

DC 9

DATA SHEET

Description

DC 9 is HEINZMANN's digital control for small and middle-sized engines.

The highly efficient speed governor is based on a fast

16-bit microprocessor. DC 9 control unit works with one inductive pickup. Additionally a Hall-type pickup is possible via multifunctional port.

DC 9 provides speed governor functions as well as positioner abilities. It is able to drive direct working actuators. Gear-type actuators require the extension module CU-01. The set point can be transmitted as a current, voltage or PWM signal to the control unit. For configuration DC 9 uses HEINZMANN's serial interface for connection with DcDesk 2000.

Several error recognition, indication and reporting functions are provided. For major alarm a separate output is applicable. The firmware allows configuration of input/output allocation as well as activation and parameterisation of functions.

DC 9 control allows any mode of operation as running at fixed or variable speed. In combination with HEINZMANN's small and medium range actuators DC 9 provides an excellent solution for diesel or gas engines.

Applications

- Diesel engines, small and medium size
- Gas engines
- Genset applications



Features

Additional analogue inputs for synchronising and isochronous load sharing

Two separate speed pickups possible

Positioner function

Applicable to HEINZMANN direct acting actuators and combined with coil unit to actuators with gears

Generator and vehicle application

Overspeed protection, governor and sensor monitoring

Reduction of start-up smoke to a minimum by start fuel limitation regarding several engine operation values

Fuel limitation depending on speed, boost pressure and further parameters

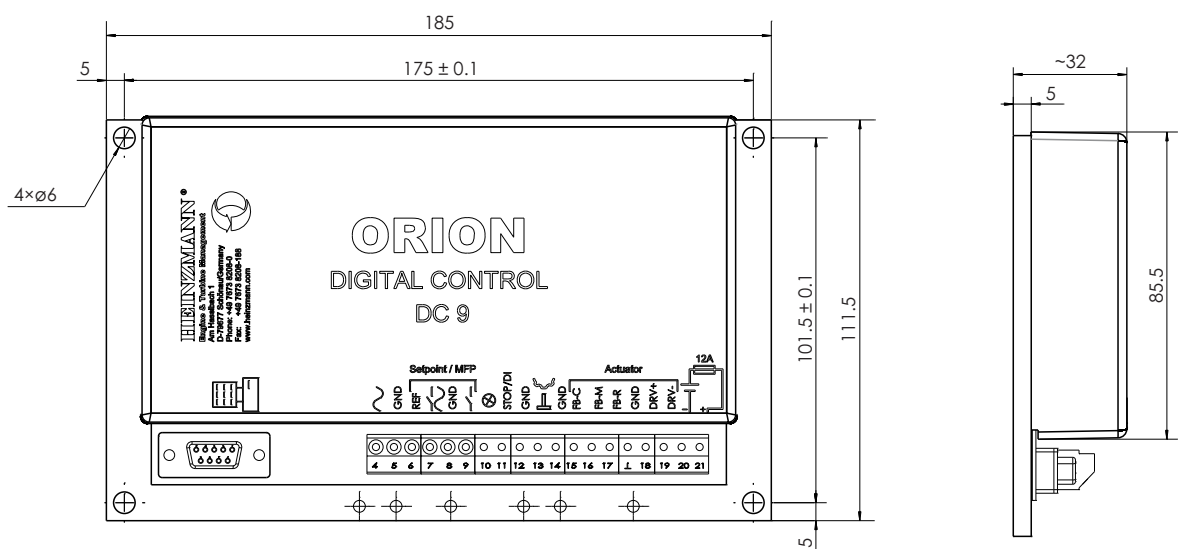
PID mapping of governors dynamic characteristic according to speed and load

Idling and maximum speed control, velocity limitation and regulation for vehicle applications

Easy parameterisation via HEINZMANN DcDesk 2000 communication tool or hand programmer

Error and operating data logging

Dimensions



Technical data

General specification	
Supply voltage	9 ... 32 VDC, nom. 24 VDC
Current consumption	approx. 300 mA (plus actuator current)
Degree of protection	IP00 for use in cabinet environment
Operating temperature	-40 ... 80 °C
Permissible ambient humidity	< 98 % at 55 °C
Vibration	0.16 ... 4g at 5 ... 24 Hz, max. 4g at 25 ... 100 Hz
Weight	approx. 1.2 kg
Wiring	screw terminal

I/O specification	
Pickups	1× inductive, 1× additional Hall sensor via multifunctional port P3
Temperature input	Pt 1000, NTC
Error output	1× 300 mA, ground switching
Alarm	1× binary output
Standard ports	
P2	Digital input
Multifunctional ports	
P1, optionally configurable	Analogue input 4 ... 20 mA or 0 ... 5 V
P3, optionally configurable	Digital input, PWM input 50 ... 500 Hz, Pickup, Hall-type
P4, optionally configurable	Analogue input 0 ... 5V, Digital input