

500 kW Perkins Powered Fully Packaged Diesel Generator

TRITON

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

Triton strives to meet all quality standards and provides a comprehensive warranty program. Triton meets 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. Triton 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
- ▶ Remote 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 XP500

- ▶ 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

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GENERATOR ENGINE

Perkins generator drive engines are one of the engines of choice of highly respected generator set manufacturers worldwide. They are simple in design, reliable, durable, economical, and globally supported giving customers worry free service in times when power is most needed.

See for yourself why leading generator set manufacturers and customers around the world choose Perkins generator drive engines. You can depend on Perkins generator drive power and worldwide Perkins parts and service. Anywhere in the world, Perkins delivers the power for you.

GENERAL DATA

Manufacturer	PERKINS
Model	2806C-E16TAG1, 4 Cycle, Turbo, Air/Air DC
Cylinder Arrangement	6 X L
Displacement	15.8 L (964.1 C.I.)
Bore and Stroke	140mm (5.5 in.) x 171mm (6.7 in.)
Compression Ratio	15.9:1
Rated RPM	1800 RPM
Moment of Inertia	1.96 (kg/m ²) 6698 (lb/m ²) ¹
Cooling Method	Water
Frequency Regulation, No Load to Full Load	NA
Frequency Regulation, Steady State	NA
Governor Type	Electronic

Exhaust System

Exhaust Gas Flow	118 L/s (4167 cfm)
Exhaust Temperature	430° C (806° F)
Max Back Pressure	6.9kPA (2.0 in Hg)

Fuel System

100% (Standby Power)	116 L/h (30.6 gal/hr)
75% (Standby Power)	88 L/h (23.3 gal/hr)
50% (Standby Power)	65 L/h (17.1 gal/hr)

FEATURES AND BENEFITS

Dynamically Balanced Crankshaft

- ▶ Induction-hardened journals for long hours of reliable service
- ▶ Robust design to drive machinery from the front of the crankshaft
- ▶ Supported by five main bearings

Forged Steel Connection Rods

- ▶ Provide excellent heat dissipation
- ▶ Precision machined for long life
- ▶ Rebuild to original specifications

Easy to Apply, Easy to Install

- ▶ Front and rear engine mounting pads on the side of the block facilitates installations
- ▶ Standard auxiliary drive rated to 50 HP - intermittent for powering ancillary equipment
- ▶ Either side service for filters and service points
- ▶ All connection points in common locations make it easy to install or package

Compact Size

- ▶ Length is ideal for both skid and packaged installations
- ▶ High mount or low mount turbocharged position to meet packaging requirements.

World-Class Performance

- ▶ Excellent fuel economy and low oil consumption

Fuel System Controls

- ▶ Proven and reliable electronic governor
- ▶ +/- .25% Governing
- ▶ 12V or 24V electric shutoff

Emissions

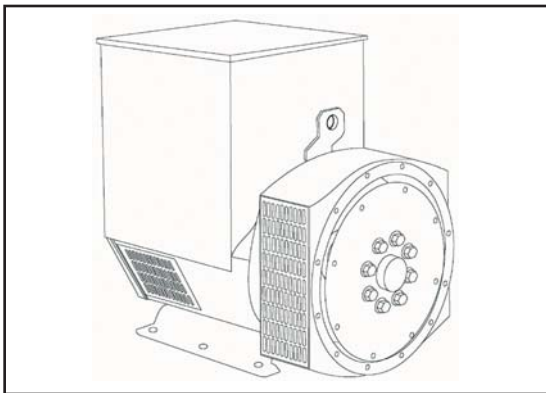
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STAMFORD NEWAGE GENERATOR END

All Triton 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.

HC1544D - 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		0.0047 Ohms PER PHASE AT 22°C SERIES STAR CONNECTED	
ROTOR WDG. RESISTANCE		1.77 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. 6314 (ISO)	
WEIGHT COMP. GENERATOR		1393 kg	
WEIGHT WOUND STATOR		657 kg	
WEIGHT WOUND ROTOR		563 kg	
WR ² INERTIA		8.0068 kgm ²	
SHIPPING WEIGHT (CRATED)		1485 kg	
SHIPPING CRATE SIZE		166cm x 87cm x 124cm	
		50 Hz	
		60 Hz	
TELEPHONE INTERFERENCE		THF < 2%	
		TIF < 50	
COOLING AIR		1.23 m ³ /sec 2615 cfm	
		1.59 m ³ /sec 3366 cfm	
VOLTAGE SERIES STAR		380/220	400/231 415/240 440/254
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
KVA BASE RATING FOR REACTANCE VALUES		500 500 500 500	584 618 644 644
Xd DIR. AXIS SYNCHRONOUS		3.02 2.72 2.53 2.25	3.58 3.39 3.23 2.97

DEEP SEA ELECTRONICS CONTROL PANEL 5210

Model 5210 is an Automatic Engine Control Module. The module is used to automatically start and stop the engine, indicating the operational status and fault conditions, automatically shutting down the engine and indicating an engine failure by means of an LCD display and an 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 possible to monitor 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 buttons. The first three buttons feature LED 'selected' indications. Further buttons provide LCD DISPLAY SCROLL and EVENT LOG VIEW functions.

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 Cosθ

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

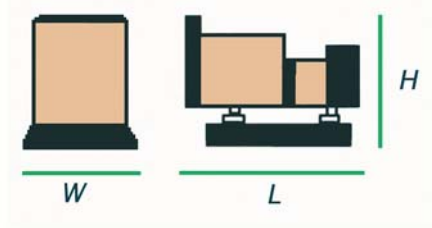
- ▶ Electronic Governor Control System
- ▶ Automatic Fuel Filling System
- ▶ Engine Oil Heater
- ▶ Remote Radiator
- ▶ Low Fuel Level Alarm
- ▶ Charge Voltmeter
- ▶ Charge Ammeter
- ▶ Critical Silencer
- ▶ Enclosure or Soundproof Canopy
- ▶ Residential Silencer
- ▶ PMG
- ▶ Tool Kit



- ▶ 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



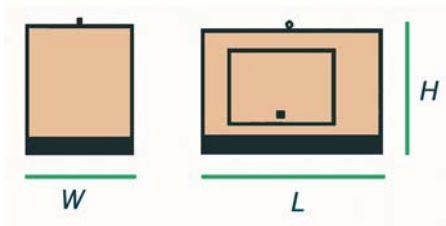
control your generator remotely



DIMENSIONS (Open Unit)

Size (L x W x H) in Inches
141.75" x 48.43" x 83.07"

Dry Weight in Pounds (lbs)
9149 lbs.



DIMENSIONS (Enclosed Unit)

Size (L x W x H) in Inches
216.54" x 63" x 99.6"

Dry Weight in Pounds (lbs)
12679 lbs.

Visit us on the web at www.tritongenerators.com

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