# **QT060**

## **Liquid Cooled Gas Engine Generator Sets**

# Standby Power Rating 60 kW 60 Hz



### **GENERAC 2.4L ENGINE**

Turbocharged/Aftercooled Gaseous Fueled

### STANDARD EQUIPMENT

- · All input connections in one single area
- High coolant temperature shutdown
- Low oil pressure shutdown
- · Low coolant level automatic shutdown
- Overspeed automatic shutdown
- Crank timer
- Exercise timer
- · Oil drain extension
- Cool flow radiator
- Closed coolant recovery system
- UV/Ozone resistant hoses
- Watertight state of the art electrical connectors

- Mainline circuit breaker
- Radiator drain extension
- Battery charge alternator
- 2 Amp static battery charger
- Battery and battery cables
- Battery rack
- · Fan and belt guards
- Isochronous governor
- Flex fuel line
- Hour meter

### **FEATURES**

- Innovative design and fully prototype tested
- UL2200 Listed
- Solid state frequency compensated voltage regulator
- Dynamic and static battery charger
- Sound attenuated acoustically designed enclosure
- Quiet test for low noise level exercise
- Acoustically designed engine cooling system
- High flow low noise factory engineered exhaust system
- State of the art digital control system with R100 digital control panel
- Watertight electrical connectors
- · Rodent proof construction
- High efficiency, low distortion Generac designed alternator
- Vibration isolated from mounting base
- Matching Generac transfer switches engineered and tested to work as a system
- · All components easily accessible for maintenance
- Electrostatically applied powder paint



## **GENERATOR SPECIFICATIONS**

TYPE	Synchronous
ROTOR INSULATION	Class H
STATOR INSULATION	Class H
TOTAL HARMONIC DISTORTION	<5%
TELEPHONE INTERFERENCE FACTOR (TIF)	<50
ALTERNATOR OUTPUT LEADS 3 PHASE	4 wire
BEARINGS	Sealed Ball
COUPLING	Flexible Disc
LOAD CAPACITY (STANDBY RATING)	60 kW
EXCITATION SYSTEM	Direct

NOTE: Generator rating and performance in accordance with ISO8528-5, BS5514, SAE J1349, ISO3046, and DIN6271 standards.

### **VOLTAGE REGULATOR**

TYPE	Electronic
SENSING	Single Phase
REGULATION	± 1%
FEATURES	V/F Adjustable
	Adjustable Voltage and Gain
	LED Indicators

### **GENERATOR FEATURES**

- Revolving field heavy duty generator
- Directly connected to the engine
- ☐ Operating temperature rise 120 °C above a 40 °C ambient
- ☐ Insulation is Class H rated at 150 °C rise
- All models are fully prototyped tested

# **CONTROL PANEL FEATURES**

### ☐ SEVEN LED INDICATOR LIGHTS ☐ ADDITIONAL FUNCTIONS

- System ready
- · Low fuel pressure
- Low battery
- · Low oil pressure
- High coolant temp/low coolant temp
- Overspeed
- Overcrank

- Utility sensing
- · Delay on utility failure for engine start
- Engine warm-up before transfer
- · Delay to retransfer to utility
- Engine cooldown timer
- · Exerciser not set
- · Hour meter

### ☐ INTERNAL FUNCTIONS:

- 3 position switch (auto, off and manual)
- 2 wire start for any transfer switch
- Communicates with the Generac RTS transfer switch
- Built-in 7 day exerciser
- Selectable engine speed at exercise
- · Governor controller is built into the master control board
- Temperature range -40 °C to 70 °C

### **ENGINE SPECIFICATIONS**

MAKE	Generac
MODEL	2.4 Liter
CYLINDERS	Inline 4
DISPLACEMENT	2.4 Liter
BORE	3.41
STROKE	3.94
COMPRESSION RATIO	8.5:1
INTAKE AIR SYSTEM	Turbocharged/Aftercooled
VALVE SEATS	Hardened
LIFTER TYPE	Hydraulic

### **GOVERNOR SPECIFICATIONS**

TYPE	Electronic
FREQUENCY REGULATION	± Isochronous
STEADY STATE REGULATION	± 0.25%
ADJUSTMENTS FOR:	
Speed	Yes
Droop	Yes

### **ENGINE LUBRICATION SYSTEM**

OIL PUMP	Gear
OIL FILTER	Full flow spin-on cartridge
CRANKCASE CAPACITY	4 Quarts

## **ENGINE COOLING SYSTEM**

TYPE	
WATER PUMP	Belt driven
FAN SPEED	2100
FAN DIAMETER	22 inches
FAN MODE	Puller

### **FUEL SYSTEM**

FUEL TYPE	Natural gas, propane vapor
CARBURETOR	Down Draft
SECONDARY FUEL REGULATOR	Standard
FUEL SHUT OFF SOLENOID	Standard
OPERATING FUEL PRESSURE	5" - 14" H <sub>2</sub> O

### **ELECTRICAL SYSTEM**

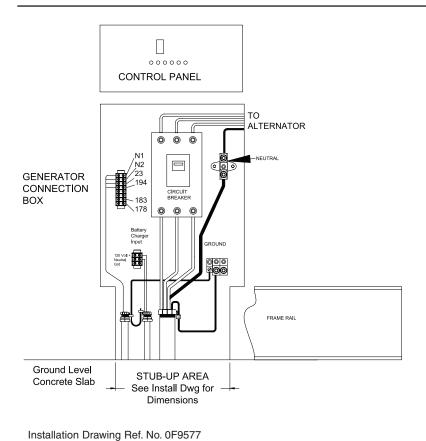
BATTERY CHARGE ALTERNATOR	12V 30 Amp
STATIC BATTERY CHARGER	2 Amp
RECOMMENDED BATTERY	Group 24F, 525CCA
SYSTEM VOLTAGE	12 Volts

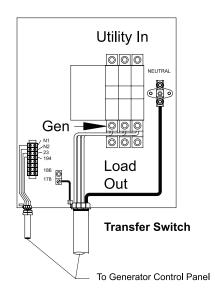


**OPERATING DATA** 

kW RATING		QT060	
KW HATING	60 2.4 Liter Inline 4		
ENGINE SIZE			
GENERATOR OUTPUT VOLTAGE/KW - 60Hz 120/208V, 3-phase, 0.8 pf 120/240V, 3-phase, 0.8 pf 277/480V, 3-phase, 0.8 pf	<b>KW</b> 60 60 60	AMP 208 180 90	<b>CB Size</b> 250 200 100
GENERATOR LOCKED ROTOR KVA AVAILABLE @ VOLTAGE DIP OF 35% Single phase or 208/240 3-phase 480V 3-phase		120 141	
ENGINE FUEL CONSUMPTION (Natural Gas) (Propane)  Exercise cycle 25% of rated load 50% of rated load 75% of rated load 100% of rated load	Natural Gas (ft <sup>3</sup> /hr.) 123 267 483 672 862	(gal/hr.) 1.34 2.7 5.0 7.0 9.0	ropane cu ft/hr 49.3 101 183 255 327
ENGINE COOLING  Air flow (inlet air including alternator and combustion air) ft³/min.  System coolant capacity US gal.  Heat rejection to coolant BTU/hr.  Max. operating air temp. on radiator °C (°F)  Max. ambient temperature °C (°F)		3,280 2.5 270,000 60 (150) 50 (140)	
COMBUSTION AIR REQUIREMENTS Flow at rated power 60 Hz cfm	180		
SOUND EMISSIONS IN DBA  Exercising at 7 meters  Normal operation at 7 meters		65 72	
EXHAUST  Exhaust flow at rated output 60 Hz cfm Exhaust temp. at muffler outlet °F		494 1,050	
ENGINE PARAMETERS Rated synchronous RPM 60 Hz HP at rated KW 60 Hz		3600 94	
POWER ADJUSTMENT FOR AMBIENT CONDITIONS  Temperature Deration  3% for every 10 °C above - °C  1.65% for every 10 °F above - °F  Altitude Deration  1% for every 100 m above - m  3% for every 1000 ft. above - ft.		25 77 915 3000	

RATING: All three phases units are rated at 0.8 power factor. All single phase units are rated at 1.0 power factor. 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.

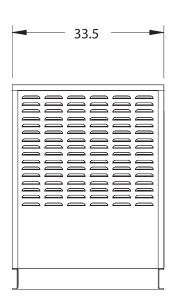


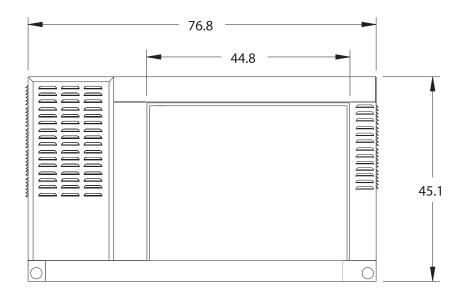


### CIRCUIT BREAKER SIZE

kW	VOLTS	/ AMPS	LUG SIZE
60	240 1ø	300	(2) 250 mcm to 2 - 1/0 or
			(1) 600 mcm to #4
60	208 3ø	250	(2) 250 mcm to 2 - 1/0 or
			(1) 600 mcm to #4
60	240 3ø	200	#6 to 300 mcm
60	480 3ø	100	#6 to 300 mcm

# INSTALLATION LAYOUT





WEIGHT: 1650 lbs.

