

# 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 perform a wide range of 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

<b>Dimensions</b>	PCB - 335 mm (L) x 254 mm (W) x 50 mm (D)
<b>Weight</b>	3 kg (approx.)
<b>Environmental</b>	Temperature -20 ... 70 °C operating ambient
<b>Humidity</b>	0 ... 97 %
<b>IP rating</b>	Enclosure-dependent
<b>Vibration</b>	5 ... 25 Hz@1.6 mm displacement 25 ... 50 Hz 4 g when suitably mounted
<b>Connections</b>	I/O connections are via plug-in 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

<b>EMC</b>	Viking35 complies with the requirements of EN 61000-6-2 and EN 61000-6-4
<b>Power supply</b>	24 VDC nominal (18 to 36 VDC)
<b>Perception head inputs</b>	2 off (isolated) channels. Supports passive and active sensors with sensing from markers or flywheel/gear teeth. Frequency range 1 Hz ... 20 kHz.
<b>Digital inputs</b>	16 off (isolated) channels. 24 VDC nominal input signal (18 ... 36 VDC range). Status of each input shown via LED indicators.
<b>Digital outputs</b>	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 (isolated) opto output channels. 25 mA@24 VDC rating. Status of each output shown via LED indicators.
<b>Analogue inputs</b>	8 off (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)
<b>Analogue outputs</b>	8 off (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)
<b>Actuator output</b>	1 off including wire break detection. 0 ... 1 A, 0 ... 200 mA output ranges supported
<b>Communication interfaces</b>	2 off (isolated) RS-232/RS-485 with jumper-selectable termination resistors. LED status indicators for each port.  3 off (isolated) CAN communication ports with jumper-selectable termination resistors. LED status indicators for each port.
<b>System expansions</b>	The Viking35 has a dedicated I/O expansion system to provide additional analogue inputs, digital inputs, & 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 standard fieldbus protocols.

## Dimensions

