KSE 3A

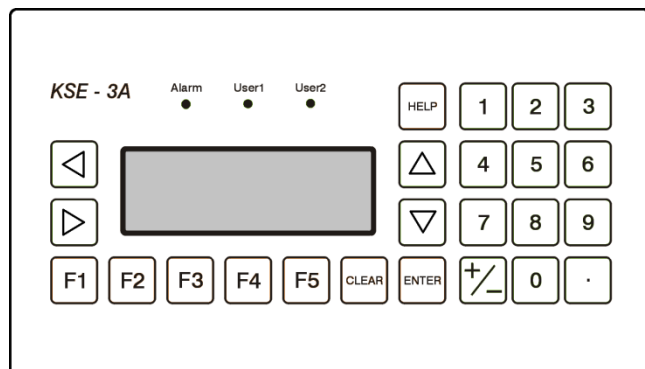# Technical chart

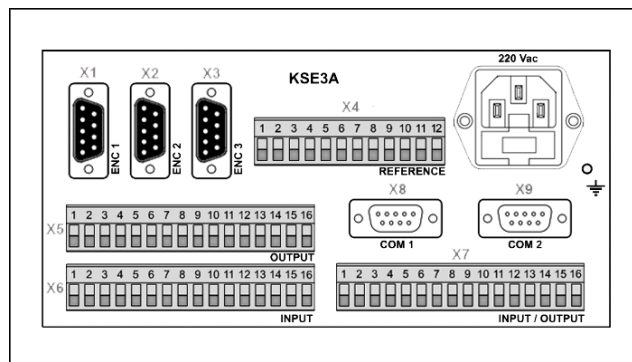## 3-AXES CNC

VARIOUS VERSIONS

front and rear view

Description

CNC controller with PLC for asynchronous axes, ON/OFF hydraulic valves, pneumatic valves, etc. Origin-reposition and jog mode available in manual mode; the KSE-3A controller can handle 3 encoders and 4 DAC output channels, with one channel reserved for a spindle. Expansible with KSE-CIO boards. Includes a file manager for applications + data.

Technical details

Keyboard: 24 numeric/function keys +3 led.

LCD: backlight, 4x20

COM PORTS: 2x RS232C

Encoder channels: 3 incremental/differential channels, 5V optoisolated line driver; max freq. 500kHz; integrated 5V power; x4 encoder pulses multiplication.

Digital Input: 16 optoisolated DIO 24V DC PNP.

Input levels: logic 1 > 14VDC; logic 0 < 10V DC

Digital Output: 16 optoisolated DIO 24V DC PNP; fan out 700mA; + protection against overload and short-circuit.

Signals configuration: 14 signals configurable as input, 24V DC PNP, or output, 24V DC PNP.

Analog Inputs: 2 analog inputs +/- 10V DC, 12 bit optoisolated; impedance 130kΩ, max error 8%

Analog Output: 4 analog outputs +/- 10V DC; optoisolated 14 bit DAC, + protection against short-circuit; power 5mA; impedance (1kHz) 23Ω

Power supply: 220V AC; 50/60Hz; RC filter + inlet fuse

PLC: built-in; AWL programming language; 5000+ lines of code; development tools for Windows 2k/XP/Win7

Connections: SUB-D 9 for RS232 + Encoder.

Cooling: 24V DC fan.

Protection: IP65 front side; IP20 + IP30 other sides.

Dimensions/weight

WxHxD	185x90x202mm – 7.3"x3.5"x8"
Front frame	196x112mm – 7.7"x4.4"
Length with connectors	260mm – 10.2"
Weight	2,5kg – 5.5lb

SW versions

ISO: ISO interpreter with 3 closed-loop axes + DAC.

1AC X2: closed-loop application with origin shift table.

1AC X3: closed-loop application for a turning axis with IO expansions.

1AC X4: closed-loop application for a turning axis, with optional IO expansion with double program input.

1AC X5: closed-loop application for single axis with G54 command (origin reposition) from photocell.

1AC X6: closed-loop application for a turning axis with IO expansion and double input.

2AC X1: closed-loop application for 2 axes.

2AC X2: application for linear axis + turning axis with optional IO expansion.

123: closed-loop application for 1-2-3 axes with/without speed override.

68AFXBG: application for a flexo machine.

AP: application for grab feeder, 2 speeds with electronic cam.

AVR: application for press roll feeder with electronic cams + steps average calculation.

AVR-BOT: application for roll feeder for a punching bench with measures optimization from tech. drawing.

AVR CD: application for a press roll feeder with electronic cams + DAC management + PLC-controlled auxiliary DAC.

CNC Controls - INDUSTRIAL AUTOMATION – RETROFITTING

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mod. 1 - rev. 1.0, 02 Mar 2011

Technical chart

KSE 3A

Last rev.:
11 Dec 2013

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3-AXES CNC

VARIOUS VERSIONS

AVR GP: application for a press roll feeder with electronic cams + punch steps calculation.

AVR-ZZ: application for a press roll feeder with electronic cams.

CDC: application for intake manifolds stopper.

CRV: single axis crossover application, 1 open-loop/closed-loop.

ECY4: Application for a laminator with separator with 2 PID thermoregulations.

FFT: application for hairpin bender for pipe bundles.

GY: application for gantry with 2 closed-loop axes.

LFM T1: application for pipe cutter-bender.

SPINDLE: application for spindle control.

PAL: application for palletiser with 2 open-loop axes.

RTT: application for pipes straightening machine/cutter with downloader.

SFZ: application for a coiler.

TP1: application for pipe bender/cutter.

TVL: application for a linear cutter/puncher.

TVL BOT: application for a puncher on carriage.

TVL P: application for cutter.

Uses

- Open-loop/closed-loop application
- Press feed
- Electric shafts + synched shafts
- Rotating and linear cutter
- ISO programs
- Cutting + Punching line
- Pipe bender
- Special applications.

Notes

Free AWL SDK.

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