



NESSCAP® Ultracapacitor Products 125V MODULES

Features

- 125V module with rated capacitance of 62F
- Highest power performance with ultra-low internal resistance
- Integrated UMU (Ultracapacitor Management Unit) for:
 - Individual cell balancing
 - Voltage and temperature diagnosis by logic output
 - Optional CAN or RS communication interface
- Rugged design for harsh environments
- Typical applications:
 - Transportation and automotive
 - Industrial, UPS, DVR, and telecommunications



Specifications

Rated Capacitance (F)	Internal Resistance (mΩ)		Max Current ¹ (A)	Leakage Current (mA)	Stored Energy (Wh)	Specific Energy (Wh/kg)	Nominal Weight (kg)	Part Number
	Discharge with constant current at 25°C	AC (100Hz)						
62	< 12.7	< 15.0	1,850	< 5.2	134.5	2.36	57	EMHSR-0062C0-125R0S

Rated Voltage, V _R		125V DC	
Surge Voltage		136.8V DC	
Capacitance Tolerance		0% / +20%	
Operating Temperature Range		-40 ~ 65°C	ΔCAP < 5% and ΔESR < 150% of initial value measured at 25°C
Storage Temperature Range		-40 ~ 70°C	
Lifetime	Endurance	1,500 hours at V _R and 65°C	ΔCAP < 20% and ΔESR < 60% of specified value
	At Room Temperature	10 years ² at V _R	ΔCAP < 30% and ΔESR < 150% of specified value
Cycle Life		1,000,000 cycles between V _R and 1/2V _R using constant current charge and discharge at 25°C	ΔCAP < 30% and ΔESR < 150% of specified value
Electronics (Ultracapacitor Management Unit)	Balancing	Active Balancing	
	Monitoring	Over Voltage & Over Temperature	Requires external 5V DC input, configurable to user specific requirements
	Communications	High/Low Logic signal Optional CAN 2.0B, J1939 or RS485 interface	
	Signal Output	8 pin Deutsch connector	
Output Terminals	M8 screw holes	Located inside cover	
Enclosure	Insulation Coordination	Rated insulation voltage : 1kV DC Or 2.8kV AC (50Hz, 10sec) Rated impulse withstand voltage : 6kV DC	IEC 61287-1 (Cat. : OV II)
	Protection Degree	IP 55 with fans, cells protected in IP65 enclosure	IEC 60529
	Vibration & Shock Resistance	SAE J2380 : Vibration SAE J2464 : Shock	
	Fan Rating	24V, < 30W each	Fan option includes 2 fans
	Mounting	4 locations, M8 holes on each feet	

1 – Warning: this value should not be used as continuous current
2 – Lifetime at room temperature is a provisional value

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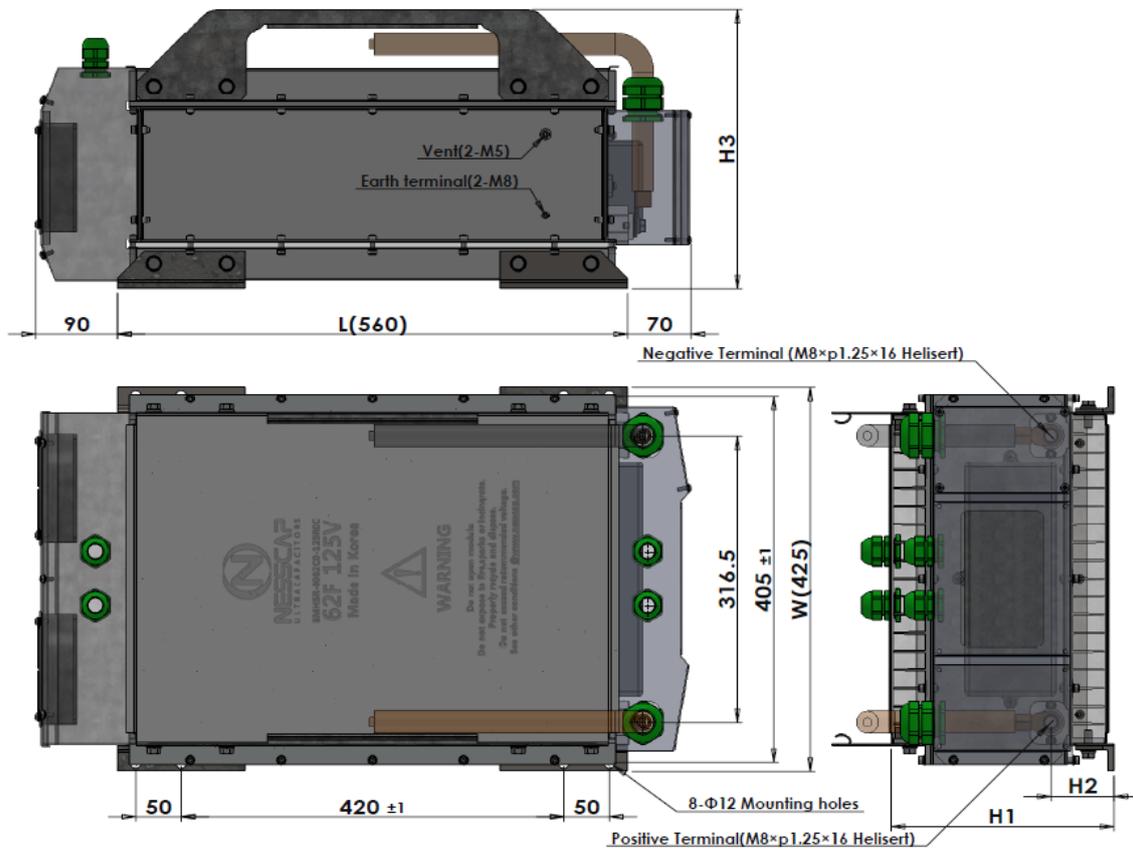
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ISO 9001, 14001, and TS 16949 certified



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Dimensions



Part Number	Capacitance (F)	Dimensions (mm)				
		L(± 3.0)	W(± 3.0)	H1(Max)	H2(Max)	H3(Max)
EMHSR-0062C0-125R0S	62	560	425	245	70	308

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