GENERAC® | INDUSTRIAL POWER

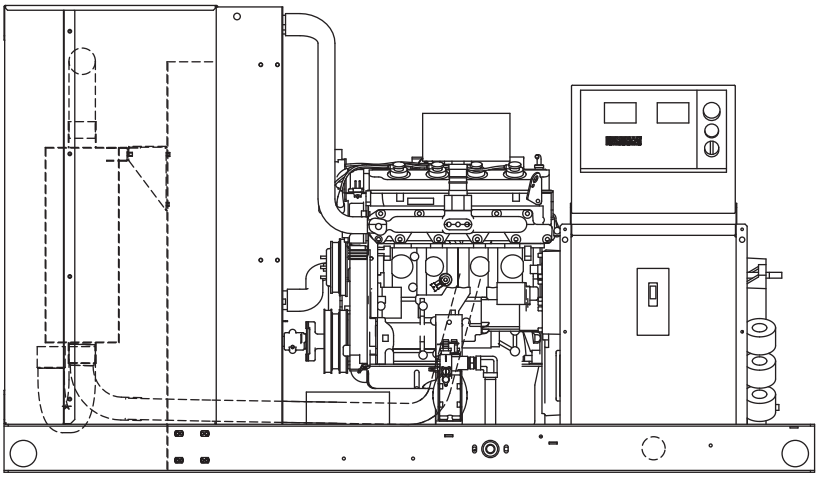
QT025A

Industrial Gaseous Generator Set

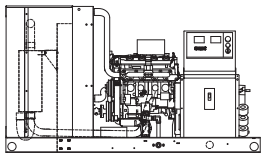
EPA Certified Stationary Emergency

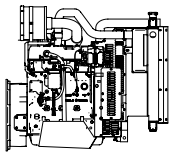
Standby Power Rating

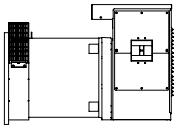
31kVA 25kW 60Hz

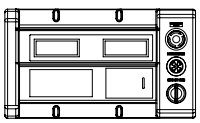


Generator image used for illustration purposes only









features benefits

Generator Set	
• PROTOTYPE & TORSIONALLY TESTED	▸ PROVIDES A PROVEN UNIT
• UL2200 TESTED	▸ ENSURES A QUALITY PRODUCT
• RHINOCOAT PAINT SYSTEM	▸ IMPROVES RESISTANCE TO ELEMENTS
Engine	
• EPA COMPLIANT	▸ ENVIRONMENTALLY FRIENDLY
• INDUSTRIAL TESTED, GENERAC APPROVED	▸ ENSURES INDUSTRIAL STANDARDS
• POWER-MATCHED OUTPUT	▸ ENGINEERED FOR PERFORMANCE
• INDUSTRIAL GRADE	▸ IMPROVES LONGEVITY AND RELIABILITY
Alternator	
• TWO-THIRDS PITCH	▸ ELIMINATES HARMFUL 3RD HARMONIC
• LAYER WOUND ROTOR & STATOR	▸ IMPROVES COOLING
• CLASS H MATERIALS	▸ HEAT TOLERANT DESIGN
• DIGITAL 3-PHASE VOLTAGE CONTROL	▸ FAST AND ACCURATE RESPONSE
Controls	
• ENCAPSULATED BOARD W/ SEALED HARNESS	▸ EASY, AFFORDABLE REPLACEMENT
• 4-20mA VOLTAGE-TO-CURRENT SENSORS	▸ NOISE RESISTANT 24/7 MONITORING
• SURFACE-MOUNT TECHNOLOGY	▸ PROVIDES VIBRATION RESISTANCE
• ADVANCED DIAGNOSTICS & COMMUNICATIONS	▸ HARDENED RELIABILITY

primary codes and standards

NEMA · c UL us LISTED · NFPA · ASTM INTERNATIONAL · ISO · ICC

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QT025A application and engineering data

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Engine Reference	See Emissions Data Sheet
Cylinder #	4
Type	In-line
Displacement - L	2.4
Bore - mm (in.)	86.61 (3.41)
Stroke - mm (in.)	100.08 (3.94)
Compression Ratio	9.5:1
Intake Air Method	Naturally Aspirated
Number of Main Bearings	5
Connecting Rods	Forged
Cylinder Head	Aluminum
Cylinder Liners	No
Ignition	High Energy
Pistons	Aluminum Alloy
Crankshaft	Cast
Lifter Type	Overhead Cam
Intake Valve Material	Steel Alloy
Exhaust Valve Material	Hardened Steel
Hardened Valve Seats	Yes

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-flow spin-on cartridge
Crankcase Capacity - L (qts)	3.8 (4)

Cooling System

Cooling System Type	Pressurized Closed
Water Pump Flow	11 gal/min
Fan Type	Pusher
Fan Speed (rpm)	2150
Fan Diameter mm (in.)	457 (18)
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120VAC

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" H2O*

*Fuel pressure must remain within specified range and not drop more than 1 in. w.c. from static (no-load) to full load.

Engine Electrical System

System Voltage	12VDC
Battery Charging Alternator (Amps)	30
Battery Size (at 0ºC)	525CCA
Battery Group	26
Battery Voltage	12VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390mm
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50
Standard Excitation	Brush Type
Bearings	Sealed Ball
Coupling	Flexibile Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes

Voltage Regulator Type	Full Digital
Number of Sensed Phases	3
Regulation Accuracy (Steady State)	+/- 0.25%

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	+/- 0.25%

CODES AND STANDARDS COMPLIANCE (WHERE APPLICABLE)

NFPA 99
NFPA 110
ISO 8528-5
ISO 1708A.5
ISO 3046
BS5514
SAE J1349
DIN6271
IEEE C62.41 TESTING
NEMA ICS 1
UL2200

Rating Definitions:
Standby – Applicable for a varying emergency load for the duration of a utility power outage with no overload capability. (Max. load factor = 70%)

QT025A operating data (60Hz)

POWER RATINGS (kW)

	Natural Gas		Propane Vapor	
Single-Phase 120/240VAC @1.0pf	25	Amps: 104	25	Amps: 104
Three-Phase 120/208VAC @0.8pf	25	Amps: 87	25	Amps: 87
Three-Phase 120/240VAC @0.8pf	25	Amps: 75	25	Amps: 75
Three-Phase 277/480VAC @0.8pf	25	Amps: 38	25	Amps: 38

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

		480VAC						208/240VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	25	16	25	33	41	49	57	12	19	25	31	37	43

FUEL

Fuel Consumption Rates*

Natural Gas			Propane Vapor		
Percent Load	ft³/hr	m³/hr	Percent Load	ft³/hr	m³/hr
25%	140	3.9	25%	56	1.6
50%	220	6.2	50%	87	2.5
75%	300	8.5	75%	119	3.4
100%	380	10.8	100%	151	4.3
* Refer to "Emissions Data Sheet" for maximum fuel flow for EPA and SCAQMD permitting purposes.					

COOLING

		STANDBY
Air Flow (inlet air combustion and radiator)	ft³/min (m³/min)	1500 (42.48)
System Coolant Capacity	Gal (Liters)	2.5 (9.46)
Heat Rejection to Coolant	BTU/hr	95,000
Max. Operating Air Temp on Radiator	°F (°C)	122 (50)
Max. Ambient Temperature	°F (°C)	104 (40)
Maximum Radiator Backpressure	in H_2O	1.5

COMBUSTION AIR REQUIREMENTS

		STANDBY
Flow at Rated Power	cfm	70

ENGINE

		STANDBY
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	40
Piston Speed	ft/min	1182
BMEP	psi	120

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

EXHAUST

		STANDBY
Exhaust Flow (Rated Output)	cfm (m³/min)	220 (6.2)
Maximum Recommended Back Pressure	inHg	1.5
Exhaust Temp (Rated Output)	°F (°C)	975 (524)
Exhaust Outlet Size	in	2.5

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

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QT025A

standard features and options

GENERATOR SET

● Genset Vibration Isolation	Std
○ Extended warranty	Opt
○ Gen-Link™ Communications Software	Opt
○ Steel Enclosure	Opt
○ Aluminum Enclosure	Opt

ENGINE SYSTEM

General	
● Oil Drain Extension	Std
● Critical Exhaust Silencer	Std
● Air cleaner	Std
● Fan guard	Std
● Radiator duct adapter	Std
Fuel System	
● Fuel lockoff solenoid	Std
● Secondary Fuel Regulator	Std
● Flexible fuel lines	Std
Cooling System	
● 120VAC Coolant Heater	Std
● Closed Coolant Recovery System	Std
● UV/Ozone resistant hoses	Std
● Factory-Installed Radiator	Std
● Radiator Drain Extension	Std
Engine Electrical System	
● Battery charging alternator	Std
● Battery cables	Std
● Battery tray	Std
● Solenoid activated starter motor	Std
● 10A UL float/equalize battery charger	Std
● Rubber-booted engine electrical connections	Std

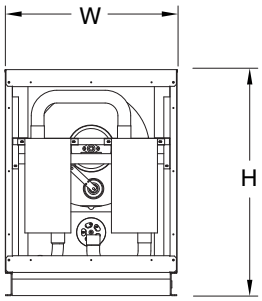
ALTERNATOR SYSTEM

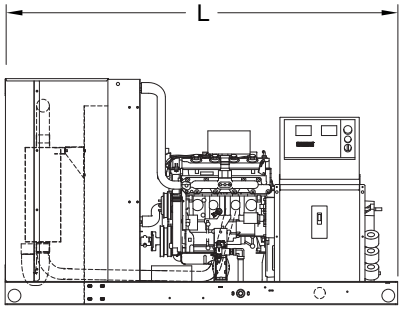
● UL2200 GENprotect™	Std
● Main Line Circuit Breaker	Std

CONTROL SYSTEM

Control Panel	
● Digital H Control Panel - Dual 4x20 Display	Std
● Programmable Crank Limiter	Std
○ 21-Light Remote Annunciator	Opt
○ Remote Relay Panel (8 or 16)	Opt
● 7-Day Programmable Exerciser	Std
● Special Applications Programmable PLC	Std
● RS-232 Communications	Std
● RS-485 Communications	Std
● All-Phase Sensing DVR	Std
● Full System Status	Std
● Utility Monitoring (Req. H-Transfer Switch)	Std
● 2-Wire Start Compatible	Std
● Power Output (kW)	Std
● Power Factor	Std
● Reactive Power	Std
● All phase AC Voltage	Std
● All phase Currents	Std
● Oil Pressure	Std
● Coolant Temperature	Std
● Coolant Level	Std
● Fuel Pressure	Std
● Engine Speed	Std
● Battery Voltage	Std
● Frequency	Std
● Isochronous Governor Control	Std
● -40deg C - 70deg C Operation	Std
● Waterproof Plug-In Connectors	Std
● Audible Alarms and Shutdowns	Std
● Not in Auto (Flashing Light)	Std
● Auto/Off/Manual Switch	Std
● E-Stop (Red Mushroom-Type)	Std
● NFPA 110 Level I and II (Programmable)	Std
● Remote Communication - RS232	Std
Alarms (Programmable Tolerances, Pre-Alarms and Shutdowns)	
● Low Fuel Pressure	Std
● Oil Pressure (Pre-programmed Low Pressure Shutdown)	Std
● Coolant Temperature (Pre-programmed High Temp Shutdown)	Std
● Coolant Level (Pre-programmed Low Level Shutdown)	Std
● Engine Speed (Pre-programmed Overspeed Shutdown)	Std
● Voltage (Pre-programmed Overvoltage Shutdown)	Std
● Battery Voltage	Std

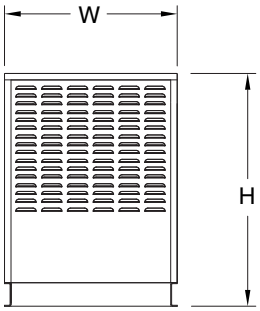
QT025A dimensions, weights and sound levels

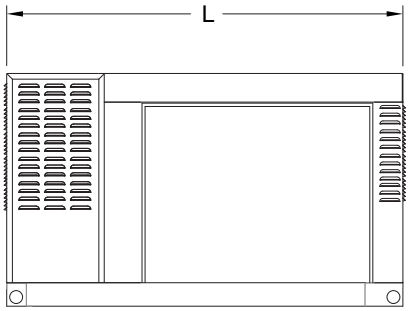




OPEN SET

L	W	H	WT	dBA*
77	34	43	1163	83





LEVEL 1 ACOUSTIC ENCLOSURE

L	W	H	WT	dBA*
77	34	46	1414	60

*All measurements are approximate and *All measurements are approximate and for estimation purposes only. Sound levels measured at 23ft (7m) under normal operation and do not account for ambient site conditions. estimation purposes only. Sound levels measured at 23ft (7m) and does not account for ambient site conditions.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.