# PC10

## Solid State POWERCORE Management Enclosure

CANopen

J1939

# BLINK MARINE

The Power Management Unit is the brain of the system. It receives requests from switches or keypads and handles these commands based on the current state of the system. The output may be the activation/deactivation of a circuit or starting a timer function. The PowerCore then sends status data from system to keypads to turn on/off the LED indicators and backlighting.

## ELECTRICAL FEATURES

- 12V or 24V nominal input voltage
- 100Ampere total PME input current carrying capability
- 12 switched circuits that include:
    - Momentary, toggle, and time-out functions.
    - Pulse-width modulation of output voltage for dimming capability.
    - 3 circuits rated up to 20A maximum continuous load, 9 circuits rated up to 15A.
    - 2 complete H-Bridge circuits for driving reversible motors
- Parallelable output increases current rating.
- An electronic circuit breaker protects every circuits. The current ratio for each circuit can be set independently.
- Remote reset of any output circuitry fault through keypad.
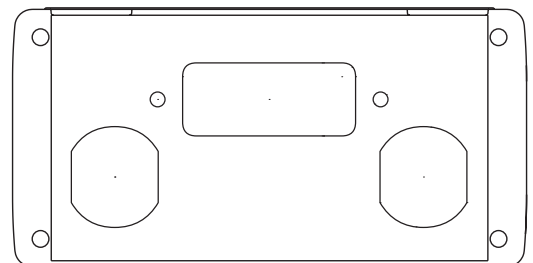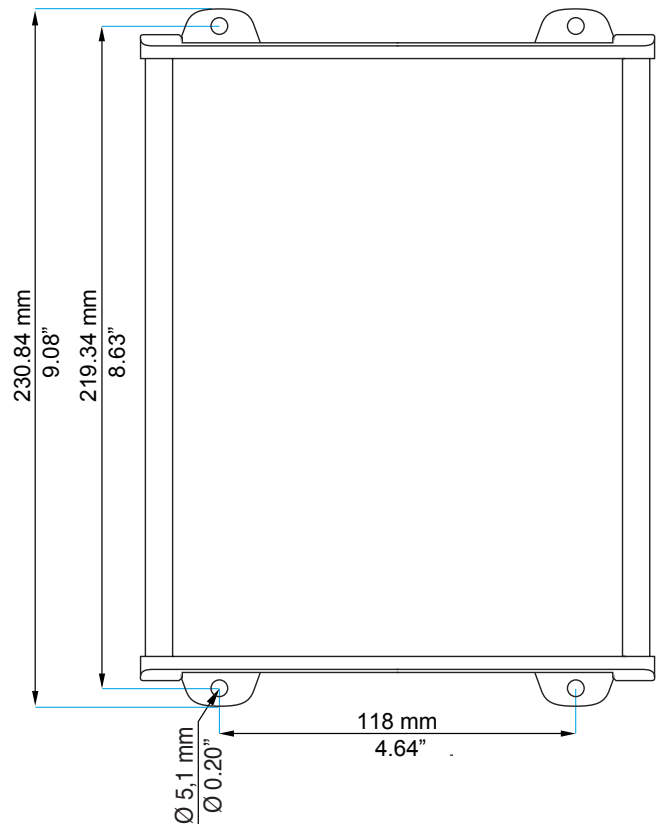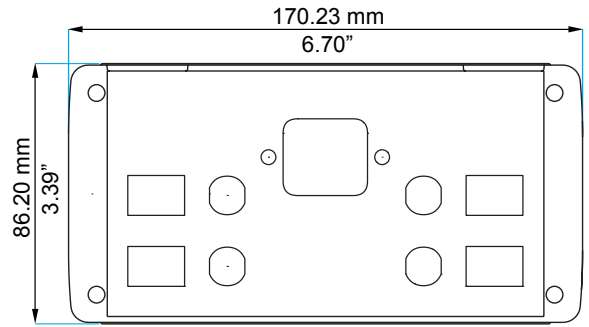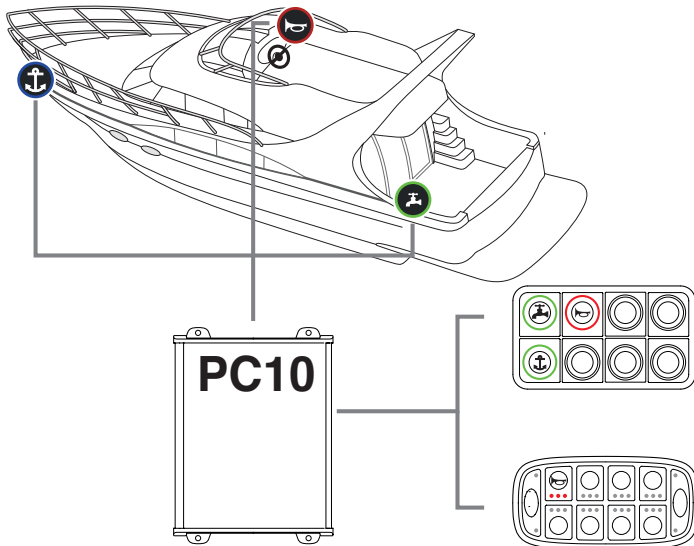- Input undervoltage lock down.

## SPECIAL FEATURES

- CAN-bus compatible (CANopen/J1939 compliance available)
- Field programmability of electrical functions and current limit trip points available to authorized OEMs and Value-Added Resellers (VARs)
- 4-circuit bypass for essential functions
- Optional N.O. relay contact

*blink*
M A R I N E

# SPECIFICATIONS FOR PC10 SOLID STATE POWERCORE MANAGEMENT ENCLOSURE



170.23 mm
6.70"

86.20 mm
3.39"

230.84 mm
9.08"

219.34 mm
8.63"

118 mm
4.64"

Ø 5,1 mm
Ø 0.20"

| ELECTRICAL | PC10 |
|---|---|
| Supply voltage | 12V and 24V Nominal Voltage (8-32VDC) |
| Standby current | <30mA per PME |
| Load current | Max 20A |
| Input current | 100A max |
| Communication bus | RS-485 between keypad and PME<br>CAN Bus Slave |
| Circuit protection | electronic overcurrent protection and automotive mini blade fuse |

| MECHANICAL | |
|---|---|
| Connector | Molex MX150L #19427-0049 & 19427-0032 |
| Mating connector | Molex MX150L #19418-0030 & 19418-0004 |
| Housing | ALLOY 6060 and ZA4C1 |
| Seal | TPV 8211-75 |
| Power stud | Amphenol surlock plus series |
| PC board | 1,6mm thick, Nema Grade FR-4, Double clad with 3oz copper |

| ENVIRONMENTAL | |
|---|---|
| Operating temperature | -20ºC to +85ºC |
| Storage temperature | -40ºC to +85ºC |
| Humidity | 0 to 98% (no condensation) |
| Ingress Protection Rating | IP65 |

| FEATURES | |
|---|---|
| Circuits | 12 |
| Size mm connectors incl. | 230 x 170 x 86 |
| Remote current trip reset | Standard on all outputs |
| System reset | Optional |
| Status indicator | Standard |
| By-pass | 4 outputs |
| Low volt sense & lock down | Optional |
| Pull down | 4 outputs |
| "H" Bridge capability | 2 complete "H" bridges available |
| Level sense input | 8 inputs |
| Dimming/PWM Features | Available on 10 outputs |
| Circuit status monitoring | Optional |
| Field re-programmable | Optional |
| External status communication on the bus | Optional |
| N.O. relay contact | Optional |