

# POWER CORE

10  
10-SR  
20  
21B

AUTOMOTIVE - MARINE



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.



Icons shown on this keypad are for visual demonstration only.

## ELECTRICAL FEATURES

- 12V or 24V nominal input voltage

### - 12 switched for PC10 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

### - 10 switched for PC10-SR circuits that include:

- Momentary, toggle, and time-out functions.
- Pulse-width modulation of output voltage for dimming capability.
- 2 complete H-Bridge circuits for driving reversible motors

### - 22 switched for PC20 circuits that include:

- Momentary, toggle, and time-out functions.
- Pulse-width modulation of output voltage for dimming capability.
- 5 circuits rated up to 20A maximum continuous load, 17 circuits rated up to 15A.
- 4 complete H-Bridge circuits for driving reversible motors

### - 22 switched for PC21B circuits that include:

- Momentary, toggle and time-out functions
- Pulse-width modulation of output voltage for dimming
- 22 circuits, each 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 (PC20 - PC10)
- Optional N.O. relay contact (PC20 - PC10)



# SPECIFICATIONS FOR STANDARD KEYPADS



	PC10	PC10-SR	PC10-SR	PC20	PC21B
<b>ELECTRICAL</b>					
Supply voltage	12V and 24V Nominal Voltage (8-32VDC)				
Standby current	<30mA per PME				
Load current	Max 20A	Max 15A	Max 15A	Max 20A	Max 15A
Input current	100A max	100A max	100A max	150A max	150A max
Communication bus	RS-485 between keypad and PME CAN Bus Slave	RS-485 between keypad and PME	RS-485 between keypad and PME	RS-485 between keypad and PME CAN Bus Slave	RS-485 between keypad and PME CAN Bus Slave
Circuit protection	Electronic overcurrent protection and automotive mini blade fuse				

## MECHANICAL

Connector	Molex MX150L #19427-0049 & 19427-0032	Deutsch DRC13-24PA	Deutsch DRC13-24PA	Molex MX150L #19427-0032 & 19429-0040 & 19429-0039	Deutsch DRC 10-40P-A004
Mating connector	Molex MX150L #19418-0030 & 19418-0004	Deutsch DRC16-24SA	Deutsch DRC16-24SA	Molex MX150L #19418-0030 & 19418-0004 & 19418-0027	Deutsch DRC 16-40S
Housing	Alloy 6060 and ZA4C1	Alloy 6060 and ZA4C1	Alloy 6060 and ZA4C1	Alloy 6060 and ZA4C1	Aluminum AB46100 Anodic oxidation+powder-coating+zinc-coated bronze ZnCu20
Seal	TPV 8211-75	TPV 8211-75	TPV 8211-75	TPV 8211-75	EPDM GASKET
Battery contact	Amphenol surlock plus series	1/4-20 Threaded stud	1/4-20 Threaded stud	Amphenol surlock plus series	Blink Marine CuZn20 UNC#14-20
PC board	1,6mm thick, Nema Grade FR-4, Double clad with 3oz copper				

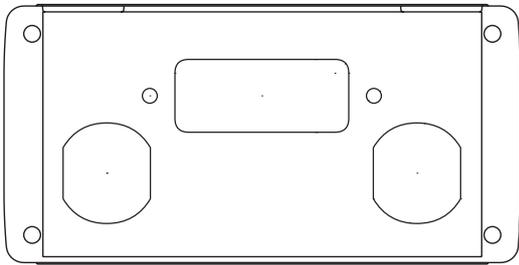
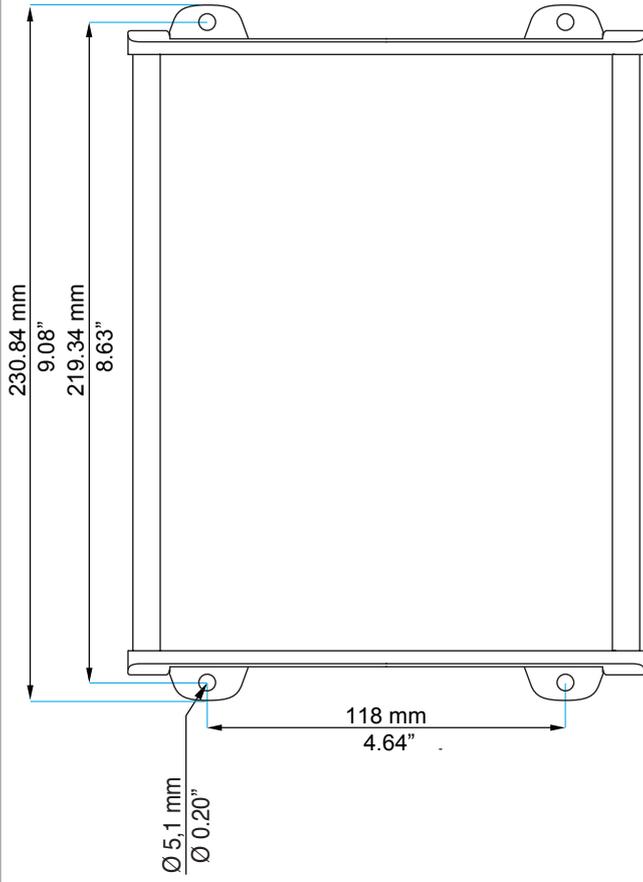
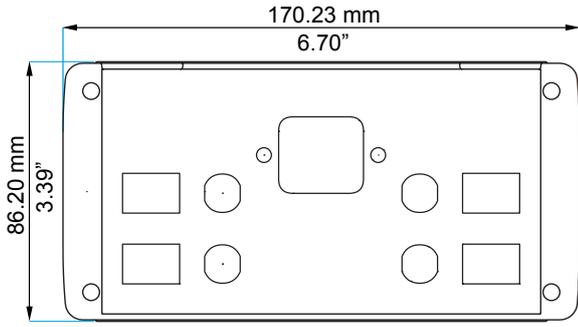
## ENVIRONMENTAL

Operating temperature	-20°C to +85°C				
Storage temperature	-40°C to +85°C				
Humidity [no condensation]	0 to 98%				
Ingress Protection Rating	IP65	IP65	IP65	IP65	IP67

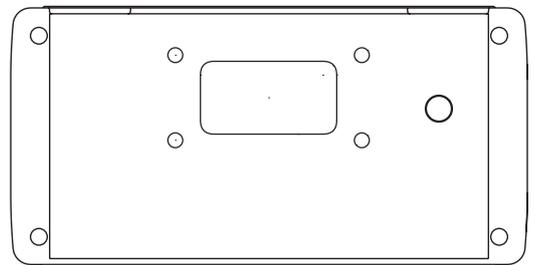
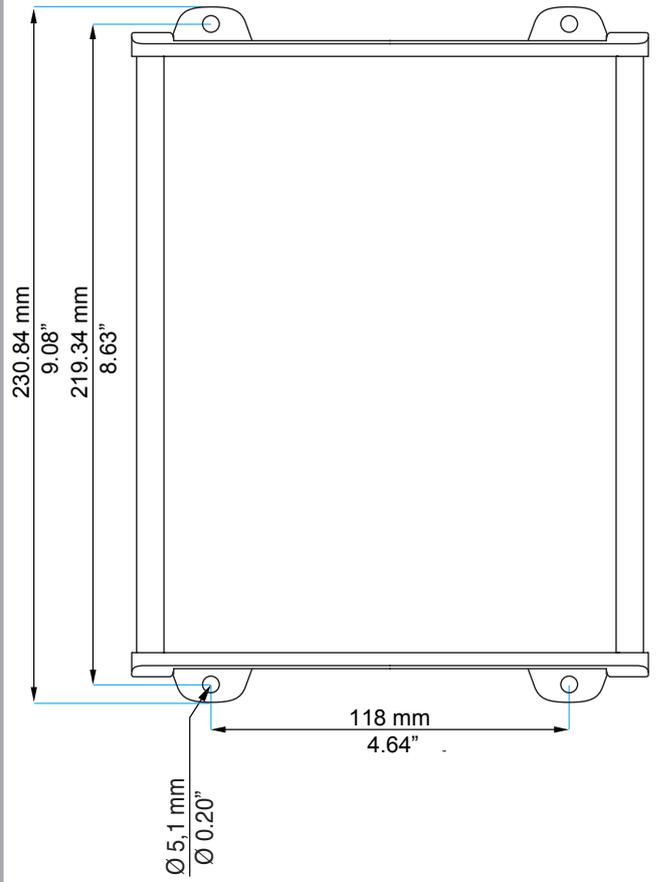
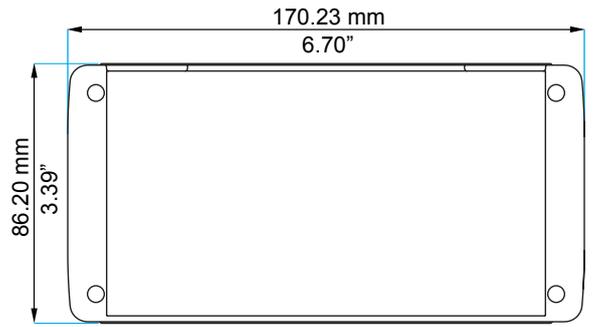
## FEATURES

Circuits	10	15	15	22	22
Size mm/inches	230x170x86	230x170x86	150x170x86	230x170x86	237x168x55
	9.05x6.69x3.38	9.05x6.69x3.38	5.90x6.69x3.38	9.05x6.69x3.38	9.33x6.63x2.16
Remote current trip reset	Connectors included				
System reset	Standard on all outputs	10 Switched output	10 Switched output	Standard on all outputs	Standard on all outputs
Status indicator	Optional				
By-pass	Standard				
Low volt sense & lock down	4 outputs	4 outputs	4 outputs	4 outputs	-
Pull down	Optional				
"H" Bridge capability	4 outputs	-	-	9 outputs	4 outputs
Level sense input	2 complete "H" bridges available	-	-	4 complete "H" bridges available	2 complete "H" bridges available
Dimming/PWM Features	8 inputs	8 inputs	8 inputs	8 inputs	4 inputs
Circuit status monitoring	Available on 10 outputs	Available on 10 outputs	Available on 10 outputs	Available on 10 outputs	Available on 3 outputs
Field re-programmable	Optional				
External status communication on the bus	Optional				
N.O. relay contact	Optional	Optional	Optional	Optional	-

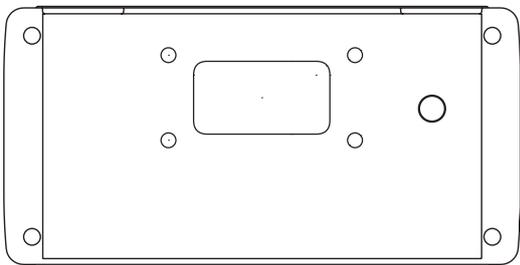
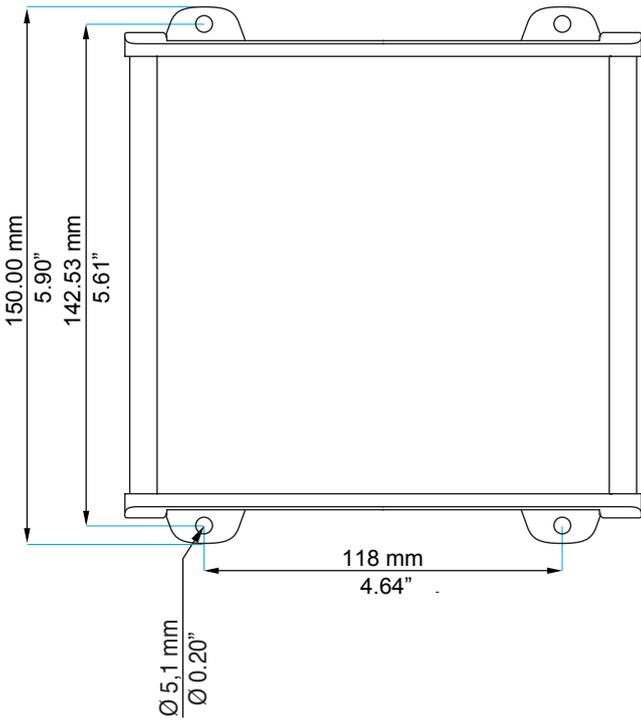
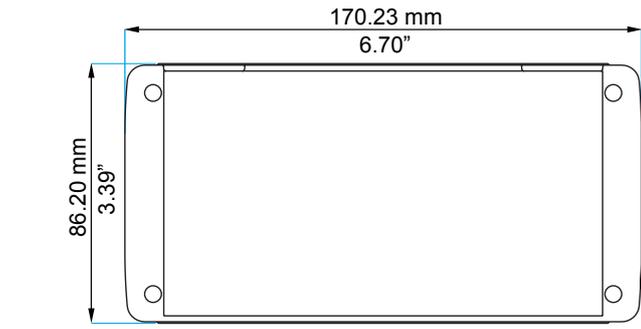
PC10



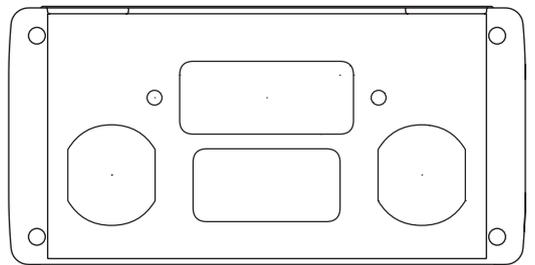
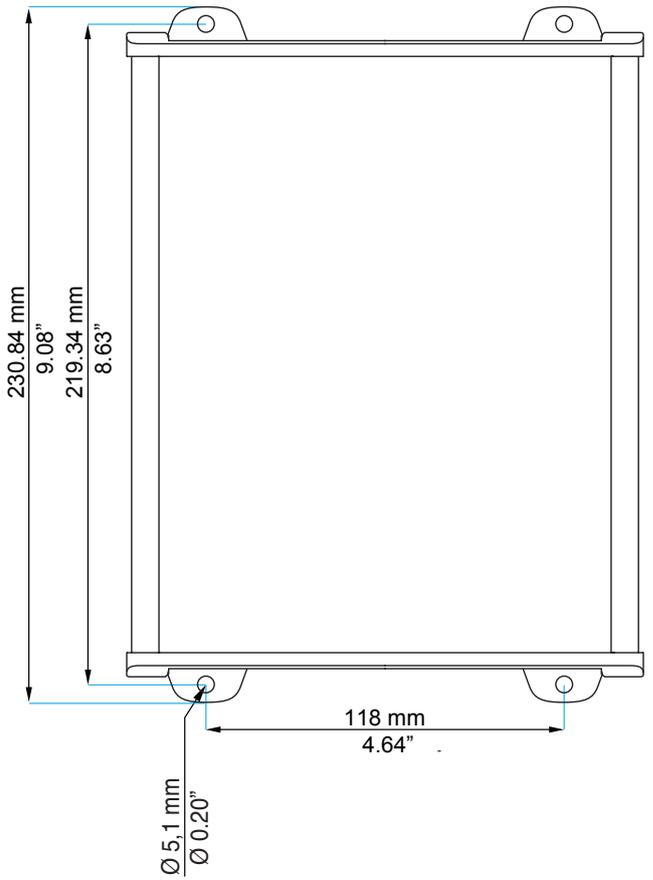
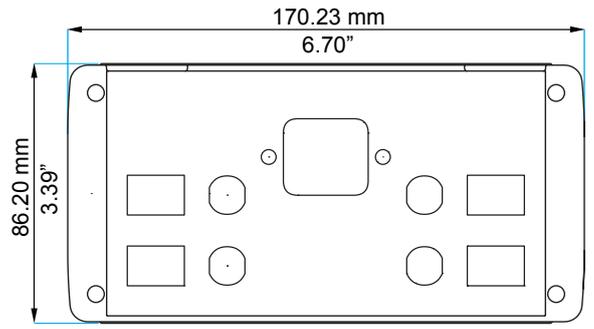
PC10-SR

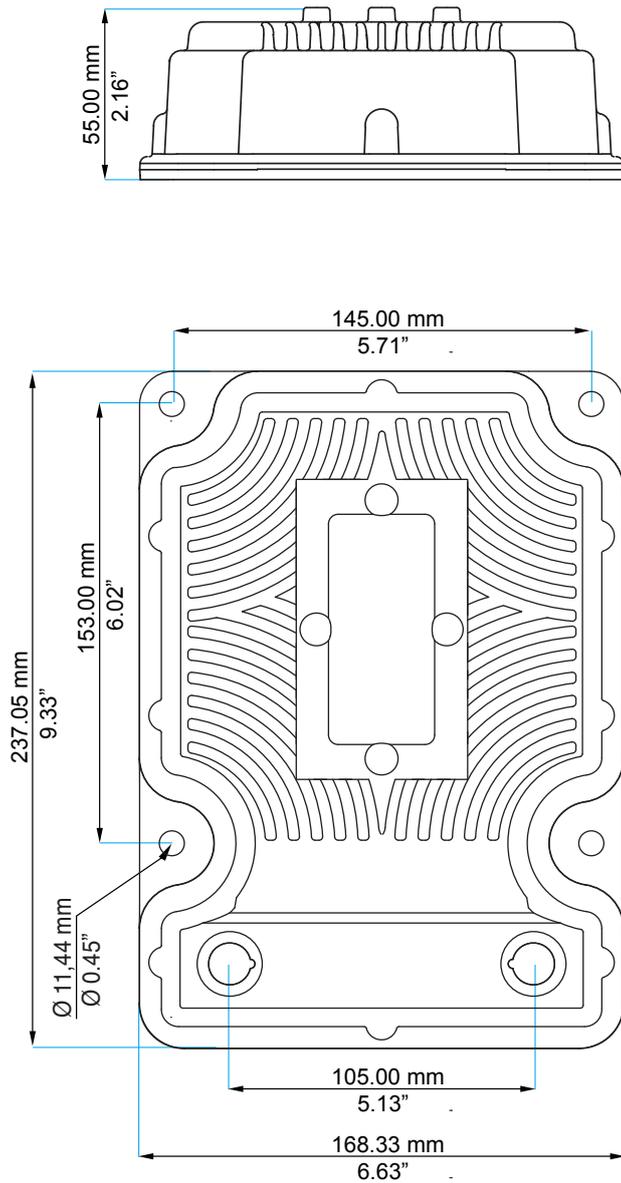


PC10-SR



PC20





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MARINE

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