

DC 8

DATA SHEET

Description

Digital control DC 8 was specially designed to work with HEINZMANN's powerful electronically commuted rotating actuator types.

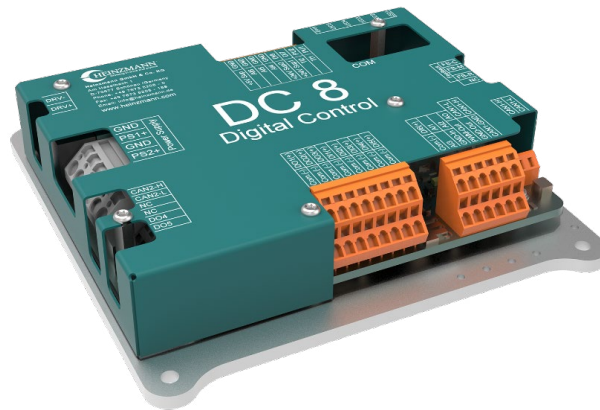
Heart of DC 8 is a very rapid and highly powerful microprocessor.

DC 8 provides speed governor functions as well as 4Q-positioner abilities. Besides that, it can be applied as peripheral module in control systems to extend I/O abilities of main controller and drive one more actuator. DC 8 is able to drive direct working as well as gear-type actuators which however require the extension module CU01. Setting torques up to 30 Nm are possible.

Two separate speed pick-up inputs are implemented, inductive or Hall type. The set point can be transmitted as a current, voltage, PWM or CAN signal to the control unit. Operating states of the system are supplied as analogue and digital output signals. For communication, DC 8 provides a galvanically insulated CAN bus interface, that meets Bosch CAN Spec. 2.0B standard or ISO11898, plus HEINZMANN's serial interface for connection with DcDesk.

Several error recognition, indication and reporting functions are provided. Major alarms and status indications are displayed by LEDs on the housing. DC 8 software is designed for universal use while providing extra functionality. The firmware allows configuration of input/output allocation as well as activation and parameterisation of functions.

The DC 8 control allows any mode of operation as running at fixed or variable speed. In combination with HEINZMANN's small, medium and large range actuators or the Bosch eDC™ pump DC 8 provides an excellent solution for diesel or gas engines or turbines in industrial applications.



Features

Limiting functions depending on speed or boost pressure

Inductive or Hall-type pickup applicable

4Q-Positioner function

Galvanically insulated customer interfaces

Engine shutdown protection

Engine monitoring functions

Error logging

Applicable actuators

- Any HEINZMANN small, medium and large range actuator
- Bosch eDC™ pump

Applications

- Genset application, mains & island-parallel
- Industrial engine applications

Certificates

On request

Technical data

General specification

Supply voltage	18 ... 32 VDC, nom. 24 VDC
Current consumption	< 0.5 A + actuator current consumption + sensor supplies
Degree of protection	IP00 for use in cabinet environment
Operating temperature	-40 ... +80 °C
Vibration	2.0 Hz ... 25 Hz at 1.6 mm 26 ... 100 Hz at 4g max.
Permissible ambient humidity	< 95 % at 55 °C
Weight	approx. 1.1 kg
Wiring	spring cage terminal (IP 00)

I/O specification

Pick-ups/Sensor supplies	2× inductive, 0.5 ... 30 Vpp, 50 ... 9000 Hz 2× 24 V, < 300 mA; 1 × 5 V, < 50 mA
Actuator output	7 A (8 A for t < 60 s)
Analogue inputs	AI-1, galvanically insulated 4 ... 20 mA configurable AI-2 & AI-3, galvanically insulated 0 ... 5 V / 0 ... 10 V / PWM AI-4 ... AI-6, not insulated 4 ... 20 mA / 0 ... 5 V / 0 ... 10 V Temperature, 2 × Pt1000 / NTC / Ni1000
Analogue outputs	AO-1, galvanically insulated 4 ... 20 mA PWM, galvanically insulated 10 ... 90 %, 50 ... 500 Hz, < 300 mA
Digital inputs	DI-1 ... DI-6, galvanically insulated DI-7 & DI-8, not insulated
Digital outputs	DO-1 ... DO-3, galvanically insulated DO-4 & DO-5, not insulated
Optical status interface	6× status LEDs
Communication	1× CAN galvanically insulated 1× CAN not insulated CAN protocol: HEINZMANN CAN protocol, CANopen, DeviceNet, SAE J1939, Other protocols on request
Configuration tool	HEINZMANN serial interface for HEINZMANN DcDesk

Dimensions

