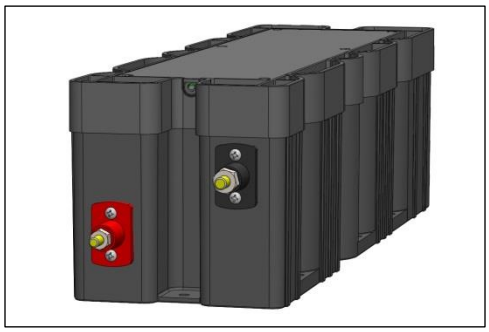
PowerStor XLM Family

High power, high energy storage modules



Description

Eaton PowerStor supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies offers high reliability, high power energy for grid applications such as uninterruptible power supplies (UPS), electrical grid energy storage and other industrial bridge power applications.

Features and benefits

- Up to 20-Year Operating Life
- Low ESR for High Power Density
- Easy rack or cabinet mounting
- UL Recognized
- Active balancing to maximize lifetime
- Low standby current for high efficiency
- Lead free, RoHS compliant

Applications

- Datacenter UPS
- Bridge power
- Hospital UPS
- Hybrid power system with fuel cells
- Grid storage
- SEMI F47

The PowerStor brand of supercapacitors (formerly of the Bussmann Division of Cooper Industries) is now part of Eaton's Electrical Group, Electronics Division.

PowerStor is now part of Eaton
Same great products plus even more.

Powering Business Worldwide

Specifications

Capacitance	130F
Maximum working voltage	62.1V
Maximum series connected voltage	1500V
Capacitance tolerance	-0% to +20%
Operating temperature range	-40°C to +65°C

Standard Product

Capacitance[1] (F)	Part Number	Initial DC ESR Maximum[1] (mΩ)	Standby current maximum[2] (mA)	Continuous current 15 °C Rise[3] (A)	Maximum current[4] (A)	Peak Power maximum[5] (kW)	Stored energy[6] maximum (Wh)	Thermal Resistance, typical (Rth - °C/W)	Mass, typical (kg)
130	XLM-62R1137-R	8.0	13.3	N/A	2000	120	69.6	0.30	16

1. Measured according to IEC 62391 @ 62.1V
2. After 72 hour charge and hold, 25ºC
3. Continuous Current = $\sqrt{\Delta T/(DC\ ESR\ x\ Rth)}$
4. Maximum current, 1 second discharge – ½ C V / (1 + DC ESR x C)
5. Power = Vrated^2 / 4 / DC ESR
6. Energy = ½ C Vrated^2/3600

Performance

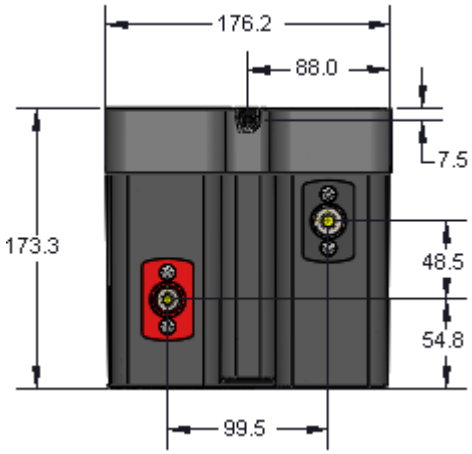
Parameter	Capacitance Change (% of initial value)	ESR (% of initial specified value)
Life - 1500 hours at rated voltage, maximum temperture	≤ 20%	≤ 200%
Charge/discharge cycling - 1,000,000 cycles	≤ 20%	≤ 200%

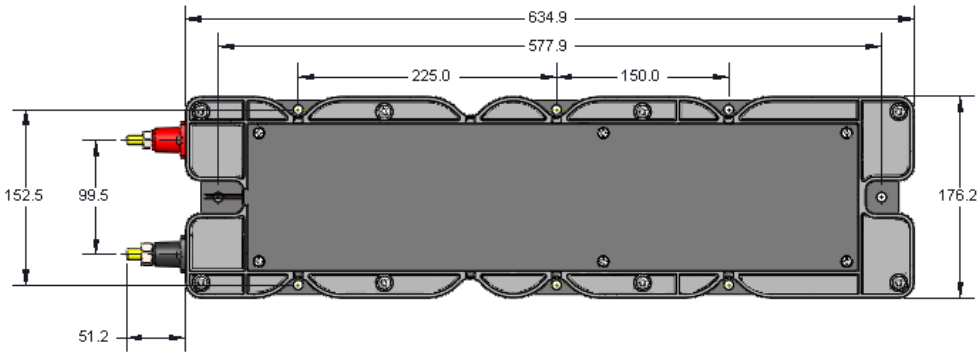
1. Cycling between 62V and 31V, 100A, 3s rest

Standards and Certifications

Agency information	UL810A
Shock and vibrations	Telcordia GR-63 Zone 4
Environmental	IP30, RoHS, lead free, halogen free
Altitude, Operating	10,000 ft / 3,000 meters
Altitude, Non-operating	40,000 ft / 12,000 meters

Dimensions- mm





Positive Terminal: 5/16”-18 threaded stud
Negative Terminal: 3/8”-16 threaded stud

Part numbering system

XLM	- □ R □	□ □	□	-R
Family code	Voltage (V) R= decimal	Capacitance (µF) Value	Multiplier	
	62R1= 62.1V	Example 137= 13 x 10^7 µF or 130F		RoHS compliant

Packaging information

- Standard packaging 1 piece per box

Part marking

- Manufacturer
- Capacitance (F)
- Max operating voltage (V)
- Family code or part number
- Polarity

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