

PN: 99-0690



Description

Trombetta offers a family of output modules designed for harsh duty with an intergrated automotive connector interface that delivers superior ingress protection while meeting the sophisticated output demands of the mobile equipment market.

Features

- Available in J1939 and CANopen Protocols
 - 12V or 24V nominal voltage range
 - 3A (sourcing) continuous output current (all outputs)
 - Auto baud rate detection 125Kbps-1Mkbps
 - IP67 rated
 - -40°C to 85°C operating temp range*
 - Reverse battery protection
 - Oen load detection
 - 10 digital outputs
 - 10 digital/PWM capable outputs
 - LED outputs status
 - Ground returns for each output
 - Optiona 2nd CAN bus
 - Optional load dump circuitry
- *30A max module current at 85°C

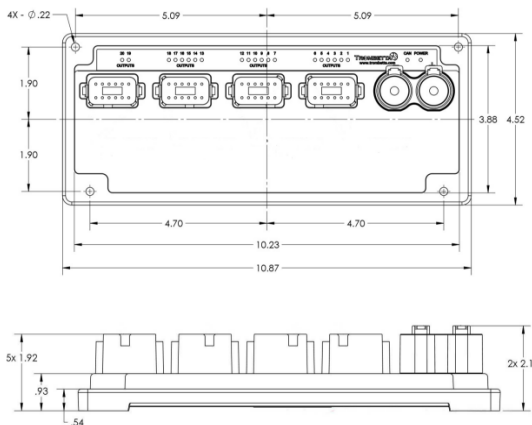
Specifications

Parameter	Min	Nominal	Max	Notes
Functional Battery Voltage	8VDC	28VDC	32VDC	Nominal 12/24VDC battery systems
Reverse Battery Voltage	-	-	-32VDC	Indefinitely with 3A max loads attached. No problem mechanism are available during reverse battery
Max Continuous Total Current	-	-	30A	Max current for entire system. Unit should be externally fused at max current to prevent damage from system overcurrent
System Standby Current	-	25mA	30mA	Overall system current with all outputs off, input voltage in functional range
Max Output Current (On state)	-	-	3A	Continuous, Surges up to 10A (nomial) allowed for less than 2 seconds
Output Leakage Current (off state)	-	-	100uA	Per channel, current is shunted to ground via internal 47K pulldowns to allow for state measurement with a meter, and to prevent LED glow due to leakage current 32VDC
ESD Protection	-	-	15KV	All pins
CAN Bus Baud Rate	125Kbps	250Kbps	1M	Requires two devices with a fixed baud rate on the same CAN bus to dtermine baud rate
Node ID	-	0xB0	-	Default can be changed with Ground pin Matrix and Configuration Message 0xA7

Test Parameters

Thermal Cycle Test	SAE J1455. Section 4.1.3 8-Hr Cycle
Thermal Shock Test	ISO16750-4 Section 5.2, 5.2
Drop Test/Handling Shock	IEC 60068-2-31 Section 5.2, 5.2
Humidity & Temp Cycling (Thermal Cyclic Aging)	SAE J1455- Section 4.2.3, Figure 4A, 8-Hour Cycle
Fluid Compatibility	SAE J1455 Section 4.4
Thermal Shock Immersion	ISO16750-4 Section 5.4.3
Ingress Protection (IP)	IEC 60519, IP67
Vibration-Sinusoidal	10-22.289Hz 10mm P-P Displacement, 22.289Hz to 500Hz, 20g RMS acceleration
Vibration-Random	Trombetta profile, 11.55G RMS, 5-2000Hz
Load Dump	ISO16750-2 Section 4.6.4.2.1, SAE J1113-11, Pulse 5B, ISO7637 Pulse 5B
Reverse Battery	ISO16750-2 Section 4.7.2.3
Short I/O(S) to Power/Ground	ISO16750-2 Section 4.10
Jump Start	ISO16750-2 Section 4.3.2
Eletrostatic Discharge	SAE J1313-13 Handling, Section 5, Test Sequence 1-5

Product Dimensions



Mechanical Parameters

Storage Temperature	-40°C to 125°C
Operating Temperature	-40°C to 125°C
Mechanical Shock-Operational	50g
Ingress Protection	IP67
Mating Connectors:	Deutsch DTHD06-1-4S, 0462-203-04141 (contact)
Power/Ground	Deutsch DT06-12SA (Grey) Deutsch DT06-12SB (Black)
Output Connectors	Deutsch DT06-12SC (Green) Deutsch DT06-12SD (Brown) Contact: 0462-201-1614 Wedglock: W12S

