



# Variable speed alternators

**LSA VS for Telecom tower applications**

**15.8 kVA/2000 rpm**

**5.3 kVA/900 rpm**



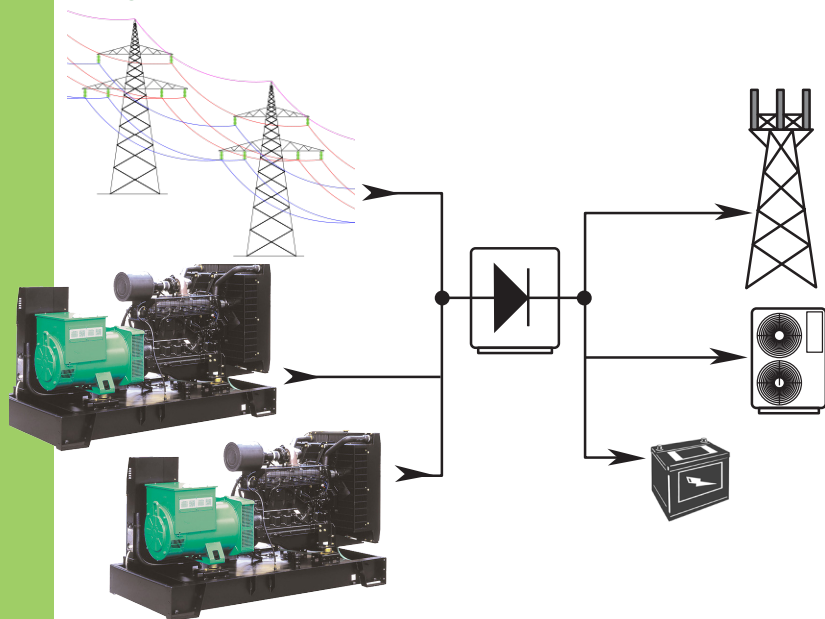
**Leroy-Somer™**

# Variable speed alternators for Telecom tower applications

Leroy-Somer brings its expertise and know-how to the Telecom industry with an exciting hybrid technology leveraging variable speed alternators.

Using a simple but smart system, important cost reductions can be made compared with existing technology.

## Typical Telecom power set-up

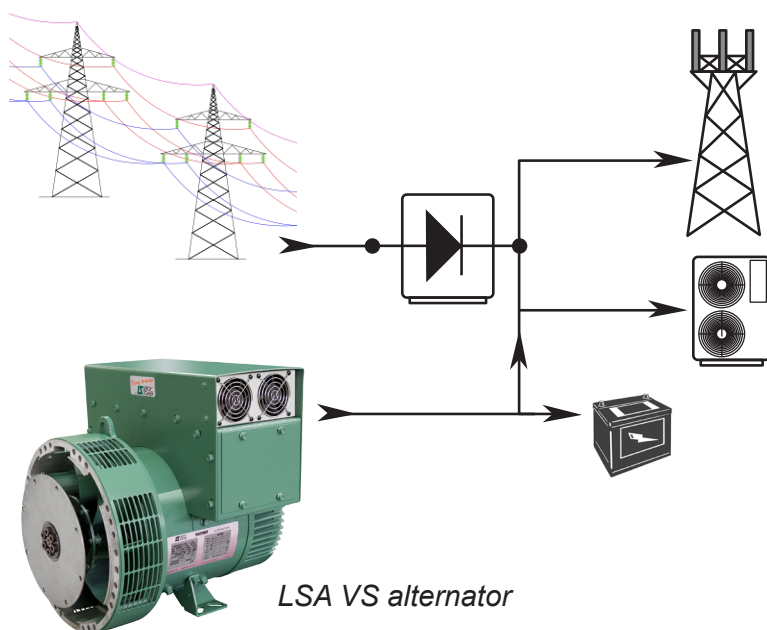


Off-grid operation means:

- Operation of a generator at rated power 100%: 24/7
- Second generator as a backup

- ▶ High consumption
- ▶ Non ecological
- ▶ Maintenance of 2 generators

## Variable speed hybrid solution with a Leroy-Somer alternator (LSA VS)



LSA VS alternator

Off-grid operation with variable speed alternator (as an example: 11 hrs off-grid):

- Operation of the generator at variable power 45%: 5 hrs  
(3 hrs high speed / low speed 2 hrs)
- 55% battery operation: 6 hrs

- ▶ Fuel consumption savings: 36%
- ▶ Reduced maintenance

Specially dedicated for the hybrid Telecom applications market, this efficient and robust solution will respond to your needs by reducing operating costs, while ensuring an optimal level of operation.

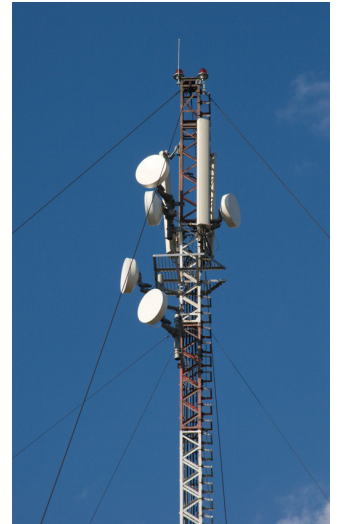
The LSA VS alternator adapts to the power output demand (peak or mains grid failure) and will enable substantial cost savings.

## LSA VS ALTERNATOR

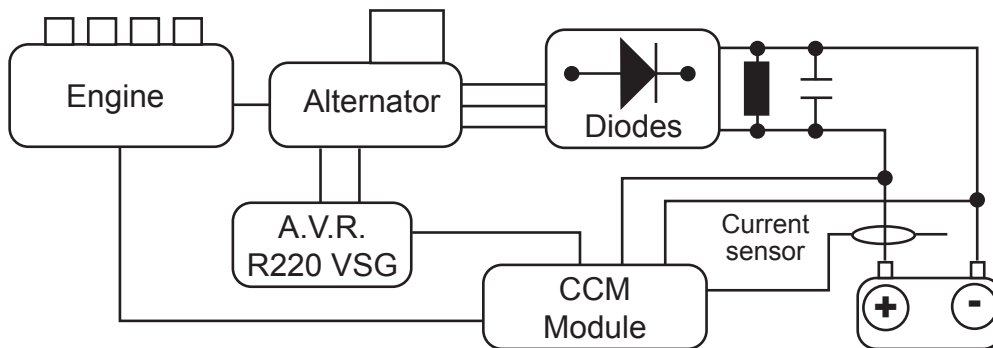
- Steel frame
- Standard SAE coupling
- IP 23 protection



The variable speed LSA VS alternator is a dedicated brushless alternator. Thanks to a dedicated regulator (R220-VSG) and an integrated rectifier, the variable speed solution is able to deliver constant DC Voltage Output according to the power output needed (two speeds: low and high).



## Configuration



An integrated load control module “CCM” manages battery charging thus optimising battery life. All types of battery technology (OPzV, SBS EON, EXIDE A600 and Evolion) can be managed. The CCM also features the following functionalities:

- Battery charge rate control
- Start or stop according to level of charge
- Start or stop according to mains status

Speed	Rating: kVA - P.F. 0.95
2000 rpm	15.8 kVA
900 rpm	5.3 kVA
Ripple	
Voltage	< 1%
Current	< 1.3%



CCM module

# Leroy-Somer™

[www.leroy-somer.com/epg](http://www.leroy-somer.com/epg)

© Emerson 2017. The information contained in this brochure is for guidance only and does not form part of any contract. The accuracy cannot be guaranteed as Emerson have an ongoing process of development and reserve the right to change the specification of their products without notice.

Moteurs Leroy-Somer SAS. Headquarters: Bd Marcellin Leroy, CS 10015, 16915 Angoulême Cedex 9, France. Share Capital: 65 800 512 €, RCS Angoulême 338 567 258.