



PMA KS90-1 Industrial and Process Controller

Product Images



Short Description

Industrial and Process controller providing simple 2-point (on/off) control, continuous PID control, or 3-point stepping control.

The KS 90-1 process controller is suitable for universal, precise, and cost-effective control. The instrument provides simple 2-point (on/off) control, continuous PID control, or 3-point stepping control.

The process value signal is connected via a universal input. A supplementary analog input can be used for heating current measurement, as an external set-point input for position feedback measurement of motorised stepping controllers.

The optional 3rd input is a universal input that can be used for several functions, e.g. temperature dependent setpoint correction or differential control. The standard KS 90-1 is suitable for oxygen control using heated and unheated O₂ sensors.

The KS 90-1 is particularly suited to the following applications:

- Furnaces and ovens
- Burners and boilers

- Plastics processing
- Driers

Description

Two universal inputs

- Day & Night display shows plain text and bargraphs
- Manual gain scheduling
- Self-Tuning to the setpoint without oscillation
- PROFIBUS DPV1 fieldbus interface option

Features and Benefits

- BluePort®
- Front interface and BlueControl software
- Maintenance manager and error list
- Valve controller with position feedback and DAC monitoring
- Type tested to EN 14597 (replaces DIN 3440) and cULus
- High-impedance mV input for O2 sensors
- 100 ms cycle time
- Valve controller with position feedback and DAC monitoring
- Two freely configurable analog output, e.g. as process value output
- Customer-specific Linearization for all sensors
- 3-point controller for water, fan and oil cooling
- Built-in transmitter power supply
- Rate of change monitoring (/min) and discriminator time
- Splash-water proof front (IP 65)

Software

The KS 90-1 controller works in conjunction with Blue Control software. Functionality includes:

- Fast Parameter Configuration
- Clone Other Devices
- Simulator for Process Testing
- Remote Management for Increased Efficiency
- Familiar Software Environment for Ease-of-Use

Additional Information

Country of Manufacture	United Kingdom	
Explanation	Product Category:	Single Loop controller
	Dimensions and size:	96m x 48mm x 118mm (HxWxD), 1/8 DIN
	Connectors:	Pin or screw terminals
	Primary Input Type:	Universal (TC, RTD, DC linear mA/mV)
	Other Inputs:	External setpoint, Ratio input, Potentiometer input, Heating current monitoring
	Output Type:	Relay, Logic, Linear mA/VDC, Optocoupler
	Max. Number of Outputs:	6
	Scan Time:	100 ms
	Number of Programmer Segments:	16 Program x 16 Segments
	Control Type:	2-point (on/off), continuous PID control, or 3-point stepping
	Power Supply:	90-260 VAC, 20,4-26,4 VAC: Frequency 48-62 Hz, 18-31 V DC
	Communications:	RS422 & RS485 Modbus, Profibus-DP
	Panel Sealing:	IP65
Certifications:	CE, cULus, DIN EN 14597	
Software Tools:	Blue Control	
Brand	West	
Display Colour	Red	
Display Digits	4	

Input Type	Thermocouple, RTD, Linear
Typical applications	Environmental (Indoor), Industrial, Oven Profiling, Thermal Processing
Measurements	Oxygen Level, Temperature

Additional Options

Terminal Type	[0]Flat Pin Terminals
	[1]Screw Terminals
Power Supply & Outputs	[0]90-250V AC, 4 relays
	[1]24VAC/18-30VDC, 4 relays
	[2]90-250V AC, 3 relays + mA/logic
	[3]24VAC/18-30VDC, 3 relays + mA/logic
	[4]90-250V AC, 2 relays + 2 xmA/logic
	[5]24VAC/18-30VDC, 2 relays + 2xmA/logic
Serial Interface & Options	[0]No Option
	[1]RS422/485 (Modbus RTU) + UT + di2, di3 + OUT5, OUT6
	[2]PROFIBUS DP + UT + di2, di3 + OUT5, OUT6
Additional Analog Inputs	[0]INP1 and INP2
	[1]INP1, INP2 and INP3
Main Function	[0]Controller
	[1]Programmer with 8 Programmes
	[2]Programmer with 16 Programs
Configuration	[0]Standard Configuration
	[9]Configuration to Specification
Manual Language	[0]No Manual
	[E]English
	[F]French
	[D]German
Certification	[0]Standard
	[U]UL certified (*UL only available with screw terminals)
	[D]DIN 3440 certified
Documentation	KS90-1 Manual - German

KS90-1 Manual - English

KS90-1 Manual - French

KS90-1 Datasheet - German

KS90-1 Datasheet - English

KS90-1P Manual - German

KS90-1P Manual - English

KS90-1P Manual - French

KS90-1P Datasheet - German

KS90-1P Datasheet - English

KS90-1/DP Datasheet - German

KS90-1/DP Datasheet - English