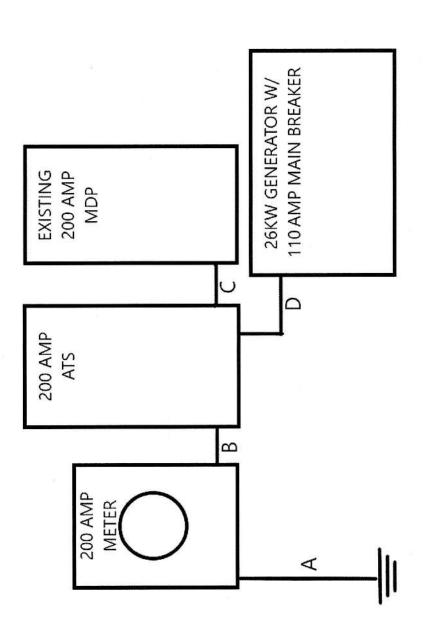
Peter & Moira Fuhr 132 SW Bay PL Fort White, FL 52038



- A. Existing grounding electrode
- B. 2" PVC W/ three 4/0 AL THWN
- C. 2" PVC W/ three 4/0 AL THWN & one #4 AL THWN
- D. 1.5" PVC W/ three #1 AL THWN, one #4 AL XHWN, & six #18 CU TFFN





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330000

TRADEMARK ELECTRIC INC. 3621 NW 27th Avenue OCALA, FL, 34475 +1 (352) 629-8617

### Sizing Report

Sizing Information for: Moira & Peter Fuhr 132 SW Bay PI Fort White, FL, 32038

Rated Nominal Voltage

Generator Fuel Choice

Sizing Method (NEC 220)

Ceneral Lighting & Receptacles

Control Point Operator (MAC)

2500

Minimum size generator for motor starting requirements

BTU load required

General Lighting & Receptacles

Square Footage Being Covered (ft^2)

Small Appliance Circuits (20 amps)

Kitchen Circuits

Laundry Circuits

Laundry Circuits

Load (kW)

7.77

2590

7.77

3.0

3.0

1.5

Laundry Circuits	1.0		1.5		
Fixed-In-Place Appliances & Motors	Managed Loads	Estimated (kW)	Nameplate (amps)	240 V	Load (kW)
Dishwasher		1.5	12.5		1.5
Dryer		5.5	22.92	X	5.5
Freezer		0.8	6.67		0.8
Microwave		1.25	10.42		1.25
Range - Oven w/ Top		8.5	35.42	X	8.5
Refrigerator		8.0	6.67	0220	0.8
Water Heater		5.0	20.83	X	5.0
Well Pump		2.45	10.2	X	2.45
Air Conditioning & Cooling	Managed Loads	Estimated (kW)	Nameplate (amps)	240 V	Load (kW)
3.5 Ton Unit		3.5	14.58	X	3.5
Heating & Heat Pumps	Managed Loads	Estimated (kW)	Nameplate (amps)	240 V	Load (kW)
Heat Pump (3.5 Ton)		3.5	14.58	Х	3.5
Transient Requirement	Estimat (LRA)		Actual (LRA)		Utilized (LRA)
Largest Motor's Starting Amps (LRA)	100.6		0.0		100.6
Summary NEC Load			Load		NEC
2000 May 2011			(kW)	P	Required
General Lighting & Receptacles			12.27		
Fixed-in-Place Appliances & Motors			25.80		
Sum of all General Loads			38.07		21.228
Cooling			3.5		3.5
Heating (w/demand factors)			3.5	3.50	
Larger of Heating & Cooling			3.5		3.50
Sizing based on requirements of NEC Artic	le 220: Part IV				24.728
Sizing based on requirements of NEC Article 220: Part IV					27.720

Deter & Moira Fohr 1325W Bay PL. Fort White, FL. 52038

S13 feet generator to Front property line.

50 feet generater to Left property line.







# GUARDIAN® SERIES Residential Standby Generators Air-Cooled Gas Engine

### Standby Power Rating

G007290-0, G007291-0 (Aluminum - Bisque) - 26 kW 60 Hz

### **INCLUDES:**

- True Power™ Electrical Technology
- Two-line multilingual digital LCD Evolution™ controller (English/Spanish/French/Portuguese)
- 200 amp service rated transfer switch available
- Electronic governor
- Standard Wi-Fi<sup>®</sup> connectivity
- System status & maintenance interval LED indicators
- Sound attenuated enclosure
- Flexible fuel line connector
- Natural gas or LP gas operation
- 5 Year limited warranty
- Base fascia
- Listed and labeled for installation as close as 18 in (457 mm) to a structure.\*
  - \*Must be located away from doors, windows, and fresh air intakes and in accordance with local codes.





Note: CETL or CUL certification only applies to unbundled units and units packaged with limited circuit switches. Units packaged with the Smart Switch are ETL or UL certified in the USA only.

### **FEATURES**

- INNOVATIVE ENGINE DESIGN & RIGOROUS TESTING are at the heart of Generac's success in providing the most reliable generators possible. Generac's G-Force engine lineup offers added peace of mind and reliability for when it's needed the most. The G-Force series engines are purpose built and designed to handle the rigors of extended run times in high temperatures and extreme operating conditions.
- TRUE POWER™ ELECTRICAL TECHNOLOGY: Superior harmonics and sine wave form produce less than 5% Total Harmonic Distortion for utility quality power. This allows confident operation of sensitive electronic equipment and micro-chip based appliances, such as variable speed HVAC systems.
- O TEST CRITERIA:
  - ✓ PROTOTYPE TESTED

SYSTEM TORSIONAL TESTED

- ✓ NEMA MG1-22 EVALUATION
  ✓ MOTOR STARTING ABILITY
- MOBILE LINK® CONNECTIVITY: FREE with select Guardian Series Home standby generators, Mobile Link Wi-Fi allows users to monitor generator status from anywhere in the world using a smartphone, tablet, or PC. Easily access information such as the current operating status and maintenance alerts. Users can connect an account to an authorized service dealer for fast, friendly, and proactive service, With Mobile Link, users are taken care of before the next power outage.

- 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. Digital voltage regulation at ±1%.
- SINGLE SOURCE SERVICE RESPONSE from Generac's extensive dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.
- GENERAC TRANSFER SWITCHES: Long life and reliability are synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line is offered with its own transfer systems and controls for total system compatibility.











### **Features and Benefits**

### **Engine**

26 kW

Maximizes engine "breathing" for increased fuel efficiency. Plateau honed cylinder walls and plasma moly Generac G-Force design rings help the engine run cooler, reducing oil consumption and resulting in longer engine life.

Rigid construction and added durability provide long engine life. "Spiny-lok" cast iron cylinder walls

These features combine to assure smooth, quick starting every time. Electronic ignition/spark advance

Pressurized lubrication to all vital bearings means better performance, less maintenance, and longer engine Full pressure lubrication system

life. Now featuring up to a 2 year/200 hour oil change interval.

Shutdown protection prevents catastrophic engine damage due to low oil.

Allows unit to be used for demand response applications.

Prevents damage due to overheating.

### Generator

Allows for a smaller, light weight unit that operates 25% more efficiently than a revolving armature generator. Revolving field

Produces a smooth output waveform for compatibility with electronic equipment. Skewed stator

Maximizes motor starting capability.

Regulating output voltage to  $\pm 1\%$  prevents damaging voltage spikes.

For your safety.

## Transfer Switch (if applicable)

 Displaced phase excitation Automatic voltage regulation

UL 2200 listed

Low oil pressure shutdown system

High temperature shutdown

EPA Certified for non-emergency applications

 Fully automatic Transfers vital electrical loads to the energized source of power.

NEMA 3R Can be installed inside or outside for maximum flexibility.

Capability to manage additional loads for efficient power management. Integrated load management technology

Mounts near an existing distribution panel for simple, low-cost installation. Remote mounting

### Evolution™ Controls

Selects the operating mode and provides easy, at-a-glance status indication in any condition. AUTO/MANUAL/OFF illuminated buttons

Two-line multilingual LCD Provides homeowners easily visible logs of history, maintenance, and events up to 50 occurrences.

Smooth, weather-resistant user interface for programming and operations, Sealed, raised buttons

Utility voltage sensing Constantly monitors utility voltage, setpoints 65% dropout, 80% pick-up, of standard voltage.

Constantly monitors generator voltage to verify the cleanest power delivered to the home. Generator voltage sensing

Prevents nuisance start-ups of the engine, adjustable 2-1500 seconds from the factory default setting of 5 Utility interrupt delay

seconds by a qualified dealer.

Verifies engine is ready to assume the load, setpoint approximately 5 seconds. Engine warm-up

Allows engine to cool prior to shutdown, setpoint approximately 1 minute. Engine cool-down

Operates engine to prevent oil seal drying and damage between power outages by running the generator for Programmable exercise

5 minutes every other week. Also offers a selectable setting for weekly or monthly operation providing

flexibility and potentially lower fuel costs to the owner.

Smart battery charger Delivers charge to the battery only when needed at varying rates depending on outdoor air temperature.

Compatible with lead acid and AGM-style batteries.

Protects generator from overload. Main line circuit breaker

Maintains constant 60 Hz frequency. Electronic governor

### Unit

Sound attenuated enclosures ensure quiet operation and protection against mother nature, withstanding SAE weather protective enclosure winds up to 150 mph (241 km/h). Hinged key locking roof panel for security. Lift-out front for easy access

to all routine maintenance items. Electrostatically applied textured epoxy paint for added durability.

Quiet, critical grade muffler is mounted inside the unit to prevent injuries. Enclosed critical grade muffler

Makes for an easy, eye appealing installation, as close as 18 in (457 mm) away from a structure.

Small, compact, attractive

### 26 kW

# **Features and Benefits**

**GENERAC** 

In-tal		C	
Instal	lation	Sys	цеп

Listed ANSI Z21.75/CSA 6.27 outdoor appliance connector for the required connection to the gas supply • 14 in (35.6 cm) flexible fuel line connector

 Integral sediment trap Meets IFGC and NFPA 54 installation requirements.

### Connectivity (Wi-Fi equipped models only)

Monitor generator with a smartphone, tablet, or computer at any time via the Mobile Link application for · Ability to view generator status complete peace of mind.

Review the generator's complete protection profile for exercise hours and total hours.

Provides maintenance information for the specific model generator when scheduled maintenance is due.

Detailed monthly reports provide historical generator information.

Built in battery diagnostics displaying current state of the battery.

Provides detailed local ambient weather conditions for generator location.

Ability to view generator Exercise/Run and Total Hours

Ability to view generator maintenance information

Monthly report with previous month's activity

Ability to view generator battery information

Weather information

3 of 6



G007290-0

# **Specifications**

		ra		

Model

**26 kW** 

Model	G007291-0 (26 kW)
Rated maximum continuous power capacity (LP)	26,000 Watts*
Rated maximum continuous power capacity (NG)	22,500 Watts*
Rated voltage	240
Rated maximum continuous load current - 240 volts (LP/NG)	108.3 / 93.8
Total Harmonic Distortion	Less than 5%
Main line circuit breaker	110 amp
Phase	
Number of rotor poles	2
Rated AC frequency	60 Hz
Power factor	1,0
Battery requirement (not included)	12 Volts, Group 26R 540 CCA minimum or Group 35AGM 650 CCA minimum
Unit weight (lb / kg)	518 / 235
Dimensions (LxWxH) in / cm	48 x 25 x 29 / 121.9 x 63.5 x 73.7
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load**	67
Sound output in dB(A) at 23 ft (7 m) with generator in Quiet-Test™ low-speed exercise mode**	57
Exercise duration	5 min
Engine	

### Engine

Liigine		
Engine type		GENERAC G-Force 1000 Series
Number of cylinders		2
Displacement		999 cc
Cylinder block		Aluminum w/ cast iron sleeve
Valve arrangement		Overhead valve
Ignition system		Solid-state w/ magneto
Governor system		Electronic
Compression ratio		9.5:1
Starter		12 VDC
Oil capacity including filter		Approx, 1.9 qt / 1.8 L
Operating rpm		3,600
Fuel consumption Natural gas	ft³/hr (m³/hr)	
rvaturar gas	1/2 Load	188 (5.32)
	Full Load	333 (9.43)
Liquid propane	ft <sup>3</sup> /hr (gal/hr) [L/hr] 1/2 Load	75 (2.06) [7.78]
	Full Load	132 (3.63) [13.73]

Note: Fuel pipe must be sized for full load. Required fuel pressure to generator fuel inlet at all load ranges – 3.5–7 in water column (0.87–1.74 kPa) for NG, 10–12 in water column (2.49–2.99 kPa) for LP gas. For BTU content, multiply ft<sup>3</sup>/hr x 2500 (LP) or ft<sup>3</sup>/hr x 1000 (NG). For Megajoule content, multiply m³/hr x 93.15 (LP) or m³/hr x 37.26 (NG).

### Controls

Two-line plain text multilingual LCD	Simple user interface for ease of operation,
Mode buttons: AUTO	Automatic start on utility failure. Weekly, Bi-weekly, or Monthly selectable exerciser.
MANUAL	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
OFF	Stops unit. Power is removed. Control and charger still operate.
Ready to Run/Maintenance messages	Standard
Engine run hours indication	Standard
Programmable start delay between 2–1500 seconds	Standard (programmable by dealer only)
Utility Voltage Loss/Return to Utility adjustable (brownout setting)	From 140-171 V / 190-216 V
Future Set Capable Exerciser/Exercise Set Error warning	Standard
Run/Alarm/Maintenance logs	50 events each
Engine start sequence	Cyclic cranking: 16 sec on, 7 rest (90 sec maximum duration).
Starter lock-out	Starter cannot re-engage until 5 sec after engine has stopped.
Smart Battery Charger	Standard
Charger Fault/Missing AC warning	Standard
Low Battery/Battery Problem Protection and Battery Condition indication	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection	Standard
Under-Frequency/Overload/Stepper Overcurrent Protection	Standard
Safety Fused/Fuse Problem Protection	Standard
Automatic Low Oil Pressure/High Oil Temperature Shutdown	Standard
Overcrank/Overspeed (@ 72 Hz)/rpm Sense Loss Shutdown	Standard
High Engine Temperature Shutdown	Standard
Internal Fault/Incorrect Wiring protection	Standard
Common external fault capability	Standard
Field upgradable firmware	Standard
Pating definitions - Optional Standby: Applicable for supplying backup power for the duration of	of the utility nower outane with correct maintenance performed

Rating definitions — Optional Standby: Applicable for supplying backup power for the duration of the utility power outage with correct maintenance performed.

\* No overload capability is available for this rating. (All ratings in accordance with BS5514, IS03046, UL2200, and DIN6271). Maximum kilovolt amps and current are subject to and limited by such factors as fuel BTU/Megajoule content, ambient temperature, altitude, engine power and condition, etc. Maximum power decreases approximately 3.5% for each 1,000 ft (304.8 m) above sea level and approximately 1% for each 10°F (6°C) above 60°F (16°C). \*\*Sound levels are taken from the front of the generator. Sound levels taken from other sides of the generator may be higher depending on installation parameters.

U.S. EPA certified for non-emergency applications.

# **Switch Options**

GENERAC

### Service Rated Automatic Transfer Switch Features

- Intelligently manages up to four air conditioner loads with no additional hardware.
- Up to eight additional large (240 VAC) loads can be managed when used in conjunction with Smart Management Modules (SMMs).
- Electrically operated, mechanically-held contacts for fast, clean connections.
- Main breakers are rated for 80% continuous load.
- 2-pole, 250 VAC contactors.
- Service equipment rated, dual coil design.
- Rated for both aluminum and copper conductors.
- Main contacts are silver plated or silver alloy to resist welding and sticking.
- NEMA/UL 3R aluminum outdoor enclosure allows for indoor or outdoor mounting flexibility.

### **Dimensions**

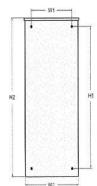
			nps 120/24 sition Servi		
1 1	Hei	ight	Wi	dth	Double
	H1	H2	W1	W2	Depth
in	26.8	30.1	10.5	13.5	6.9
cm	67.95	76.43	26.67	34.18	17.5

Wire Ranges		
Conductor Lug	Neutral Lug	Ground Lug
250 MCM - #6	350 MCM - #6	2/0 - #14

Model	G007291-0 (26 kW)	
No. of poles	2	
Current rating (amps)	200	
Voltage rating (VAC)	120/240, 10	
Utility voltage monitor (fixed)* -Pick-up -Dropout	80% 65%	
Return to Utility*	Approx. 13 sec	
ETL or UL listed	Standard	
Enclosure type	NEMA/UL 3R	
Circuit breaker protected	22,000	
Lug range	250 MCM - #6	
ACT PROVIDES TO STREET, STREET, PROSE CONTROL OF STREET, STREE		

\*Function of Evolution controller Exercise can be set to weekly, bi-weekly, or monthly





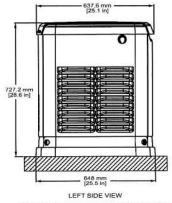
# GENERAC\*

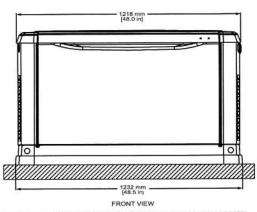
# **Available Accessories**

Model #	Product	Description
G007101-0	Battery Pad Warmer	Pad warmer rests under the battery. Recommended for use if temperature regularly falls below 0 °F (-18 °C). (Not necessary for use with AGM-style batteries).
G007102-0	Oil Warmer	Oil warmer slips directly over the oil filter. Recommended for use if temperature regularly falls below 0 °F (-18 °C).
G007103-1	Breather Warmer	Breather warmer is for use in extreme cold weather applications. For use with Evolution controllers only in climates where heavy icing occurs.
G005621-0	Auxiliary Transfer Switch Contact Kit	The auxiliary transfer switch contact kit allows the transfer switch to lock out a single large electrical load that may not be needed. Not compatible with 50 amp pre-wired switches.
G007027-0 - Bisque	Fascia Base Wrap Kit	The fascia base wrap snaps together around the bottom of the new air-cooled generators. This offers a sleek, contoured appearance as well as offering protection from rodents and insects by covering the lifting holes located in the base.
G005703-0 - Bisque	Touch-Up Paint Kit	If the generator enclosure is scratched or damaged, it is important to touch up the paint to protect from future corrosion. The touch-up paint kit includes the necessary paint to correctly maintain or touch up a generator enclosure.
G006485-0	Scheduled Maintenance Kit	Generac's scheduled maintenance kit provides all the items necessary to perform complete routine maintenance on a Generac automatic standby generator (oil not included).
G007005-0	Wi-Fi LP Tank Fuel Level Monitor	The Wi-Fi enabled LP tank fuel level monitor provides constant monitoring of the connected LP fuel tank. Monitoring the LP tank's fuel level is an important step in verifying the generator is ready to run during an unexpected power failure. Status alerts are available through a free application to notify users when the LP tank is in need of a refill.
G007000-0 (50 amp) G007006-0 (100 amp)	Smart Management Module	Smart Management Modules (SMM) are used to optimize the performance of a standby generator. It manages large electrical loads upon startup and sheds them to aid in recovery when overloaded. In many cases, using SMM's can reduce the overall size and cost of the system.
G007169-0 - 4G LTE G007170-0 - Wi-Fi/ Ethernet	Mobile Link <sup>®</sup> Cellular Accessories	The Mobile Link family of Cellular Accessories allow users to monitor generator status from anywhere in the world, using a smart phone, tablet, or PC. Easily access information such as the current operating status and maintenance alerts. Users can connect an account with an authorized service dealer for fast, friendly, and proactive service. With Mobile Link, users are taken care of before the next power outage.
G007220-0 - Bisque	Base Plug Kit	Base plugs snap into the lifting holes on the base of air-cooled home standby generators. This offers a sleek, contoured appearance, as well as offers protection from rodents and insects by covering the lifting holes located in the base. Kit contains four plugs, sufficient for use on a single air-cooled home standby generator.

# **Dimensions & UPCs**

Model	UPC
G007290-0	696471087307
G007291-0	696471087314



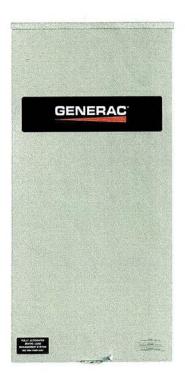


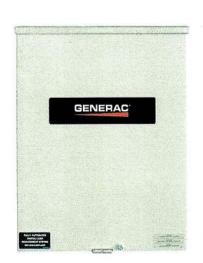
Dimensions shown are approximate. See installation manual for exact dimensions, DO NOT USE THESE DIMENSIONS FOR INSTALLATION PURPOSES.



**Transfer Switches** 

# Service and Non-Service Rated **Automatic Transfer Switches**





RXSC100A3 Models:

> RXSW100A3 RXSW150A3 RXSC200A3 RXSW200A3





# Description

This series of Generac Automatic Transfer Switches is designed for use with single phase generators that utilize an Evolution™ or Nexus™ Controller. The 100 and 200 Amp open transition switches are available in single phase in both service equipment rated and non-service equipment rated configurations. The 150 Amp open transition switch is only available in a service rated equipment configuration.

# **Standard Features**

Service rated (RXSW) Generac Automatic Transfer Switches are housed in an aluminum NEMA Type 3R enclosure\*, with electrostatically applied and baked powder paint. The Heavy Duty Generac Contactor is an ETL recognized device, designed for years of service. The controller at the generator handles all the timing, sensing, exercising functions, and transfer commands. All switches are covered by a five year limited warranty.

\* Non-service rated (RXSC) switches are housed in a steel enclosure.

# Load Management Technology

Through the use of the integrated Smart A/C Module (SACM), these switches have the capability to manage up to four individual HVAC (24 VAC controlled) loads with no additional hardware. When used in tandem with external Smart Management Modules, a total of eight more loads can be managed, providing the most installation efficient power management options available.







# 100-200 Amps, Single Phase

# **Automatic Transfer Switches**

### **Functions**

All timing and sensing functions originate in the generator controller.

Utility Voltage Drop-out	<65%
Timer to Generator Start	10 Second Factory Set, Adjustable Between 2 - 1,500 Seconds by a Qualified Dealer*
Engine Warmup Delay	5 Seconds
Standby Voltage Sensor	65% for 5 Seconds
Utility Voltage Pickup	>80%
Re-transfer Time Delay	15 Seconds
Engine Cooldown Timer	60 Seconds
Exerciser	Nexus™: 12 Minutes Weekly Evolution™: 5 to 12 Minutes Adjustable, Weekly/Bi-weekly/Monthly
The Transfer Switch can be Operated Manuall	y Without Power Applied

<sup>\*</sup> When used in conjunction with units utilizing Evolution™ controls

# **Specifications**

Model	RXSC100A3	RXSW100A3	RXSW150A3	RXSC200A3	RXSW200A3	
Amps	100	100 120/240, 1ø Open Transition Service Rated	150 120/240, 1ø Open Transition Service Rated	200	200 120/240, 1ø Open Transition Service Rated	
Voltage	120/240, 1ø			120/240, 1ø		
Load Transition Type (Automatic)	Open Transition			Open Transition		
Enclosure Type	NEMA 3R	NEMA 3R	NEMA 3R	NEMA 3R	NEMA 3R	
ETL Rating	cETLus	ETLus	ETLus	cETLus	ETLus	
Withstand Rating 10,000 (Amps)		10,000	22,000	10,000	22,000	
Lug Range	2/0 - #14		250 MCM - #6			



# 100-200 Amps, Single Phase

# **Automatic Transfer Switches**

### **Dimensions**

Model		RXSC100A3	RXSW100A3	RXSW150A3	RXSC200A3	RXSW200A3
Height - in (mm)	H1	17.2 (437.9)	17.2 (437.9)	26.8 (679.4)	17.2 (437.9)	26.8 (679.4)
	H2	20.0 (508.0)	20.0 (508.0)	30.0 (672.0)	20.0 (508.0)	30.0 (672.0)
Width - in (mm)	W1	12.5 (317.5)	12.5 (317.5)	10.5 (266.7)	12.5 (317.5)	10.5 (266.7)
	W2	14.6 (370.8)	14.6 (370.8)	13.5 (342.9)	14.6 (370.8)	13.5 (342.9)
Depth - in (mm)		7.1 (180.1)	7.1 (180.1)	6.3 (160.1)	7.1 (180.1)	6.3 (160.1)
Weight - Ibs (kg)	3.47	20.0 (9.1)	22.5 (10.2)	39.0 (17.7)	20.0 (9.1)	39.0 (17.7)

