

220 kW Cummins Powered Fully Packaged Diesel Generator

The XC Power Generation AC commercial series generator set is a fully integrated power generation system providing optimum performance with the reliability and versatility of a Cummins Engine.

All XC units meet the following standards: VDE 0530, BS 4999, BS 5000, IEC 34. Manufactured in accordance with ISO 9001.

Optional sound attenuated weather-protective enclosures are available to shield the generator set from extreme operating conditions.

Diesel powered generator sets remain the number-one choice for standby and emergency power systems worldwide. XC diesel generator sets are the epitome of rugged dependability and reliable mechanical and electrical performance.

Standard Features

- ▶ Electric Starter
- ▶ Electronic Governor
- ▶ Single Bearing Alternator
- ▶ Insulation class H/H
- ▶ Skid Mounted with Vibration Isolators
- ▶ Dry Type Air Filter
- ▶ Main Line Circuit Breaker
- ▶ Battery Rack and Cables
- ▶ User Manual
- ▶ Heavy Duty Fabricated Steel Base Frame
- ▶ 8 Hour Base Mounted Fuel Tank
- ▶ One Year Limited Warranty
- ▶ Deep Sea Control Panel

Model XC220



- ▶ High quality and reliable
- ▶ Compact design
- ▶ Easy start and maintenance possibility
- ▶ Every gen-set is subject to a comprehensive test program which includes full and overload testing, checking and proving of all control and safety shut down functions

Powered By: CUMMINS

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GENERATOR ENGINE

Cummins heavy-duty diesel engines use advanced combustions technology for reliable and stable power, low emissions, and fast response to sudden load changes.

Electronic governing is available for applications requiring constant (isochronous) frequency regulation such as Uninterruptible Power Supply (UPS) systems, non-linear loads, or sensitive electronic loads. Electronic governing is standard on 100 kW and up. Optional coolant heaters are recommended for all emergency standby installations or for any application requiring fast load acceptance after startup.

Base Engine	Cummins Model LTA10-G2 Turbocharged
Displacement in3 (L)	610.0 (10.0)
Overspeed Limit, RPM	2100
Regenerative Power, kW	26.00
Cylinder Block Configuration	Cast Iron, In-Line 6 Cylinder
Cranking Current	550 Amps at Ambient Temp. 32°F (0°C)
Battery Charging Alternator	45 Amps
Starting Voltage	24 Volt, Negative Ground
Lube Oil Filter Types	Single Spin-On Canister, Full Flow
Standard Cooling System	122°F (50°C) Ambient Radiator

Power Output	Standby	Prime
Gross Engine Output	380.0 bhp (283.5 kWm)	345.0 bhp (257.4 kWm)
BMEP at Rated Load	247.0 psi (1703.0 kPa)	226.0 psi (1558.2 kPa)
Bore	4.92 in. (125.0 mm)	4.92 in. (125.0 mm)
Stroke	5.35 in. (135.9 mm)	5.35 in. (135.9 mm)
Piston Speed	1605.0 ft/min (8.2 m/s)	1605.0 ft/min (8.2 m/s)
Compression Ratio	16.0:1	16.0:1
Lube Oil Capacity	38.0 qt (36.0 L)	38.0 qt (36.0 L)

Fuel Flow	Standby	Prime
Fuel Flow at Rated Load	64.0 Gal/hr (242.2 L/hr)	64.0 Gal/hr (242.2 L/hr)
Maximum Inlet Restriction	4.0 in. Hg (101.6 mm Hg)	4.0 in. Hg (101.6 mm Hg)
Maximum Return Restriction	6.5 in. Hg (165.1 mm Hg)	6.5 in. Hg (165.1 mm Hg)

Air Cleaner	Standby	Prime
Maximum Air Cleaner Restriction	25.0 in. H ₂ O (6.2 kPa)	25.0 in. H ₂ O (6.2 kPa)

Exhaust	Standby	Prime
Exhaust Flow at Rated Load	1660.0 cfm (47.0 m ³ /min)	1500.0 cfm (42.4 m ³ /min)
Exhaust Temperature	950.0°F (510.0°C)	920.0°F (493.3°C)
Max Back Pressure	41.0 in. H ₂ O (10.2 kPa)	41.0 in. H ₂ O (10.2 kPa)

Fuel System	Direct Injection, Number 2 Diesel, Fuel Filter; Water Separator; Automatic Electric Fuel Shutoff
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RATING DEFINITIONS

Standby Rating based on: Applicable for supplying emergency power for the duration of normal power interruption. No sustained overload capacity is available for this rating.

Prime Rating based on: Applicable for supplying power in lieu of commercially purchased power. Continuous running at variable load for unlimited periods with 10% overload available 1 hour in any 12 hour period.

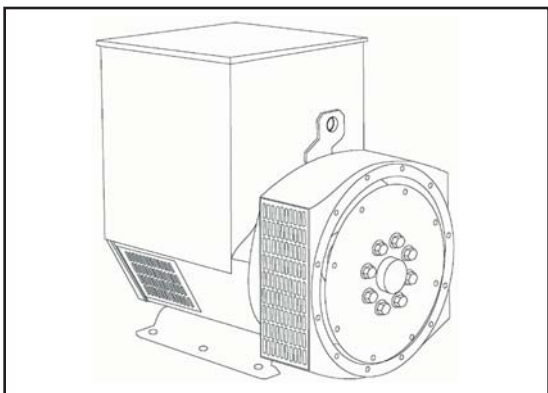
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STAMFORD NEWAGE GENERATOR END

All TRC generators are built using Stamford Newage Generator Ends in order to provide high quality power generators.

STAMFORD NEWAGE has a long history of producing high-quality reliable products for the power generation market. Their portfolio of high quality generator ends is recognized as an industry standard.

HC144C - Technical Data



CONTROL SYSTEM		SELF EXCITED	
A.V.R.	SX 440	SX 421	
VOLTAGE REGULATION	± 1.0%	± 0.5%	WITH 4% ENGINE GOVERNING
SUSTAINED SHORT CIRCUIT	WILL NOT SUSTAIN A SHORT CIRCUIT		
INSULATION SYSTEM		CLASS H	
PROTECTION		IP23	
RATED POWER FACTOR		0.8	
STATOR WINDING		DOUBLE LAYER LAP	
WINDING PITCH		TWO THIRDS	
WINDING LEADS		12	
STATOR WDG, RESISTANCE		0.0166 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED	
ROTOR WDG, RESISTANCE		0.92 Ohms AT 22°C	
R.F.I. SUPPRESSION		BS EN 61000-6-2 & BS EN 61000-6-4, VDE 0875G, VDE 0875N. REFER TO FACTORY FOR OTHERS	
WAVEFORM DISTORTION		NO LOAD < 1.5% NON DISTORTING BALANCED LINEAR LOAD < 5.0%	
MAXIMUM OVERSPEED		2250 REV/MIN	
BEARING DRIVE END		BALL. 6317 (ISO)	
BEARING NON-DRIVE END		BALL. 6314 (ISO)	
		1 BEARING	
WEIGHT COMP. GENERATOR		850 kg	
WEIGHT WOUND STATOR		370 kg	
WEIGHT WOUND ROTOR		324 kg	
WR ² INERTIA		3.5531 kgm ²	
SHIPPING WEIGHT (CRATED)		920 kg	
SHIPPING CRATE SIZE		155cm x 87cm x 107cm	
		50 Hz	
		60 Hz	
TELEPHONE INTERFERENCE		THF < 2%	
		TIF < 50	
COOLING AIR		0.486 m ³ /sec 1030 cfm	
		0.580 m ³ /sec 1240 cfm	
VOLTAGE SERIES STAR		380/220	400/231 415/240 440/254 416/240 440/254 460/266 480/277
VOLTAGE PARALLEL STAR		190/110 200/115 208/120 220/127	208/120 220/127 230/133 240/138
VOLTAGE SERIES DELTA		220/110 230/115 240/120 254/127	240/120 254/127 266/133 277/138

DEEP SEA ELECTRONICS CONTROL PANEL 5210

Model 5210 is an Automatic Mains Failure Control Module. The module is used to monitor a mains supply and automatically start a standby generator set. The module also provides indication of operational status and fault conditions, automatically shutting down the genset and indicating failures by means of an LCD display, and appropriate flashing LED on the front panel.

Selected timers and alarms can be altered by the customer from the front panel. Alterations to the system are made using the 810 interface and a PC. This interface also provides real time diagnostic facilities.

It is also possible to monitor the operation of the system either locally or remotely. (Optional: Remote Communications output versions only.)

Easy Pushbutton Control

Operation of the module is via pushbutton controls (with security locking facility mounted on the front panel with STOP/RESET, AUTO, MANUAL, and START pushbutton. The first three pushbuttons feature LED "selected" indications. Further pushbuttons provide LCD DISPLAY SCROLL and EVENT LOG VIEW functions.

www.gurston.com | www.generatorsurplus.com

Microprocessor Control

The module features 16-bit microprocessor control and a comprehensive list of timers and pre-configured sequences. This allows demanding specifications to be achieved. Configurable expansion facilities are also provided.

Metering

The 5210 module provides metering via the LCD display with the following instrumentation displays, accessed via the LCD DISPLAY SCROLL push buttons:

- ▶ Generator Volts L1-N, L2-N, L3-N
- ▶ Generator Volts L1-L2, L2-L3, L3-L1
- ▶ Generator Amps L1, L2, L3
- ▶ Generator Frequency Hz
- ▶ Engine Speed RPM
- ▶ Engine Oil Pressure
- ▶ Fuel Level %
- ▶ Engine Temperature
- ▶ Plant Battery Volts
- ▶ Engine Hours Run
- ▶ Generator kVA
- ▶ Generator kW
- ▶ Generator Cosφ
- ▶ Mains Volts L1-N, L2-N, L3-N
- ▶ Mains Volts L1-L2, L2-L3, L3-L1
- ▶ Mains Frequency Hz

Additional Features

- ▶ Event Log
- ▶ Digital Inputs
- ▶ Analog Inputs
- ▶ Relay Outputs
- ▶ Multiple Alarm Channels
- ▶ Emergency Shutdowns
- ▶ Built-in Exerciser Scheduler
- ▶ Multi-Functional Timers
- ▶ Magnetic Pickup or Alternator
- ▶ Speed Monitoring
- ▶ System Lock Input
- ▶ And More



Control Panel By: 

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Optional Features

- ▶ Electronic Governor Control System
- ▶ Automatic Fuel Filling System
- ▶ Engine Oil Heater
- ▶ Remote Radiator
- ▶ Low Fuel Level Alarm
- ▶ Charge Voltmeter
- ▶ Charge Ammeter
- ▶ Critical Silencer
- ▶ Enclosure or Soundproof Canopy
- ▶ Residential Silencer
- ▶ PMG
- ▶ Tool Kit



- ▶ U.L. Breaker
- ▶ Anti Condensation Heater for Alternator
- ▶ Sub-base, Remote, or Day Fuel Tank
- ▶ 4 Pole Contactor
- ▶ Oversized Alternator
- ▶ Automatic Transfer Switch
- ▶ Trailer
- ▶ Remote Monitoring System
- ▶ NFPA Controls
- ▶ Manual Sump Oil Drain Pump
- ▶ And More



control your generator remotely



DIMENSIONS (Open Unit)

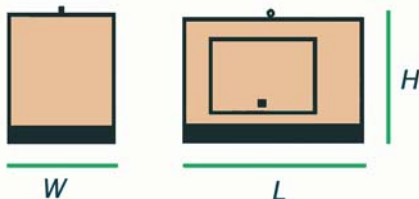


Size (L x W x H) in Inches
114.25" x 45.25" x 71"

Dry Weight in Pounds (lbs)
4233 lbs.



DIMENSIONS (Enclosed Unit)



Size (L x W x H) in Inches
157" x 45.5" x 81"

Dry Weight in Pounds (lbs)
6328 lbs.



Design and specifications subject to change without notice.
Dimensions shown are approximate. Contact your dealer for more information. DO NOT USE THESE DIMENSIONS FOR INSTALLATION PURPOSES.