Home Standby - 7kW - 12kW - 15kW

Air-Cooled Gas Engine Generator Sets

Continuous Standby Power Rating

Model # 04389 - 7kW 60Hz
Model # 04456 - 12kW 60Hz
Model # 04390 - 15kW 60Hz

INCLUDES:

- ***Automatic*** **Transfer Switch With Built-In Emergency Load Center**
- **Pre-wired External Connection Box**
- **Flexible Fuel Line**
- **Composite Mounting Pad**
- **Pre-wired conduits**
- **Natural Gas or LP Gas Operation**
- **UL 2200 Listed**

FEATURES

- ❒ **INNOVATIVE DESIGN & PROTOTYPE TESTING** are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- ❒ **TEST CRITERIA:**
  - ✓ **PROTOTYPE TESTED**
  - ✓ **SYSTEM TORSIONAL TESTED**
  - ✓ **NEMA MG1-22 EVALUATION**
  - ✓ **MOTOR STARTING ABILITY**
- ❒ **SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION.** This state-of-the-art power maximizing regulation system is standard on all Generac models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine.
- ❒ **SINGLE SOURCE SERVICE RESPONSE** from Generac's dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component. You are never on your own when you own a GENERAC POWER SYSTEM.
- ❒ **GENERAC TRANSFER SWITCHES.** Long life and reliability are synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems and controls for total system compatibility.

GUARDIAN®
by Generac Power Systems, Inc.

HOME STANDBY SPECIFICATIONS

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ENGINE	•Generac (OHVI) Design	Maximizes engine "breathing" for increased fuel efficiency. Cylinder walls run cooler, reducing oil consumption. Because heat is the primary cause of engine wear, the OHVI has a significantly longer life than competitive engines.
	•"Spiny-lok" cast iron cylinder walls	Rigid construction and added durability provide long engine life.
	•Electronic ignition, spark advance and compression release	These features combine to assure smooth, quick starting every time.
	•Full pressure lubrication system	Superior lubrication to all vital bearings means better performance, less maintenance and significantly longer engine life.
	•Low oil pressure shutdown system	Superior shutdown protection prevents catastrophic engine damage due to low oil.
	•High temperature shutdown	Prevents damage due to overheating.
GENERATOR	•Revolving field	Allows for smaller, light weight unit that operates 25% more efficiently than a revolving armature generator.
	•Skewed stator	Produces a smooth output waveform for compatibility with electronic equipment.
	•Displaced phase excitation	Maximizes motor starting capability. Provides more surge capability than brushless generator designs.
	•Automatic voltage regulation	Regulates the output voltage to ±2% prevents damaging voltage spikes.
	•UL 2200 Listed	For your safety
TRANSFER SWITCH	•Fully Automatic	Transfers your vital electrical loads to the energized source of power.
	•Remote Mounting	Mounts near your existing distribution panel for simple, low cost installation.
	•UL Listed	For your safety
MICROPROCESSOR CONTROL	•Manual/Auto/Off switch	Selects the operating mode.
	•Utility voltage sensing	Constantly monitors utility voltage, setpoints 60% dropout, 80% pick-up, of standard voltage.
	•Utility interrupt delay	Prevents nuisance start-ups of the engine, set point approximately 10 seconds.
	•Engine warm-up	Ensures engine is ready to assume the load, setpoint approximately 10 seconds.
	•Engine cool-down	Allows engine to cool prior to shutdown, setpoint approximately 1 minute.
	•Seven day exerciser	Operates engine to prevent oil seal drying and damage between power outages.
	•Timed Trickle Battery charger	Maintains battery amperage to insure starting.
	•Main Line Circuit Breaker	Protects generator from overload.
UNIT	•Weather protective enclosure	Ensures protection against mother nature. Hinged key locking roof panel for security. Electrostatically applied epoxy paint for durability.
	•Enclosed critical grade muffler	Quiet, critical grade muffler is mounted inside the unit to prevent injuries.
	•Small, compact, attractive	Makes for an easy, eye appealing installation.
INSTALLATION KIT	•Pre-wired External Connection Box •1' Flexible Fuel Line •Composite Mounting Pad •Pre-wired conduits •UL Listed wire nuts	Easy Installation - Virtually all hardware included, plus step-by-step photographed Installation Guide.

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GENERATOR	Model 04389 (7kW)	Model 04456 (12kW)	Model 04390 (15kW†)
Rated Maximum Continuous Power Capacity (LP)	7,000 Watts*	12,000 Watts*	15,000 Watts*
Rated Maximum Continuous Power Capacity (NG)	6,000 Watts*	12,000 Watts*	13,000 Watts*
Rated Voltage	120/240	120/240	120/240
Rated Maximum Continuous Load Current			
120 Volts	50.0 NG/58.3 LP	100.0 NG/100.0 LP	108.3 NG/125.0 LP
240 Volts	25.0 NG/29.2 LP	50.0 NG/ 50.0 LP	54.2 NG/62.5 LP
Main Line Circuit Breaker	30 Amp	50 Amp	60 Amp/70 Amp†
Phase	1	1	1
Number of Rotor Poles	2	2	2
Rated AC Frequency	60Hz	60Hz	60Hz
Power Factor	1	1	1
Battery Requirement (not included)	Group 26/26R 12 Volts and 350 Cold-cranking Amperes Minimum	Group 26/26R 12 Volts and 550 Cold-cranking Amperes Minimum	Group 26/26R 12 Volts and 550 Cold-cranking Amperes Minimum
Shipping Weight (Includes Transfer Switch)	452 Pounds	470 Pounds	487 Pounds
Dimensions (L" x W" x H")	48 x 24 x 28-1/4	48 x 24 x 28-1/4	48 x 24 x 28-1/4

†15kW on LP fuel requires electrical upgrade kit 04578-0. Kit includes power harnesses and 70 amp 2-pole circuit breaker.

ENGINE	Model 04389 (7kW)	Model 04456 (12kW)	Model 04390 (15kW)
Type of Engine	GH 410	GENERAC OHVI V-TWIN	GENERAC OHVI V-TWIN
Number of Cylinders	1	2	2
Rated Horsepower	14.5 @ 3,600 rpm	30 @3,600 rpm	30 @ 3,600 rpm
Displacement	410cc	992cc	992cc
Cylinder Block	Aluminum w/Cast Iron Sleeve	Aluminum w/Cast Iron Sleeve	Aluminum w/Cast Iron Sleeve
Valve Arrangement	Overhead Valve	Overhead Valve	Overhead Valve
Ignition System	Solid-state w/Magneto	Solid-state w/Magneto	Solid-state w/Magneto
Compression Ratio	8:6:1	9:5:1	9:5:1
Starter	12 Vdc	12 Vdc	12Vdc
Oil Capacity Including Filter	Approx. 1.7 Qts	Approx. 1.7 Qts.	Approx. 1.7 Qts.
Operating RPM	3,600	3,600	3,600
Fuel Consumption			
Natural Gas cu.ft./hr.			
1/2 Load	74	114	148.5
Full Load	105	185	240
Liquid Propane ft^3/hr(gal/hr)			
1/2 Load	33/0.91	48.9(1.34)	63.2(1.73)
Full Load	44.1/1.21	79.0(2.17)	102.3(2.8)

CONTROLS	
Model Switch	
-Auto	Automatic Start on Utility failure/7 day exerciser
-Off	Stops unit. Power is removed Control and charger still operate
-Manual/Test (start)	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
Engine Start Sequence	Cyclic cranking: 7 sec. on, 7 rest (90 sec. maximum duration)
Engine Warm-up	10 seconds
Engine Cool-Down	1 minute
Starter Lock-out	Starter cannot re-engage until 5 sec. after engine has stopped.
2.5 Amp Timed Trickle Battery Charger	Standard
Automatic Voltage Regulator w/Overvoltage Protection	Standard
Automatic Low Oil Pressure Shutdown	Standard
Overspeed Shutdown	Standard, 72Hz
High Temperature Shutdown	Standard
Overcrank Protection	Standard
Safety Fuse	Standard

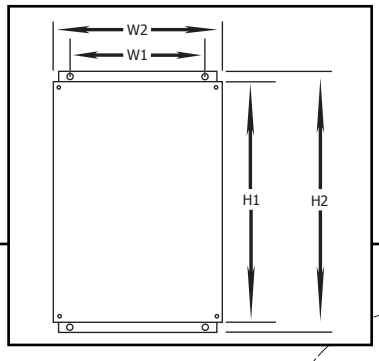
Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). Prime (Unlimited Running Time): Unit not recommended for prime power applications. Applicable for supplying electric power in lieu of commercially purchased power. Prime power is the maximum power available at variable load. A 10% overload capacity is available for 1 hour in 12 hours. (All ratings in accordance with BS5514, ISO3046, ISO8528 and DIN6271).
* Maximum wattage and current are subject to and limited by such factors as fuel Btu content, ambient temperature, altitude, engine power and condition, etc. Maximum power decreases about 3.5 percent for each 1,000 feet above sea level; and also will decrease about 1 percent for each 12° C (10° F) above 15.5° C (60°F).

Home Standby - 7kW - 12kW - 15kW

TRANSFER SWITCH & EMERGENCY LOAD CENTER	Model 04389 (7kW)	Model 04456 (12kW)	Model 04390 (15kW)
No. of Poles	2	2	2
Current Rating (amps)	100	100	100
Voltage Rating (VAC)	250	250	250
Utility Voltage Monitor (fixed)			
-Pick-up	80%	80%	80%
-Dropout	60%	60%	60%
Return to Utility	approx. 13 sec.	approx. 13 sec.	approx. 13 sec.
Exerciser weekly for 12 minutes	Standard	Standard	Standard
UL Listed	Standard	Standard	Standard
Dimensions (H" x W" x D")	26.5 x 12.5 x 7	26.5 x 12.5 x 7	26.5 x 12.5 x 7
Total of Pre-wired Circuits	8	10	12
No. 15A 120V	5	3	5
No. 20A 120V	1	3	3
No. 15A 240V	-	-	-
No. 20A 240V	-	1	1
No. 30A 240V	1	1	1
Circuit Breaker Protected Available RMS Symmetrical Fault Current @ 250 Volts	10,000	10,000	10,000

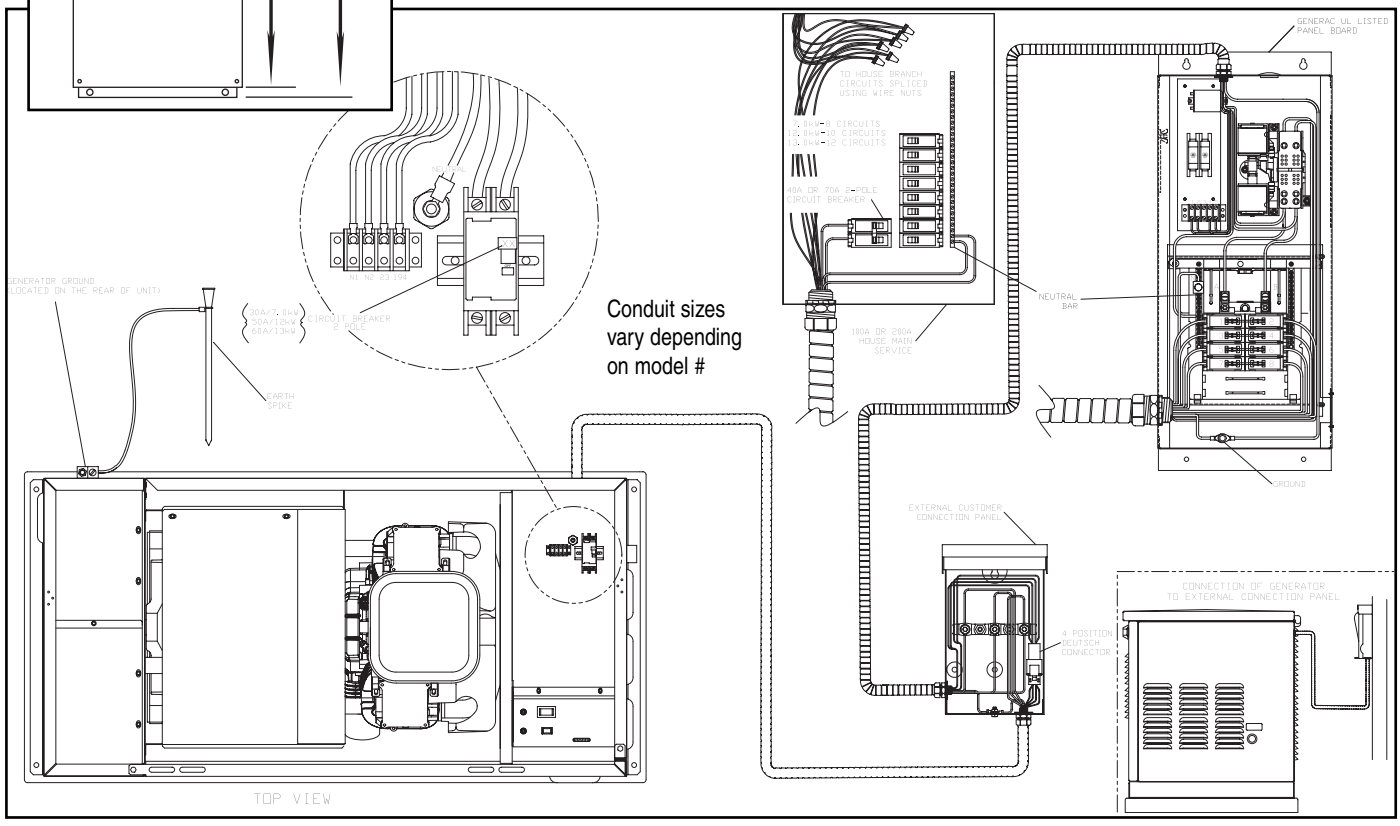
Transfer Switch Features

- Electrically operated, mechanically-held contacts for fast, positive connections.
- Rated for all classes of load, 100% equipment rated, both inductive and resistive.
- 2 pole, 250 VAC contactors.
- 160 millisecond transfer time.
- Dual coil design.
- Main contacts are silver plated or silver alloy to resist welding and sticking.
- Nema 1 enclosure is standard on the 100 amp switch.



Mechanical Dimensions (in inches)						
Current Rating	No. of Poles	Height H1	Height H2	Width W1	Width W2	Depth
100 UL Listed	2	26.5	29.25	8.14	12.0	7

Terminal Wire Ranges			
ATS Rated Amps	Switch Terminal	Neutral Lug/Stud	Ground Lug
100A 2-Pole UL	1 x 1/0-12	1 x 3/8-16 Stud	1 x 2/0-14



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