

HCB

ECU for mobile machinery.

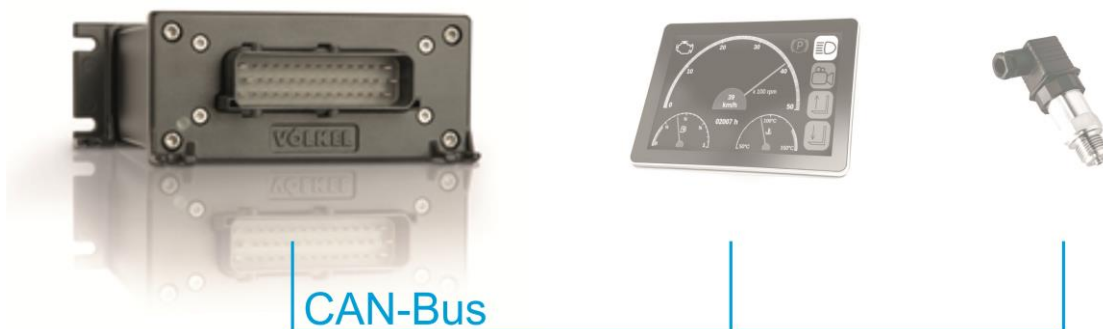
The HCB is a universal ECU for diverse applications in mobile machines for construction, forestry, agriculture or comparable application fields. Configurable in- and outputs enables easy adaption for the required application. Display and extension modules can be connected via CAN-Bus.



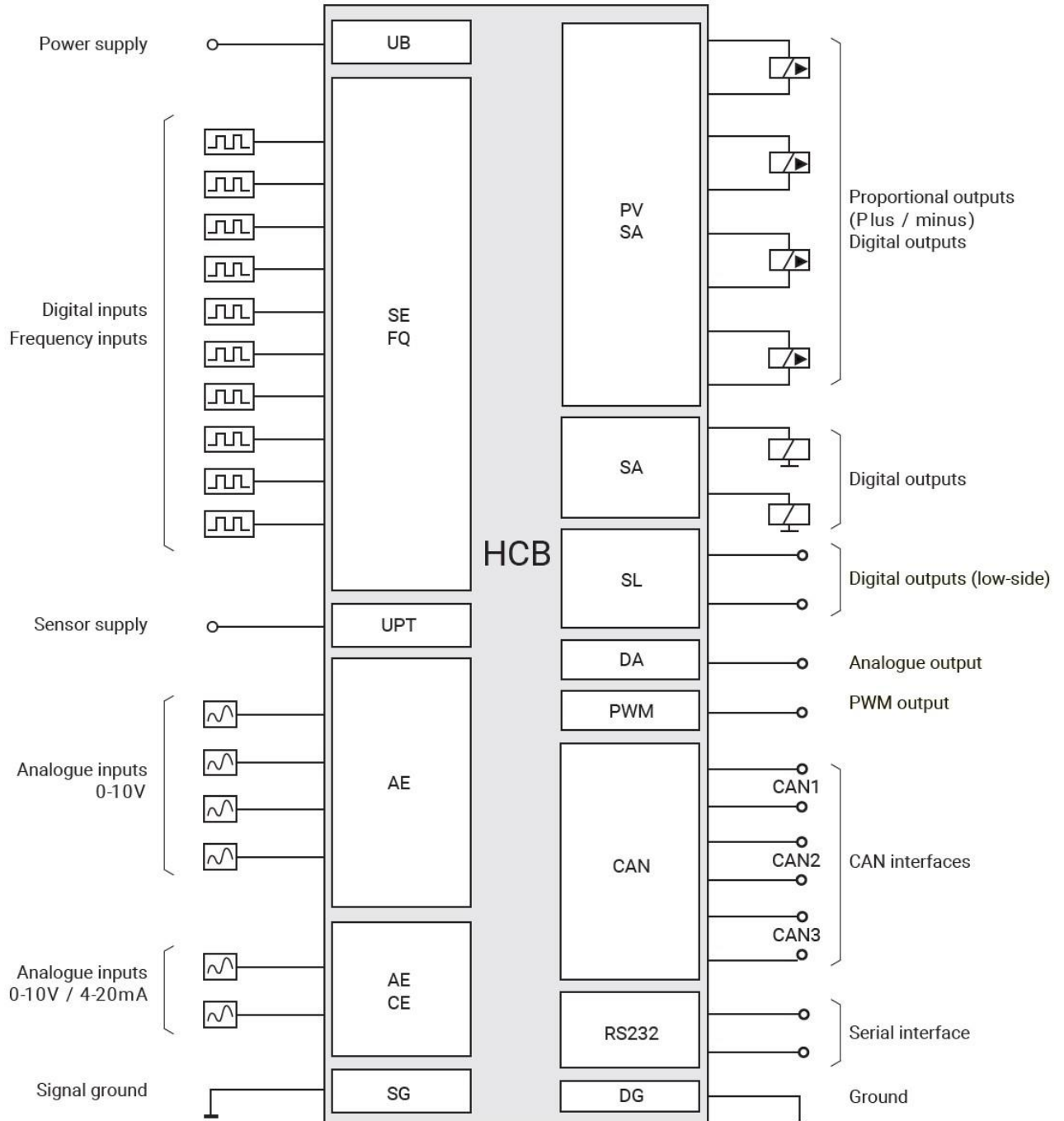
Highlights

- Microcontroller with external watchdog
- Re-measurement and diagnostics of all outputs
- Modular extendable over CAN-Bus
- Customer and application specific software based on the Völkel platform
- Parametrization and diagnosis via ConDoc™
- Robust and outdoor-suitable housing

Individual CAN communication



Connection diagram

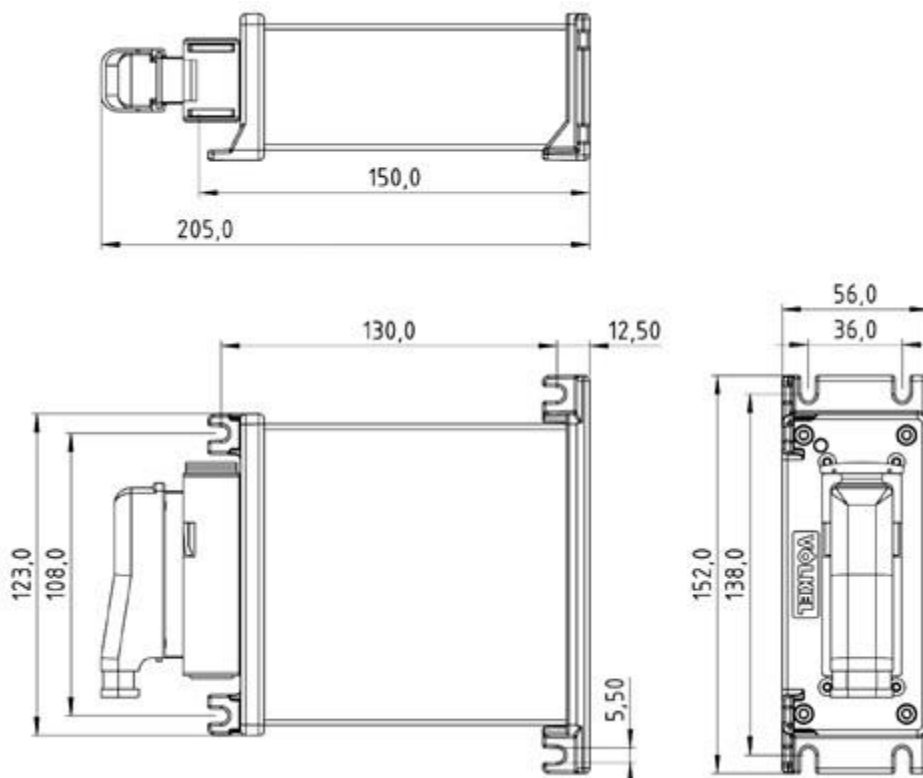


Technical data:

Inputs	Digital inputs	Number	Up to 10 (8 ⁽¹⁾ + 2 ⁽²⁾)
		Input resistance	2x adjustable Pull-Down/Pull-Up/high resistance 8x Pull-Down
		Switching threshold	adjustable 0 ... 32V
	Frequency inputs	Number	Up to 10
		Input resistance	2 x adjustable Pull-Down/Pull-Up/high resistance 6 x Pull-Down 1 x Pickup 1 x Clamp W
		Switching threshold	8 x fix thresholds 1 x Pickup threshold 1 x Clamp W threshold
		Range	Max. 10kHz
		Optional	4x configurable as rotary encoder (¹) 8 x configurable as digital input (²) 2 x configurable as digital input (Pickup)
	Analogue inputs	Number	6
		Voltage inputs	Up to 6x 0 ... 10V
		Current inputs	Up to 2x 4 ... 20mA
		Resolution	10 Bit
	Outputs	Digital outputs	Number
Output current			2x High-Side switch, max. 3A each 2x Low-Side switch, max. 4A each
Proportional outputs		Number	4
		Output current	max. 3A each
		Optional	(³) 4 x configurable as digital output
Analogue output		Number	1
		Range	0 ... 10V
PWM output		Number	1
		Output voltage	0/5V
		Frequency range	0 ... 1000Hz
UB Sensor		Sensor supply	configurable 5 ... 10V, max. 400mA
Communication	CAN	Number	3
		Transmission rate	CAN 2.0B (max. Baudrate 1Mbit/s)
		Terminal resistance	Not available
	RS232	Number	1
Transmission rate		Max. 115,2kBit/s	
Environment	Supply	8 ... 32V	
	Operating temperature	-40 ... 85 °C (Housing temperature)	

Housing	Dimensions		(W/H/D) 152mm x 150mm x 56mm (without connector)
	Weight		ca. 650g
	Material		Aluminium housing with DAE
	Connector		AMP-TE MIX42P, 42 pin
	Protection class		IP65, IP69 (DIN 40050, DIN EN 60529) IP69K (ISO 20653)
Protection types	Safety	Components	Microcontroller-Watchdog Shutdown by watchdog and relais Reverse polarity protection
		MTTF	115 Jahre
		EMC	Road vehicles
	EMC	Construction machinery	DIN EN 13309, ISO 7637-3
		Agricultural and forestry machinery	Directive 2009/64/EG, EN ISO 14982, ISO 7637-3
		Industrial use	DIN EN 61000-6-2, DIN EN 61000-6-4
	Mechanical, climatic resistance	Cold	DIN EN 60068-2-1
		Dry heat	DIN EN 60068-2-2
		Oscillation	DIN EN 60068-2-6
		Temperature changes	DIN EN 60068-2-14
		Shock	DIN EN 60068-2-27
		Continuous shock	DIN EN 60068-2-27
		Damp heat	DIN EN 60068-2-30
		Free falling	DIN EN 60068-2-32

Overall dimensions



Structural diagram

