

ICCS PROPCAN

Controllers



ICCS PropCAN is a graphically programmable PLC for the control of proportional solenoids.

The pulse width modulated (PWM) output is used to trigger the proportional valve with the ICCS PropCAN. The valve current is detected by an integrated current measurement and can be accurately controlled. In addition to the valve control, it is possible to integrate the required control logic by means of graphical programming, eliminating the need for additional controls.

An externally accessible potentiometer can be used to pre-set the setting values, PWM parameters and a dither signal can be individually configured via software.

Applications

- Controller for mobile hydraulics
- Autonomous mini control system for proportional valves
- Control proportional valves by CAN bus
- PWM adjustment and control functions

Technical data

General information	
Connector	9 pins DIN
Dimensions	30 x 30 x 40 mm
Weight	~70 g
Operating temperature	-40 °C to 85 °C
Storage temperature	-40 °C to 85 °C
Ingress protection	IP 53
EMC	E1
Operating voltage Vsupply	9 V to 30 V DC
Pre-fusing	5 A
Current consumption	30 mA
Processor type	Freescale HCS08
Clock frequency	40 MHz
Flash memory	60 kB
RAM	4 kB
EEPROM	1 kB available for graphical programming

CAN bus	
acc. ISO 11898-2	High speed
acc. CAN 2.0 B	29 Bits extended address identifier
acc. CAN 2.0 A	11 Bits address identifier
Baud rate	20 kBit/s to 1000 kBit/s (125 kBit/s default value)

Inputs / outputs overview		
Qty	I/O type	Description
2	Analogue inputs	1x 0 – 11.4 V DC 12 Bit
1	PWM valve output	max 2.5 A / max 5 kHz
1	Open collector output or analogue input	max 2 W 0 – 11.4 V DC 12 Bit

Every analogue input is also usable as a digital input in the programming software

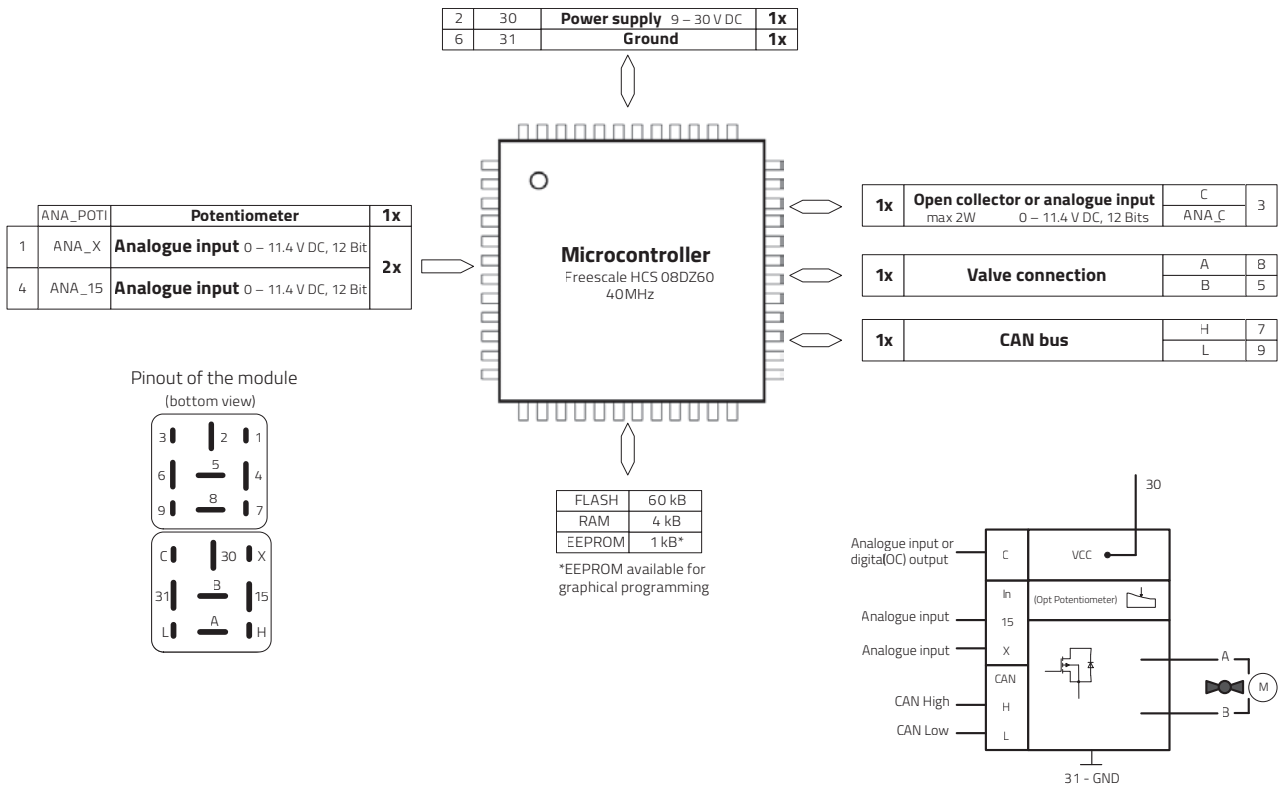
Inputs / outputs details	
Analogue inputs	
Input voltage max	Vsupply
Measuring range	0 – 11.4 V DC
Resolution	12 Bit
Input resistance	22.6 kΩ
Digital outputs	
Load power	max 2 W
PWM outputs	
PWM frequency	100 Hz to 5 kHz
Duty cycle	0 to 100 %
Resolution	0.1 %
Load current	Continuous 2.5 A (max 5 A)

Settable min./max. current

The controller can only be operated with a connected load.

The cable length between controller and valve shall not exceed 2 meters.

Hardware map



Pin assignment

Connector ICCS PropCAN		
Pin	Description	Function
1	X	Analogue input 0 – 10 V
2	30	Vcc Main power supply 9 – 30 V DC
3	C	Analogue input 0 – 10 V or Open collector output
4	15	Analogue input 0 – 10 V
5	B	Valve connection pin B
6	31	Ground
7	H	CAN bus high
8	A	Valve connection pin A
9	L	CAN bus low

Dimensions



Order information

Available references	Part number
ICCS PropCAN with integrated potentiometer	ICS-95159

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