

Viking35

DATA SHEET

Description

The REGULATEURS EUROPA Viking35 digital controller has built on the experience of the well-proven Viking25 and takes the evolution a step further. Unique in the RE offering is the capability to add the most complex CAN bus load sharing schemes, to provide cost effective solutions to engine builders and ship owners.



The Viking35 engine management system is designed to control a wide range of diesel and dual-fuel engines and turbines in propulsion, traction and generating applications.

Viking35 is complemented by a range of hydraulic actuators that allows it to control the fuelling of the largest of engines or it can interface directly with a number of leading electronic fuel injection systems.

With its large and expandable range of conventional I/O and its communication ports, Viking35 is more than just a governor; it can be programmed to do all of your engine management functions and control associated plant, in one integrated and cost-effective package.

The user-friendly Viking Vision PC program provides a Windows®* based interface for configuration and diagnostics. With its convenient menu structure and graphical capability it allows for parameters to be displayed as graphs, gauges and charts.

Specification

Dimensions	PCB - 335 mm (L) x 254 mm (W) x 50 mm (D)
Weight	3 kg (approx.)
Environmental	Temperature -20 ... 70 °C operating ambient
Humidity	0 ... 97 %
IP rating	Enclosure dependent
Vibration	5 ... 25 Hz@1.6 mm displacement 25 ... 50 Hz 4 g when suitably mounted
Connections	All connections are via plug connectors with either screw or cage clamp mechanisms, or IDC ribbon cable connectors

Features

Complete engine management system

Controls diesel and dual fuel engines and turbines using actuators or electronic fuel injection systems

Two RS-485/RS-232 and three CAN bus communication ports provide flexible interfacing via standard industrial protocols (e.g. Modbus, CANopen or application specific protocols)

Suitable for propulsion, traction and generating applications

I/O can easily be expanded via dedicated modules or conventional distributed I/O

Easy configuration and support with Viking Vision Windows® software

EMC	Viking35 complies with the requirements of EN 61000-6-2 and EN 61000-6-4
Power supply	24 VDC nominal (18 to 36 VDC)
Perception head inputs	2 off (independently isolated) channels. Supports passive and active sensors with sensing from markers or flywheel/gear teeth. Frequency range 1 Hz ... 20 kHz.
Digital inputs	16 off (independently isolated) channels. 24 VDC nominal input signal (18 ... 36 VDC range). Status of each input shown via LED indicators.
Digital outputs	8 off voltage-free relay contact channels. 2 A@24 VDC rating. Selectable as N/O or N/C output. Status of each output shown via LED indicators. 8 off (independently isolated) opto output channels. 25 mA@24 VDC rating. Status of each output shown via LED indicators.
Analogue inputs	8 off (independently isolated) channels. 10 bit resolution. Input range for each channel selectable as: 1) 0 ... 5 V 2) 0 ... 10 V 3) 4 ... 20 mA (0 ... 20 mA)
Analogue outputs	8 off (independently isolated) channels. 10 bit resolution. Power supply can be generated internally. Output range for each channel selectable as: 1) 0 ... 5 V 2) 0 ... 10 V 3) 4 ... 20 mA (0 ... 20 mA)
Actuator output	1 off. Includes wire break detection. 0 ... 1A, 0 ... 200 mA
Communication interfaces	2 off (independently isolated) RS-232/RS-485 communication ports. Termination resistors (120 R) jumper selectable. Status of port activity shown via LED indicators. 3 off (independently isolated) CAN bus 2.0B Active communication ports. Termination resistors (120 R) jumper selectable. Status of port activity shown via LED indicators.
System expansions	The Viking35 has additional dedicated I/O expansion to provide a further 64 analogue inputs, 64 digital inputs, and 64 digital outputs. Alternatively, the Viking35 can be I/O expanded using standard distributed I/O modules, such as the REGULATEURS EUROPA 'ICENI' range, communicating via a fieldbus protocol.

Dimensions

