ComAp®
The heart of smart control

ECON-4

Order code: ECON-4

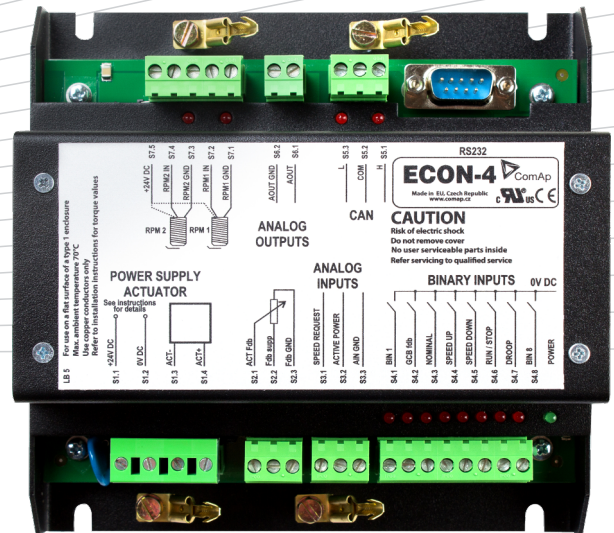# Digital Speed Governor

Datasheet

Product description

▶ Stand-alone digital speed governor for gas gen-sets

Key features

▶ Wide range of supported actuators within one hardware

▶ Precise throttle position control, with optional position feedback utilization

▶ Different modes of control – over Binary signals, over Analogue signals, over CAN line (with specific ComAp controllers and firmwares)

▶ Load dependent PID adjustment possibility for variable load applications (e.g. Oil&Gas industry)

▶ Droop operation function

▶ Overspeed protection

▶ Configurable with ComAp PC tool (WinScope)

▶ Data Interface with InteliSys Gas controller over CAN line

Supported interface to actuators

▶ 0 - 200 mA

▶ 0 - 8 A continuous, 10 A peak

▶ PWM signal, 12 - 32 V, 0 - 6000 Hz

▶ 0 - 5 V

▶ 0 - 20 mA

Example of supported actuators

▶ Heinzmann actuators – STG6, STG10, STG30, STG2010, STG2040, etc.

▶ Woodward actuators – ITB PWM, ITB 0-200mA, F-series, etc.

▶ GAC actuators – ATB552, etc.

Certifications and standards

This product is CE compliant.

▶ EN 60068-2-6 ed.2:2008

▶ EN 60068-2-27 ed.2:2010

▶ EN 60068-2-30, May 2000

▶ EN 60068-2-64

▶ EN 61010-1:2003

List of standards is available on: https://webstore.iec.ch/

Technical data

Power supply

Power supply range	12-36 V DC
Consumption	0,5 – 10 A, depends on supply voltage and used actuator

Operating conditions

Operating temperature	- 30 to +70 ˚C
Storage temperature	-30 to +80˚C
Humidity	95% without condensation
Low voltage directive	EN 61010-1:95 +A1:97
Electromagnetic compatibility	EN 50081-1:94, EN 50081-2:96 EN 50082-1:99, EN 50082-2:97
Vibrations	5 - 25 Hz, ± 1,6mm 25 - 100 Hz, a = 4 g
Shocks	a = 200 m/s^2

Binary inputs

Number	8
Input resistance	4.4 kΩ
Input range	0 - 36 V DC
Switching voltage level for close contact indication	0 - 2 V
Max voltage level for open contact indication	8 - 36 V

Analog inputs

Number	2 non electrically separated
Resolution	10 bits
Range	0 - 10 V; input resistance 11 kΩ 0 - 20 mA; load resistor 50 Ω
Analog measurement tolerance	1 %

Actuator feedback input

Resolution	10 bits non electrically separated

RS232 interface

Maximal distance	10 m
Speed	19 200 bps

Speed pick-up inputs

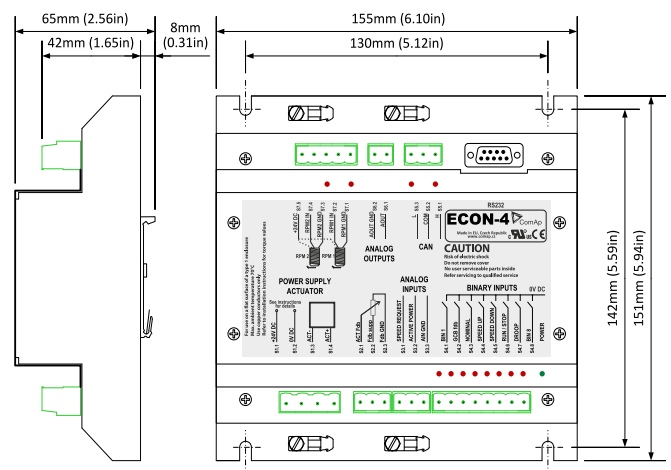|	
Type of sensor	Active or magnetic pick-up (connection by shielded cable is strongly recommended)
Minimum input voltage	2 Vpk-pk (from 4 Hz to 4 kHz)
Maximum input voltage	50 Veff
Minimum measured frequency	4 Hz
Maximum measured frequency	10 kHz (min. input voltage 6Vpk-pk)
Frequency measurement tolerance	0,2 %

CAN bus interface

Maximal CAN bus length	200 m galvanically separated
Speed	250 kBd
Nominal impedance	120 Ω
Cable type	twisted pair (shielded)

General information

Weight	600 g
Protection	IP20

Dimensions, terminals and mounting

Note: *The unit is mounted on DIN rail (35 mm/1.38 in).*

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