

MCE0010C0-0090R0TBA



FEATURES AND BENEFITS

- Compact, fully enclosed splash proof design
- Highest power performance
- Individually balanced cells
- Over 1,000,000 duty cycles
- Ultra-low internal resistance

TYPICAL APPLICATIONS

- Automotive
- Industrial
- Telecommunications
- Railway transportation
- Uninterruptible Power Supplies(UPS)

SPECIFICATIONS

ELECTRICAL

Capacitance

Nominal capacitance	10 F
Capacitance tolerance	+20% / -0%

Voltage

Rated voltage	90 V
Absolute Maximum Voltage	95 V

Resistance

ESR, DC	120 mΩ
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Current

Maximum continuous current ($\Delta T=40^{\circ}C$)	25 A
Maximum peak current, 1 sec.	230 A
Leakage current (25°C, after 72h)	0.5 mA

TEMPERATURE

Operating temperature range

(Cell case temperature)	-40°C to +65°C
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Storage temperature range

(Storage uncharged)	-40°C to +70°C
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PHYSICAL

Weight	8 kg
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Power Terminals	Block Terminal
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Recommended Wire Size	6mm ²
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Vibration Specification	GB-T 11287-2000
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Shock Specification	GBT 14537-1993
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Environmental Protection	IP20
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Internal Temperature Sensor	Temperature Switch
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Alarm method: Using a contact switch, which is closed at ordinary time, and open when module is over temperature. Rated load: 250VAC 2A

Switch value	65°C±5°C
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Module Voltage Monitoring	Over voltage Alarm
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Alarm method: Using a contact switch, which is closed at ordinary time, and open when module is over voltage. Rated load: 0.50A at 125VAC, 1A at 24VDC

Switch value	Over 95V
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POWER AND ENERGY

Usable power density (Pd)	1,010 W/kg
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Impedance match power density (Pmax)	1,680 W/kg
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Gravimetric energy density (Emax)	1.4 Wh/kg
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Energy available	11.2 Wh
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LIFE

High Temperature

(at Rated Voltage & Maximum operating Temperature)	1,500 hours
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Capacitance change (% decrease from minimum initial value)	≤20%
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ESR change (% increase from maximum initial value)	≤100%
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Room Temperature

(at Rated Voltage at 25°C)	10 years
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Capacitance change (% decrease from minimum initial value)	≤20%
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ESR change (% increase from maximum initial value)	≤100%
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Cycle Life

(Number of cycles)	1,000,000
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Capacitance change (% decrease from minimum initial value)	≤20%
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ESR change (% increase from maximum initial value)	≤100%
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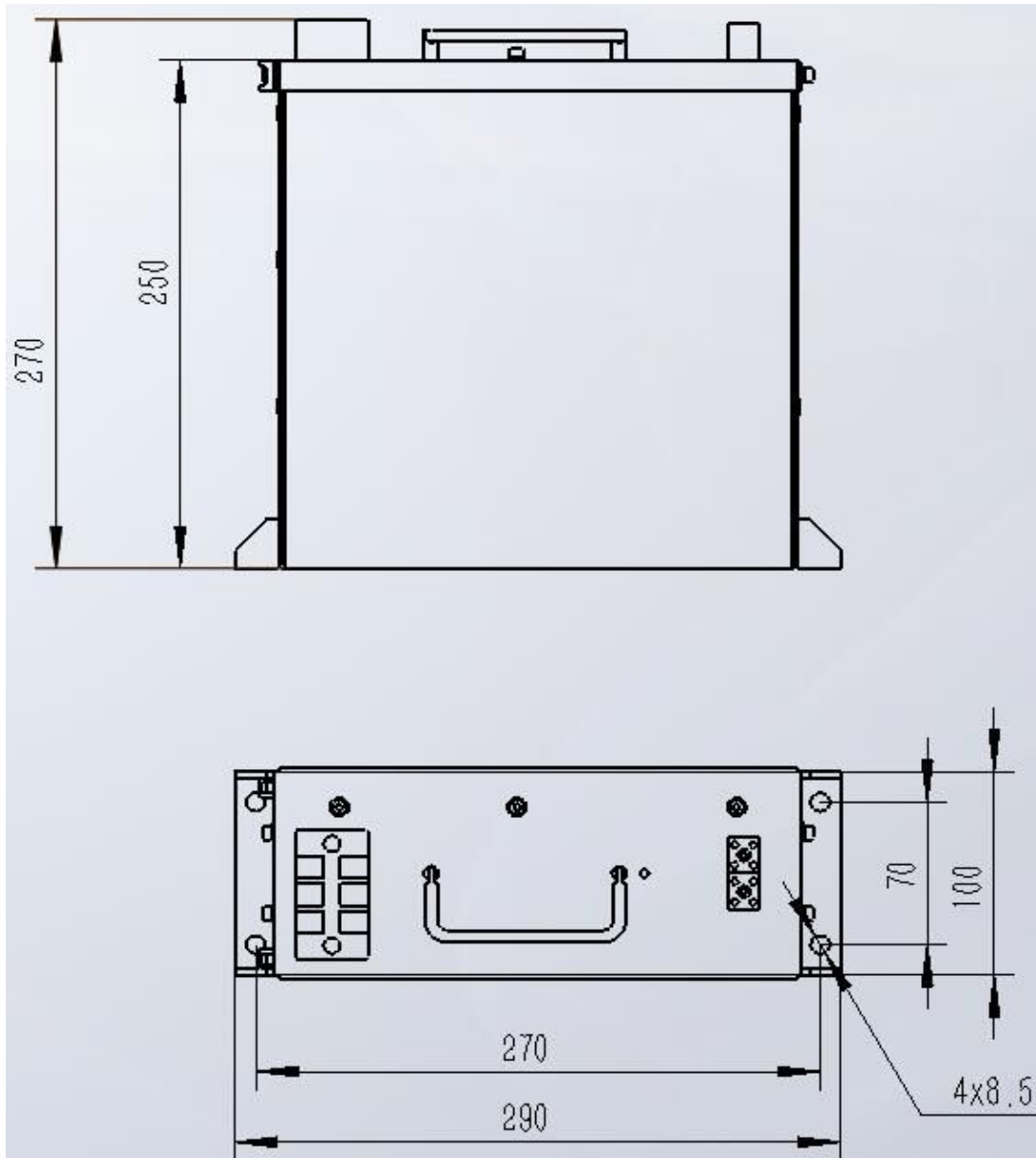
Shelf Life

(Stored uncharged up to a maximum storage temperature)	2 years
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Factory High-Pot Test	1,500 V DC
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Environment humidity	≤90%
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Part Number	Dimension (mm)			Package Quantity(set)
	L ($\pm 0.5\text{mm}$)	W ($\pm 0.5\text{mm}$)	H ($\pm 0.5\text{mm}$)	
MCE0010C0-0090R0TBA	290.0	100.0	270.0	5

Product dimensions are for reference only unless otherwise identified. Product dimensions and specifications may change without notice.
Please contact SPS directly for any technical specifications critical to application.