Regulateurs Europa
Member of the HEINZMANN Group

Viking45

DATA SHEET

Description

The REGULATEURS EUROPA Viking45 digital governor has been designed and built on the experience of the well proven Viking25 and Viking35, taking the evolution a step further. From basic digital speed governing to the most complex CAN bus based load sharing schemes, the Viking45 can provide a cost-effective solution for engine builders and ship owners.

The Viking45 digital governor is designed to control a wide range of diesel and dual-fuel engines and turbines in propulsion, traction, and generating applications.

Viking45 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 range of dedicated on-board I/O expansion modules, ICENI distributed I/O, and communication ports, Viking45 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.

Features

Backward compatibility to support upgrade of Viking25 & Viking35

Configurable 0 … 1 A or 0 … 200 mA actuator output

Improved speed sensing via software-based variable trigger level

Standard versions of marine propulsion and diesel power plant software

Special software available to meet customers specific requirements

Last 20 alarms logged as standard and viewed via Viking Vision

Capability for additional datalogging via on-board USB port

I/O expansion via dedicated on-board modules and ICENI distributed I/O

Easy configuration and support via free Viking Vision Windows® software

Specification

Dimensions	380 mm (L) x 259 mm (W) x 61 mm (D)
Weight	3.75 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 … 100 Hz 4 g when suitably mounted
Connections	I/O connections are via plug-in connectors with either screw or cage clamp mechanisms, or IDC ribbon cable connectors

EMC	Viking45 complies with the requirements of EN 61000-6-2 & EN 61000-6-4
Power supply	24 VDC nominal (18 … 36 VDC)
Perception head inputs	2 off (isolated) supporting inductive & hall-effect sensors with sensing from markers or flywheel/gear teeth. Dynamically-adjustable reference level. Frequency range 1 Hz … 20 kHz.
Digital inputs	30 off (isolated). 24 VDC nominal input signal (18 … 36 VDC range). LED status indicators for each channel.
Digital outputs	8 off relay (voltage-free contacts). 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. LED status indicators for each channel.
Analogue inputs	8 off (isolated). 14-bit (hardware) 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 (isolated). 14-bit (hardware) 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 including wire break detection. 0 … 1 A, 0 … 200 mA output ranges supported.
Communication interfaces	2 off (isolated) RS-232/RS-485 with jumper-selectable termination resistors. LED status indicators for each port. 1 off (isolated) additional RS-232 port dedicated to Viking Vision/Operator Interface. 3 off (isolated) CAN communication ports with jumper-selectable termination resistors. LED status indicators for each port.
System expansions	The Viking45 has a dedicated I/O expansion system to provide additional analogue inputs, digital inputs, & digital outputs. Alternatively, the Viking45 can be I/O expanded using standard distributed I/O modules, such as the REGULATEURS EUROPA 'ICENI' range, communicating via standard fieldbus protocols.

Dimensions