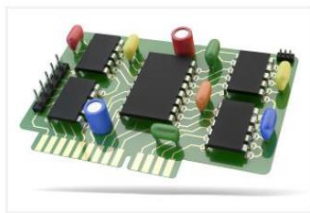


## Fail-Safe & Fault-Tolerant architecture for converter

Electronic power systems play an increasing role in sensitive applications. These systems must withstand hard stresses, and any failure is a critical event causing application downtime. For a complete electrical system, failure rate is linked to more than 33% to fail convertor. How to go beyond these issues without increasing system costs and limited?

### DESCRIPTION\*

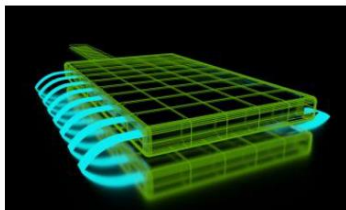
- Security system allowing internal failure confinement and backup cell launching
- A passive coupling and switching circuit shifting to a unique backup cell
- Continuity of service at full power rate after a power device failure
- On line non-intrusive diagnostic of the backup cell



Unique system  
✗ No safety



Full redundant system  
✗ Electrical fiability  
✗ Cost



Technology architecture: fail-safe  
and 100% internal fault-tolerant capability system

### COMPETITIVE ADVANTAGES

- Fail-Safe capability
- Safety
- Post-fault continuation
- Redundancies reduction
- Generic concept:  
adaptability to most electrical systems

### APPLICATIONS

- Power generation
- Motor control
- Marine industry
- Rail industry
- Aeronautics
- Automotive

### INTELLECTUAL PROPERTY

- Patent in force

### DEVELOPMENT STAGE

- Technology validated in relevant environment

1 2 3 4 5 6 7 8 9

### LABORATORY



### TECHNICAL SPECIFICATIONS

Converters	AC/DC, DC/AC, DC/DC
Back up cell key component	Circuit breakers
Voltage ans intensity adaptations	28V, 48V, 300V... 1000V 100A maximum

### CONTACT

T. +33 (0)5 62 25 50 60

systemes@toulouse-tech-transfer.com

www.toulouse-tech-transfer.com