

## RG Protector® Series

## Protector® Series Standby Generators Liquid-Cooled Gaseous Engine

### STANDARD FEATURES

- Evolution™ Controller
- Padlockable Control Panel Cover
- Cellular Connectivity with Wi-Fi backup for Mobile Link® and Fleet<sup>1</sup>
- Corrosion Resistant Aluminum Enclosure
- 5 Year/2,000 Hour Limited Warranty
- ±1% Digital Voltage Regulation
- <5% Total Harmonic Distortion Power Quality
- Propane or Natural Gas
- EPA Emissions Certified
- UL 2200 Listed
- SwRI listed and labeled (NFPA 37) allowing installation as close as 18 in (457 mm) to a structure<sup>2</sup>

1 - Cellular service for the US, Canada, and other supported countries using the Generac Generator Connectivity Accessory, Cellular (GGCAC). Cellular is the primary mode for connectivity with Wi-Fi as a secondary mode when a cellular connection is not possible.

2 - Must be located away from doors, windows, and fresh air intakes and in accordance with applicable codes and regulations.

### OPTIONAL FIELD-INSTALLABLE FEATURES

- Push-button Emergency Stop
- Cold Weather Operation Heaters

## 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.
- **MOBILE LINK® CONNECTIVITY:** Standard with the Generac Liquid-Cooled RG Protector Series home standby generators, Mobile Link Cellular Connectivity with Wi-Fi® backup 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 provider for fast, friendly, and proactive service. With Mobile Link, users are taken care of before the next power outage.
- **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.
- **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 service 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 the GENERAC product line is offered with its own transfer systems and controls for total system compatibility.

### STANDBY POWER RATING

Model RG02515 - 25 kW, 60 Hz Emergency Standby Power Generator  
Model RG03015 - 30 kW, 60 Hz Emergency Standby Power Generator



Product may vary from above image



EPA Emissions Certified

**GENERATOR SPECIFICATIONS**

**GENERATOR OUTPUT**

Propane

Voltage	RG02515		RG03015	
	Power (kW)	Current (A)	Power (kW)	Current (A)
120/240 V 1-Phase	25	104	30	125
208/120 V 3-Phase	25	86	30	104
240/120 V 3-Phase	25	75	30	90

Natural Gas

Voltage	RG02515		RG03015	
	Power (kW)	Current (A)	Power (kW)	Current (A)
120/240 V 1-Phase	25	104	30	125
208/120 V 3-Phase	25	86	30	104
240/120 V 3-Phase	25	75	30	90

Emergency Standby Power (ESP) Rating: Standby ratings apply to installations served by a reliable utility source. The ESP rating is applicable to varying loads for the duration of a power outage. The average power output over 24 hours shall not exceed 70% of the ESP rating.

**VOLTAGE REGULATION**

Type	Electronic
Sensing	1-Phase
Regulation	± 1%

**ALTERNATOR SYSTEM**

Circuit Breaker (CB) Size (A)	RG02515		RG03015	
	120/240 V 1-Phase	125	150	
	208/120 V 3-Phase	100	125	
	240/120 V 3-Phase	90	100	
Alternator Type		Synchronous		
Rotor Insulation Class		H		
Stator Insulation Class		H		
Telephone Interference Factor (TIF)		< 50		
Bearings		Sealed Ball		
Coupling		Flexible Disc		
Excitation System		Direct		
Total Harmonic Distortion		< 5%		

**SURGE CAPACITY**

Surge Amps at <0.4 Power Factor	RG02515		RG03015	
	15% Voltage Dip (A)	30% Voltage Dip (A)	15% Voltage Dip (A)	30% Voltage Dip (A)
120/240 V 1-Phase	65	170	75	180
208/120 V 3-Phase	80	130	96	155
240/120 V 3-Phase	69	112	83	134

## ENGINE SYSTEM

	RG02515	RG03015
Make	Generac	
Model	1.5 L Inline 4-Cylinder, Naturally Aspirated	
Compression Ratio	11:1	
Lifter Type	Hydraulic	
Oil Pump Type	Gear	
Oil Filter Type	Full Flow Spin-On Cartridge	
Crankcase Capacity (qt (L))	4 (3.8)	
Temperature Derate	1.7% per 10 °F above 77 °F (1.5 °C per 5 °C above 25 °C)	
Altitude Derate	3% per 1,000 ft above 600 ft (1% per 100 m above 183 m)	
Exercise Speed (RPM)	1,800	
Operating Speed (RPM)	3,600	
Exhaust Flow at Rated Output (CFM (m <sup>3</sup> /min))	203 (5.7)	237 (6.7)

## GOVERNOR

Type	Electronic
Frequency Regulation	Isochronous

## COOLING SYSTEM

Coolant	50/50 (50% Ethylene Glycol)
Coolant System Capacity (US gal (L))	2 (7.6)
Water Pump Type	Belt driven
Fan Type	Belt driven
Fan Quantity	1
Maximum Ambient Air Temperature (°F (°C))	122 (50)

## GENERATOR SPECIFICATIONS

### FUEL SYSTEM

Fuels	Liquid Propane (LP) Vapor or Natural Gas (NG)
Fuel Type Configuration	Fuel System & Controller Selection
LP Vapor Pressure (in H <sub>2</sub> O (kPa))	5-14 (1.24-3.48)
NG Pressure (in H <sub>2</sub> O (kPa))	5-14 (1.24-3.48)
Fuel Shutoff Solenoid	Standard

### FUEL CONSUMPTION

#### LIQUID PROPANE

Rated Load	RG02515		RG03015	
	(US gph)	(L/h)	(US gph)	(L/h)
No Load @ Exercise Speed	0.7	2.5	0.7	2.5
25%	2.9	9.1	2.6	10.0
50%	3.3	12.3	3.5	13.3
75%	4.0	15.0	4.4	16.6
100%	4.7	17.8	5.4	20.4

Propane - 91,452 BTU/US gal (25.5 MJ/L); 36 ft<sup>3</sup>/US gal (0.27 m<sup>3</sup>/L); 2,516 BTU/ft<sup>3</sup> (93.7 MJ/m<sup>3</sup>); 4.24 lb/US gal (0.508 kg/L)

#### NATURAL GAS

Rated Load	RG02515		RG03015	
	(CFH)	(m <sup>3</sup> /h)	(CFH)	(m <sup>3</sup> /h)
No Load @ Exercise Speed	60	1.7	60	1.7
25%	220	6.3	240	6.8
50%	297	8.4	320	9.1
75%	362	10.3	400	11.4
100%	430	12.2	492	14.0

Natural Gas - 1,036 BTU/ft<sup>3</sup> (37.3 MJ/m<sup>3</sup>)

See Emissions Data Sheets for maximum fuel flow for EPA and SCAQMD permitting purposes.

### ELECTRICAL SYSTEM

System Voltage (V)	12
Charge Alternator (A)	15
Battery Charger (A)	2.5
Recommended Battery (not included)	Group 26, Flooded Lead Acid, 525 CCA Minimum

### ENCLOSURE

	RG02515	RG03015
Sound Level at Exercise Speed (dB(A) @23 ft (7 m))	59	59
Sound Level at Operating Speed & No Load (dB(A) @23 ft (7 m))	72	73
Color	Bisque	

## EVOLUTION CONTROLLER FEATURES

Two-Line Plain Text LCD	Simple user interface for ease of operation.
Mode Switch: AUTO	Automatic Start on Utility failure. 7 day exerciser.
OFF	Stops unit. Power is removed. Control and charger still operate.
MANUAL	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
Programmable start delay between 10 – 30 seconds	Standard 10 sec
Engine Start Sequence	Cyclic cranking: 16 sec on, 7 rest (90 sec maximum duration)
Engine Warm-up	5 sec
Engine Cool-Down	1 min
Starter Lock-out	Starter cannot re-engage until 5 sec after engine has stopped.
Smart Battery Charger	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection	Standard
Automatic Low Oil Pressure Shutdown	Standard
Overspeed Shutdown	Standard, 72 Hz
High Temperature Shutdown	Standard
Overcrank Protection	Standard
Safety Fused	Standard
Failure to Transfer Protection	Standard
Low Battery Protection	Standard
50 Event Run Log	Standard
Future Set Capable Exerciser	Standard
Incorrect Wiring Protection	Standard
Internal Fault Protection	Standard
Common External Fault Capability	Standard
Governor Failure Protection	Standard

## FIELD-INSTALLABLE ACCESSORIES & KITS

PRODUCT	PART NUMBER	DESCRIPTION
<b>Control System Kits</b>		
Generac Generator Connectivity Accessory, Cellular (GGCAC)	G0072150	The GGCAC provides a reliable cellular connection for the generator with Wi-Fi backup. Monitoring of the generator is possible for the owner using Mobile Link and for the servicer using Fleet. The GGCAC can be installed on any generator that already has a Wi-Fi-only device to upgrade to cellular connectivity. NEW RG02515 and RG03015 generators include the GGCAC as standard.
GGCAC Wire Harness Adapter	A0005166075	Wire harness adapter required to connect the G0072150 Generac Generator Connectivity Accessory Cellular to the wire harness of <u>already installed generators which have the Wi-Fi only device</u> . NEW RG02515 and RG03015 generators include the GGCAC as standard.
Enclosure Mounted Emergency Stop Kit	G0065100	Emergency stop consists of a red push button switch. It mounts to the exterior of the generator enclosure replacing the generator emergency shutdown rocker switch in the same location.
Generac Load Manager, 50 A	G0070001	50 A Load Manager helps optimize the performance of the standby generator by managing large electrical loads upon startup and sheds them to aid in recovery when overloaded.
Generac Load Manager, 100 A	G0070061	100 A Load Manager helps optimize the performance of the standby generator by managing large electrical loads upon startup and sheds them to aid in recovery when overloaded.
Generac LTE Propane Tank Fuel Level Monitor	G0070090	The Propane Tank Fuel Level Monitor connects to 4G LTE cellular service to measure and report amount of LP fuel remaining in the tank. The app alerts the user of both remaining LP fuel and usage reports, offering the ultimate peace of mind.
<b>Operating Environment Kits</b>		
Battery Heater Kit	G0061750	Recommended for operating environments where the temperature drops below 32 °F (0 °C). The heater is externally powered by 120 VAC, 60 Hz. The kit is compatible with RG02515 and RG03015.
Engine Block Heater Kit	G0061740	Recommended for operating environments where the temperature drops below 0 °F (-18 °C). The heater is externally powered by 120 VAC, 60 Hz. The kit is compatible with RG02515 and RG03015.
<b>Installation Kits</b>		
Base Plug Kit	G0056510	Base plugs to fit in the lifting holes of the baseframe to keep debris out.
<b>Maintenance Kits</b>		
1.5 L NA Gaseous Engine Regular Maintenance Kit	G0056560	Regular maintenance kit includes oil filter, oil funnel, air filter, and spark plugs. The kit applies to RG02515 and RG03015 generator models.
Touch-up Paint Kit	G0057030	If the generator enclosure is scratched or damaged, it is important to touch-up the paint to protect from future corrosion. The paint kit includes the necessary paint to correctly maintain or touch-up a generator enclosure.

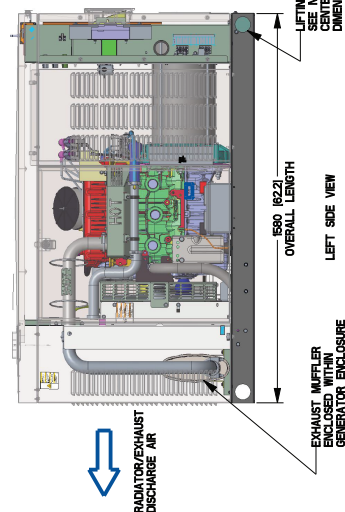
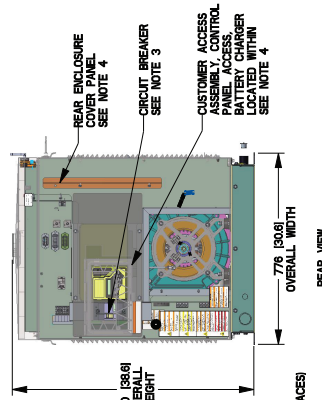
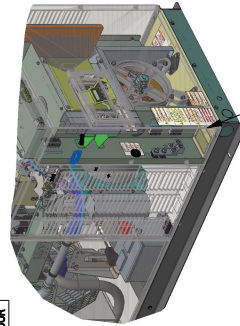
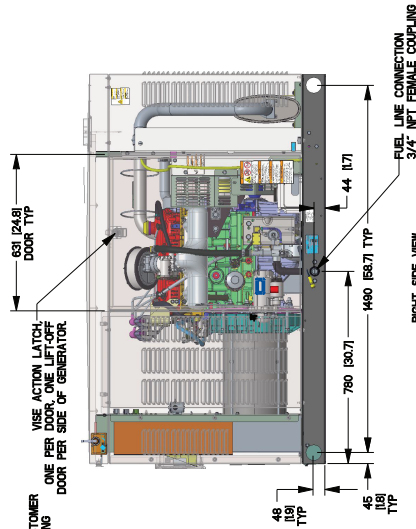
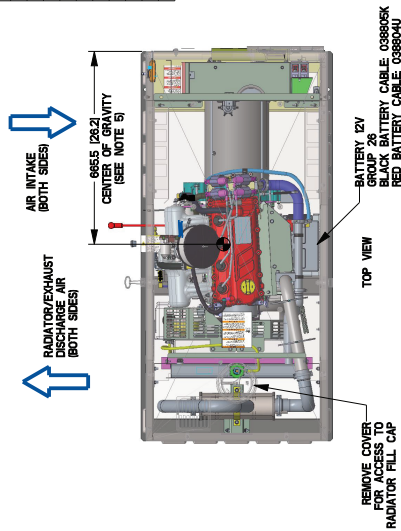
25 & 30 KW

Drawing #0K8420-G (1 of 2)

- NOTES:**
- MINIMUM RECOMMENDED CONCRETE PAD SIZE IS 6" OFFSET OF OVERALL LENGTH AND WIDTH OF GENERATOR. (0821 (42.6) WIDE X 0847 (74.2) LONG. REFERENCE INSTALLATION GUIDE SUPPLIED WITH THE UNIT FOR CONCRETE PAD GUIDELINES. REINFORCEMENT SHALL BE PERFORMED IN ACCORDANCE WITH REINFORCED CONCRETE SLABS.
  - ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE AND SERVICING. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE NFPA 37 AND NFPA 70 STANDARDS AS WELL AS ANY OTHER FEDERAL, STATE, AND LOCAL CODES.
  - CONTROL PANEL, CIRCUIT BREAKER INFORMATION:
    - SEE SPECIFICATION SHEET OR OWNERS MANUAL
    - ACCESS THROUGH CUSTOMER ACCESS ASSEMBLY DOOR ON REAR OF GENERATOR. THE STAIR AREA AS FOLLOWS: COVER PANEL TO ACCESS
    - HIGH VOLTAGE CONNECTION INCLUDING AC LOAD LEAD CONDUIT CONNECTION
    - NEUTRAL CONNECTION, BATTERY CHARGER 20 VOLT AC (0.5 AMP MAX) CONNECTION
    - 120 VOLT USE CONNECTION INCLUDING TRANSFER SWITCH CONTROL WIRES
    - GROUNDING CONNECTION INCLUDING TRANSFER SWITCH CONTROL WIRES
    - REAR OF GENERATOR SET MUST BE ENCLOSED TO PREVENT PEST INTRUSION AND RECYCLATION OF DISCHARGE AIR AND/OR IMPROPER COOLING AIR FLOW.
    - EXHAUST SYSTEM MAXIMUM BACK PRESSURE 24 INCHES H2O.
    - RECOMMENDED MOUNTING BELTS OR STRIPS TO MOUNTING SURFACE SHALL BE 1/2" DIAMETER (USE STANDARD SAE TORQUE SPECS)
    - MUST ALLOW FREE FLOW OF INTAKE AIR, DISCHARGE AIR AND EXHAUST. SEE SPECIFICATION SHEET FOR MOUNTING REQUIREMENTS.
    - GENERATOR MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS AVAILABLE AND THAT DISCHARGE AIR FROM RADIA TOR IS NOT RECYCLED.
    - EXHAUST MUFFLER ENCLOSED WITHIN GENERATOR ENCLOSURE.
    - REMOVE ENCLOSURE TO ACCESS EXHAUST MUFFLER.

SERVICE ITEM	USL
OIL FILL CAP	EITHER DOOR
OIL DIP STICK	RIGHT DOOR
OIL FILTER	RIGHT DOOR
OIL DRAIN HOSE	RIGHT DOOR
RADIATOR DRAIN HOSE	RIGHT DOOR
AIR CLEANER ELEMENT	RIGHT DOOR
SPARK PLUGS	RIGHT DOOR
MUFFLER	SEE NOTE 12
FAN BELT	EITHER DOOR
BATTERY	LEFT DOOR

REFERENCE OWNERS MANUAL FOR PARTS AND REPLACEMENT PART LISTINGS.



ENGINE/KW	WEIGHT DATA			
	ENCLOSURE MATERIAL	WEIGHT GENSET ONLY	WEIGHT SHIPPING SKID	WEIGHT SHIPPING
15L/25KW	ST	352 (156)	30 (14)	422 (192)
15L/30KW	ST	405 (184)	30 (14)	436 (198)
15L/25KW	AL	352 (177)	30 (14)	362 (164)
15L/30KW	AL	366 (167)	30 (14)	396 (179)

**INSTALLATION DRAWING**

25 & 30 KW

Drawing #0K8420-G (2 of 2)

NOTE - STUB-UP AREA FOR HIGH AND LOW VOLTAGE CONNECTIONS. CIRCUIT BREAKER, NEUTRAL AND CUSTOMER CONNECTION OPENING.

