

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
---------	--------

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
-------------------------	----------------

Storage temperature range

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

PHYSICAL

Weight	8 kg
--------	------

Power Terminals	Block Terminal
-----------------	----------------

Recommended Wire Size	6mm ²
-----------------------	------------------

Vibration Specification	GB-T 11287-2000
-------------------------	-----------------

Shock Specification	GBT 14537-1993
---------------------	----------------

Environmental Protection	IP20
--------------------------	------

Internal Temperature Sensor	Temperature Switch
-----------------------------	--------------------

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
--------------	----------

Module Voltage Monitoring	Over voltage Alarm
---------------------------	--------------------

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
--------------	----------

POWER AND ENERGY

Usable power density (Pd)	1,010 W/kg
---------------------------	------------

Impedance match power density (Pmax)	1,680 W/kg
--------------------------------------	------------

Gravimetric energy density (Emax)	1.4 Wh/kg
-----------------------------------	-----------

Energy available	11.2 Wh
------------------	---------

LIFE

High Temperature

(at Rated Voltage & Maximum operating Temperature)	1,500 hours
--	-------------

Capacitance change (% decrease from minimum initial value)	≤20%
---	------

ESR change (% increase from maximum initial value)	≤100%
---	-------

Room Temperature

(at Rated Voltage at 25°C)	10 years
----------------------------	----------

Capacitance change (% decrease from minimum initial value)	≤20%
---	------

ESR change (% increase from maximum initial value)	≤100%
---	-------

Cycle Life

(Number of cycles)	1,000,000
--------------------	-----------

Capacitance change (% decrease from minimum initial value)	≤20%
---	------

ESR change (% increase from maximum initial value)	≤100%
---	-------

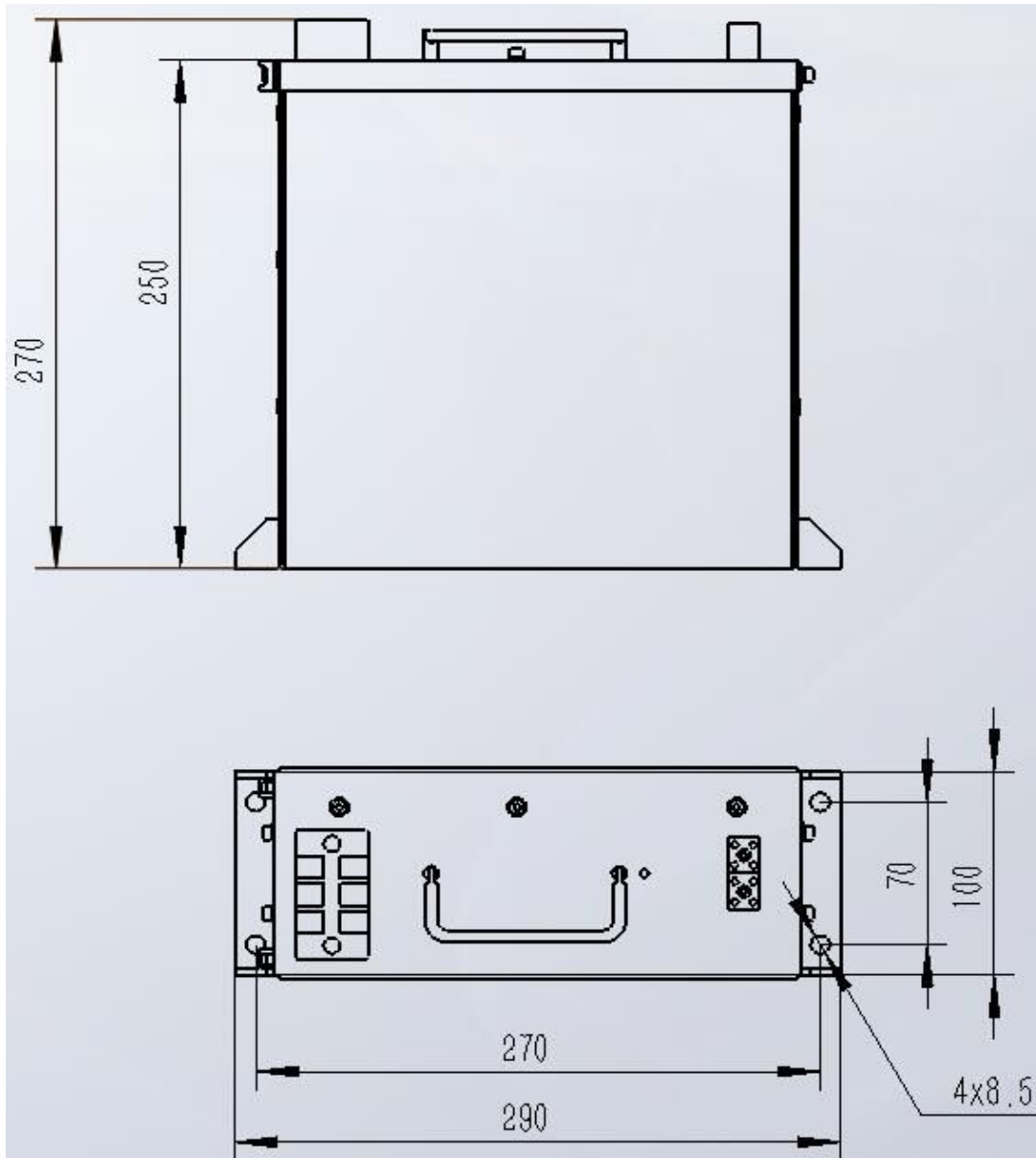
Shelf Life

(Stored uncharged up to a maximum storage temperature)	2 years
--	---------

Factory High-Pot Test	1,500 V DC
-----------------------	------------

Environment humidity	≤90%
----------------------	------

MCE0010C0-0090R0TBA



Part Number	Dimension (mm)			Package Quantity(set)
	L (±0.5mm)	W (±0.5mm)	H (±0.5mm)	
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.