BUCHER automation

JetControlMobile 231

Controller



- 32-bit CPU > 200 MHz
- 2 CAN bus interfaces
- Programming in C/C++
- Withstands high total continuous current
- Configuration inputs for simplified multiple use
- Heavy-duty bridge outputs
- Temperature measurement input
- Compact geometries
- Potted housing

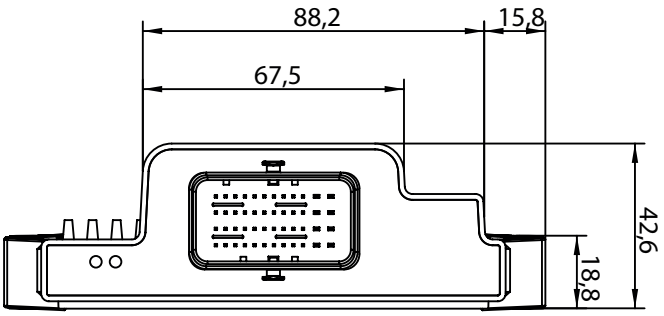
Description

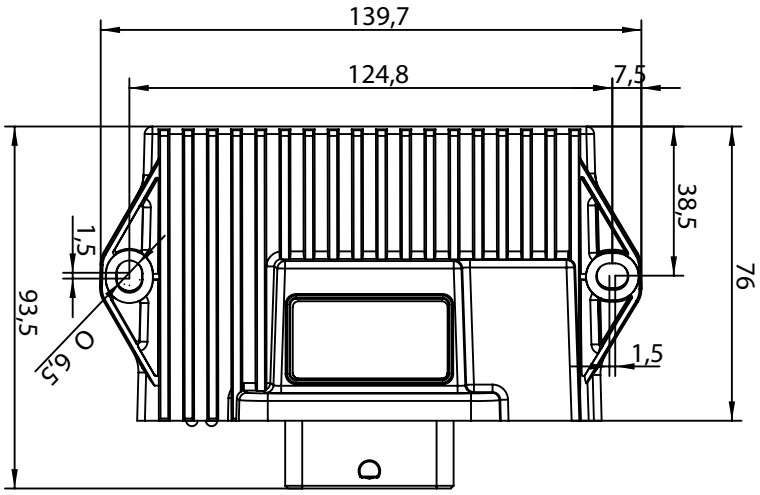
The JetControlMobile 231 is a compact controller packed with a stunning amount of freely configurable inputs and outputs. It stands out thanks to the amply dimensioned half bridges, which are configured as full bridges and, if paralleled, supply up to 24 A of electricity. Short-circuit-proof reference and sensor supplies reduce the wiring effort. The built-in PT1000 temperature measurement input allows for the use fan controls for example. Programming is done in C/C++ via the STM32 CUBE IDE.

Technical specifications

CPU	STM32 F7
Programming	C/C++
Operating voltage range	DC 8 V ... 32 V, with separate ECU power supply
Operating/storage temperature	-40 °C ... +85 °C
CAN ports	2; e.g. for CANopen, SAE J1939, ISOBUS, ..., requires the corresponding stack
Max. amount of inputs/outputs	27
Inputs	
Analog	6; 0 ... 10 V/0 ... 20 mA, can be configured individually, resolution: 12 bits, input impedance: 35 kΩ, load resistor: 120 Ω
Thermal sensor inputs	1; PT1000
Digital/frequency	8; input impedance 5.6 kΩ 0.1 Hz ... 10 kHz NPN/PNP input, switchable via software
Digital / coding	2, coding e.g. for CAN ID, tri-state
Outputs with diagnostic capabilities (short-circuit, cable break)	
PWM, precision current measuring	4; 3 A, 1.5 kHz max., supports dithering; current-controlled, diagnostic capabilities; short-circuit-proof Alternative usage: Digital input, active-low, input impedance 10 kΩ Digital output 3 A
PWM, half bridge	4; 12 A,10 Hz min, 15 kHz max., supports dithering, diagnostic capabilities, short-circuit-proof Tow half bridges connect to a full bridge to control DC motors (open-loop control), optional parallel connection
PWM, half bridge	4; 5 A,10 Hz min, 5 kHz max., supports dithering, diagnostic capabilities, short-circuit-proof Tow half bridges connect to a full bridge to control DC motors (open-loop control), optional parallel connection
Sensor power supply	3 sensor supplies (of which 1 x 10 V reference output)
Max. permitted total current	24 A
Degree of protection	IP66
Vibration	ISO 16750-3
Shock	ISO 16750-3
Protection against polarity reversal	Yes
Certifications	E1 (ECE R10), CE ISO 14982
Output diagnostics	Short circuit, no-load

Dimensional drawing





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Further details and order information are available on request. Specifications are subject to change without notice. Errors and omissions excepted.

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