



UltraCap[®]

Module
200 F/ 42 V

Series/Type:

Ordering code: B48621A7205Q018

Date: March 2005

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Features

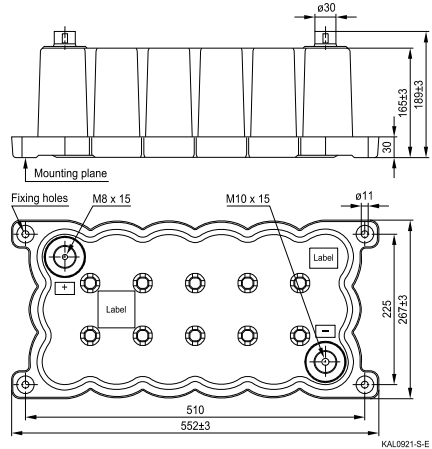
- Screw terminal M8 × 15 (plus), M10 × 15 (minus)
- Active cell voltage balancing
- Case material polyethylene, black
- Power type
- 18 serial single cells of 3600 F
- Maintenance-free
- Short-circuit-proof
- Low ESR due to laser-welded interconnections

Options

- Passive cell voltage balancing (by resistor)

Note

- Please pay attention to the safety, transport and waste disposal instructions in chapter "Cautions".

Dimensional drawing


Dimensions in mm

Electrical specifications

| | | | | |
|---------------------------------|---|--------------------|---------|--------|
| Rated capacitance | ($T_A = 25\text{ °C}$; DCC) ¹⁾ | C_R | 200 | F |
| Tolerance of C_R | | | -10/+30 | % |
| Rated voltage | ($T_A = 25\text{ °C}$) | V_R | 42 | V |
| Capacity | | | 2300 | mAh |
| Specific power | (IEC 62391-2) | | 2.0 | kW/kg |
| Specific power | (IEC 62391-2) | | 1.9 | kW/l |
| Stored energy | ($V = V_R$) | E | 176400 | J |
| Specific energy | ($V = V_R$) | | 2.5 | Wh/kg |
| Specific energy | ($V = V_R$) | | 2.4 | Wh/l |
| Surge voltage | | V_{surge} | 48 | V |
| Maximum series resistance | ($T_A = 25\text{ °C}$; 1 kHz) | ESR | 3.0 | mΩ |
| Maximum series resistance | ($T_A = 25\text{ °C}$; 50 mHz) | ESR _{DC} | 5.4 | mΩ |
| Weight | | | 20.0 | kg |
| Volume | | | 21.0 | l |
| Operating temperature range | | T_{op} | -30/+70 | °C |
| Storage temperature | | T_{st} | -40/+70 | °C |
| Lifetime (hours) ²⁾ | ($V = 0\text{ V}$) | | 90000 | h |
| Lifetime (cycles) ³⁾ | ($T_A = 25\text{ °C}$; $V = V_R$) | | 500000 | cycles |
| | ($T_A = 25\text{ °C}$; $I = 100\text{ A}$) | | | |

1) DCC: discharging with constant current.

 2) Requirements: $|\Delta C/C_R| \leq 30\%$, $\text{ESR} \leq 2$ times of specified limit, $I_{\text{leak}} \leq 2$ times of initial value.

 3) Requirements: $|\Delta C/C_R| \leq 30\%$, $\text{ESR} \leq 2$ times of specified limit, $I_{\text{leak}} \leq 2$ times of initial value (1 cycle: charging to V_R , 30 s rest, discharging to $V_R/2$, 30 s rest).