three-phase					
		J—240V, three-phase					
EGEN36	36	A—120/240V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	Y—Yes		
		G—208V, three-phase			N—No		
		J—240V, three-phase					
		K—480V, three-phase					
EGEN45	45	A—120/240V, single-phase	N—NG/LP field convertible (Default set up for NG)	S—Steel	Y—Yes		
		G—208V, three-phase			N—No		
		J—240V, three-phase					
		K—480V, three-phase					
EGEN48	48	A—120/240V, single-phase	N—NG/LP field convertible (Default set up for NG)	A—Aluminum	Y—Yes		
		G—208V, three-phase			N—No		
		J—240V, three-phase					
		K—480V, three-phase					
EGEN60	60	A—120/240V, single-phase	N—Natural gas	A—Aluminum	Y—Yes		
		G—208V, three-phase	L—Liquid propane			S—Steel	N—No
		J—240V, three-phase					
		K—480V, three-phase					
EGEN70	70	A—120/240V, single-phase	N—Natural gas	A—Aluminum	Y—Yes		
		G—208V, three-phase	L—Liquid propane			N—No	
		J—240V, three-phase					
		K—480V, three-phase					
EGEN80	80	A—120/240V, single-phase	N—Natural gas	A—Aluminum	Y—Yes		
		G—208V, three-phase	L—Liquid propane			N—No	
		J—240V, three-phase					
		K—480V, three-phase					
EGEN100	100	A—120/240V, single-phase	N—Natural gas	A—Aluminum	Y—Yes		
		G—208V, three-phase	L—Liquid propane			N—No	
		J—240V, three-phase					
		K—480V, three-phase					
EGEN130	130	A—120/240V, single-phase	N—Natural gas	A—Aluminum	Y—Yes		
		G—208V, three-phase	L—Liquid propane			N—No	
		J—240V, three-phase					
		K—480V, three-phase					
EGEN150	150	A—120/240V, single-phase	N—Natural gas	A—Aluminum	Y—Yes		
		G—208V, three-phase	L—Liquid propane			N—No	
		J—240V, three-phase					
		K—480V, 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 legally required “emergency” applications as required by NEC Article 700/NFPA 110.

② Models 70–150 kW include battery. For all other liquid-cooled models, battery must be furnished by others.

Accessories

Generator Accessories—Air and Liquid-Cooled Generators

	Description	Catalog Number
	General Accessories	
	Air-cooled transportation cart	EGENCART
	Bisque paint kit for 2008 model lineup	EGENPAINT
	Display shell—bisque color	EGENSHELL
	Generator fascia for air-cooled models. Bisque color (included as standard on EGENX20A models)	EGENFASCIA
	Wireless Remote Monitoring	
	Wireless remote monitor for air-cooled and liquid-cooled generators. Compatible with 2008 models or newer. USA only	EGENMOBILE
	EGENMOBILE adapter wire harness kit required for liquid-cooled generators only. 2008 models or newer. USA only	EGENKIT
	Basic remote wireless monitor. Compatible with air/liquid-cooled models 8–150 kW. 2008 models or newer	5928CH
	Remote monitor adapter kit for liquid-cooled units only—must be ordered w/5928CH basic remote monitor. 2008 models or newer	5958CH
	Cold Weather Kits	
	Cold weather kit for all air-cooled generator models (8–20 kW). Battery and crankcase warmer	6212CH
	22, 27, 36, 45 and 60 kW (2.4L) cold weather kit	5630CH
	25 and 30 kW (1.5L) cold weather kit	6175CH
	100 and 130 kW (6.8L) cold weather kit	5633CH
	48 (5.4L), 80 (4.6L) and 70 and 150 kW (6.8L) cold weather kit	5632CH
	25 and 30 kW (1.6L) cold weather kit for models prior to February 2012	5629CH
	48 kW (4.2L) cold weather kit for models prior to February 2012	5631CH
	Extreme Cold Weather Kits	
	25 and 30 kW extreme cold weather kit 1.5L engine	6174CH
	25 and 30 kW extreme cold weather kit 1.6L engine (prior to February 2012)	5615CH
	22, 27, 36, 45 and 60 kW extreme cold weather kit for 2.4L engine	5616CH
	48 kW extreme cold weather kit for 5.4L engine	6204CH
	48 kW extreme cold weather kit for 4.2L engine (prior to February 2012)	5618CH
	70, 100 and 130 kW generator extreme cold weather kit for 6.8L engine gear drive	5620CH
	80 kW extreme cold weather kit for 4.6L engine	5619CH
	150 kW generator extreme cold weather kit for 6.8L 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 #EGENX11 model only	6483CH
	14 and 17 kW generator maintenance kit, 760/990 cc engine. For #EGENX14 & #EGENX17-17A models only	6484CH
	20 kW generator maintenance kit, 999 cc engine. For #EGENX20A 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 & EGEN17-17A vintage models only	5664CH
	20 kW generator maintenance kit, 999 cc engine. #EGEN20A vintage model only	5665CH
	22 and 27 kW generator maintenance kit, 2.4L engine	5656CH
	25 and 30 kW generator maintenance kit, 1.5L engine	6176CH
	25 and 30 kW generator maintenance kit, 1.6L engine (prior to February 2012)	5655CH
	36 kW generator maintenance kit, 2.4L engine	5984CH
	45 kW generator maintenance kit, 2.4L engine	6172CH
	48 kW generator maintenance kit, 4.2L engine	5658CH
	60 kW generator maintenance kit, 2.4L engine	6171CH
	80 kW generator maintenance kit, 4.6L engine	5985CH
	70, 100, 130 and 150 kW generator maintenance kit, 6.8L engine	5660CH

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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/ampere 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 Dimension 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)	340 (154.4)
EGENX11	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	387 (175.7)
EGENX14	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	439 (199.3)
EGENX17	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	455 (206.6)
EGENX17A	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	421 (191.1)
EGENX20A	48.00 (1219.2)	25.00 (635.0)	29.00 (736.6)	451 (204.8)

Liquid-Cooled Standby

Catalog Number	Length	Width	Height	Weight in Lbs (kg)
EGEN22	62.00 (1574.8)	29.00 (736.6)	34.00 (863.6)	895 (406.3)
EGEN25	63.00 (1600.2)	30.00 (762.0)	35.00 (889.0)	875 (397.3)
EGEN27	64.00 (1625.6)	31.00 (787.4)	36.00 (914.4)	891 (404.5)
EGEN30	60.00 (1651.0)	32.00 (812.8)	37.00 (939.8)	935 (424.5)
EGEN36	77.00 (1955.8)	34.00 (863.6)	45.00 (1143.0)	1683 (764.1)
EGEN45	78.00 (1981.2)	35.00 (889.0)	46.00 (1168.4)	1414 (642.0)
EGEN48	79.00 (2006.6)	36.00 (914.4)	47.00 (1193.8)	1703 (773.2)
EGEN60 ^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.

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.

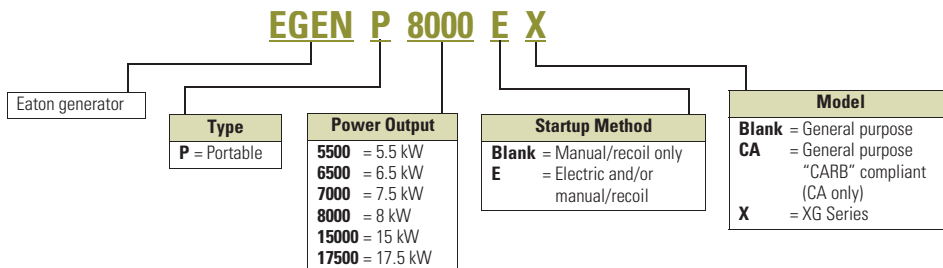
Standards and Certifications

- UL Listed



Catalog Number Selection

Portable Generators



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Residential Standby Backup Power Solutions

Portable Generators

Product Selection

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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 30A L14-30R (twist lock), 2 x 20A 5-20R duplex	2/1 Ltd	EGENP5500
EGENP6500 	6500	8125	389 cc/OHV	Manual	7.2	10	No	1 x 30A L14-30R (twist lock), 2 x 20A 5-20R duplex	2/1 Ltd	EGENP6500
EGENP6500E 	6500	8125	389 cc/OHV	Manual/ electric	7.2	10	Yes	1 x 30A L14-30R (twist lock), 2 x 120A 5-20R duplex	2/1 Ltd	EGENP6500E
EGENP7500E 	7500	9375	420 cc/OHV	Manual/ electric	8.0	12	Yes	1 x 30A L14-30R (twist lock), 2 x 20A 5-20R duplex	2/1 Ltd	EGENP7500E
EGENP15000E 	15000	22500	992 cc/OHVI	Manual/ electric	16.0	12	Yes	1 x 50A 14-50R, 1 x 30A L14-30R (twist lock), 2 x 30A L5-30R (twist lock), 1 x 20A 5-20R duplex, 1 x 20A GFCI 5-20R duplex	2/1 Ltd	EGENP15000E
EGENP17500E 	17500	26250	992 cc/OHVI	Manual/ electric	16.0	10	Yes	1 x 50A 14-50R, 1 x 30A L14-30R (twist lock), 1 x 30A L5-30R (twist lock), 1 x 20A 5-20R duplex, 1 x 20A 5-20R GFCI duplex	2/1 Ltd	EGENP17500E

Notes

① Requires gasoline as fuel to operate.
All 120/240V. Required gasoline as fuel.

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 30A L14-30R (twist lock), 2 x 20A GFCI 5-20R duplex	2/1 Ltd	EGENP7000EX
										
EGENP8000EX	8000	10000	407 cc/OHVI	Manual/ electric	10	10	Yes	1 x 30A L14-30R (twist lock), 2 x 20A GFCI 5-20R duplex	2/1 Ltd	EGENP8000EX
										
EGENP10000EX	10000	12500	530 cc/OHVI	Manual/ electric	10	10	Yes	1 x 50A 14-50R, 1 x 30A L14-30R (twist lock), 1 x 30A L5-30R (twist Lock), 2 x 20A GFCI 5-20R duplex	2/1 Ltd	EGENP10000EX
										
CARB Compliant (Required in California Only)										
EGENP5500CA	5500	6875	389 cc/OHV	Manual	7.2	10	No	1 x 30A L14-30R (twist lock), 2 x 20A GFCI 5-20R duplex	2/1 Ltd	EGENP5500CA
										
EGENP6500CA	6500	8125	389 cc/OHV	Manual	7.2	10	No	1 x 30A L14-30R (twist lock), 2 x 120A 5-20R duplex	2/1 Ltd	EGENP6500CA
										

Notes

^① Requires gasoline as fuel to operate.
All 120/240V. Required gasoline as fuel.

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Residential Standby Backup Power Solutions

Portable Generators

Dimensions

Approximate Dimension 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)
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



Product Description

50, 100, 150, 200 and 400A 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.

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Description

Automatic Transfer Switches

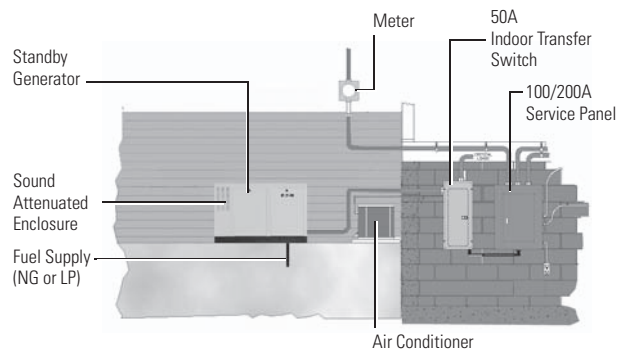
Standards and Certifications	V1-T3-12
Catalog Number Selection	V1-T3-12
Product Selection	V1-T3-13
ATS Ready Loadcenter	V1-T3-14
Dimensions	V1-T3-15

Application Description

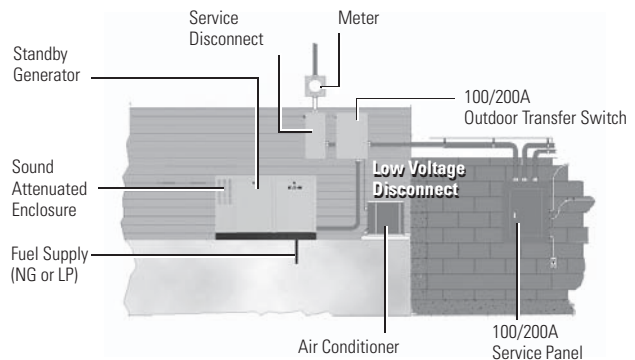
50, 100, 150, 200 and 400A Switches

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

50A—Indoor Installation—Selected Load Pre-Wired



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



3.3

Residential Standby Backup Power Solutions

Automatic Transfer Switches

Standards and Certifications

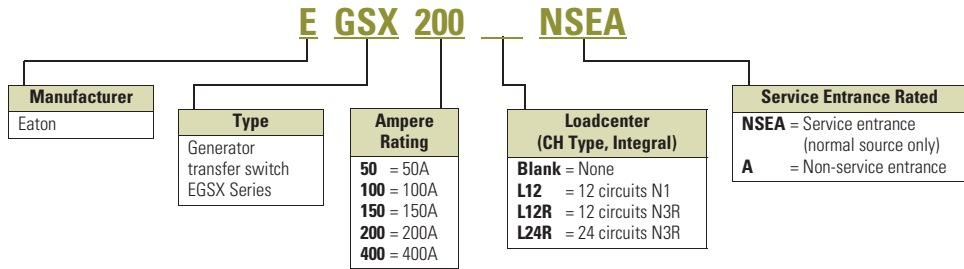
- UL 1008 listed

3

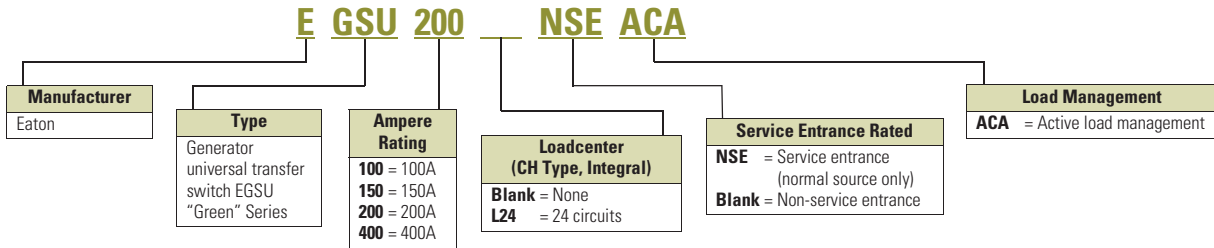


Catalog Number Selection

Standard Automatic Transfer Switches—EGSX Series



Green Automatic Transfer Switches—EGSU Series



Product Selection

3

EGSX50L12R



Standard Automatic Transfer Switches ①

Ampere Rating	Voltage	Service Entrance Rated	No. of Load Shed Contacts	Contact Wire Size Range(s)	No. of Cables per Phase	Withstand Current (rms) at 240 Vac	No. of Circuits Included ②	Frequency (Hz)	Enclosure Type	Recommended Generator Sizes (kW) ③	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, 14	EGSX100A
100	120/240	Yes	2	#14–#2/0	1	10,000	—	50/60	NEMA 3R (outdoor)	8, 11, 14	EGSX100NSEA
100	120/240	No	2	#14–#2/0	1	25,000	24	50/60	NEMA 3R (outdoor)	8, 11, 14	EGSX100L24RA
150	120/240	Yes	2	#4–300 kcmil	1	25,000	—	50/60	NEMA 3R (outdoor)	14, 17, 20	EGSX150NSEA
200	120/240	No	2	#4–300 kcmil	1	25,000	—	50/60	NEMA 3R (outdoor)	14, 17, 20	EGSX200A
200	120/240	Yes	2	#4–300 kcmil	1	25,000	—	50/60	NEMA 3R (outdoor)	14, 17, 20	EGSX200NSEA
400	120/240	Yes	2	750 kcmil–2 300 kcmil–1/0	1/2	35,000	—	50/60	NEMA 3R (outdoor)	>20	EGSX400NSEA

EGSU200NSEACA



Green Automatic Transfer Switches ④—Featuring Active Load Management Technology

Ampere Rating	Voltage	Service Entrance Rated	Contact Wire Size Range(s)	No. of Cables per Phase	Withstand Current (rms) at 240 Vac	No. of Circuits Included ②	Frequency (Hz)	Enclosure Type	Recommended Generator Sizes (kW) ③	Catalog Number
100	120/240	No	#14–#2/0	1	10,000	—	50/60	NEMA 3R (outdoor)	8, 11, 14	EGSU100ACA
100	120/240	Yes	#14–#2/0	1	10,000	—	50/60	NEMA 3R (outdoor)	8, 11, 14	EGSU100NSEACA
100	120/240	No	#14–#2/0	1	10,000	24	50/60	NEMA 3R (outdoor)	8, 11, 14	EGSU100L24RACA
150	120/240	Yes	#4–300 kcmil	1	25,000	—	50/60	NEMA 3R (outdoor)	14, 17, 20	EGSU150NSEACA
200	120/240	No	#4–300 kcmil	1	25,000	—	50/60	NEMA 3R (outdoor)	14, 17, 20	EGSU200ACA
200	120/240	Yes	#4–300 kcmil	1	25,000	—	50/60	NEMA 3R (outdoor)	14, 17, 20	EGSU200NSEACA
400	120/240	Yes	750 kcmil–2 300 kcmil–1/0	1/2	35,000	—	50/60	NEMA 3R (outdoor)	>20	EGSU400NSEACA

CHSPT2ULTRA ⑤



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, 120/240V 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 200A single-phase MCB 36-circuit loadcenter
- 50A 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 #EGENX11

CH36B200EGPK



Dimensions

Approximate Dimension 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

<i>Description</i>	<i>Page</i>
Manual Transfer Switches	
Standards and Certifications	V1-T3-17
Reference Information	V1-T3-17
Product Selection	V1-T3-18
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 CHNT 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)	—	120/240V	CHEGENFKIT
Power inlet box	20	120/240V	EGSPIB20
Power inlet box	30	120/240V	EGSPIB30
Power inlet box	50	120/240V	EGSPIB50

Warranty

Manual Transfer Switch

- 15-year loadcenter warranty
- Lifetime branch breaker warranty

Generator Panel

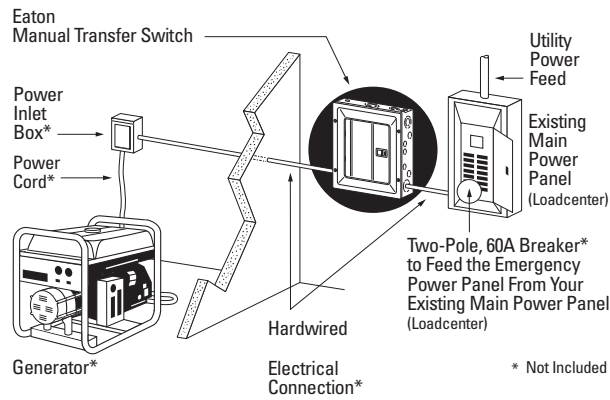
- 15-year loadcenter warranty
- Lifetime branch breaker warranty

Technical Data and Specifications

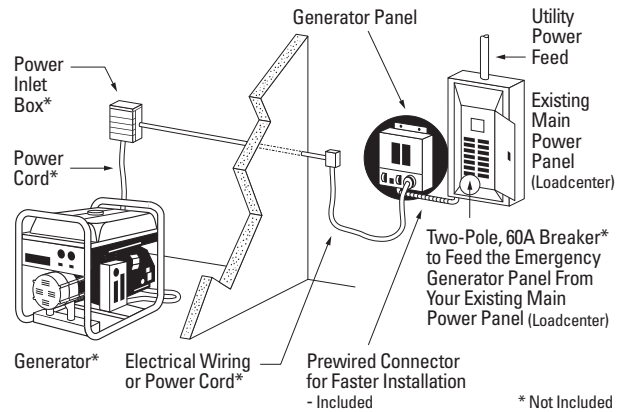
- 10,000 AIC rating
- Switching devices must be circuit breakers
- Manual transfer switch must be supplied with neutral and ground
- Power inlet box must be connected to a circuit breaker for generator protection

Installation Diagrams

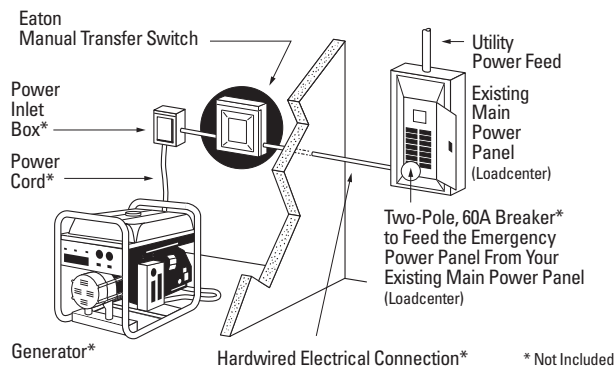
Manual Transfer Switches—Indoor Installation Diagram



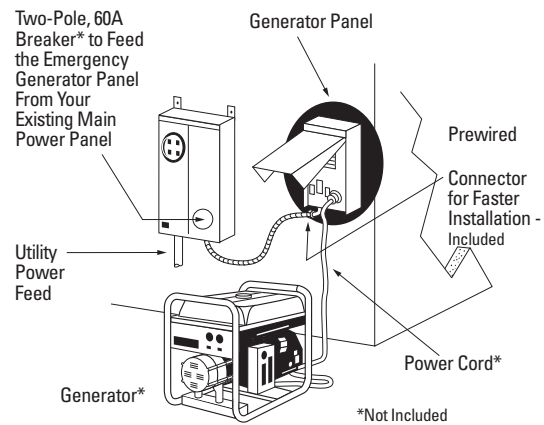
Generator Panels—Indoor Installation Diagram



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)	
				Six-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)