

## Standby Generators

## Standby Generators Liquid-Cooled Gaseous Engine

### INCLUDES:

- Two-Line LCD Tri-Lingual Digital Nexus™ Controller
- Isochronous Electronic Governor
- Sound Attenuated Enclosure
- Closed Coolant Recovery System
- Smart Battery Charger
- UV/Ozone Resistant Hoses
- ±1% Voltage Regulation
- Natural Gas or LP Operation
- 2 Year Limited Warranty
- UL 2200 Listed

### Standby Power Rating

- Model QT100 (Aluminum - Bisque) - 100 kW 60 Hz
- Model QT130 (Aluminum - Bisque) - 130 kW 60 Hz
- Model QT150 (Aluminum - Bisque) - 150 kW 60 Hz



\*Assembled in the USA using domestic and foreign parts

Meets EPA Emission Regulations  
100, 130 & 150 kW meet CA/MA emissions requirement with optional catalyst

## 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**                      ✓ **NEMA MG1-22 EVALUATION**
  - ✓ **SYSTEM TORSIONAL TESTED**      ✓ **MOTOR STARTING ABILITY**
- **MOBILE LINK® CONNECTIVITY:** FREE with all QT 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 the GENERAC product line is offered with its own transfer systems and controls for total system compatibility.

**100 • 130 • 150 kW****GENERATOR SPECIFICATIONS**

Type	Synchronous
Rotor Insulation Class	H
Stator Insulation Class	H
Telephone Interference Factor (TIF)	<50
Alternator Output Leads 1-Phase	4 wire
Alternator Output Leads 3-Phase	6 wire (150 kW) or 12 wire (100 & 130 kW)
Bearings	Sealed Ball
Coupling	Flexible Disc (150 kW) or Gear Drive (100 & 130 kW)
Excitation System	Brushless

**VOLTAGE REGULATION**

Type	Electronic
Sensing	Single Phase
Regulation	± 1%

**GOVERNOR SPECIFICATIONS**

Type	Electronic
Frequency Regulation	Isochronous
Steady State Regulation	± 0.25%

**ELECTRICAL SYSTEM**

Battery Charge Alternator	12 Volt 30 Amp
Static Battery Charger	2 Amp
Recommended Battery (battery not included)	Group 24F, 525 CCA (150 kW) or Group 27F, 700 CCA (100 & 130 kW)
System Voltage	12 Volts

**GENERATOR FEATURES**

Revolving field heavy duty generator Directly connected to the engine Operating temperature rise 120 °C above a 40 °C ambient Class H insulation is NEMA rated All models fully prototyped tested
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**ENCLOSURE FEATURES**

Aluminum weather protective enclosure	Ensures protection against mother nature. Electrostatically applied textured epoxy paint for added 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.
SAE	Sound attenuated enclosure ensures quiet operation.

**ENGINE SPECIFICATIONS: 100, 130 & 150 kW**

Make	Generac
Model	V-Type
Cylinders	10
Displacement (Liters)	6.8
Bore (in/mm)	3.55 / 90.2
Stroke (in/mm)	4.17 / 105.9
Compression Ratio	9:1
Intake Air System	Naturally Aspirated
Lifter Type	Hydraulic

**ENGINE LUBRICATION SYSTEM**

Oil Pump Type	Gear
Oil Filter Type	Full flow spin-on cartridge
Crankcase Capacity (qt/l)	5 / 4.7 (100, 130 & 150 kW)

**ENGINE COOLING SYSTEM**

Type	Closed
Water Pump	Belt driven
Fan Speed (rpm)	1,670 – 100 kW 1,950 – 130 kW 2,200 – 150 kW
Fan Diameter (in/mm)	26 / 660.4 (100, 130, & 150 kW)
Fan Mode	Puller (100, 130, & 150 kW)

**FUEL SYSTEM**

Fuel Type	Natural gas, propane vapor
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard
LP Fuel Pressure	11 – 14 in water column / 21 – 26 mm HG
NG Fuel Pressure	11 – 14 in water column / 21 – 26 mm HG

## 100 • 130 • 150 kW

## operating data

### GENERATOR OUTPUT VOLTAGE/kW - 60 Hz

		kW LPG	Amp LPG	kW Nat. Gas	Amp Nat. Gas	CB Size (Both)
QT100	120 / 240 V, 1Ø, 1.0 pf	100	417	89	371	450
	120 / 208 V, 3Ø, 0.8 pf	100	347	94	326	400
	120 / 240 V, 3Ø, 0.8 pf	100	301	94	283	350
	277 / 480 V, 3Ø, 0.8 pf	100	150	94	141	175
QT130	120 / 240 V, 1Ø, 1.0 pf	130	542	117	488	600
	120 / 208 V, 3Ø, 0.8 pf	130	451	122	423	500
	120 / 240 V, 3Ø, 0.8 pf	130	391	122	367	450
	277 / 480 V, 3Ø, 0.8 pf	130	195	122	183	225
QT150	120 / 240 V, 1Ø, 1.0 pf	144	625	136	567	700
	120 / 208 V, 3Ø, 0.8 pf	150	520	142	493	600
	120 / 240 V, 3Ø, 0.8 pf	150	451	142	427	500
	277 / 480 V, 3Ø, 0.8 pf	150	225	142	214	250

### SURGE CAPACITY IN AMPS

		Voltage Dip @ < .4 pf	
		15%	30%
QT100	120/240 V, 1Ø	150	413
	120/208 V, 3Ø	186	452
	120/240 V, 3Ø	161	392
	277/480 V, 3Ø	107	261
QT130	120/240 V, 1Ø	236	648
	120/208 V, 3Ø	364	885
	120/240 V, 3Ø	315	767
QT150	277/480 V, 3Ø	161	390
	120/240 V, 1Ø	486	1,214
	120/208 V, 3Ø	534	1,334
	120/240 V, 3Ø	463	1,156
	277/480 V, 3Ø	250	624

### ENGINE FUEL CONSUMPTION

		Natural Gas		Propane		
		(ft³/hr)	(m³/hr)	(gal/hr)	(l/hr)	(ft³/hr)
QT100	Exercise cycle	130	3.7	1.4	5.4	52
	25% of rated load	371	10.5	4.1	15.5	149
	50% of rated load	713	20.3	7.9	29.8	287
	75% of rated load	991	28.2	11	41.5	400
	100% of rated load	1,260	35.8	13.9	52.6	507
QT130	Exercise cycle	135	3.8	1.4	5.7	55
	25% of rated load	482	13.7	5.3	20	193
	50% of rated load	927	26.3	10.3	38.7	373
	75% of rated load	1,292	36.7	14.3	54	520
QT150	100% of rated load	1,786	50.8	19.8	74.6	719
	Exercise cycle	155	4.4	1.7	6.5	63
	25% of rated load	556	15.8	6.09	23.2	224
	50% of rated load	1,070	30.4	11.72	44.7	431
	75% of rated load	1,491	42.4	16.33	62.3	600
	100% of rated load	2,061	58.6	22.57	86.1	830

Note: **Fuel pipe must be sized for full load.**

For Btu content, multiply ft³/hr x 2,520 (LP) or ft³/hr x 1,000 (NG)

For megajoule content, multiply m³/hr x 93.15 (LP) or m³/hr x 37.26 (NG)

Refer to "Emissions Data Sheets" for maximum fuel flow for EPA and SCAQMD permitting purposes.

STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice.

**100 • 130 • 150 kW****operating data****ENGINE COOLING**

	<b>100 kW</b>	<b>130 kW</b>	<b>150 kW</b>
Air flow (inlet air including alternator and combustion air in ft <sup>3</sup> /min)	5,500 / 155.7	6,450 / 182.6	7,800 / 220.9
System coolant capacity (gal / liters)	4.5 / 17	4.5 / 17	4.5 / 17
Heat rejection to coolant (BTU/hr)	342,000 / 360.8	496,000 / 523.3	568,000 / 599.3
Maximum operation air temperature on radiator (°F / °C)	140 / 60		
Maximum ambient temperature (°F / °C)	122 / 50		

**COMBUSTION REQUIREMENTS**

Flow at rated power (cfm / cmm)	262 / 7.4	336 / 9.5	140 / 11.6
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**SOUND EMISSIONS**

Sound output in dB(A) at 23 ft (7 m) with generator in exercise mode*	68	69	66
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load*	72	75	79

\*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.

**EXHAUST**

Exhaust flow at rated output (cfm / cmm)	888 / 25.1	1,119 / 31.7	1,535 / 43.5
Exhaust temperature at muffler outlet (°F / °C)	960 / 516	970 / 521	1,100 / 593

**ENGINE PARAMETERS**

Rated Synchronous rpm	2,300	2,970	3,600
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**POWER ADJUSTMENT FOR AMBIENT CONDITIONS**

Temperature Deration ..... 3% for every 10 °C above 25 °C or 1.65% for every 10 °F above 77 °F  
 Altitude Deration (100, 130, & 150 kW) ..... 1% for every 100 m above 183 m or 3% for every 1,000 ft above 600 ft

**CONTROLLER FEATURES**

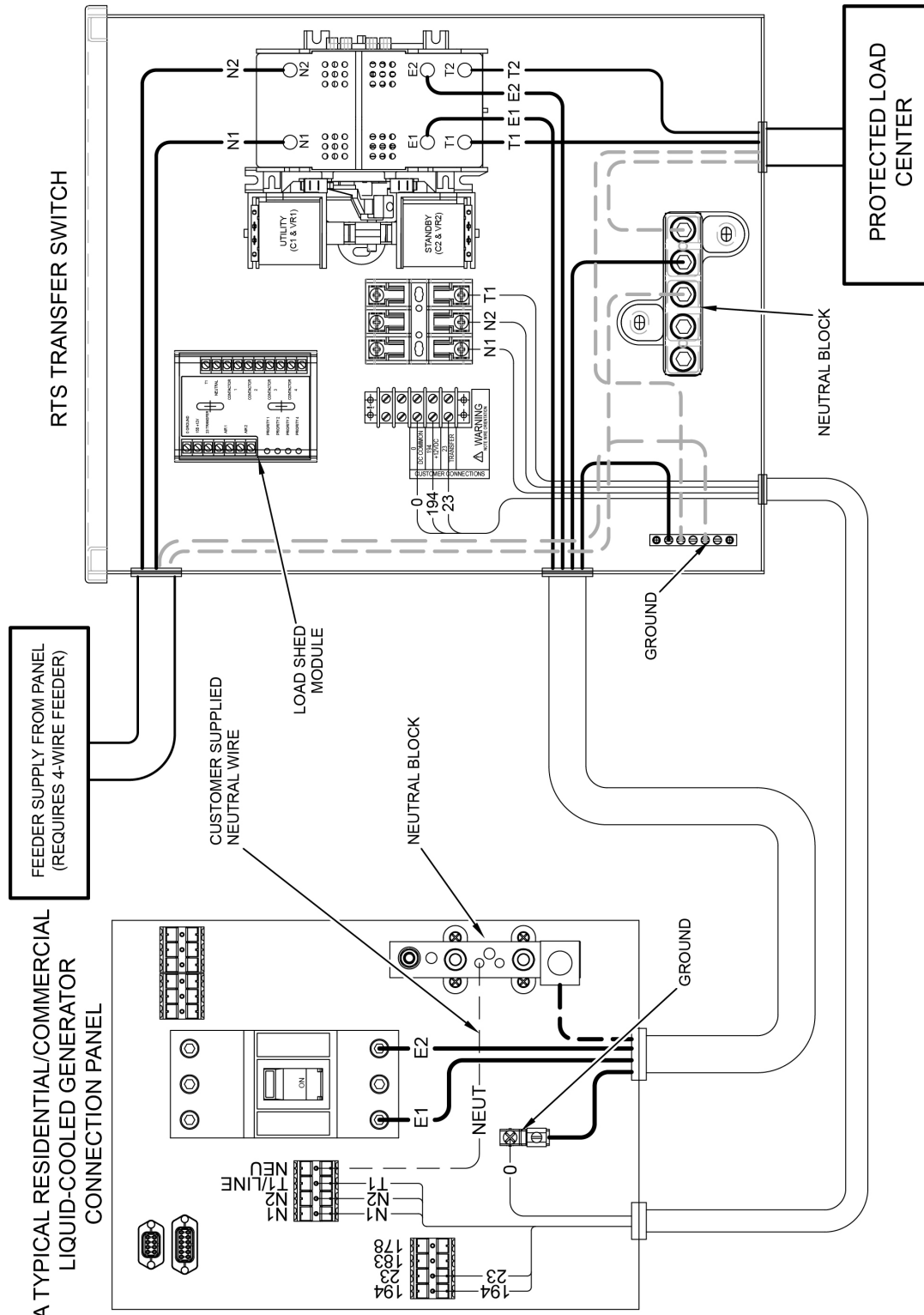
Two-Line Plain Text LCD Display .....	Simple user interface for ease of operation.
Mode Switch: Auto .....	Automatic Start on Utility failure. 7 day exerciser.
Off .....	Stops unit. Power is removed. Control and charger still operate.
Manual .....	Start with starter control, unit stays on. If utility 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

**REMOTE MONITORING**

● Ability to view generator status	Monitor generator with a smartphone, tablet, or computer at any time via the Mobile Link application for complete peace of mind.
● Ability to view generator Exercise / Run and Total Hours	Review the generator's complete protection profile for exercise hours and total hours.
● Ability to view generator maintenance information	Provides maintenance information for the specific model generator when scheduled maintenance is due.
● Monthly report with previous month's activity	Detailed monthly reports provide historical generator information.
● Ability to view generator battery information	Built in battery diagnostics displaying current state of the battery.
● Weather information	Provides detailed local ambient weather conditions for generator location.

Model #	Product	Description
G0071690	Mobile Link® 4G LTE Cellular Accessory	Generac's Mobile Link allows you to check the status of your generator from anywhere that you have access to an Internet connection from a PC or with any smart device. You will even be notified when a change in the generator's status occurs via e-mail or text message. Note: Harness Adapter Kit required. Available in the U.S. only.
G006478-0	Kit, Adapter Mobile Link L/C (Required for QT and RG Series)	The Harness Adapter Kit is required to make liquid-cooled units compatible with Mobile Link®.
G005632-1 - 150 kW G005633-0 - 100 & 130 kW	Cold Weather Kit	If the temperature regularly falls below 32 °F (0 °C), install a cold weather kit to maintain optimal battery temperature. Kit consists of battery warmer with thermostat built into the wrap.
G005620-0 - 100 & 130 kW G005667-0 - 150 kW	Extreme Cold Weather Kit	Recommended where the temperature regularly falls below 32 °F (0 °C) for extended periods of time. For liquid cooled units only.
G005651-0	Base Plug Kit	Add base plugs to the base of the generator to keep out debris.
G005703-0 - Bisque	Paint Kit	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 properly maintain or touch-up a generator enclosure.
G005660-0 - 100, 130, & 150 kW	Scheduled Maintenance Kit	The Liquid-Cooled Scheduled Maintenance Kits offer all the hardware necessary to perform complete maintenance on Generac liquid-cooled generators.
G007000-0 (50 Amps) G007006-0 (100 Amps)	Smart Management Module	Smart Management Modules (SMM) optimize the performance of a standby generator. They manage large electrical loads upon startup and load shed to aid in recovery when overloaded. In many cases, SMMs can reduce the overall size and cost of the system.
G006510-0	E-Stop resettable switch for commercial installs to NEC2020	E-stop allows for immediate fuel shutoff and generator shutdown in the event of an emergency.
G007005-0	Wi-Fi LP Fuel Level Monitor	The Wi-Fi enabled LP fuel level monitor provides constant monitoring of the connected LP fuel tank. Monitoring the LP tank's fuel level is an important step in making sure your generator is ready to run during an unexpected power failure. Status alerts are available through a free application to notify when your LP tank is in need of a refill.
A0000018981	Ultrasonic Cleaner Solution	An ultra-concentrated anti-corrosive cleaning solution engineered to reach the smallest cavities to clean the toughest contaminants. This water based formula is non-toxic, biodegradable, and safe for both metal and plastic surfaces and is superior in rinsability.
A0000019001	All Surface Protectant	All Surface Protectant for vinyl, rubber, and plastics creates a barrier that seals & protects surfaces from water and UV rays while renewing the look of the surface.

Drawing #0H7452-D



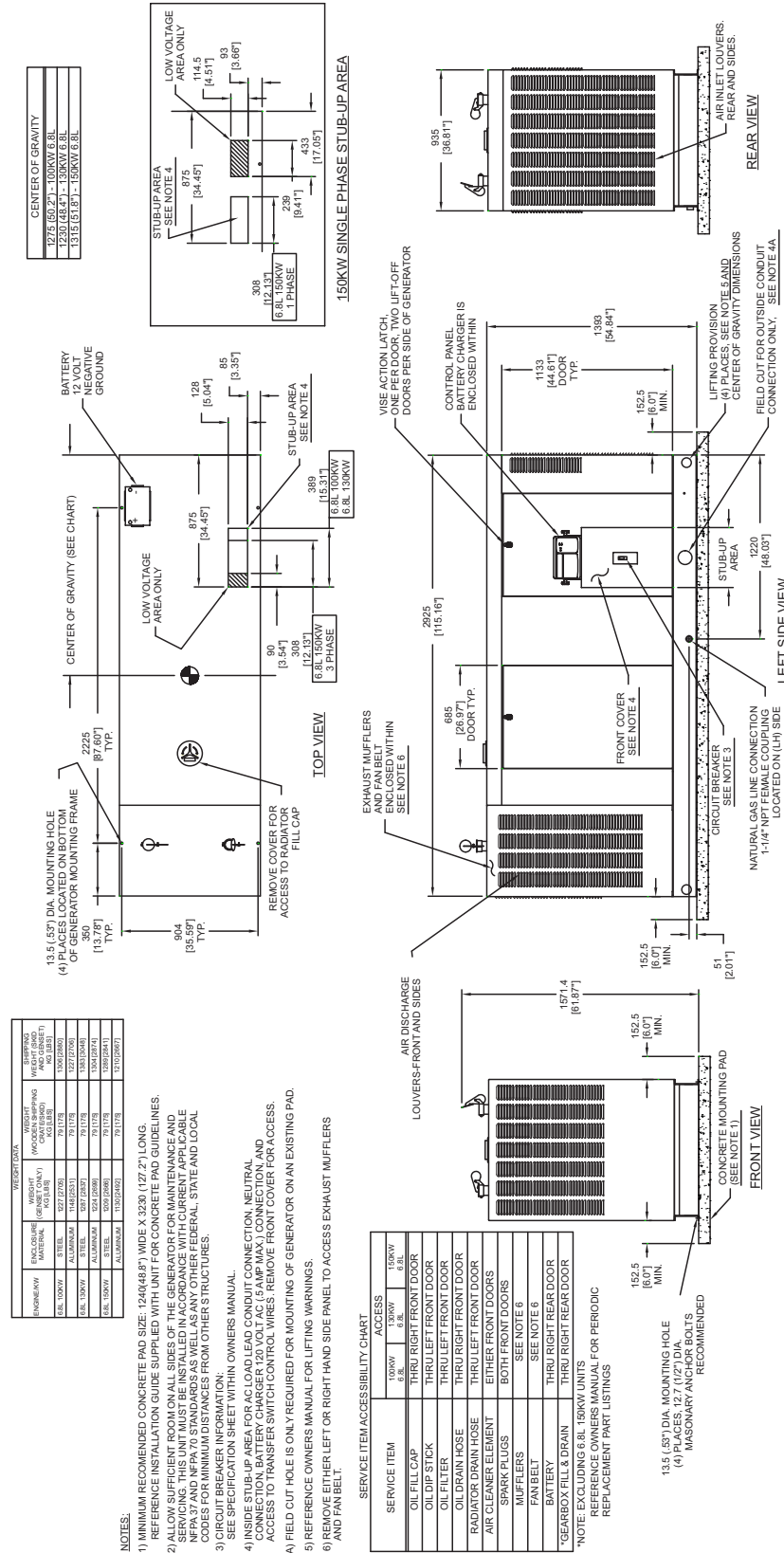
A TYPICAL RESIDENTIAL/COMMERCIAL LIQUID-COOLED GENERATOR CONNECTION PANEL

**NOTE:**  
MATCH WIRE  
NUMBERS TO  
TERMINAL NUMBERS

LIQUID COOLED INSTALLATION

**Note:** Use the generator's specific installation manual and wiring diagrams to verify generator wiring connections, as they may differ slightly from illustration.

100 • 130 • 150 kW



DIMENSIONS: MM [INCH]