



Motor Controller 5A CAN





Technical Data

Construction	Standard Relay
Mounting	Socket
Connector	FASTON Terminal® 6.3mm (pin 15, 30, 31, 87, 87a) FASTON Terminal® 2.8mm (pin C, X, H, L)
Housing Dimensions	30 x 30 x 40 mm
Weight	60g
Ambient Temperature	- 40 to 85°C
Storage Temperature	- 40 to 85°C
Protection Class	IP 53
Operating Voltage U _B	9 - 30 V DC
Quiescent Current	1.5 mA (at 24 V); 0,8 mA (at 12 V)

Processor

Manufacturer	Freescale
Processor Type	S9S08DZ60
Clock Frequency	40 MHz
Flash	60 K
RAM	4 K
EEPROM	2 K

Interfaces

CAN-bus

According to ISO 11898-2	High Speed
According to CAN 2.0 A	11-bit address-identifier
According to CAN 2.0 B	29-bit extended address-identifier
Baud Rate	10-kBit/s ...1-MBit/s, standard 125-kBit/s

Technical Examination

E1 approval-no.:	10 R - 046879
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Possible Inputs and Outputs

Analog Inputs (Programmable)	alternative usable as digital inputs.	3
PWM – Output, Full-Bridge Output M1, M2		1
Current-monitored, switching to operating voltage and ground		

Technical Data Inputs and Outputs

Characteristics of Analog Inputs

Input Voltage	0 V...11 V DC
Resolution	12-bit
Precision	+/- 3% Full scale
Input Resistor	22.7 kΩ
Input Frequency	< 100 Hz

Characteristics of digital inputs

Start-Up Level High	> 6 V
Start-Off Level Low	< 4 V

Characteristics of PWM-Outputs

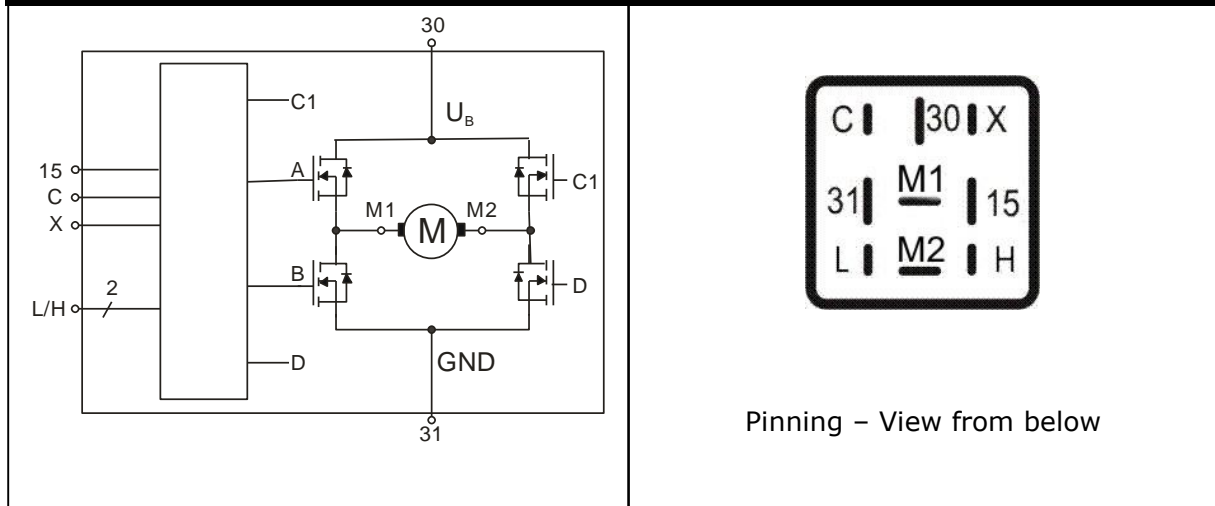
Max. Load Current	Short 5 A / Duration 3 A
PWM-Frequency, Adjustable	0.02 - 5 kHz

Programming

Interface	CAN-bus
Software	MRS Developers Studio with built-in function library, similar programmable like FUP. Customizable program components can be integrated into “C-code”. Program memory is sufficient for about 300 simple components.



Diagram / Pin Assignment



Pin	Signal	Pin Description
C	AI_C / DI_C	Analog input 0 – 11 V, Alternative use as digital input
30	AI_30	U _B operating voltage 9 – 30 V
X	AI_X / DI_X	Analog input 0 - 11 V, alternative use as digital input
31	-	Mass
M1	-	Motor connection 1
15	AI_15 / DI_15	Analog input 0 - 11 V
L	-	CAN low
M2	-	Motor connection 2
H	-	CAN high

Order Information

Designation	Order-No.
Motor Controller 5 A CAN	1.037.300.00E

Accessories

Part Name	Order Number
Programing Tool MRS Developers Studio	1.100.100.09
Cable Set	109446
Socket	1.017.002.00
FASTON Terminal® 6.3 mm 1.5 – 2.5 mm ²	103064
FASTON Terminal® 6.3 mm 1 mm ²	102355
FASTON Terminal® 2.8 mm 0.5 – 1.0 mm ²	105292