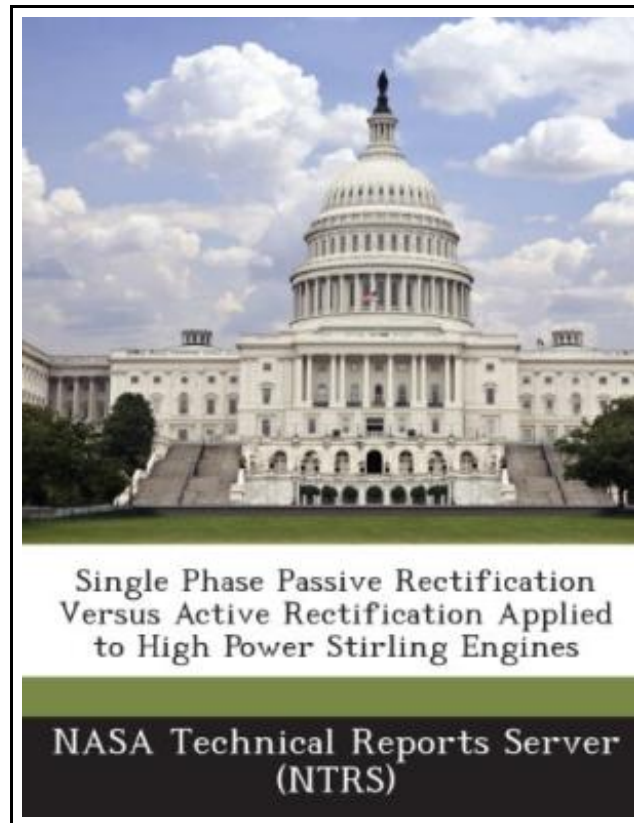


## Single Phase Passive Rectification Versus Active Rectification Applied to High Power Stirling Engines



Filesize: 6.6 MB

### ***Reviews***

*This ebook could be worthy of a go through, and a lot better than other. I have study and that i am sure that i will likely to read through yet again once more in the future. I found out this pdf from my i and dad suggested this pdf to discover.*

***(Lorine Rohan)***

## SINGLE PHASE PASSIVE RECTIFICATION VERSUS ACTIVE RECTIFICATION APPLIED TO HIGH POWER STIRLING ENGINES

[DOWNLOAD](#)

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. Stirling engine converters are being considered as potential candidates for high power energy conversion systems required by future NASA explorations missions. These types of engines typically contain two major moving parts, the displacer and the piston, in which a linear alternator is attached to the piston to produce a single phase sinusoidal waveform at a specific electric frequency. Since all Stirling engines perform at low electrical frequencies (less or equal to 100 Hz), space explorations missions that will employ these engines will be required to use DC power management and distribution (PMAD) system instead of an AC PMAD system to save on space and weight. Therefore, to supply such DC power an AC to DC converter is connected to the Stirling engine. There are two types of AC to DC converters that can be employed, a passive full bridge diode rectifier and an active switching full bridge rectifier. Due to the inherent line inductance of the Stirling Engine-Linear Alternator (SE-LA), their sinusoidal voltage and current will be phase shifted producing a power factor below 1. In order to keep power the factor close to unity, both AC to DC converters topologies will implement power factor correction. This paper discusses these power factor correction methods as well as their impact on overall mass for exploration applications. Simulation results on both AC to DC converters topologies with power factor correction as a function of output power and SE-LA line inductance impedance are presented and compared. This item ships from La Vergne, TN. Paperback.



[Read Single Phase Passive Rectification Versus Active Rectification Applied to High Power Stirling Engines Online](#)



[Download PDF Single Phase Passive Rectification Versus Active Rectification Applied to High Power Stirling Engines](#)

## Related PDFs



### **Animalogy: Animal Analogies**

Sylvan Dell Publishing. Paperback. Book Condition: New. Cathy Morrison (illustrator). Paperback. 32 pages. Dimensions: 9.8in. x 8.4in. x 0.4in. Compare and contrast different animals through predictable, rhyming analogies. Find the similarities between even the most incompatible...

[Read eBook »](#)



### **The Whale Tells His Side of the Story Hey God, Ive Got Some Guy Named Jonah in My Stomach and I Think Im Gonna Throw Up**

B&H Kids. Hardcover. Book Condition: New. Cory Jones (illustrator). Hardcover. 32 pages. Dimensions: 9.1in. x 7.2in. x 0.3in. Oh sure, we all heard the story of Jonah and the Whale a hundred times. But have we...

[Read eBook »](#)



### **God Loves You. Chester Blue**

Henry and George Press. Paperback. Book Condition: New. Ursula Andrejczuk (illustrator). Paperback. 140 pages. Dimensions: 8.0in. x 5.2in. x 0.3in. BEAUTIFUL NEW ILLUSTRATIONS BRING THE STORY TO LIFE! A charming book about a mysterious bear that shows...

[Read eBook »](#)



### **Good Night, Zombie Scary Tales**

Feiweil & Friends. Paperback. Book Condition: New. Iacopo Bruno (illustrator). Paperback. 112 pages. Dimensions: 8.2in. x 5.4in. x 0.2in. Welcome. Have a seat. Ignore the shambling undead outside. Let us tell you a story. But be...

[Read eBook »](#)



### **Yearbook Volume 15**

RareBooksClub. Paperback. Book Condition: New. This item is printed on demand. Paperback. 58 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. This historic book may have numerous typos and missing text. Purchasers can usually download a free...

[Read eBook »](#)