



Air Conditioning Electric

**SUTRAK®**

# Power Generation for Transit Bus Electric HVAC

## Breakthrough Technology

SUTRAK's power generation "G" package supports full electrification of ACE electric A/C systems. The traditional compressor is replaced with a belt-driven generator designed to power the A/C system's 3-phase hermetic compressor, fan and blower motors. This high efficiency design incorporates brushless technology and is maintenance free.

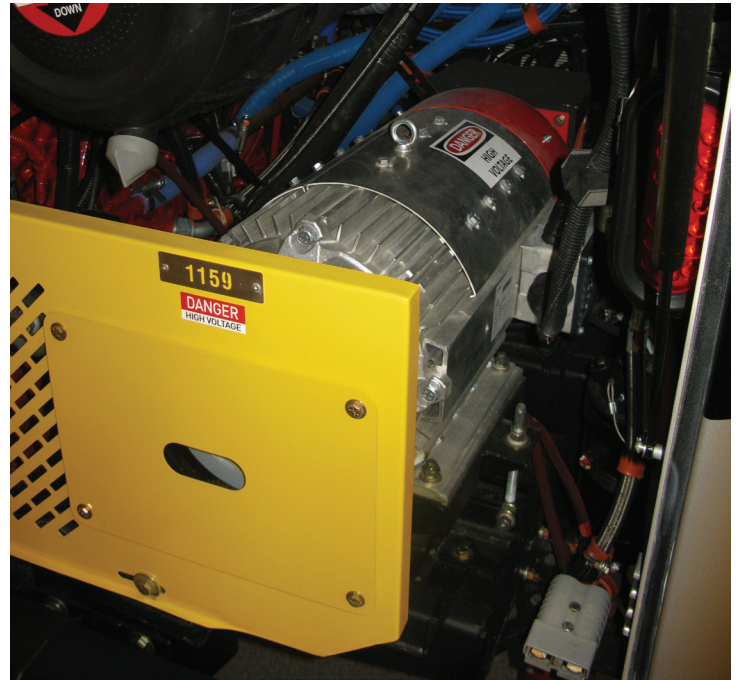
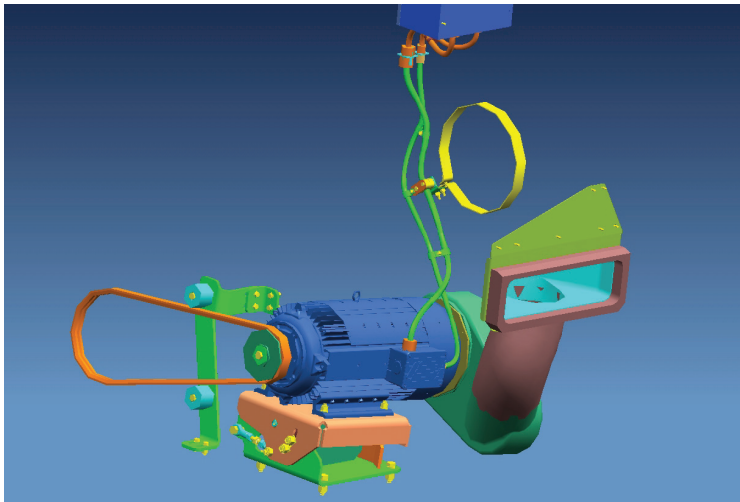
The "G" package has been in revenue service since 2006 and consists of a generator (belt-driven from the main engine), frequency and voltage regulation, and various protection components. With this package, ACE systems improve performance with near constant cooling capacity across all operating modes while reducing parasitic load at the engine.

## Power Generation System Complete

At the core of this package is an air-cooled, synchronous, 4-pole generator that provides 3-phase alternating current. There are two sizes available and in general the following applies:

- 2-axle bus (1 HVAC system): 10-15kVA generator
- 3-axle bus (2 HVAC systems): 20-30kVA generator

Voltage and frequencies are managed by regulators, and a main line contactor, overload protection, and GFI are integrated into a special power distribution box.



## Features

- ✓ Dedicated a.c. power supply for ACE 3-phase components
  - Hermetic scroll compressor
  - Condenser fans
  - Evaporator blowers
- ✓ Air-cooled, synchronous 3-phase a.c. power
- ✓ Optimized heat stabilized bearing with HD high temp grease

## Benefits

- ✓ Parasitic load reduction off the engine
- ✓ Enable use of ACE hermetic systems improving :
  - Performance
  - Reliability
  - Efficiency

## Specifications

Dimensions	(h/w/d)
<b>10-15kVA</b>	(12.40/12.20/23.875)
<b>20-30kVA</b>	(13.84/12.25/30.55)
Supply Voltage (a.c.):	50-3-380/420 (standard-"G" model)
Design	Corrosion free alloy
Body	Aluminum

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