



## UltraCap®

Module  
33 F/ 42 V

**Series/Type:**

**Ordering code:** B48621A7334Q018

**Date:** March 2005

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**Features**

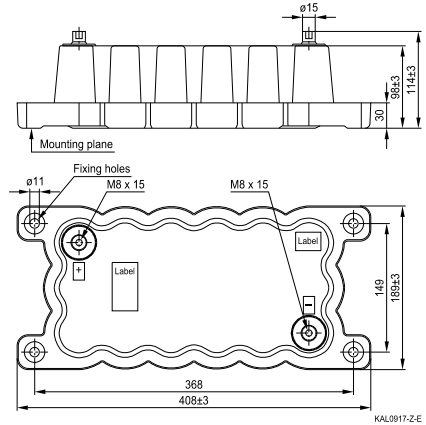
- Screw terminal M8 × 15 (plus, minus)
- Active cell voltage balancing
- Case material polyethylene, black
- Power type
- 18 serial single cells of 600 F
- Maintenance-free
- Short-circuit-proof
- Low ESR due to laser-welded interconnections

**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	$(T_A = 25\text{ °C}; \text{DCC})^1$	$C_R$	33	F
Tolerance of $C_R$			-10/+30	%
Rated voltage	$(T_A = 25\text{ °C})$	$V_R$	42	V
Capacity			390	mAh
Specific power	(IEC 62391-2)		1.6	kW/kg
Specific power	(IEC 62391-2)		1.4	kW/l
Stored energy	$(V = V_R)$	E	29106	J
Specific energy	$(V = V_R)$		1.5	Wh/kg
Specific energy	$(V = V_R)$		1.3	Wh/l
Surge voltage		$V_{\text{surge}}$	48	V
Maximum series resistance	$(T_A = 25\text{ °C}; 1\text{ kHz})$	ESR	12.0	mΩ
Maximum series resistance	$(T_A = 25\text{ °C}; 50\text{ mHz})$	ESR <sub>DC</sub>	24.0	mΩ
Weight			5.5	kg
Volume			6.1	l
Operating temperature range		$T_{\text{op}}$	-30/+70	°C
Storage temperature	$(V = 0\text{ V})$	$T_{\text{st}}$	-40/+70	°C
Lifetime (hours) <sup>2)</sup>	$(T_A = 25\text{ °C}; V = V_R)$		90000	h
Lifetime (cycles) <sup>3)</sup>	$(T_A = 25\text{ °C}; I = 25\text{ A})$		500000	cycles

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).