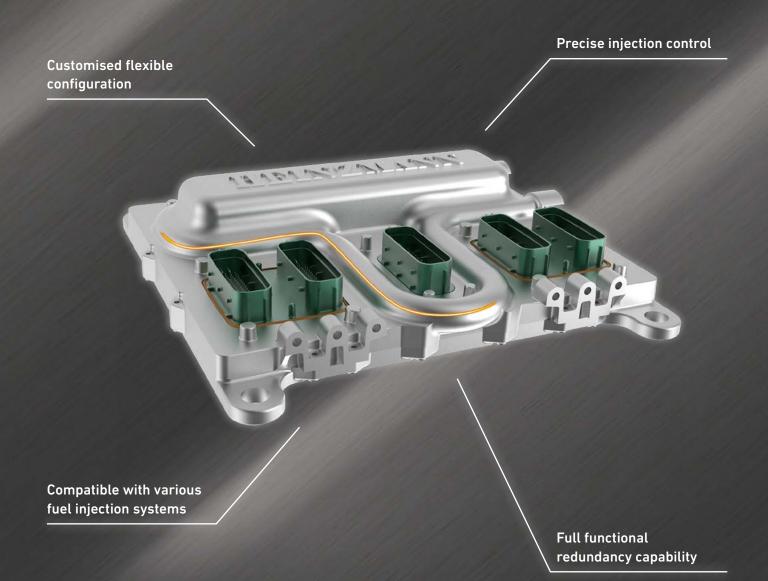


For Diesel, Gas & Dual-Fuel Engines

# **DARDANOS**

## **Electronic Fuel Injection Control System**



## **DARDANOS**

## Electronic fuel injection controllers

# The DARDANOS series is designed as universal speed controllers for engines with electronic fuel injection systems.

In addition to their primary purpose of controlling speed, these controllers provide additional features that offer other benefits for your engines, such as optimised fuel efficiency, increase of engine power, lower environmentally harmful emissions. Thus Electronic Fuel Injection (EFI) helps in an essential way to comply with emission laws.

The systems are designed to fulfil a wide range of applications. Therefore, HEINZMANN offers devices for engines with different numbers of cylinders and modified housing tailored for the relevant application. A choice of HEINZMANN sensors and solenoids completes the systems. They may be programmed by our configuration tool DcDesk.

The DARDANOS system components are an essential part of HEINZMANN's complete common rail solution ODYSSEUS. Our customers can choose between different sizes of high-pressure pumps, injectors and rails in order to set up the ideal common rail system tailored for their particular application.



### **FEATURES**

#### **EFI FUNCTIONS**

- Map-controlled start of injection
- Start of injection adaptation to environmental conditions
- Single cylinder injection begin and period correction
- Map-controlled rail pressure regulation
- Rail pressure adaptation to environmental conditions
- Up to seven injections per cylinder
- Cylinder faults monitoring
- Solenoid click test (tool for wiring check)

### **GENERAL FUNCTIONS**

- Up to three independent CAN bus lines (various protocols)
- Communication software DcDesk for monitoring & adjustment

### BASIC SPEED CONTROL FUNCTIONS

- Start fuel quantity adjustment
- Speed ramps
- Variable speed setpoint demands
- Adaption of PID parameters
- Fuel quantity limitation
- Integrated engine monitoring functions
- Sensor monitoring functions
- Speed droop
- Proven functionality for marine, generator, locomotive & vehicle applications

### **DARDANOS SERIES**

DARDANOS is conceived as a series of devices with varying extent to satisfy different demands and engine sizes. HEINZMANN's electronic fuel injection controls drive solenoid actuated diesel and gas injection systems. Together with HEINZMANN's MEGASOL Solenoid Operated Gas Admission Valves, it also forms an injection control system for gas and dual fuel engines. External communication is realised via various CAN protocols.

For more information please refer to the product manual "MV 09 001-e – Basis Information 2000 for electronically controlled injection systems".

#### POWERFUL SOFTWARE PACKAGE

HEINZMANN's configuration and visualisation software DcDesk offers all features required for configuration, testing, commissioning and servicing. Thanks to its design as a Windows®\* program, DcDesk offers a lot of graphical features, printouts and records of data for documentation purposes. Using DcDesk, the parameters of any connected device may be adjusted while the system is running and the response can be observed directly. It is also possible to prepare a data set not being connected with the device and to download it later on.

\* All trademarks are the property of their respective owners.

Gas Admission Valves

### **APPLICATIONS**

Common Rail

The DARDANOS Control Units are used in locomotive, marine, genset and vehicle applications.

Electronically controlled

Pump-Pipe-Nozzle







F-PNII

Electronically controlled

Pump-Nozzle-Unit





### **DARDANOS MVC 01-24**

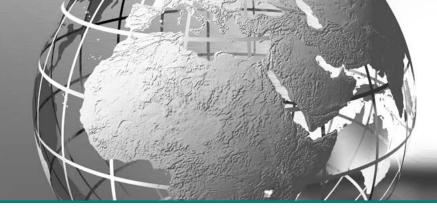
The MVC 01-24 is HEINZMANN's most powerful electronic fuel injection control for engines, such as diesel, gas and dual fuel up to a maximum of 24 cylinders. For diesel common rail it can control the rail pressure of up to four separate pumps. It can drive solenoids with flexible configurable voltage in a range of 24-110 VDC. MVC 01-24 comes with a comprehensive number of in and outputs. The system architecture of this sophisticated EFI control is tailored for redundant mode.

#### TECHNICAL DATA

EFI control system	MVC 01-24
Supply voltage	15 33 VDC (nom. 24 VDC)
Max. inj. boost / hold current	30 / 18 A
Ambient temperature	-40 +80 °C -40 +125 °C with cooling

Permissible humidity	up to 95 % at 55 °C
Degree of protection	IP6K9K
Vibration	max. ±2 mm at 10 24 Hz max. 0.24 m/s at 24 64 Hz max. 9 g at 64 2000 Hz
Shock level	30 g, 11 ms – half sine wave

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### HEINZMANN GROUP – THINKING IN DRIVE AND CONTROL

HEINZMANN is a globally active family business founded in 1897 with its headquarters in Schönau (Germany), in the Black Forest.

Today, in the field of engine management HEINZMANN is one of the leading suppliers of components and systems for industrial combustion engines, generators and turbines. As a specialist and development partner, HEINZMANN is committed to developing exactly the right solution for increasing efficiency and reducing emissions.

In the Electric Drives division, HEINZMANN also demonstrates innovative strength and development expertise in engine technologies of the future. The company has established itself as a reliable partner and system provider for electric drive systems.

Our collaborative interaction with more than 40 globally active subsidiaries and sales companies characterizes the spirit within the HEINZMANN group of companies and makes us a reliable partner.

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