Systematic multiloop control

Flexible & modular: the KS vario multiloop controller system

now with ProfiNet
Modular, intelligent, open

KS vario: The system components

Application areas
- Extruder automation
- Textile machines
- Medical technology
- Ovens
- Sterilizers
- Semiconductor production
- Heat treatment
- Driers
- Furnaces
- Hot runners
- Textile machines
- Packaging machines
- Extruder automation

KS vario: The system components

I/O MODULES

COUPLERS

INPUT MODULES

OUTPUT MODULES

L/O MODULES

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KS vario: The system components

I/O MODULES

COUPLERS

INPUT MODULES

OUTPUT MODULES

L/O MODULES
The system at a glance

Control functions

All conventional control modes including master/slave and valve motor control are selectable per channel. Two self-tuning options are available for determining the best control parameters: during start-up or at setpoint. Individual sampling rates starting at 100 ms are adjustable for each channel.

Controller modules

- 4, 6 or 8 analog inputs
- Thermocouples or resistive sensors
- Up to 8 outputs, 24 VDC, 70 mA
- Integrated heating current monitor
- Expandable up to 30 control zones

Additional functions

Several special functions such as controlled start-up for plastics processing machines are standard features of the basic version. Comprehensive heating current monitoring functions with correction for mains voltage variations (per phase), and the direct connection of strain gauge pressure sensors are just two of many other features.

BlueControl® Engineering Tool

BlueControl® is a powerful engineering tool for controller and system configuration. It combines clear operating functions with visualization and monitoring. Moreover, the tool provides a simulation of the entire control loop with selectable process responses.

Performance features in detail

Comprehensive communication options

Bus couplers connect the I/O systems to all established field bus systems: Profinet, Ethernet IP, Ethernet TCP/IP, Proflbus, CANopen, DeviceNet, Modbus.

Demand-oriented expansion

Simply by plugging additional I/O modules into the system, a finely graduated expansion up to 30 control loops is possible.

Automatic inter-connections

The necessary modules of a KS vario system are simply plugged together without the need for tools. All peripheral and data signals, as well as the supply voltages are connected automatically. The external 24 VDC system supply must only be connected to the bus coupler at one point.

Fast module replacement

Thanks to the plug-in spring clamp connectors for the I/O wiring, quick and simple module replacement is ensured.

Galvanic isolation

Each segment is energized by means of special isolated power supply terminals, which automatically isolates them from the adjacent segments.

Clear identification

KS vario modules can be fitted with ‘Zack’ numbering markers to identify every terminal. It is also possible to label each channel in plain text.