

Vega MULTIFUNCTION CONTROLLER

The small-sized, powerful and versatile controller VEGA runs the automatic operation of machines and production systems in all industrial sectors. Besides the usual logical, timing and counting operations the inside PLC performs a series of complex operations, thus allowing to engineer elaborated applications in a simple and direct way.

The Integrated Development Environment ELAP CM STUDIO for the creation of the PLC program and of the user interface allows to configure the graphical display with icons, backgrounds and animation.

Thanks to the high protection degree on the front case (IP65) VEGA can be used in severe industrial environments.

SOME APPLICATIONS:

- Sheat working and cutting machinery
- Glass working machinery
- Marble working machines
- Winding machines
- Textile machinery
- Sawing machines
- Packing machinery
- Food processing machinery
- Palletizers
- Wood-working machinery
- Cutting optimization

SPECIFICATIONS AND PERFORMANCES

- Control over 2 axes
- Embedded PLC, programming language: LADDER or Mnemonic
- Programmable user interface
- Graphical pages handled
- Main bus for I/O expansion

HARDWARE

- CPU 32 bit RISC 65 MIPS
- Flash Memory 256 Kbyte
- RAM Memory for user programs, data, pages: 128 Kbyte expansible up to 512 Kbyte

USER INTERFACE

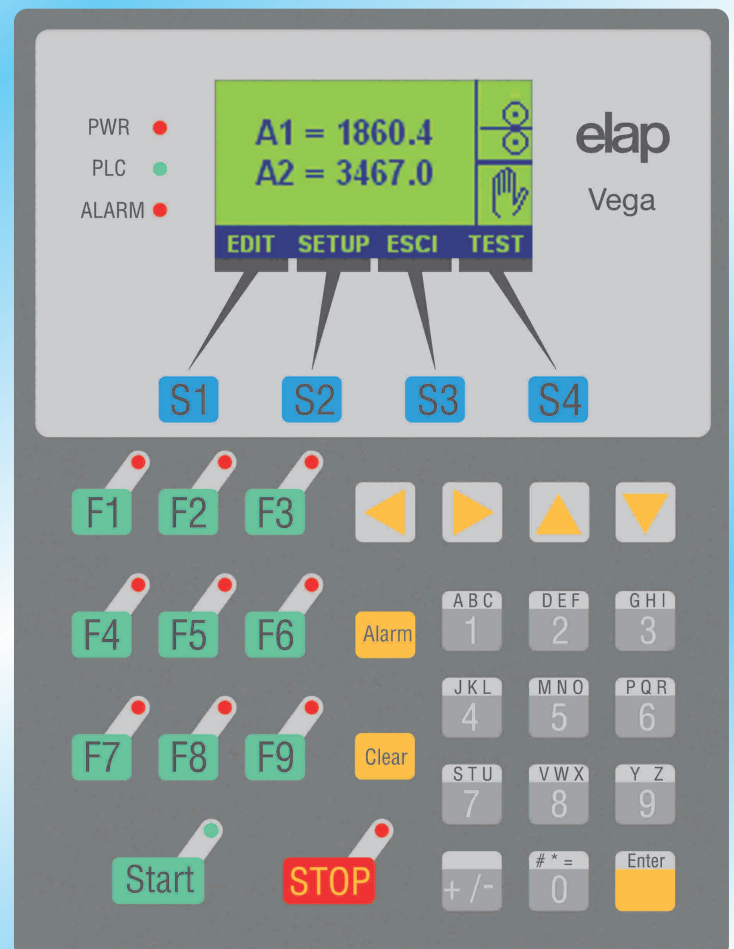
- Polyester KEYBOARD with 33 keys, every one with programmable functions, i.e.:
 - 4 keys in the display area
 - 9 function keys
 - 4 navigation keys
 - 1 key for the reset function or alarm display
- numerical pad
- START and STOP push-buttons with LED
- 12 programmable signalling LEDs
- LCD GRAPHIC REAR LIGHTED LED DISPLAY 128x64 pixel
 - 64 expansible text pages
 - 16 bit-map backgrounds 128x64 pixel
 - 256 messages, each by 20 byte
 - storable data structures with indexed access (recipes)
 - texts handled in four languages
 - 64 images by 32x32 pixel for icons and animation

GENERAL SPECIFICATIONS

- Front case protection degree IP65
- Supply 24 Vdc $\pm 15\%$ 24 Watt max.
- Connections: extractable terminal box: supply, digital I/O.
- Canon connectors: encoder, analogue I/O, serial ports on request: digital outputs on relay modules
- Lithium battery min. 5 years life

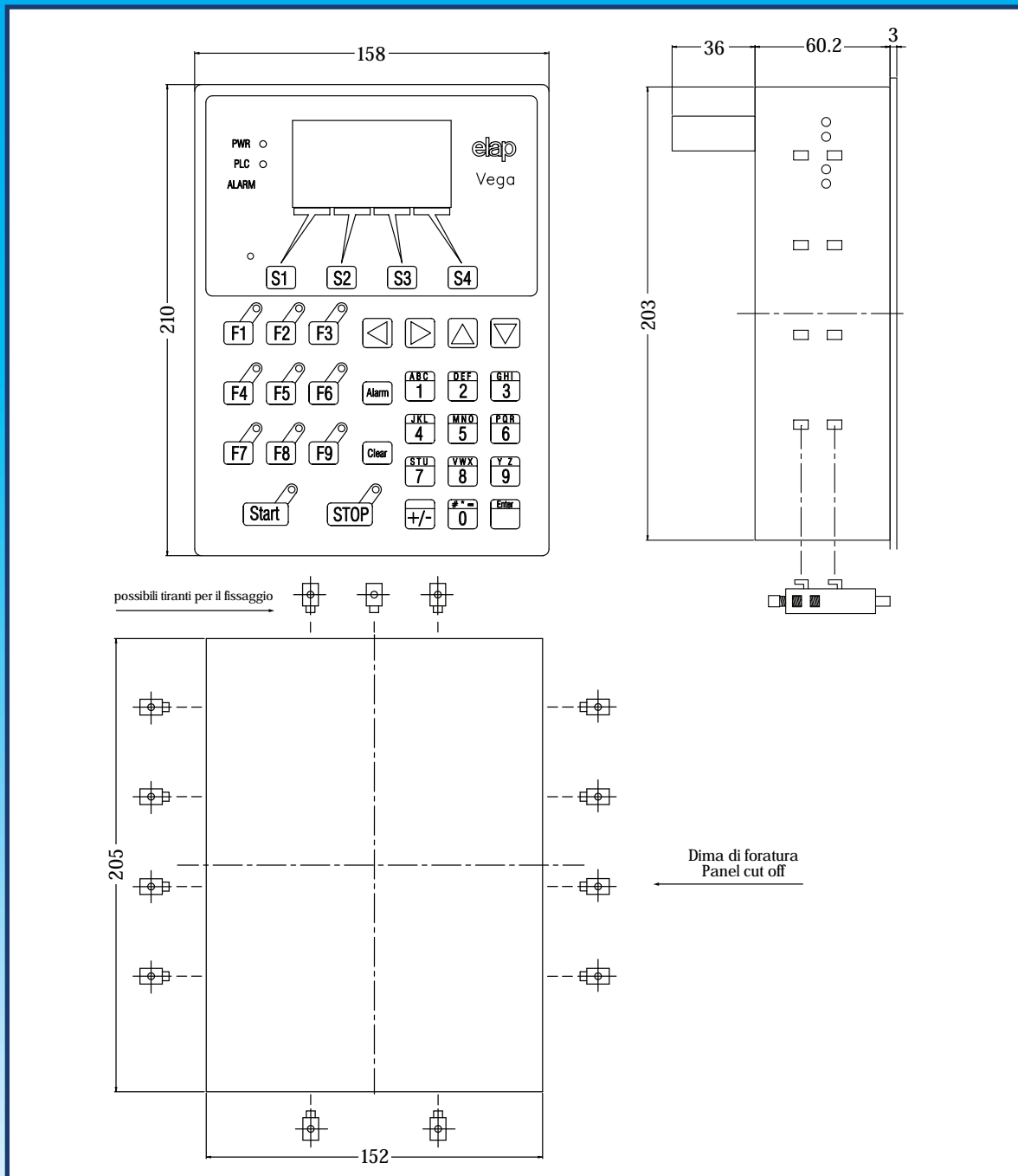
INTERFACE TO THE FIELD

- DIGITAL INPUTS: 16 optoisolated inputs, and 2 devoted to the interrupt command
- DIGITAL OUTPUTS: 16 optoisolated outputs 50 mA
- EXPANSION MODULES: 16 + 16 I/O 500 mA DIN bar fixing
- INCREMENTAL ENCODER: 2 bidirectional count inputs 5 Vdc line driver (RS422) with zero reference reading, frequency 500 KHz
- AXIS COMMAND: 2 ± 10 Vdc analogue outputs with 12 bit resolution Possibility to command ON/OFF axes
- ANALOGUE INPUTS: 4 0-5 Vdc analogue inputs with 10 bit resolution
- ALARMS: 1 contact for system watch-dog
- COMUNICATION: 2 serial ports RS232, or 1 serial port RS232 + 1 RS485



Vega

DIMENSIONI D'INGOMBRO DIMENSIONS



elap



Modbus Network For The Controllers Series Nexus, Lynx, Vega, Neos

Starting from the present moment the **Modbus RTU protocol** can be used to create a **network connection including the controllers series Nexus, Lynx, Vega and Neos**, through the serial port COM1.

The **Modbus protocol allows for communication between different devices connected to the same serial line (RS485)**; each device is identified by a unique software address (1 to 247), which is programmed inside each single device.

The communication parameters (baudrate, parity check and stop bit) relating to the instruments can be modified to meet the network requirements.

Any Nexus, Vega or Lynx unit can be used as network Master, if programmed accordingly. The I/O expansion module (A2018068) can be included in the slave network.

The request for the Modbus firmware must be specified when ordering a controller of the series.

Our Technical Experts will be pleased to let you know further information on the matter: please, feel free to contact our Technical Department by phone or via e-mail to applicazioni@elap.it.



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