

STAMFORD[®] HYBRID PRIME



Case history

90% reductions in fuel consumption and CO² emissions
for hybrid Solar Line generator sets

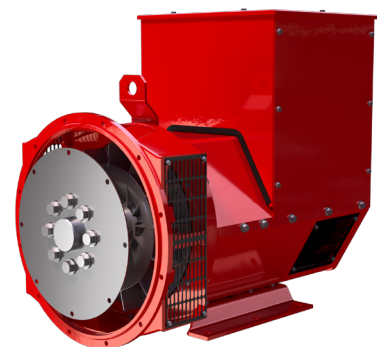
Where:
Italy

Specified:
40kVA STAMFORD[®] UC22
65kVA STAMFORD[®] UC27

Purpose:
Hybrid Solar generator set line to meet
environmental goals.

TRIME have chosen STAMFORD alternators to help deliver their clients up to 90% reductions in fuel consumption and CO² emissions with their hybrid Solar Line generator sets.

The Solar Line range is a truly hybrid generator set solution, combining battery and solar technology alongside diesel to dramatically save fuel and reduce CO². It is particularly suited to use on construction sites where, because of high peak power demands from intermittent crane operation, traditional solutions would see an oversized generator set employed. With this approach, the diesel engine operates under insufficient load which reduces operating temperature and increases the amount of unburned fuel in the exhaust system. This 'wet stacking' increases maintenance costs and can cause permanent engine damage.



STAMFORD UC22/27

We have a long relationship with STAMFORD | AvK and really value their application expertise. We chose these two STAMFORD alternators because they were perfectly matched to the current required by the inverters



Sustainable solar power

The Solar line eliminates this issue whilst harnessing solar power and battery technology to create a hybrid solution with significant sustainability credentials. Eight lithium batteries, each rated at 25.6V-280Ah, supply the power output via two 32A and two 63A 400V outlet sockets. These batteries are primarily charged by four 360W solar panels meaning the generator set can operate with zero fuel consumption, zero CO² emissions and zero noise. Additional solar panels can also be connected via an RVS inlet plug to increase the amount of battery charging from the sun.

A hybrid solution

However, solar charging alone is not sufficient to cover the energy demands at peak consumption times so additional charging, and peace of mind, is delivered thanks to STAMFORD alternators coupled to Stage V diesel engines. The Solar Line generator set automatically engages the engine only when the battery charge demands it and this reduces fuel consumption by up to 90%. This brings a huge cost saving, not only in the price of fuel but also the high costs associated with refuelling visits. By reducing engine running to 10% of the day, maintenance costs are almost eliminated. Two different STAMFORD alternators are used in the Hybrid Solar Line range. One option sees a 40kVA STAMFORD UC22 charging the batteries via a 30kVA inverter. Where peak power demands are even greater, a 65kVA STAMFORD UC27 charges through a 45kVA inverter.

Supporting environmental targets

“We have a long relationship with STAMFORD | AvK and really value their application expertise. We chose these two STAMFORD alternators because they were perfectly matched to the current required by the inverters” explains Matteo Tagliani, Sales Director at TRIME S.r.l. “We offer significant benefits to our customers thanks to the near-zero environmental impact when they use Solar Line. But our customers also demand reliability and with STAMFORD alternators we know we have a partner we can rely on to deliver this reliable performance.”

TRIME have set an ambitious target, in their Goal 2025 initiative, to supply only ‘green’ products to the market by 2025, and their partnership with STAMFORD | AvK is helping them to achieve this.



We are here to support your future decarbonisation goals, through our end-to-end expertise in versatile solutions. Backed by the reassurance of our world-renowned brands recognised for reliability and complete peace of mind, we are with you on your journey towards sustainability.

stamfordavk.li/future-ready



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