

Xcelion[®] 6T Type B55

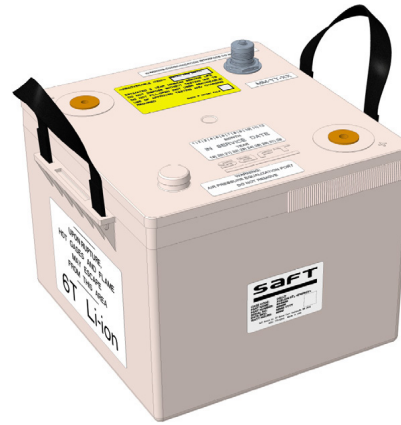
Rechargeable Li-ion battery system

SUPER LITHIUM-IRON PHOSPHATE 6T FORMAT BATTERY FOR HIGH PERFORMANCE APPLICATIONS

Saft P/N 208558
Designed to meet MIL-PRF 32565 Rev C

Saft's Xcelion 6T[®] is a 24V battery system that offers a drop-in replacement solution for legacy battery technology in military vehicles and other industrial applications.

This ruggedized battery uses Saft's proprietary Super-Phosphate[®] chemistry which is ideally suited for high performance applications requiring high levels of safety



Benefits

- Only Li-ion 6T battery that meets cold temperature performance requirements
- Significant weight savings and life cycle costs compared to lead-acid chemistries
- Maintenance free
- Drop-in replacement for current vehicle batteries
- Commercial off-the-shelf solution
- Communicates over J1939 CANBus protocol
- Compatible with MIL-STD-1275E power bus
- UN transport approved

Features

- Built-in self-balancing
- Fast charging under varying conditions*
- Self shut-down in unsafe conditions
- Internal battery management system

Applications

- Military ground vehicle power
- Starting, lights, and ignition (SLI)
- Silent watch
- Applications requiring balance of power and energy

Electrical characteristics

Nominal Capacity	58 Ah	
Nominal Voltage	26.4 V	
Voltage at full state of charge	28.5 VDC	
Voltage at zero state of charge	20.0 VDC	
Energy	1.5 kWh	
Cold Cranking Amps	at -18 °C for 30 seconds	1,100 A
	at -40 °C for 30 seconds	400 A
Maximum discharge current	Continuous	250 A
	Pulse (20 s)	400 A
Maximum charge current	Continuous	250 A
	Pulse (20 s)	400 A

Mechanical characteristics

Weight	20.7 kg
Height	230 mm
Width	256 mm
Length	269 mm

Operating conditions

Operating temperature	-46 °C to +71 °C
Discharge	
Charge*	

*Battery manages charge energy to ensure maximum battery life. At low temperature, the battery will automatically engage built-in heaters for optimum charging.

** Sustained high temperature storage will reduce life.

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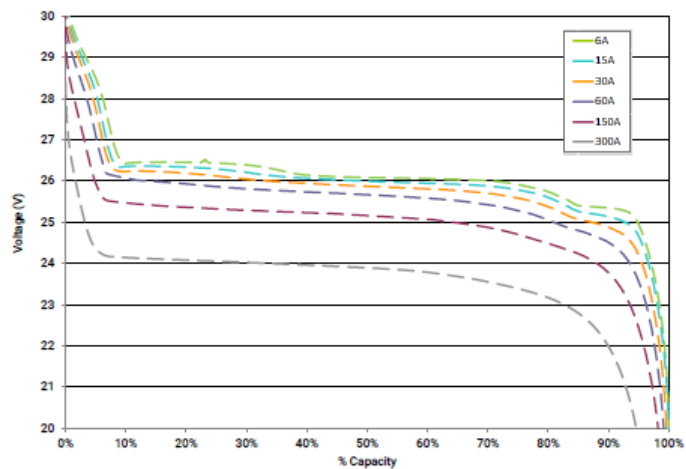
Top-level system functions

- Graphical User Interface Tool allows detailed view of battery status
- Communication of battery state of charge, temperature, and other key parameters via J1939 CAN Bus
- Redundant overcharge protection
- Overload protection
- Short circuit protection
- Over-discharge protection
- Battery reserve protection
- Battery monitoring
- Built-in-Test
- Cell heating (allows full battery capability over operating temperature)
- Continuous cell balancing

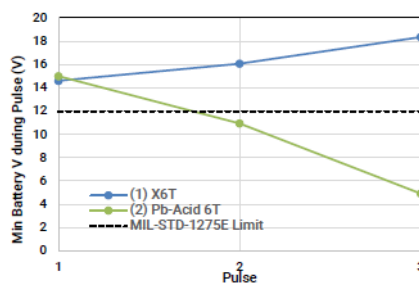
Safety heritage

- System design includes Saft's field proven electronic control architecture that includes overcharge protection, and over discharge, over temperature and overload protection.
- Cells equipped with hermetic seal and over pressure safety vent.
- Rechargeable Li-FePO4 cells ideally suited for applications requiring high discharge, continuous or pulse power, fast re-charge, long cycle and calendar life, and high levels of safety.
- Designed based upon proven Xcelion[®] 6T fielded worldwide since 2015.

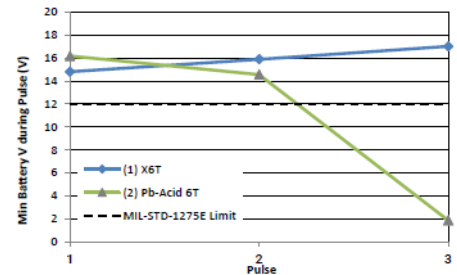
Xcelion[®] Type A-175 rate capability



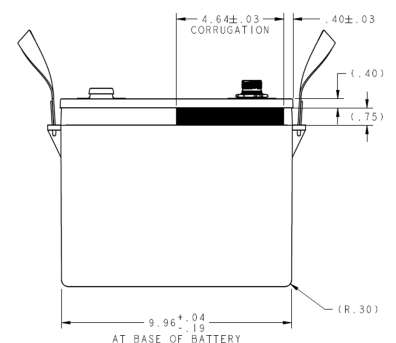
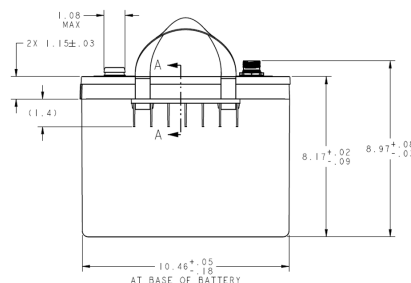
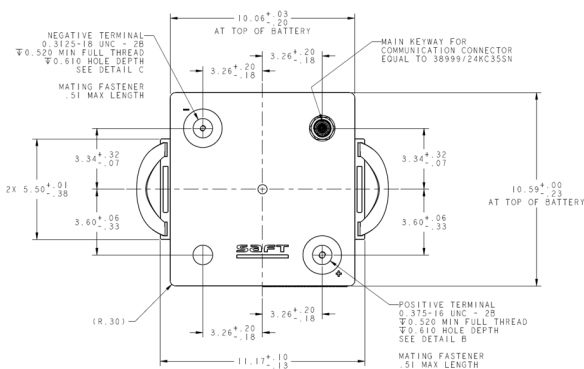
-40°C: 30s 400 Amp Pulse



-18°C: 30s 1,100 Amp Pulse



More stable performance across multiple start attempts compared to lead-acid batteries.



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