

MVC 03-8

DATA SHEET

Description

MVC 03-8 is a member of HEINZMANN's DARDANOS Electronic Fuel Injection (EFI) controller series for industrial reciprocating engines. It is designed for diesel, gas and dual-fuel engines or combinations of them which work with solenoid activated injection systems. MVC 03-8 is able to manage up to a maximum of 8 cylinders. Injection timing and duration can be mapped according to engine designer's requirements.

Additional to the primary purpose of speed control it provides features beneficial for engine performance, such as optimised fuel efficiency, increase of engine power, lower environmentally harmful emissions.

MVC 03-8 is compatible with any solenoid based fuel injection system. It comprises precise injection control with up to five injections per cylinder and stroke.

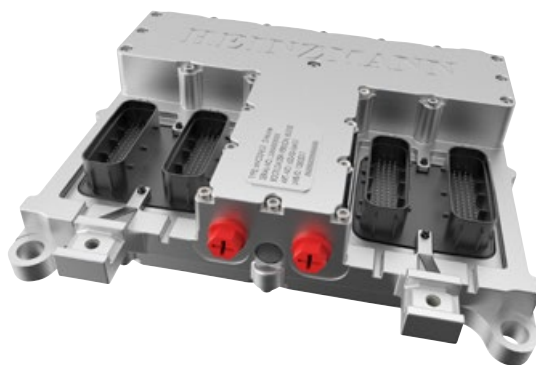
For diesel common rail systems it can control two separate high-pressure pumps. Solenoids can be driven with two stages of voltage. Configuration of current profiles is possible supplementing.

The CPU of MVC 03-8 is fuel cooled to expand operation temperature range. It comes with a comprehensive number of in and outputs. All of them are reverse polarity protected and short-circuit-proof against battery plus and minus.

Two independent CAN bus lines with various protocols offer broad opportunities for communication. For configuration and adjustment HEINZMANN's communication software DcDesk can be applied advantageously. It offers all features required for configuration, commissioning or testing and allows adjustment of connected device while the system is running. Additionally, it comprises a lot of graphical features and records of data.

Applications

➔ Electronic fuel injection at diesel engines, stationary and mobile



Features

Up to five injections per cylinder and stroke

Convenient number of I/Os for optimal engine operation and monitoring

Voltage ranges of 48 or 58 VDC to drive solenoids, configurable via software

Cylinder faults and sensor monitoring functions

Integrated barometric pressure sensor

Proven functionality for marine, generator, locomotive & vehicle applications

Compatible with any solenoid based fuel injection system

Two independent CAN bus lines (various protocols)

Technical data

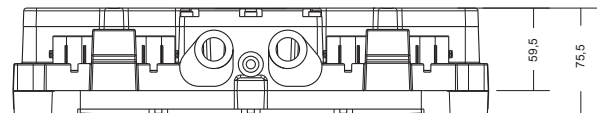
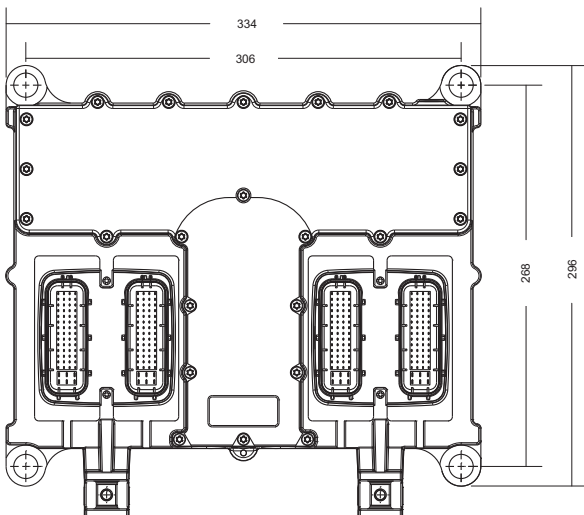
General specification	
Supply voltage	12 ... 33 VDC (nom. 24 VDC)
Injection boost current max. / hold	max. 26 A / 13 A
Degree of protection	IP6K9K
Ambient temperature	-40 ... 80 °C -40 ... 120 °C with cooling
Permissible ambient humidity	< 95 % at 55 °C
Vibration	10 ... 24 Hz; max. ± 2 mm 25 ... 64 Hz; max. 0.24 m/s 65 ... 2000 Hz; max. 9 g
Shock level	< 30 g, 11 ms - half sine wave
EMC	EN 61000-4-2 /-3 /-4 /-6
Weight	approx. 5.2 kg

I/O specification	
Signal inputs	
2× pickup inductive / frequency input	10 ... 10000 Hz
3× index pickup, Hall-type	max. 8 kHz
1× voltage input	0 ... 36 V
8× voltage input	0 ... 5 V
2× current input	0 ... 25 mA
9× binary input	7× low-side switching, 2× variable
1× terminal 15	U0 < 3.5 V, U1 > 6 V
5× temperature input	Pt 100 Standard, PTC or NTC possible
Signal outputs	
8× control magnet driver	48 or 58 VDC, current controlled, max. 14 A hold, max. 28 A boost
2× high pressure pump	I < 2.5 A
13× binary output	10× high-side switching, 3× low-side switching
1× frequency output	25 ... 10000 Hz, I < 500 mA
Communication	2× CAN ISO/DIS 11898 (1× insulated)
Configuration tool	HEINZMANN standard serial interface for HEINZMANN DcDesk
Wiring	CANNON plug

Certificates

CE, others on request

Dimensions



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