THERMO KING

SG-3500 Series

Power you can depend on

THE ULTRA-DEPENDABLE, EASY-TO-USE, AND COST-EFFECTIVE GENERATOR SET FOR MARINE REEFERS



Content

DEPENDABLE POWER 4
Run any ISO reefer with
a proven and robust engine

ENHANCED SUSTAINABILITY 6
Meet the toughest of regulations and
CO_2 emissions

SIMPLE CONTROLS 8
Give operators the information
they need to protect every cargo

COST EFFECTIVE AND INTELLIGENT 9
Lower your total cost of ownership
and extend fleet visibility

CONFIGURATIONS & SPECIFICATIONS 10
With both clip-on and undermount options,
the SG-3500 combines innovation and
impressive performance

SG-3500

Thermo King generator sets perform a critical role in international refrigerated transport. Built to be reliable, sturdy, and cost-effective to run, these are technologies that power refrigerated containers – and ensure temperature-sensitive cargoes always arrive in an ideal condition.

The SG-3500 occupies a critical position within our market-leading product range. Developed for marine reefers, the unit has been designed with reliability, sustainability, and user experience front of mind. NRMM STAGE V, EPA and GB4 compliant, available in both clip-on and undermount versions, the SG-3500 also comes with telematics options to help extend visibility into your fleet operations. If you need a highly dependable, easy-to-run, and fuel-efficient power source for marine reefers, the SG-3500 has you covered.

The inspiration to go further

Any generator set used to protect a client's cargo needs to be trusted. Utilizing a high performance engine that's designed to run consistent and true between temperature ranges of -40°C and +50°C (-40°F and +122°F), the SG-3500 offers you peace of mind for every journey. As a result, you'll have access to a generator set that's able to power all new reefers – due to its potent 24.1 horsepower engine.

With the SG-3500, reliability meets sustainability in a marine generator set that delivers remarkable fuel efficiency.

INNOVATION THAT EXTENDS TO THE ALTERNATOR

The SG-3500 features a uniquely designed alternator that offers increased capacity and reduced duty cycle times when compared to other models. This wound-field alternator is also proven to support the types of high load compressor starts that routinely stall other available units.

BUILT FOR THE LONG HAUL

Knowing the tough conditions a generator set needs to excel in, the SG-3500 comes with a robust steel frame to offer the strongest possible protection. Put through its paces in the hardest of test environments, the unit has already demonstrated its ability to survive both climatic and vibrational extremes – on the seas, on the road, and across rail operations.

Engine type	2.1L Eco-Governed (cast iron)
Power	24.1HP
Operational duration	25,000 hours (with normal maintenance)
Tested to work	-40°F and 122°F and up to 10,000 ft altitude -40°C and 50°C and up to 3,000 m altitude
Advanced diagnostics	including self-check capabilities
Stable voltage control	intelligent voltage regulation ensures voltage is always kept within limits
Power supply	400Vac/460Vac, 3phase, 50Hz/60Hz, with optional 230Vac, 3phase 50Hz/60Hz



Sustainability through effortless compliance

Compliance continues to be a key consideration for any cold chain operator. The challenge is therefore to invest in generator sets that are future-ready, and able to meet your long-term expectations without the need for expensive re-fitting.

The SG-3500 features Thermo King's latest innovations in sustainability technology. These include features that restrict both noise and CO_2 emissions, thereby helping deliver the compliance you need to explore every opportunity.

FULLY COMPLIANT

The SG-3500 offers the most costeffective generator set available for North America, Europe and many other regions. The unit is compliant with EPA Tier 4, GB4 and NRMM Stage V regulations.

KEEPING YOUR EMISSIONS TO AN ABSOLUTE MINIMUM

The SG-3500 offers a significant improvement in CO_2 emissions. The unit is also noticeably quieter, with noise reduction capabilities that make it one of the quietest generator sets on the market.

RELIABLE POWER

The power output of the SG-3500 ensures it can power all new reefer models. The unit also incorporates stable voltage control to intelligently regulate power and keep it within the limits set by ISO 1496. The SG-3500 features an intelligent controller that, all in all, provides you with "trusted power."



A powerful and user-friendly controller

Alongside its performance and sustainability credentials, the SG-3500 provides you with an easy-to-use controller packed full of important functions and features

SIMPLE INTERFACE
which includes a basic On-Off switch that allows any user to instantly start up the generator set.

PRE-HEAT FUNCTION
an automatic feature designed to overcome cold starts in sub-optimal conditions.

INTUITIVE OPERATING SCREEN
with intelligent menu that display all key operating parameters.

ALARMS
easily accessed via the keypad to gain immediate insight into generator set status, making trouble shooting easy.

PRE-TRIP FUNCTIONALITY
users can test the unit prior to any journey for a detailed readiness assessment.

ADVANCED DIAGNOSTICS
including self-check capabilities to identify any potential problems to maintain load integrity.

MULTI-LANGUAGE CAPABILITIES
English and Spanish are provided as standard, with other languages accessed through an updated software package.

ADDITIONAL FEATURES
with the SG-3500 you can also access hour meters, data logging of all events, and it's ready for future software updates that prevent idling and remote control by telematics.

The SG-3500 is ready for future developments, where idling can be prevented with our controller and automatic restarts are selectable.



Anytime, anywhere support

Backing up every SG-3500 unit is ThermoKing's international dealer network of specialist technicians. Delivering worldclass service and parts support from 500+ service points in 75 countries, this is expertise you can always rely on:

- Each dealer is extensively trained and highly experienced
- Technicians are certified to exacting ThermoKing standards

Extend your visibility and performance

TECHNOLOGY THAT LOWERS YOUR TOTAL COST OF OWNERSHIP
Equipped with a high quality Yanmar engine, alternator, and robust frame design, the SG-3500 is purpose-built to help guarantee a long-term return on investment:

+ **LOW FUEL CONSUMPTION**
  featuring an electronic governor that delivers power only when needed, the SG-3500 offers high fuel efficiency.
+ **LOW SERVICE COSTS**
  due to the generator set's quality manufacture, it only needs to be fully serviced once every 3,000 hours of operation – which in turn cuts service intervals over the life of the unit.
+ **EXTRA PROTECTION**
  with standard fuel strainer to prevent dirt from the fuel tank from going through the unit's filters and fuel pump

EXTEND YOUR VISIBILITY INTO PERFORMANCE
The SG-3500 also includes a telematics option to provide detailed insights into a wide range of key operational metrics: A 360-degree view of your fleet, including location and geofencing capabilities.

+ **POSITION:** gives full visibility to your fleet with GPS location and geofencing capabilities
+ **FUEL MONITORING:** allowing you to see fuel levels even when the generator set is turned off.
+ **FUEL ALERTS:** highlight any sudden drop in fuel levels, or those units leaving depots without sufficient fuel.
+ **BATTERY VOLTAGE:** continuous monitoring of voltage levels for units turned on or off.
+ **TOTAL RUN HOURS:** a metric vital for planning periodic maintenance schedules.
+ **MONITOR ENGINE LOAD %:** to be confident a reefer is fully connected and working.
+ **GENERATOR SET PARAMETERS:** know for certain your units are either turned on or off, engine RPM, output voltage and frequency.

Configurations



CLIP-ON

The Clip-on can be fitted with optional pin mounting, quick-disconnect fasteners, or a dual mount system.



UNDERMOUNT

The undermount can be fitted in either center-mount or side-mount configurations, to suit the specific needs of the operator.



FLEXMOUNT

The flexmount can be fitted on center-mount and side-mount configurations and offers more mounting possibilities then our undermount model. The unit comes standard without fuel tank and without mounting beams to make easier choices for different chassis options. Fuel tanks and mounting beams can be ordered as options together with remote ON/OFF switch.

Technical Specifications

THERMO DIESEL ENGINE COMPLIANT WITH EPA TIER 4, GB4 AND NRMM STAGEV REGULATIONS	
Fuel type	No. 2 Diesel (under normal conditions) / no. 1 Diesel (cold weather fuel)
Rotational speed	1500 ±25 rpm / 1800 ±25 rpm
Generator	400 vac/460 vac, 3 phase, 50 hz/60 hz
Optional	230 vac, 3 phase, 50 hz/60 hz
Nominal output power	Maximum 15 kW
Apparent power	18.75 kva
Battery	12v, 925 cca
Fuel tank size	
SG-3500 clip-on	125 gallons (473 litres)
SG-3500 undermount	50 gallons (189 litres) 30 gallons (114 litres)
SG-3500 flexmount	60 gallons (230 litres) 23 gallons (90 litres) Tankless option available

CLIP-ON



Dimensions:
27.55 in (700 mm) x 91.4 in (2321 mm) x 46.5 in (1181 mm)*

*Depth x Width x Height

UNDERMOUNT



Dimensions:
51.8 in (1316 mm) x 61.7 in (1568mm) x 31.9 in (810 mm)*

*Depth x Width x Height

FLEXMOUNT



Dimensions:
33in (840 mm) x 61.7 in (1556 mm) x 31.9 in (811mm)*

*Depth x Width x Height

SG-3500 Series

- **DEPENDABLE POWER**
  Run any ISO reefer with a proven and robust engine
- **ENHANCED SUSTAINABILITY**
  Meet the toughest of regulations and CO_2 emissions
- **SIMPLE CONTROLS**
  Give operators the information they need to protect every cargo
- **COST EFFECTIVE AND INTELLIGENT**
  Lower your total cost of ownership and extend fleet visibility
- **FLEXIBLE CONFIGURATIONS**
  With clip-on, flexmount and undermount options, the SG-3500 combines innovation and impressive performance



THERMO KING

Thermo King – by Trane Technologies (NYSE: TT), a global climate innovator – is a worldwide leader in sustainable transport climate control solutions. We engineer and provide cutting-edge technology and solutions with sustainability, reliability, and the customer experience in mind. Thermo King has provided transport temperature control solutions for various applications, including trailers, truck bodies, buses, air, shipboard containers, and railway cars since 1938.

For further information
thermoking-globalsolutions.com

Find your nearest dealer on
dealers.thermoking.com

Thermo King Europe – Lenneke Marelaan 6, B-1932 Sint-Stevens-Woluwe, Belgium
© 2025 Thermo King Europe TK 80165 (10-2025)-EN3

TRANE