

Nexus MULTIFUNCTION CONTROLLER

Engineered to simplify the programming operations of the work cycles for the processing machines of all manufacturing fields, NEXUS joins the functional flexibility of the PLC with the absolute novelty of its interface completely programmable by the user by means of NEXUS-Wintools, a software developed by ELAP.

The storable data structures with indexed access (receipts) allow to fit the configuration of the user interface to the most different application requirements.

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 to 4 axes
- Embedded PLC, programming language: LADDER or AWL
- Programmable user interface
- Graphical pages handled
- Main bus for I/O expansion
- Arrangement for further field buses (profibus, canbus, interbus)
- Removable support for the storage of data and receipts

HARDWARE

- CPU 32 bit RISC
- Flash Memory 256Kbyte, 32 Kbyte reserved for the PLC program
- RAM Memory for user programs, data, pages: 256 Kbyte expansible up to 2 Mbyte
- RAM Memory for PLC data: 4K byte expansible

INTERFACE TO THE FIELD

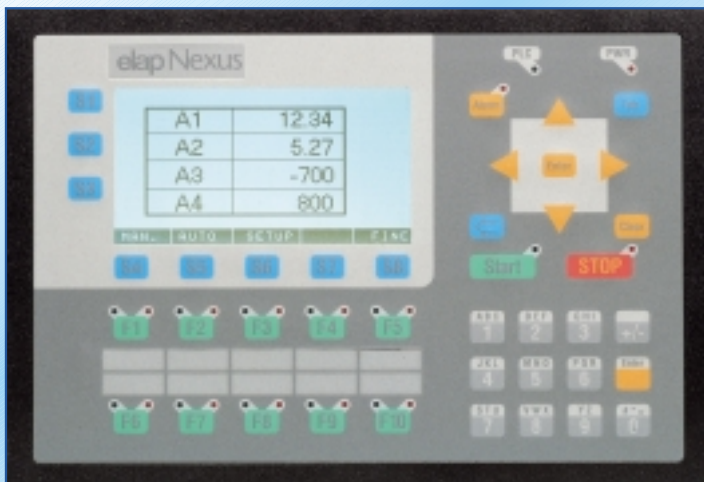
- DIGITAL INPUTS: 16+32 optoisolated inputs, and 4 devoted to the interrupt handle
- DIGITAL OUTPUTS: 16+32 optoisolated outputs
- I/O EXPANSION MODULES
- INCREMENTAL ENCODERS: 2+4 bidirectional count inputs
5 Vdc Line Driver with zero reference reading, frequency 500 KHz
- AXIS COMMAND: 2 to 4 ± 10 Vdc analogue outputs with 12 bit resolution (15 bit optional)
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 serial port RS485

GENERAL SPECIFICATIONS

- Front case protection degree IP65
- Supply 24 Vdc $\pm 15\%$ 36 Watt max.
Connections:
extractable terminal box: supply, digital I/O
Canon connectors: encoder, analogue I/O
- Lithium battery min. 5 years life

USER INTERFACE

- Polyester keyboard with 41 golden-contacts keys, every one with programmable functions, i.e.:
 - 8 keys in the display area
 - 10 function keys with label indication
 - 8 navigation keys
 - 1 key for the reset function or alarm display
- numerical pad START and STOP push-buttons
- 25 programmable signalling LEDs
- GRAPHIC REAR-LIGHTED DISPLAY 240x128 pixel
 - 128 expansible text pages
 - 25 bit-map backgrounds 240x128 pixel
 - 256 messages, each by 30 byte
 - storable data structures with indexed access (receipts)



THANKS TO THE HIGH PROTECTION DEGREE

OF THE FRONT CASE (IP65) NEXUS

CAN BE USED IN SEVERE INDUSTRIAL ENVIROMENTS