HEINZMANN®
thinking in drive and control

DC 12

DATA SHEET

Description

HEINZMANN's digital control DC 12 comprises a complete and efficient governor for speed and load control of small and medium-sized high-speed combustion engines, ensuring optimum engine behaviour and performance.

It is able to drive HEINZMANN's direct working small and middle range actuators in 4Q-operation. Electrical connection is made up by a robust industrial plug.

Small in size DC 12 is intended for direct engine mounting. It offers two separate speed pickup inputs, inductive or Hall type. CAN bus implementation provides external communication for configuration and parametrisation.

DC 12 control unit provides the ideal solution for small and medium-sized combustion engines.

Applicable Actuators

- StG 3 / StG 3⁺
- StG 2010
- StG 2005 DP / StG 2040 DP

Applications

- Diesel and gas engines, small and medium size
- Genset applications
- Off-road vehicle applications
- Positioner

Features

4Q-operation

Inductive or Hall-type pickup applicable

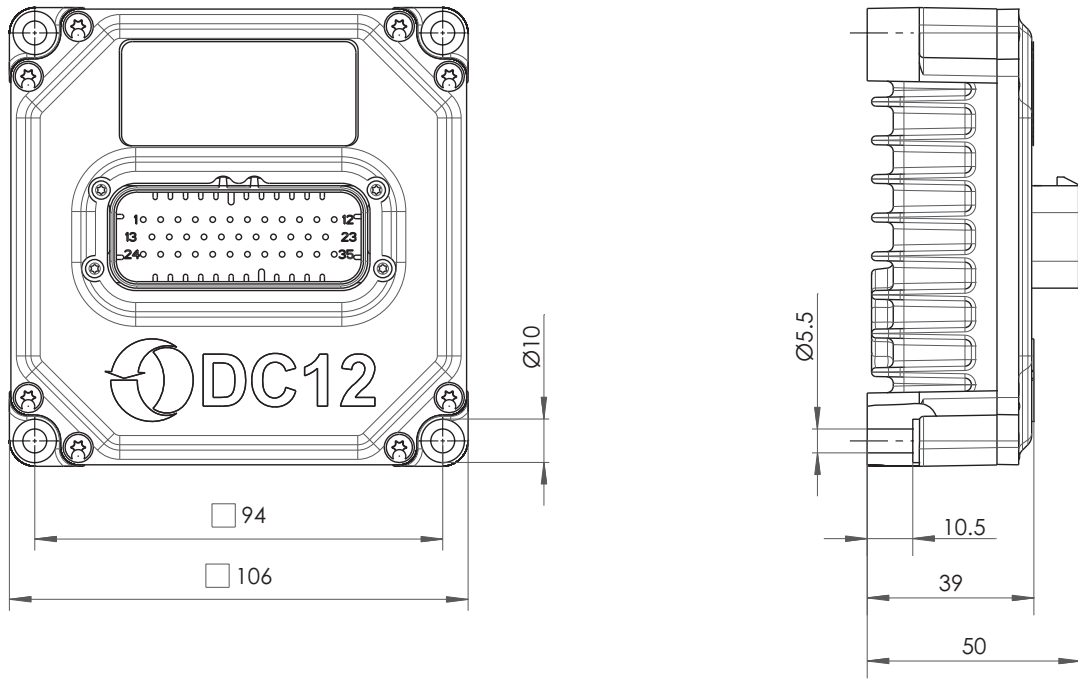Speed dependent monitoring functions with or without engine stop

Overspeed protection

CAN communication

Easy adaption of governors dynamic characteristic by parameterisation with HEINZMANN DcDesk communication tool

Suitable for generator and off-road vehicle application

Dimensions

Technical data

General specification	
Supply voltage	nom. 24 VDC (7 ... 32 VDC)
Current consumption control unit	< 0.2 A (plus actuator and sensor supplies consumption)
Degree of protection	IP6K9K
Operating temperature	-40 ... 80 °C
Vibration	10 ... 20 Hz < 2 mm 21 ... 63 Hz < 0.24 m/s 64 ... 2000 < 9g
Permissible ambient humidity	< 98 % rel. at 55 °C
Weight	approx. 0.7 kg
Wiring	Plug TYCO 35 pole

I/O specification			
Inputs	Pickup	1	inductive, 0.5 ... 30 Vpp, 50 ... 9000 Hz
		1	Hall type, 10 ... 9000 Hz,
		1	PWM input or digital input applicable optional
	Analogue	3	0 ... 5 V, assignable as binary inputs by parameter
		2	temperature input, not insulated, Pt1000/NTC
	Digital	2	binary, not insulated
Outputs	Actuator		4Q, 3.5 A continuous, 7 A for t < 20 s
	Sensor supplies	2	5 V < 50 mA each
	Analogue	1	0 ... 5 V, 5 mA
	Digital	1	low side 0.5 A, not insulated
Communication interface		1	Heinzmann service interface
		1	CAN 2.0B not insulated Protocol: HEINZMANN CAN protocol, CANopen, DeviceNet, SAE J1939, others on request