

Ex battery safety

Single cell protection circuit—intrinsically safe

The 1s IS protection circuit is specifically designed to provide optimum protection for Saft Li-ion cells designed for powering applications in hazardous areas and explosive atmospheres.

Electronic protection circuit

The Saft 1s Intrinsically Safe (IS) protection circuit is specifically designed to provide optimum protection for Li-ion batteries consisting of series assemblies for one to three cells. Other configurations are possible, please contact Saft for further information.

Benefits

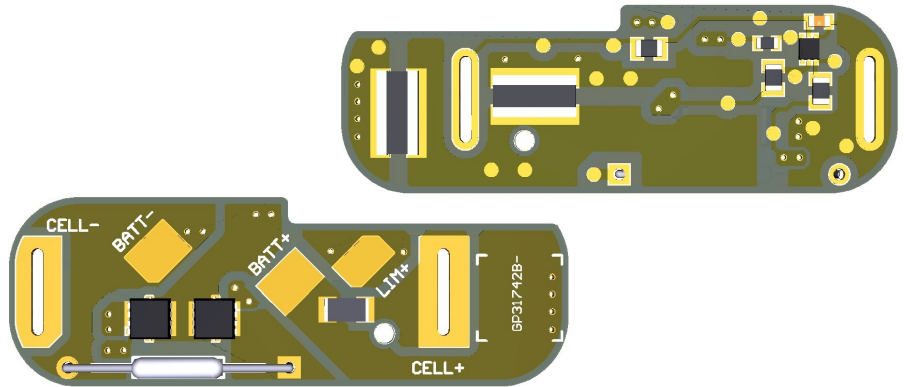
- Safety management for single cell and multi cell battery assemblies.
- Active mode and sleep mode.
- Temperature performance from -30°C to +60°C.
- High reliability
- Designed for intrinsic safety according to the IECEx system.

Key features

- Overvoltage protection (VUL).
- Under voltage protection (VLL).
- Over current protection.
- Short circuit protection.
- Over temperature protection.
- Limited output current.
- Fuse protected.
- Zero (0V) battery protection.
- **Made and designed in France.**

Designed to meet standards

- Quality: ISO 9001
- Intrinsic safety: IEC 60079-11
- General safety: IEC 60079-0
- Li-ion cell safety: IEC 62133-2
- Thermal safety: UL94-V0



Electrical characteristics

Configuration	VLL (V)	VUL (V)	Nominal current (A)	Fuse (A)
1 series cell	2.30	4.27	2.0	2.5
2 series cells	4.60	8.55	1.5	2.0
3 series cells	6.90	12.82	1.0	1.5

Operational characteristics

Ambient operational temperature	-30°C to +60°C
Gas group	I, IIB
Gas temperature classification	T4
Category 1 gas zones	0,1,2
Dust group	IIIC
Dust temperature classification	T 135°C
Category 1 dust zones	20,21,22

ExTR references.

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