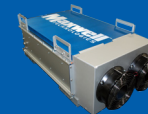


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FEATURES AND BENEFITS

- CAN Bus digital State of Health monitoring and communications
- Highest power performance available
- Over 1,000,000 duty cycles
- Temperature and voltage monitoring
- Ultra-low internal resistance
- Shock and vibration immunity (ISO16750:T14, EN61373)

TYPICAL APPLICATIONS

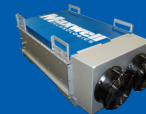
- Buses
- Electric trains and trolleys
- Heavy duty transportation
- Hoisting equipment
- Utility vehicles

PRODUCT SPECIFICATIONS

| CAPACITANCE | |
|--|-----------------|
| Nominal capacitance | 63 F |
| Tolerance capacitance | +20% / -0% |
| VOLTAGE | |
| Rated voltage | 125 V DC |
| Surge voltage | 135 V DC |
| Maximum operating voltage | 130 V DC |
| Isolation voltage 50Hz, 1 min. Maximum string operating voltage 1,500 V DC | 4,000 V AC |
| RESISTANCE | |
| ESR, DC Max., room temperature | 18 mΩ |
| Resistance tolerance | Max. |
| Thermal resistance (Rth) | 0.032°C/W |
| TEMPERATURE | |
| Operating temperature range | -40°C to +65°C |
| Max. ambient operating temp. | +50°C |
| Storage temperature range | -40°C to +70°C |
| Temperature characteristics | |
| Capacitance change | ± 5% at 25° C |
| Internal resistance change | ± 150% at 25° C |
| POWER | |
| Pd | 1,750 W/kg |
| Pmax | 4,700 W/kg |
| ENERGY | |
| E _{max} | 2.53 Wh/kg |
| Energy available Energy Available equals 1/2C (V _{nom} ² - 1/2V _{nom} ²) /3600 | 101.7 Wh |
| CYCLES | |
| Cycles 125 V to 62.5 V DC, RT End of life characterized as -20% C from nominal C, or increase of 100% in ESR | 1,000,000 |
| Capacitance change Within % of initial specified value. | 20% decrease |
| Internal resistance Within % of initial specified value. | 150% increase |

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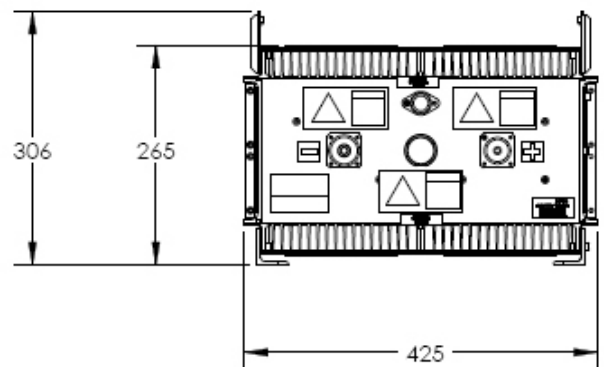
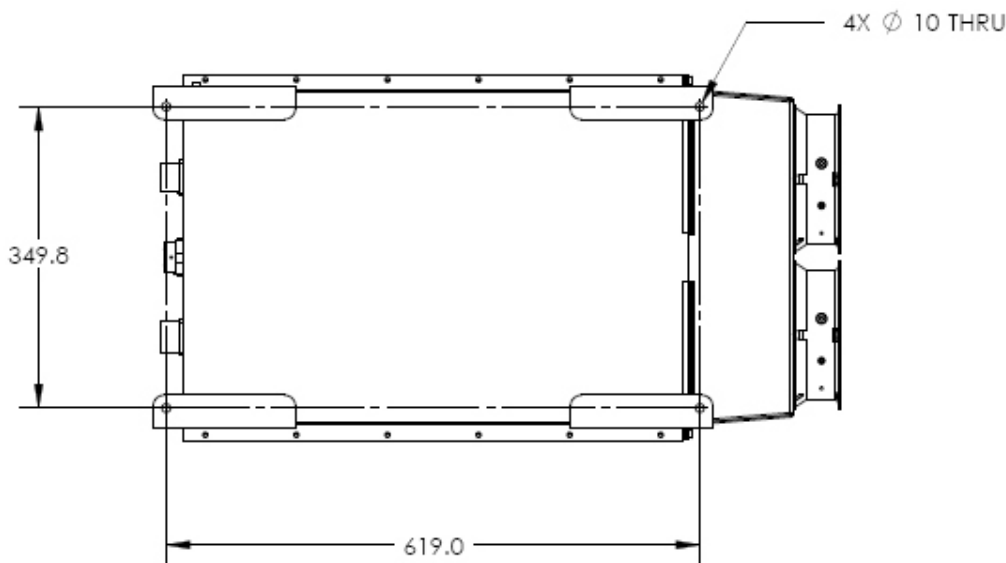
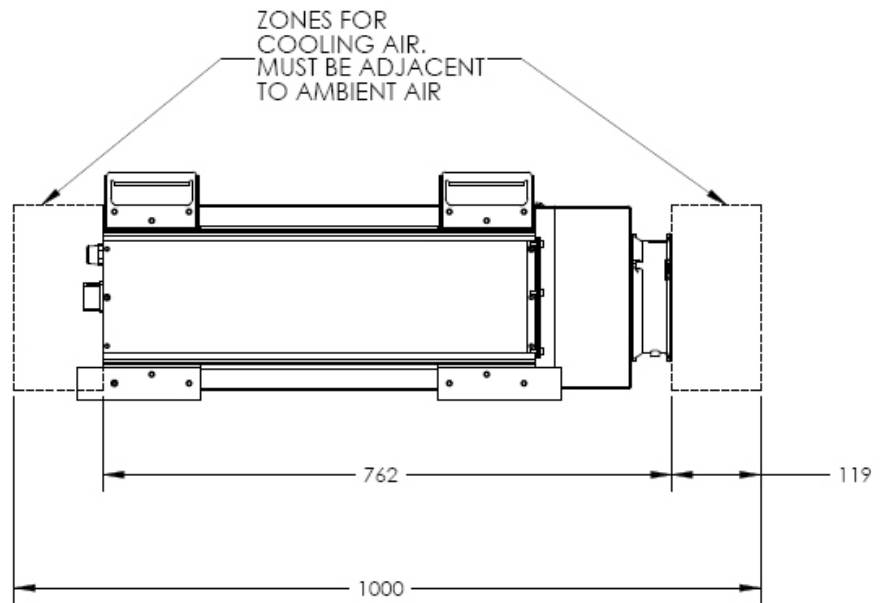
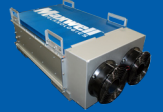
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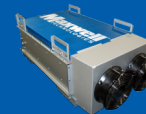
PRODUCT SPECIFICATIONS (cont.)

| LIFESPAN | |
|--|--|
| Lifetime 125 V DC, RT End of life characterized as -20% C from nominal C, or increase of 100% in ESR | 100,000 hours |
| Endurance After 1,500 hours application of rated voltage at 65°C. Within % of initial specified value. | |
| Capacitance change | <20% decrease |
| Internal resistance change | <60% increase |
| Life test After 10 years at rated voltage and 25°C. Within % of initial specified value. | |
| Capacitance change | 20% decrease |
| Internal resistance | 100% increase |
| CURRENT | |
| Leakage current After 72 hours at 25°C. Initial leakage current can be higher. | 5.2 mA |
| Maximum continuous current | 150 A |
| Maximum peak current, 1 sec 1 second, 10% duty cycle | 750 A |
| Maximum continuous current with fan cooling Assuming 15°C temperature rise above ambient temperature | 150 A |
| Maximum continuous current with passive cooling Assuming 15°C temperature rise above ambient temperature | 55 A |
| Self discharge % of initial V, 30 days RT 100V; 12 hours charge and hold | 50% |
| CONNECTION | |
| Power terminal | Radsok® |
| Communications | See last page |
| MONITORING | |
| Cell balancing | VMS (Maxwell Technologies® Voltage Management System) |
| V+, midpack, V-, temperature | CANBus SAE J1939 |
| SIZE | |
| Dimensions (L x W x H) (mm) (±0.5mm) | 762 x 425 x 265 |
| Weight | 59.5 kg |
| RATINGS | |
| Fan power Max. each fan | 12V / 42W (B14) 24V / 55W (B24) |
| Humidity resistance | IP65; IP55 (fans) |
| Shock resistance | SAE J2464 |
| Vibration resistance | EN 61373; ISO16750 Table 14 |

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INCLUDED IN BMOD0063 P125

2 Power connectors:

- Mounting adapters with isolation and mating lug connectors
- Optional adapters for normal / perpendicular mounting of power cables

1 CAN bus serial communications connector, male, Deutsch DTM04-08PA with WM-8D and 0462-201-20141

1 CAN bus serial communications connector, female, Deutsch DTM06-08SA with WM-8S and 0460-201-20141

MOUNTING RECOMMENDATIONS

The module should be mounted to a strong chassis surface with four 6-32, or M4 screws. The mounting screws should have a mechanical locking method that is appropriate for the vibration levels. To provide the best possible EMI protection, the mounting surface should be electrically grounded. Do not reverse polarize.

The use of alternate module mounting orientations or custom feet other than those provided by Maxwell Technologies will result in voiding the warranty unless such uses have been disclosed to Maxwell and approved by Maxwell by express written consent prior to implementation.

MARKINGS

Modules are marked with the following information: Rated capacitance, rated voltage, product number, name of manufacturer, positive and negative terminal, warning marking, serial number.

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