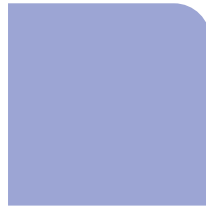


# Product Catalogue

A comprehensive range of temperature and process control instrumentation



# About West Control Solutions

West Control Solutions is the combined strength of PMA, West Instruments and CAL Controls: valued temperature and process control expertise, global presence and support, a wider range of products and the power to innovate.

Our easy-to-use products can meet a variety of demands from offering simple, entry-level temperature controllers through to highly sophisticated, functionally-rich solutions for even the most complex of control applications. Our comprehensive product range is routinely selected for use in a number of industrial and scientific applications including plastics machinery, ovens, furnaces, laboratory and test equipment, packaging machinery, food processing....and many more!

As the specialists in temperature control, our products are supported by a dedicated team of experienced temperature control experts, who can provide in-depth application expertise and advice.

West Control Solutions is headquartered in the UK with offices worldwide and a global network of carefully selected distribution partners.



# Contents

Single Loop Temperature Controllers 4



Multi-loop Temperature Controllers 16



Rail-mounted Devices 22



Indicators 30



Limit Devices 33



Thermostats 35



Thyristors 39



Paperless Recorders 41



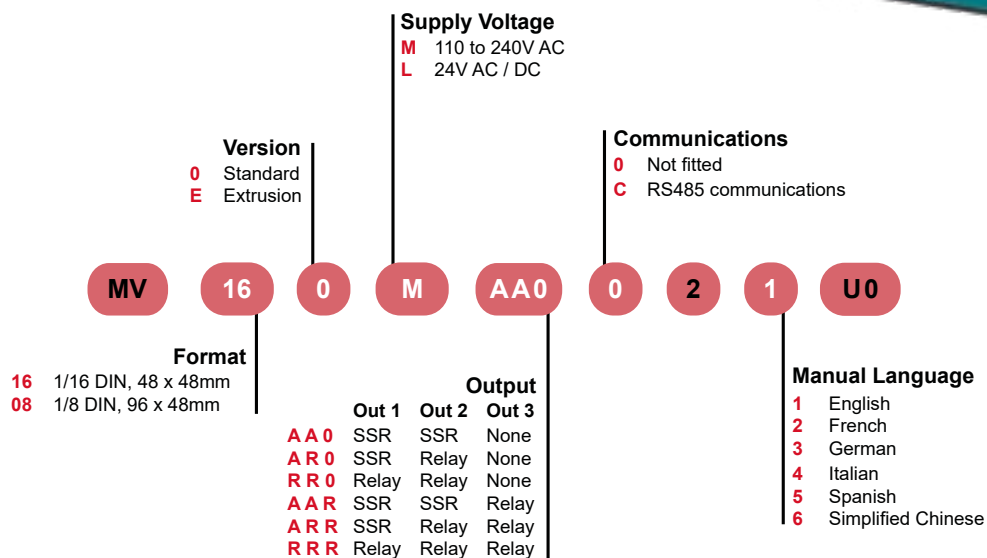
# Single Loop Temperature Controllers

## MAXVU16 & MAXVU8 Single Loop Controllers

The new MAXVU is a cost effective temperature controller which is fast-to-configure, has improved display visibility and reduces costs by minimising wiring and panel space.

### Benefits and features

- 1/16 DIN (48 x 48 x 67mm) and 1/8 DIN (96 x 48 x 67mm) formats (HxWxD)
- High visibility display -  
MAXVU16: 18mm upper and 10.2mm lower digit display  
MAXVU8: 18mm upper and lower digit display
- 'Heat' only or 'heat & cool' strategy
- 2 alarms with latching or non-latching outputs
- Zero shift or 2-point calibration
- Ramp/dwell with delay time
- Front panel keys or software set up
- Integral configuration port
- Extrusion controller variant, includes non-linear cooling
- CE, UL and cUL



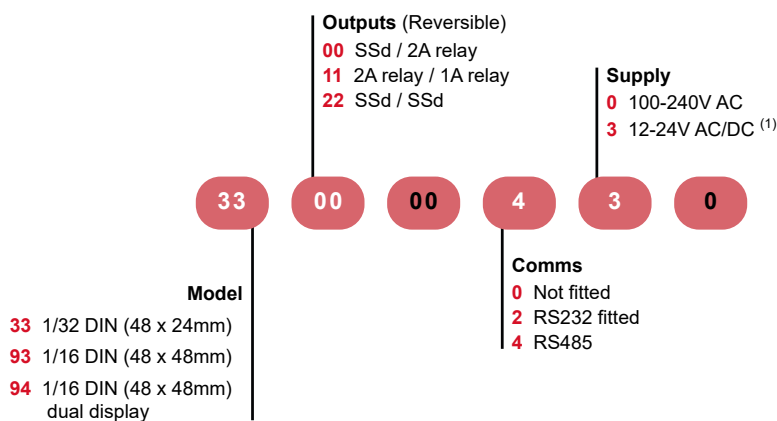
[Back to contents page >>>](#)

# 3300, 9300 & 9400 Temperature Controllers

The CAL range provides a choice of compact, efficient temperature controllers. The easy-to-use controllers provide essential temperature control functionality including heat/cool operation and a simple ramp/dwell program. Integrated auto-tune for optimum PID settings is included and the CAL controllers also offer a unique dAC function to minimise overshoot.

## Benefits and features

- 1/32 DIN (24 x 48 x 107mm) and 1/16 DIN (48 x 48 x 107mm) formats (HxWxD)
- Thermocouple, PT100 (2 wire) and mV sensor input
- Two outputs plus RS232 or RS485 MODBUS comms options
- Simple menu-driven setup
- Single ramp/soak (dwell) program
- Heat/cool operation
- IP66 protection
- CE, UL, cUL, CSA and FM



(1) Models 3311, 9311, 9400, 9411 and 9422 are not currently available in low voltage 12-24V option.

[Back to contents page >>>](#)

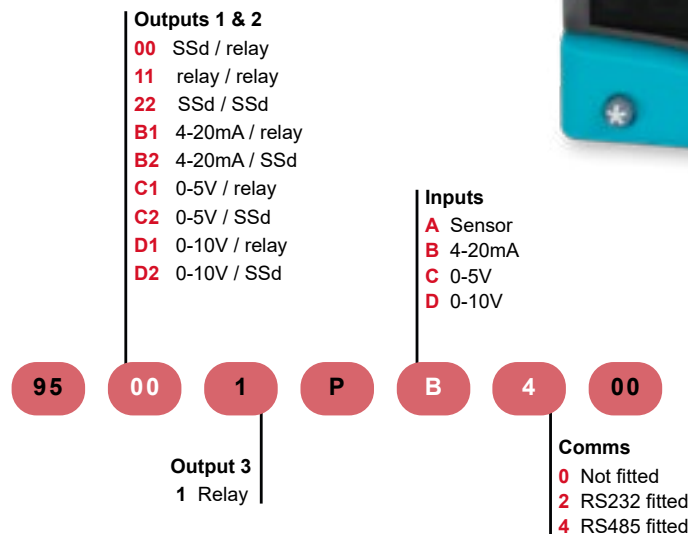
# 9500P Programmable Controller

The CAL 9500P is ideal for applications requiring programmable temperature control in a compact 1/16th DIN unit. The programmer allows up to 31 programs with up to an overall total of 126 segments.

Set up of the instrument can be carried out using the front buttons. Alternatively, CALgrafix software is available to quickly configure a unit and easily create programs using the graphical 'drag and drop' feature. Users are able to clone settings for the configuration of multiple instruments in a single network.

## Benefits and features

- 1/16 DIN (48 x 48 x 107mm) format (HxWxD)
- Thermocouple, PT100 (2 wire), mA, V and mV sensor input
- Three outputs plus RS232 or RS485 Modbus comms options
- Up to 126 segments shared in up to 31 Programs (memory dependant)
- Memory usage indication during programming
- Profiler functions include event outputs, loop, call, hold back, loop, call and 3 power recovery modes
- Simple menu-driven setup
- Graphical profile setup using CALgrafix software
- Heat/cool operation
- IP66 protection
- CE, UL, cUL and FM



[Back to contents page >>>](#)

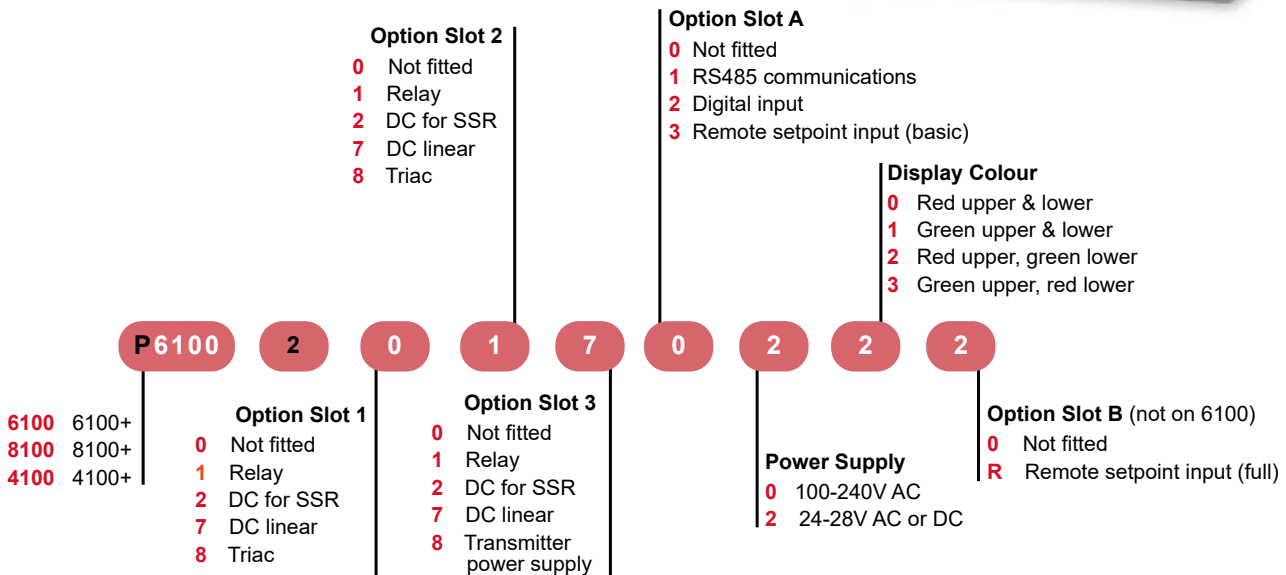
# 6100+, 8100+ & 4100+ Temperature Controllers

The + series of controllers are used in a broad range of temperature and process control applications due to their built-in versatility and ease-of-use. Input and output options include relay, SSR, transmitter power supply, linear remote setpoint and digital.

Control functionality includes remote and dual setpoint options, heat/cool control and setpoint ramping.

## Benefits and features

- 1/16 DIN (48 x 48 x 110mm), 1/8 DIN (96 x 48 x 100mm) and 1/4 DIN (96 x 96 x 100mm) formats (HxWxD)
- Ideal for general industrial applications
- Universal input for thermocouple, PT100, mV, V and mA sensors
- Up to three outputs
- Flexible options for RS485, remote setpoint, digital inputs and transmitter power supply
- Programming port for fast configuration using FTP software
- CE, UL, cUL and CSA



[Back to contents page >>>](#)

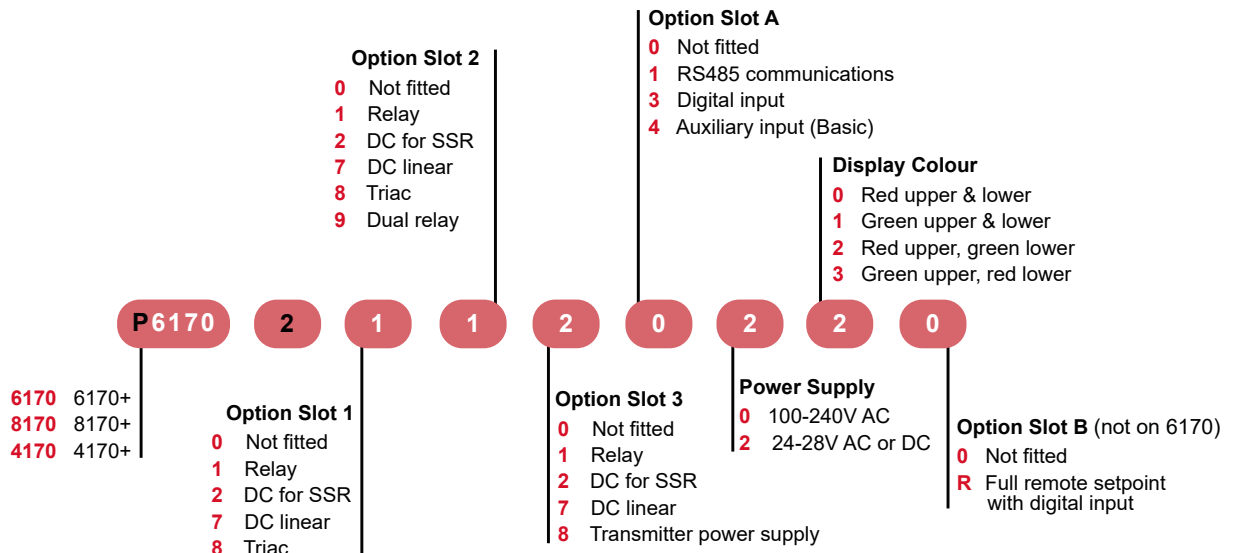
# 6170+, 8170+ & 4170+ Temperature Controllers

The 6170+, 8170+ and 4170+ have been designed specifically for open loop valve motor drive (VMD) applications. They feature an improved + series interface and greater field flexibility.

A unique VMD tuning algorithm continuously monitors the process to provide stable control at all times.

## Benefits and features

- 1/16 DIN (48 x 48 x 110mm), 1/8 DIN (96 x 48 x 100mm) and 1/4 DIN (96 x 96 x 100mm) formats (HxWxD)
- Universal input for thermocouple, PT100, mV, V and mA sensors
- Valve position indication
- Auto or manual tuning
- Process & loop alarms
- Remote/dual setpoint
- Modbus communications - RS485
- CE, UL, cUL and CSA



[Back to contents page >>>](#)



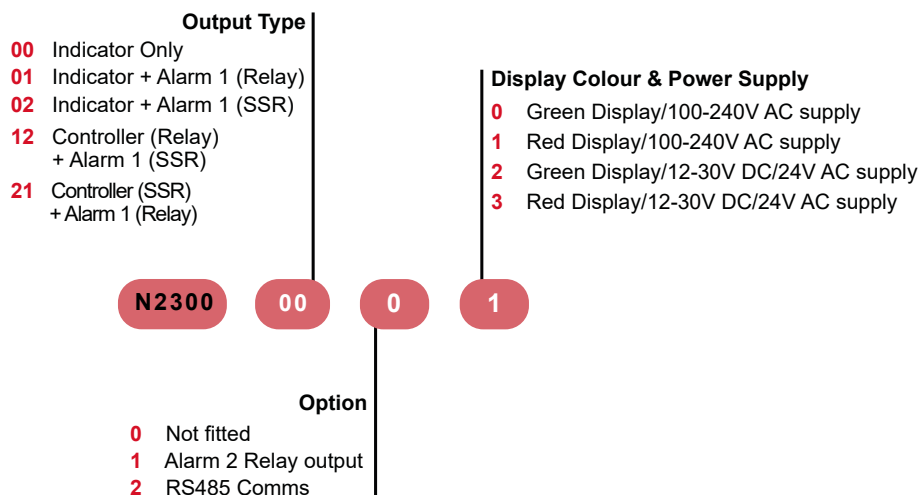
# N2300 Single Loop Temperature Controller

The West N2300 offers real flexibility as it can be used as a controller or an indicator. In addition to the red or green display the N2300 benefits from three additional multi-colour LEDs to indicate process, alarm and configuration statuses.

The large, tactile rubberised keys provide a more practical human interface which is complemented with a specially developed PID tuning algorithm, Easy-Tune, which continuously monitors and improves control. The N2300 indicator has up to two outputs (relay or solid state driver) for alarm. The controller version can have an additional relay or RS232 serial communications.

## Benefits and features

- 1/32 DIN (25 x 49 x 110mm) format (HxWxD)
- Simple operation for easy setup
- 4 digit red/green digital display
- PID control with manual override tune capability for specialised applications
- Solid state relay output for primary control
- Optional second alarm relay (option) or RS-485 communication
- CE, UL and cUL



[Back to contents page >>>](#)

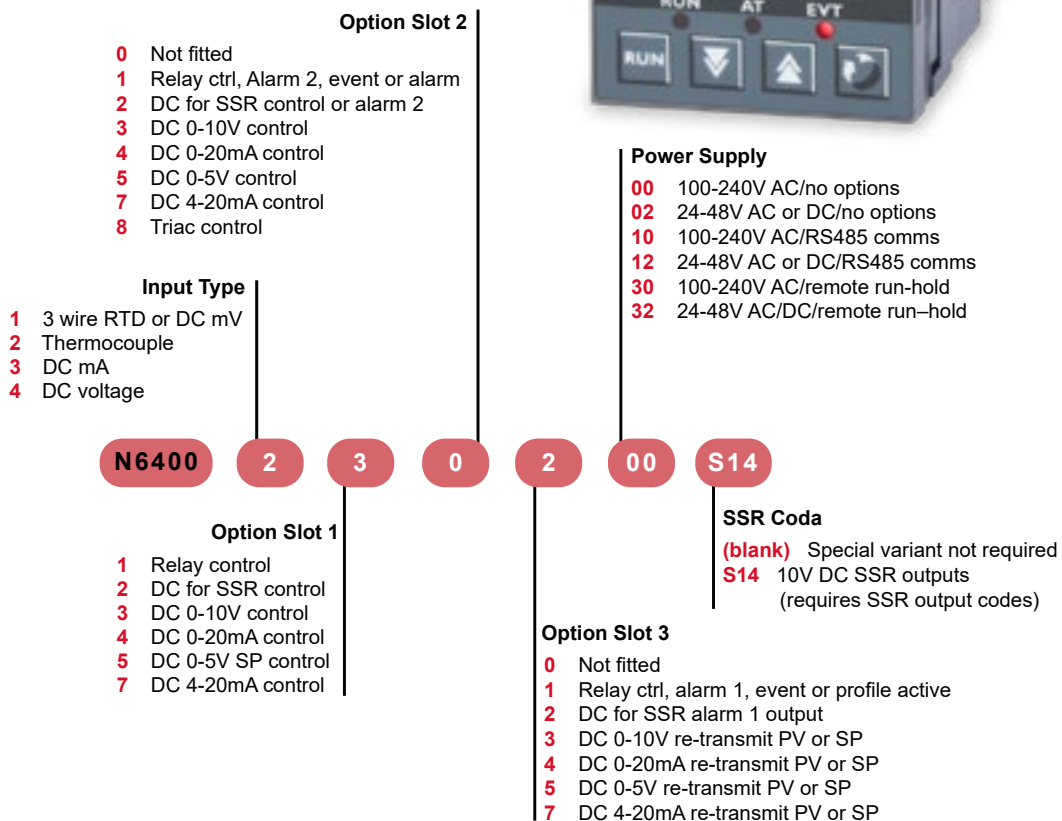
# N6400 Programmable Process Controller

The N6400 is a powerful, single loop programmable controller for complex processes. It offers profiling capability with 4 programs each of 16 free format segments.

The N6400 is an easy-to-use controller, which benefits from an informative display providing maximum process information at a glance. A dedicated configuration port allows configuration directly from a PC and allows for the development, transfer and storage of recipes by dedicated software.

## Benefits and features

- 1/16 DIN (48 x 48 x 110mm) format (HxWxD)
- Fast and accurate control via raPID fuzzy logic
- 4 programs with 16 free-form segments
- Program ramps in rate or time mode
- 'Auto hold' facility, remote run hold, event output, power failure recovery and guaranteed soak
- Delayed start
- RS 485 Modbus comms
- CE, UL and cUL



[Back to contents page >>>](#)

# KS 20-1 Advanced Process Controller

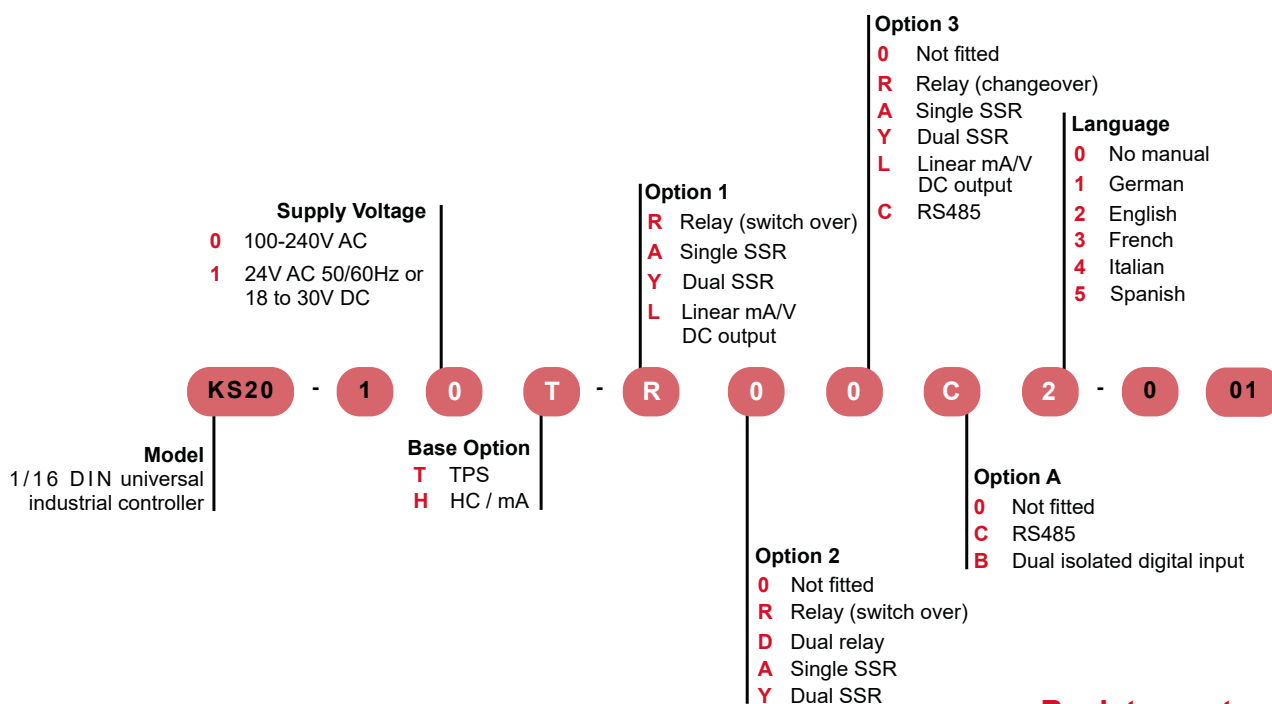
A compact, fully featured controller for demanding applications.

KS 20-1 is the only controller of its size, flexible with up to 6 outputs, 2 digital inputs, a remote setpoint input, RS485 communications and linked to best in class BlueControl<sup>®</sup> software.

The KS 20-1 offers many integrated features for unrivalled performance such as two PID sets to ensure reliable control over a wide setpoint range and separate PID for heat and cool strategies for optimised control and stability. Extensive flexibility is offered with 1 universal input and 1 optional process input, up to 4 digital inputs, 6 outputs and an inbuilt profiler.

## Benefits and features

- 1/16 DIN (48 x 48 x 118mm) format (HxWxD)
- 1 universal input + 1 optional
- Up to 4 digital inputs
- Heater or remote setpoint current input
- Customer specific linearisation for sensors
- Transmitter power supply
- Up to 6 outputs - relay, logic, SSR, linear DC
- 16 profiles x 16 segments
- CE, UL and cUL



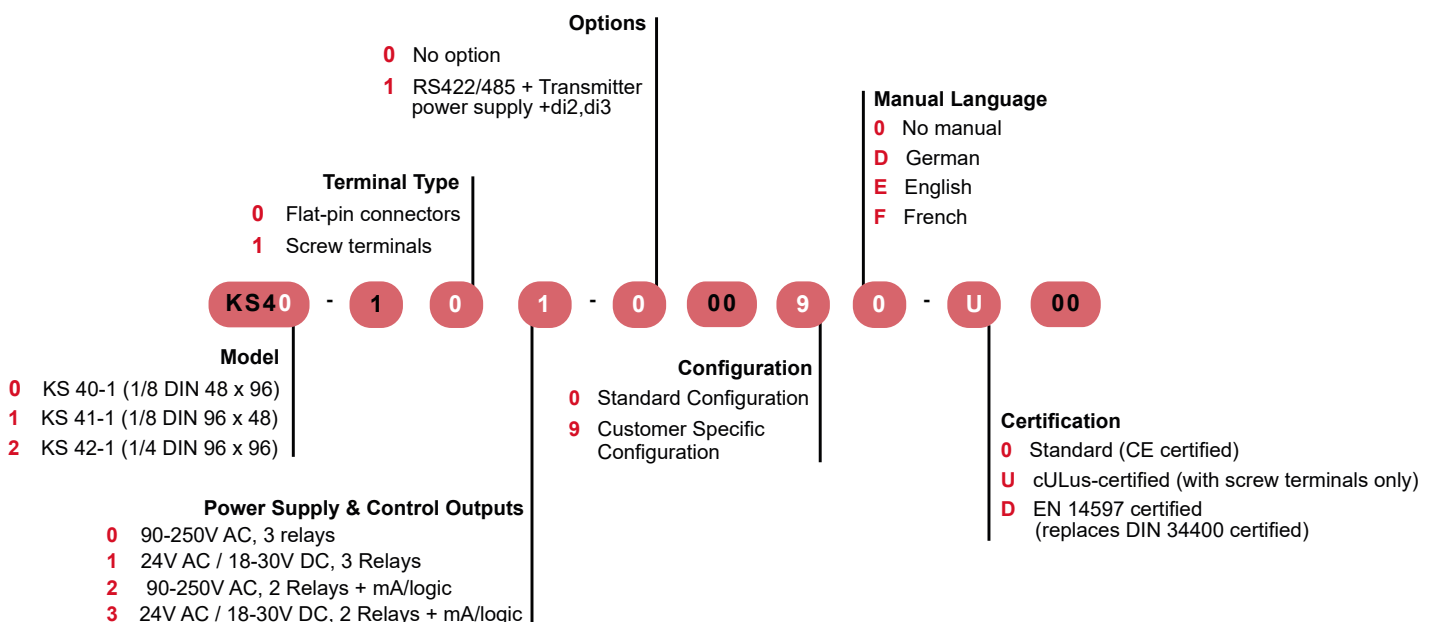
[Back to contents page >>>](#)

# KS 40-1, KS 41-1 & KS 42-1 Single Loop Controllers

The KS 40-1, KS 41-1 and KS 42-1 controllers are suitable for all thermal control operations which are handled by switching controllers – 2-point, 3-point or 3-point stepping characteristics. Three relay outputs are available for this purpose and the analogue universal output makes the device into a continuous controller.

## Benefits and features

- 1/8 DIN (horizontal) (48 x 96 x 118mm), 1/8 DIN (96 x 48 x 118mm) and 1/4 DIN (96 x 96 x 118mm) formats (HxWxD)
- BluePort® Front interface and BlueControl® software
- Maintenance manager and error list
- Automatic/manual key
- Monitoring of heating current and input circuit
- Timer and programmer
- Extended limit signalling function with latch
- CE, UL and cUL



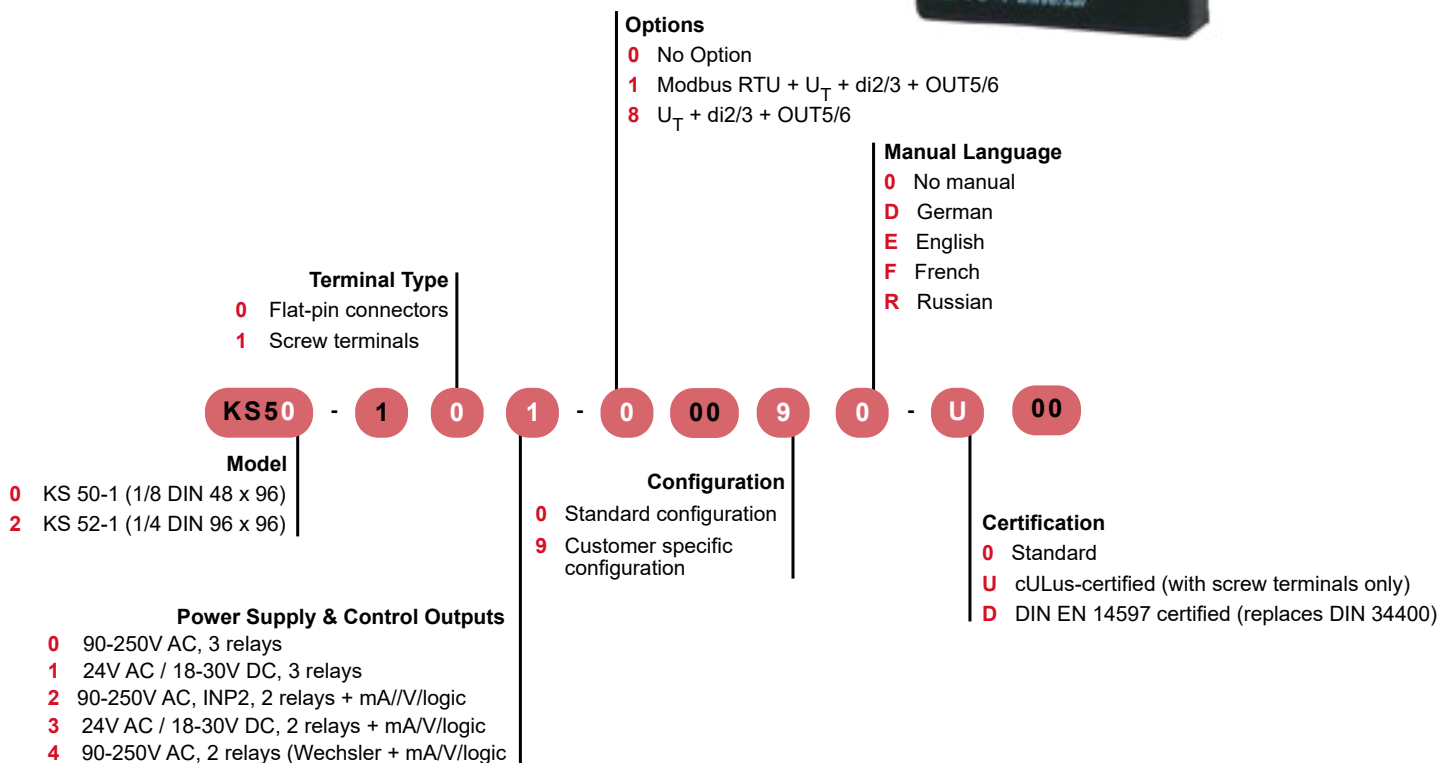
[Back to contents page >>>](#)

# KS 50-1 Single Loop Controller

The KS 50-1 is designed for use in plastics processing machinery. The KS-50-1 can be adapted to every task: from high-speed hot runners to slow mould temperature control with special functions. Extra inputs and outputs make it possible to start special functions, for example, or to monitor temperature profiles without additional PLCs. Moreover, the Modbus interface can be used to quickly integrate the KS-50-1 controller family into networks.

## Benefits and features

- 1/8 DIN (96 x 48 x 118mm) format (HxWxD)
- Freely configurable analogue output, e.g. as process value output
- Customer-specific linearisation for all sensors
- Extended temperature range up to 60°C  
- allows mounting close to the process
- Easy 2-point or offset measurement corrections
- Emergency operation after sensor break by means of the "output hold" function
- RS 422/485 Modbus RTU interface
- Built-in transmitter power supply
- Two switchable parameter sets
- Self-tune at setpoint without oscillation
- 3-point controller for water, fan or oil cooling
- Start-up function to dehumidify and boost function
- CE, UL, cUL and DIN EN 14597



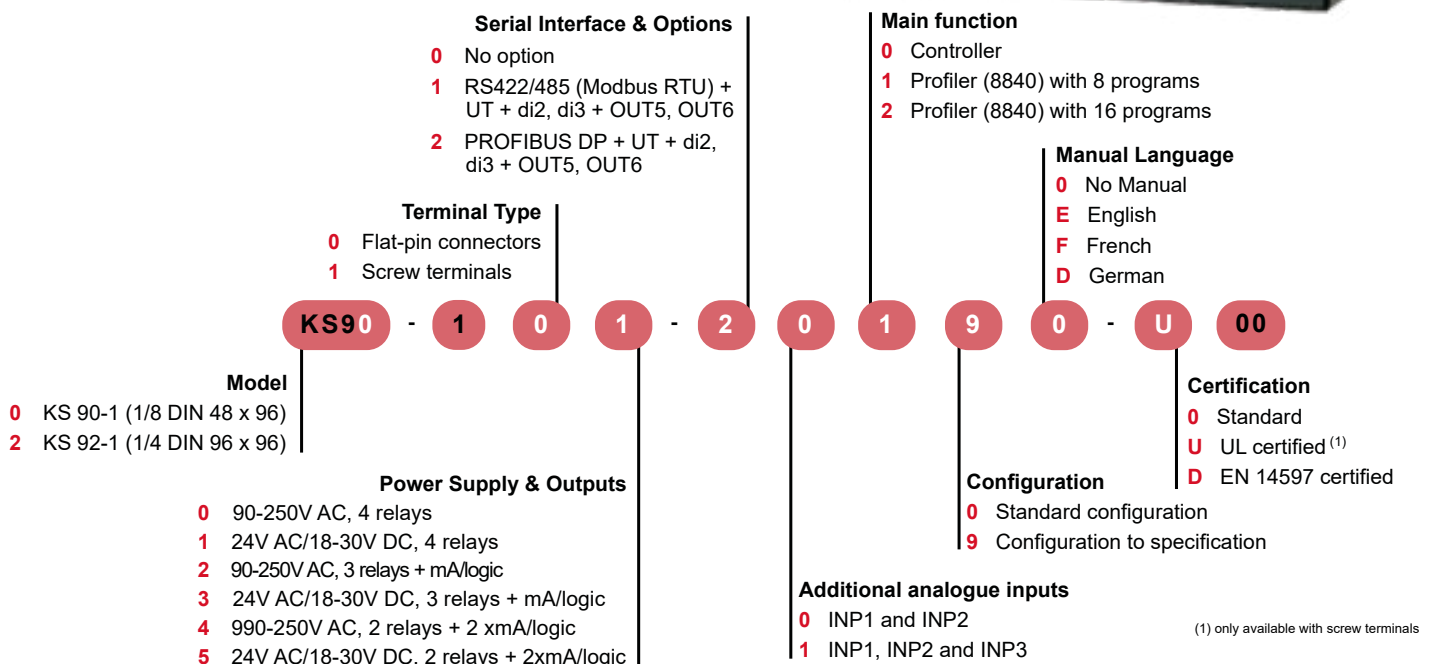
[Back to contents page >>>](#)

# KS 90-1 & KS 92-1 Single Loop Process Controllers

The industrial and process controllers of the KS 90-1 and KS 92-1 take over automatic control functions in all industrial sectors, precisely and economically. They offer the choice of simple on/off control, PID control or stepping motor control.

## Benefits and features

- 1/8 DIN (96 x 48 x 118mm) and 1/4 DIN (96 x 96 x 118mm) formats (HxWxD)
- BluePort® front interface and BlueControl® software
- Maintenance manager and error list
- Two universal inputs
- Day & night display shows plain text and bargraphs
- Type tested to EN 14597 (replaces DIN 3440) and cULus
- Valve controller with position feedback and DAC monitoring
- 3-point controller for water, fan and oil cooling
- Self-tuning at the setpoint without oscillation
- Manual gain scheduling
- High-impedance mV input for O2 sensors
- Two switchable parameter sets
- CE, UL, cUL and DIN EN 14597



[Back to contents page >>>](#)

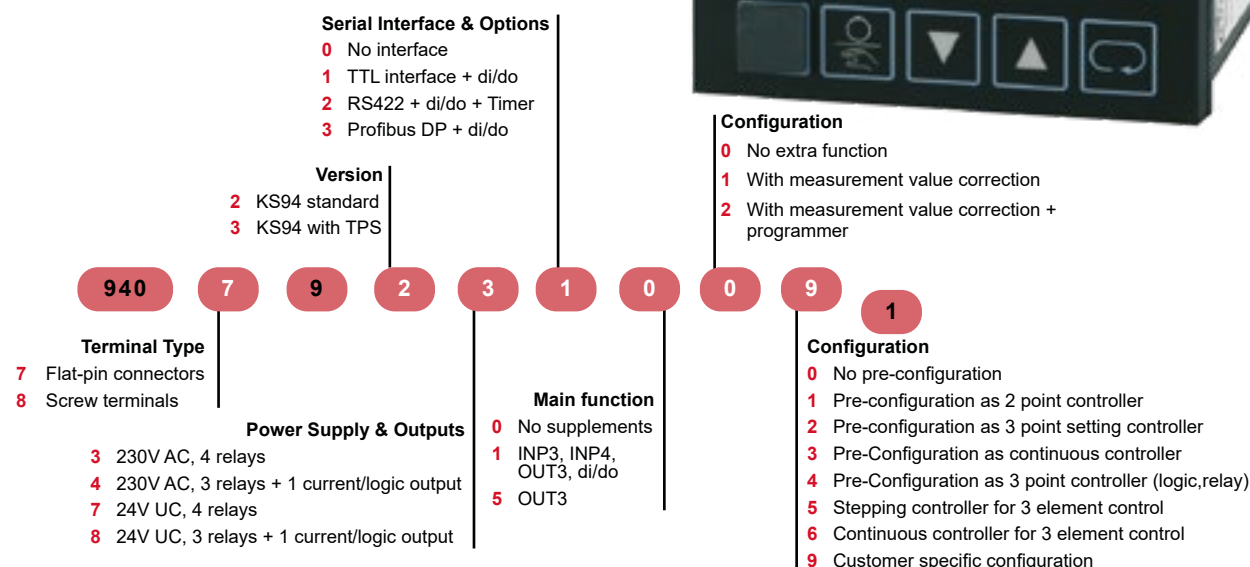
# KS 94 Single Loop Controller

The KS 94 single loop controller is configurable for on/off control, PID control and motorised valve control. The output function can be configured for on/off, position control, split-range control and numerous 3-point combinations of switching/continuous control.

Control modes are set-point, set-point/cascade and programmer, each with the possibility of setpoint offset. The effect of offset can be additive e.g. reduced standby set-point or as a factor e.g. O2 correction or split load. Offset can be triggered by an external contact, whereby the value is defined via an analogue signal or via an adjustable parameter.

## Benefits and features

- 1/4 DIN (96 x 96 x 160mm) format (HxWxD)
- Ratio control
- Mean value
- Feed-forward control
- Override control
- Measurement value output and DAC<sup>®</sup>
- Simple, menu-guided operation with plain-text displays
- Universal version for switching/continuous output
- Programmer with search function and real-time clock
- PROFIBUS-DP or RS 485 interface
- Spray-water proof front with protection type IP 65
- Interface ports at front and rear
- CE



[Back to contents page >>>](#)

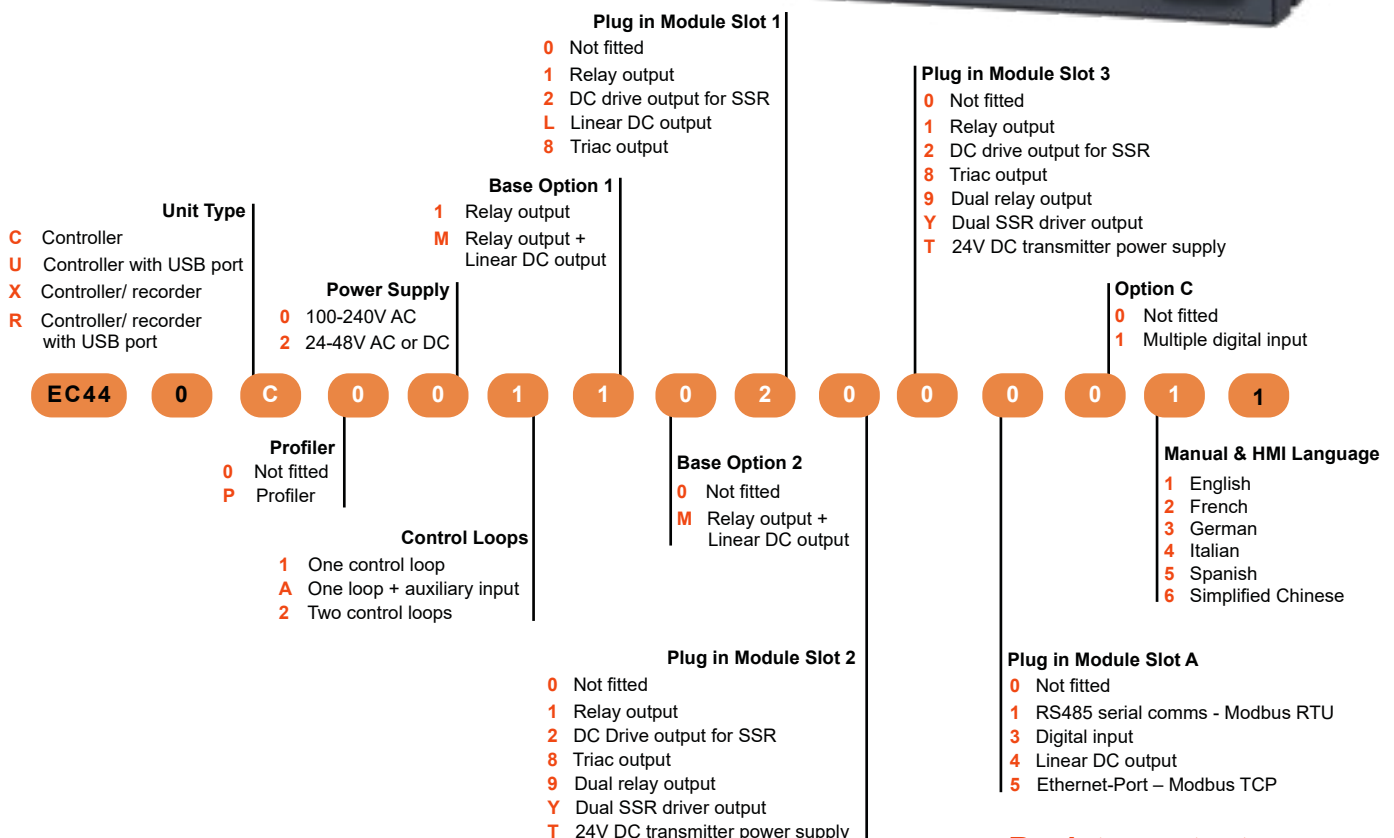
# Multi-loop Temperature Controllers

## Pro-EC44 Single or Dual Loop Controller

Pro-EC44 is designed to simplify user setup, step by step configuration with a wizard saves needing to work through several menus for initial configuration of common settings. A logical menu structure for intuitive navigation allows fast changes and updates to individual settings. Alternatively Pro-EC44 can be set up through the BlueControl<sup>®</sup> PC software.

### Benefits and features

- 1/4 DIN (96 x 96 x 117mm) format (HxWxD)
- Single or two loop
- Supports cascade and ratio control
- Graphical / text display (red/green backlit LCD)
- Profiler 255 segments shared by up to 64 programs
- USB configuration and data access
- Modbus RS485 or Modbus TCP Ethernet
- Up to 5 PID sets
- Gain scheduling
- Datalogger with real-time clock
- CE, UL and cUL



[Back to contents page >>>](#)



# MLC 9000+ Compact Multi-loop Controller

The MLC 9000+ system comprises 1 to 8 control modules. 1, 3 & 4 loop modules are available (control up to 32 loops per system), with heater break options on 1 and 3 loop modules. Communication options for connecting to a PLC, HMI, PC or SCADA include Modbus, Devicenet, PROFIBUS, Ethernet I/P and Modbus TCP.

The MLC 9000+ features a hot swap facility, a module can be replaced and back in service within 30 seconds due to automatic reconfiguration.

## Benefits and features

- Bus Module: 100 x 30 x 120mm format  
Loop Module: 100 x 22 x 120mm format (HxWxD)
- Quick to setpoint and fast reaction to process disturbances
- On-demand and auto-tuning – no need to manually tune loops
- Set-up 32 loops in less than 30 minutes
- Only buy the loops required – no need to buy in multiples of four
- CE, UL and cUL



## Bus Modules

MLC 9000

BM220

- MB

- BM220 - MB** Modbus RTU
- BM230 - DN** DeviceNet
- BM240 - PB** Profibus-DP
- BM250 - EI** Ethernet/IP
- BM250 - MT** Modbus/TCP

## Loop Modules

MLC 9000

Z1200

00

- Z1200** One universal input, two SSR/relay outputs
- Z1300** One universal input, two SSR/relay outputs and one linear output or three SSR/relay outputs
- Z1301** One universal input, one heater break input, two SSR/relay outputs and one linear output or three SSR/SP relay outputs
- Z3611** Three universal inputs, one heater break input, six relay outputs
- Z3621** Three universal inputs, one heater break input, six SSR outputs
- Z3651** Three universal inputs, one heater break input, six outputs (three SSR/three relay)
- Z4660** Four universal inputs, six outputs (four SSR/two relay)
- Z4610** Four universal inputs, six relay outputs (three SSR/three relay)
- Z4620** Four universal inputs, six SSR outputs

[Back to contents page >>>](#)

# KS 98-2 Multi-function Controller

PMA's multi-function instrument KS 98-2 combines PID control, process monitoring, sequence control, data logging and alarms.

Function blocks from an extensive library can be used to build an application by easily selecting and connecting the blocks graphically using the "ET/KS98"-utility. This method is ideal for creating tailored control, including user interface pages with minimal effort. As a complete solution in a single unit, the KS 98-2 multi-function instrument helps to reduce programming, installation cost and control cabinet space.

## Benefits and features

- Modular automation system in a 1/4-DIN (96 x 96mm) format
- Measure, control, calculate, and record
- Process visualization, operation, alarm and alerts
- Comprehensive application-oriented functionality
- Graphical programming utility with simulator
- 3.5" colour touch-screen display
- USB interface on front fascia
- Expandable with modular inputs and outputs
- Ethernet and common fieldbuses



### Communication Options [D]

- 0 None / for stand alone applications
- 1 Standard interfaces (Ethernet/USB) and CAN for Remote I/O
- 2 Standard interfaces plus RS485 / Modbus
- 3 Standard interfaces plus Profibus
- 4 Standard interfaces plus Profinet

### Base Models <sup>(1)</sup>

- 0 Fast-on terminals
- 1 Screw terminals

### I/O Extensions [B]

- 0 Not fitted
- 1 Digital-I/O extension (10 DI, 4 DO)
- 2 Modular extension (4 option module slots)

### Configuration

- 0 Default settings; No option modules installed
- 1 Default settings; Option modules according to additional order line
- 8 Preset to specification; No option modules installed
- 9 Preset to specification; Option modules according to additional order line

### Certification

- 0 Standard (CE certified)
- U UL / cUL certified
- D DIN3440 / EN 14597

### Power Supply & Outputs [P]

- 0 90...250V (2 relays, 2 option module slots)
- 1 24V UC (2 relays, 2 option Slots)
- 2 90...250V (4 relays)
- 3 24V UC (4 relays)

### Options

- 0 None
- 1 Datalogger

### I/O Extensions [C]

- 0 Not fitted
- 1 Digital-I/O extension (10 DI, 4 DO)
- 2 Modular extension (4 option module slots)

KS98 - 2 1 0 - 1 0 1 2 0 - U 0 0

(1) Universal Input, 2 digital Inputs, TPS, 2 option module slots

[Back to contents page >>>](#)

# KS 98-2 Multi-function Controller

KS 98-2 offers comprehensive modular input and output options to adapt the unit to the application needs. The unit is optimized to handle the precise measurements required in the process industry via I/O modules supporting a variety of sensor types and also have galvanic isolation. Additional signal conditioners and isolating amplifiers are not necessary in most applications, saving cost and less installation.

## Hardware flexibility

- Unprecedented number of I/O in a 1/4-DIN device
- Fully adaptable with up to 12 internal I/O-modules
- Almost every 1/4 DIN Controller can be replaced/upgraded



## KS 98-2 option modules

**A98 - F - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0**

Factory installed or separate  
Strip P / Segment 3  
Strip P / Segment 4  
Strip A / Segment 2  
Strip A / Segment 3  
Strip B / Segment 1  
Strip B / Segment 2  
Strip B / Segment 3  
Strip B / Segment 4  
Strip C / Segment 1  
Strip C / Segment 2  
Strip C / Segment 3  
Strip C / Segment 4

**I/O Extensions for KS 98-2**  
**M** Single delivery of option module  
**F** Factory installed <sup>(2)</sup>

Modules and Positions	Description
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Not fitted
- - U U U U U U U U U U	Universal input
- - R R R R R R R R R R	Dual Pt100/1000, Ni100/1000, resistance
- - T T T T T T T T T T	Dual Thermocouple, mV, 0/4...20mA
- - V V V V V V V V V V	Dual -50...1500mV (eg. Zirconia probe), 0...10V
- - P P P P P P P P P P	0/4...20mA Input with transmitter power supply
A A A A A A A A A A	Dual DC drive output for SSR
L L L L L L L L L L	Dual linear out (mA/V DC)
B B B B B B B B B B	Dual bipolar Linear Out (-10V...10V)
- - D D D D D D D D D D	Dual digital I/O

(2) Into KS 98-2 in order line above

## Separate module orders

**A98 - M - U**

- Available modules**
- U** Universal input
  - R** Dual Pt100/1000, Ni100/1000, resistance
  - T** Dual Thermocouple, mV, 0/4...20mA
  - V** Dual -50...1500mV (eg. Zirconia probe), 0...10V
  - P** 0/4...20mA Input with transmitter power supply
  - A** Dual DC drive output for SSR
  - L** Dual linear out (mA/V DC)
  - B** Dual bipolar Linear Out (-10V...10V)
  - D** Dual digital I/O

[Back to contents page >>>](#)

# KS Vario Multi-loop Control System

The KS vario multi-loop controller system was specifically developed for temperature control. In its basic configuration it comprises a controller module and a field bus coupler. Together these two components already constitute a valuable 4, 6 or 8-channel controller.

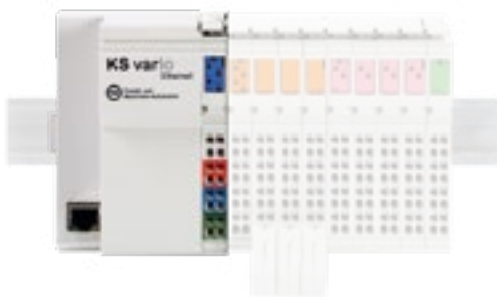
By adding any number of I/O modules, the system can be expanded up to 30 control loops very economically and in precise increments. The number of I/O module used need not exceed the actual number of inputs or outputs required.

## Benefits and features

- Compact and modular design
- Open for all major industrial field buses
- Between 4-30 temperature zones can be controlled
- Additional measurements can be integrated
- Highly modular expansion
- Detachable connectors
- CE, UL, cUL and CSA



## Buscoupler



KSVC - 1 0 1 - 0 0 1 1 1 - U 00

### Option

- 1 Profibus-DP/V1
- 2 CANopen
- 3 Modbus TCP
- 4 DeviceNet
- 5 Modbus RTU
- 7 Profinet
- 8 Ethernet IP

[Back to contents page >>>](#)

## Controller



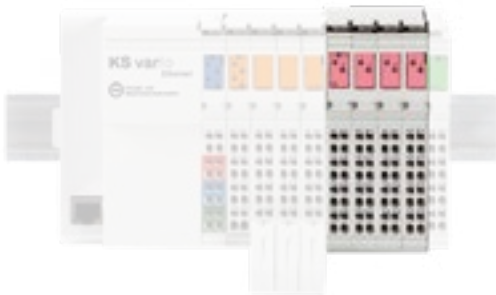
- Title**
- 0 For B.C. Ethernet Mod/TCP, Ethernet IP, Profibus, Modbus
  - 1 For B.C. DeviceNet
  - 2 For B.C. CANopen

**KSVC** - **1** **0** **4** - **0** **0** **33** **1** - **U** **00**

**Option**

- 33** KS VARIO T4/RTD  
Vario temperature controller, 4-channel, spring-clamp connection, labeling field, 4 inputs, RTD (resistance element), 3 wire connection + screening, 6 outputs 24 V DC, 1 heating current input, I/O extensible
- 43** KS VARIO T4/UTH  
Vario temperature controller, 4-channel, spring-clamp connection, labeling field, 4 inputs, TC (thermocouples), 2 wire connection + screening, 8 outputs 24 V DC, 1 heating current input, I/O extensible
- 34** KS VARIO T6/RTD  
Vario temperature controller, up to 30-channel, spring-clamp connection, labeling field, 6 inputs, RTD (resistance element), 3 wire connection + screening, 6 outputs 24 V DC, 1 heating current input, I/O extensible up to 30 channels
- 44** KS VARIO T8/UTH  
Vario temperature controller, up to 30-channel, spring-clamp connection, labeling field, 8 inputs, TC (thermocouples), 2 wire connection + screening, 8 outputs 24 V DC, 1 heating current input, I/O extensible up to 30 channels

## I/O Extension



**KSVC** - **1** **0** **x** - **0** **x** **x** **x** **1**

For a full list of available modules please refer to the KS Vario price list or visit [www.West-CS.co.uk](http://www.West-CS.co.uk) to get in contact.

[Back to contents page >>>](#)

# Rail-mounted Devices

## MAXVU Rail DIN-Rail Temperature Controller / Limiter

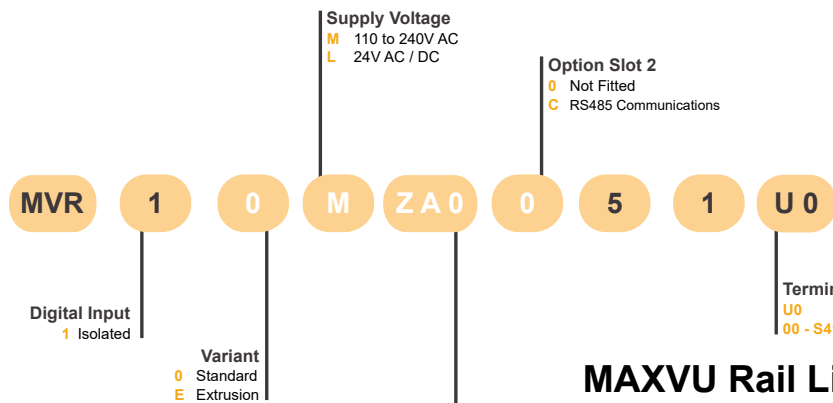
MAXVU Rail is a compact DIN-rail mount temperature controller/transmitter and limiter range for general industrial and scientific equipment requiring a reduced back panel footprint, centralised control or minimal front panel components.

### Benefits and features

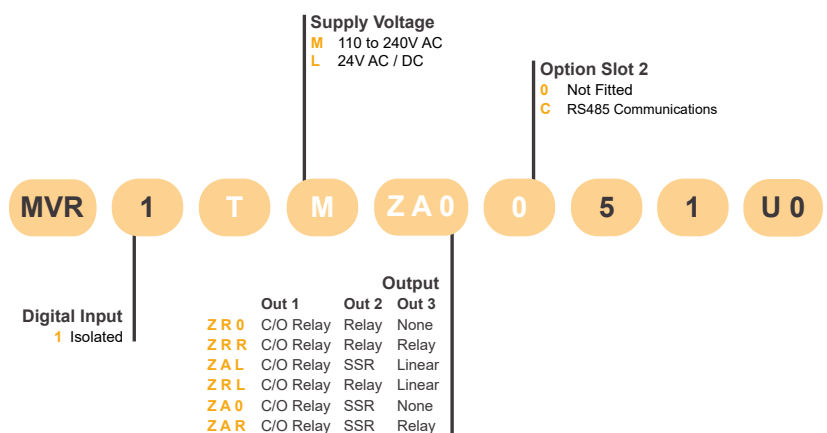
- DIN rail mounted
- Text / Icon matrix display
- Quick setup menu with main configuration parameters
- Thermocouple, PT100 or linear DC sensor input
- Up to 3 outputs; relay, SSR or Linear DC
- Isolated Digital input
- High/low, deviation or band alarms
- Limit alarm plus warning, high/low or deviation (MAXVU Rail Limiter)
- 3 button operation
- 3 status LEDs
- Front panel configuration or via PC configuration software
- RS485 Modbus RTU communications
- Spring terminal option available



### MAXVU Rail Controller / Transmitter



### MAXVU Rail Limiter



[Back to contents page >>>](#)

Decentralised installations with field bus systems are finding increasing use in process and machine automation. In order to ensure reliable control in these allocations – also involving complex processes – modular components with additional functionality are required. The flexible Rail-line system, WEST Control Solutions offers a comprehensive product portfolio for decentralised automation.

The combination of RL field bus couplers (for Profibus, CAN, Modbus TCP and Modbus RTU) with various I/O-modules, KS 45 universal controller, Uniflex CI 45 and SG 45 transmitters and the TB 45 temperature limiter, permits modular systems with distributed intelligence to be created.

The space-saving modules for rail mounting and other universally applicable system components help to save time and costs during system configuration, engineering and commissioning.



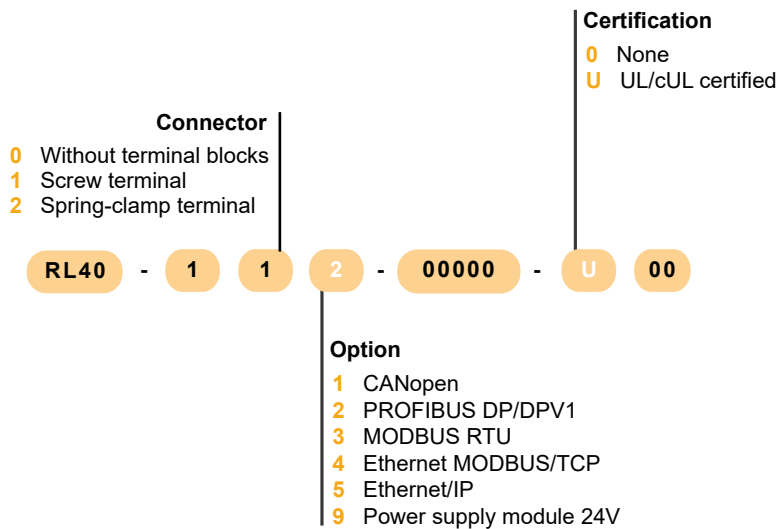
### Benefits and features

- 96 x 22.5 x 117.5mm format (HxWxD)
- Field bus coupler for Profibus, CAN, Modbus TCP, Modbus RTU and Ethernet IP – ensures cost-effective and convenient connections to PLC, IPC and operating terminals
- Bus monitoring
- Pre-defined output states in case of communication failure
- Compact design – modules only 22.5 mm wide
- 3-key operation and multi-line LC display
- Plug-in terminals – no wiring to disconnect in case of module replacement
- Module replacement during operation (hot swap)
- BluePort® front port
- PC configuration tool BlueControl®
- Cost advantages during projecting, implementation and maintenance
- Local operation
- Freely configurable menu structure
- Freely selectable monitoring functions

[Back to contents page >>>](#)

## Field bus couplers

- Profibus DP
- Ethernet IP
- Modbus/TCP
- CANopen
- Modbus RTU
- And additional power supply for large systems



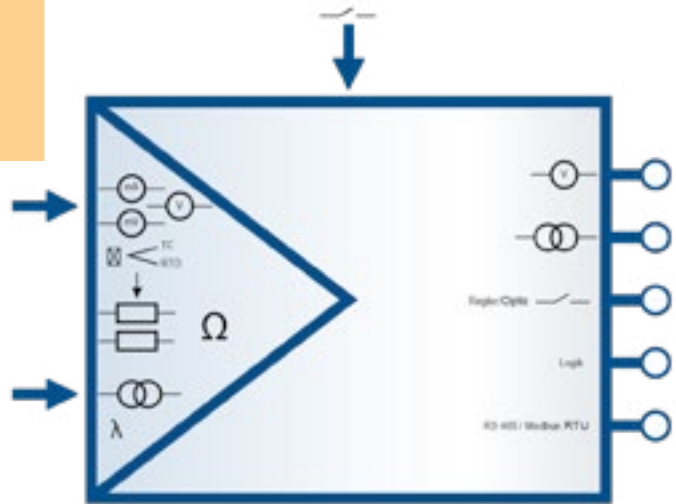


# KS 45 Controller

The KS 45 process controller is a stand alone version for direct connection via RS485 Modbus or system version with buscoupler and inter-module connections permit additional controllers, transmitters and limiters to be fitted without wiring.

## Benefits and features

- Display- and operating functions
- 2-point, 3-point, motor valve and continuous control
- Fast sampling rate
- Two universal inputs possible
- Universal output
- Timer and programmer
- Customised linearisation profile
- Auto/manual switchover
- CE, UL, cUL and Type tested to EN 14597



**Option**

- 0 No option
- 1 RS 485 / MODBUS - protocol
- 2 System interface (only for 24V versions)

**Connector**

- 0 Without plug-in connector terminals
- 1 With screw terminal connector

**Certification**

- 0 Standard (CE-certification)
- D DIN 3440 / EN 14597
- U UI/cUL certified

**Configuration**

- 0 Standard configuration
- 9 Customer-specific configuration

**Power Supply & Control Outputs**

- 0 90-260V AC, 2 output relays, INP2 as current input (0-20mA)
- 1 18-30V AC/18-31V DC, 2 output relays INP2 as current input (0-20mA)
- 2 90-260V AC, mA/V/logic + 2 relays, INP2 as current input (0-20mA)
- 3 18-30V AC/18...31V DC, mA/V/logic + 2 relays, INP2 as current input (0-20mA)
- 4 90-260V AC, 2 optocoupler outputs, 1 relay, INP2 as current input (0-20mA DC and 0-50 mA AC)
- 5 18-30V AC/18..31V DC, 2 optocoupler outputs, 1 relay, INP2 as current input(0-20mA DC and 0-50 mAAC)

**Input**

- 0 di1 as contact input
- 1 di1 as optocoupler input
- 2 INP2 as universal input, O<sub>2</sub> -measurement, di1 as contact input<sup>(1)</sup>
- 3 INP2 as universal input, O<sub>2</sub> -measurement, di1 as optocoupler input<sup>(1)</sup>

**KS45 - 1 0 1 - 2 0 0 9 0 - U 00**

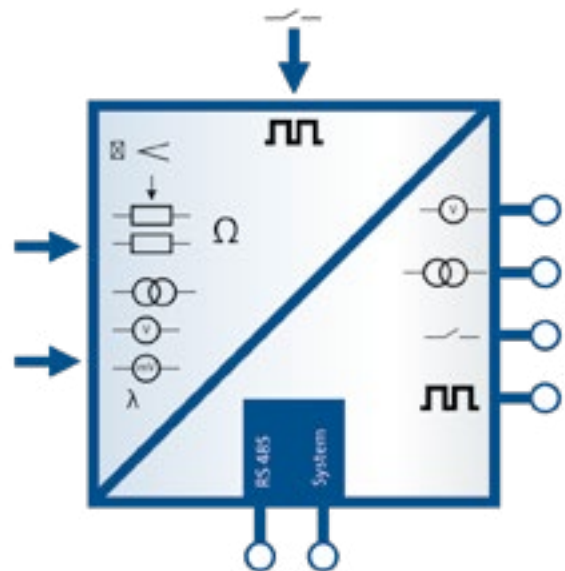
<sup>(1)</sup> Not on versions with optocoupler outputs (KS45-1x4... and KS45-1x5...)

[Back to contents page >>>](#)

A universal transmitter, stand alone version for direct connection via RS485 Modbus or system version with buscoupler and inter-module connections permit additional controllers, transmitters and limiters to be fitted without wiring.

## Benefits and features

- High resolution
- Fast sampling rate
- Two universal inputs possible
- Universal output
- Two relay outputs
- Counter/frequency input, frequency output
- Customised linearisation profile
- Correction of measurement value
- Slave pointer (min/max indicator)
- CE, UL and cUL



**Connector**

- 0 Without plug-in connector terminals
- 1 With screw terminal connector

**Option**

- 0 No option
- 1 RS 485 / Modbus - protocol
- 2 System interface (only for 24V versions)

**Certification**

- 0 Standard (CE-certification)
- U UI/cUL certified

**Configuration**

- 0 Standard configuration
- 9 Customer-specific configuration

**Power Supply & Control Outputs**

- 2 90-260V AC, mA/V/logic +1 relay
- 3 18-30V AC/18-31V DC, mA/V/logic +1 relay
- 4 90-260V AC, mA/V/logic +2 relay
- 5 18-30V AC/18-31V DC, mA/V/logic +2 relay

**Option**

- 0 No option
- 1 Option package 1 <sup>(1)</sup>
- 2 Option package 2 <sup>(2)</sup>

**CI45 - 1 0 2 - 2 0 0 9 0 - U 00**

(1) Option package 1: additional universal input INP2, plus: O2-measuring; counter input; functions tare, sample & hold and integrator  
 (2) Option package 2: additional to option package 1: digital input as optocoupler and frequency input / output

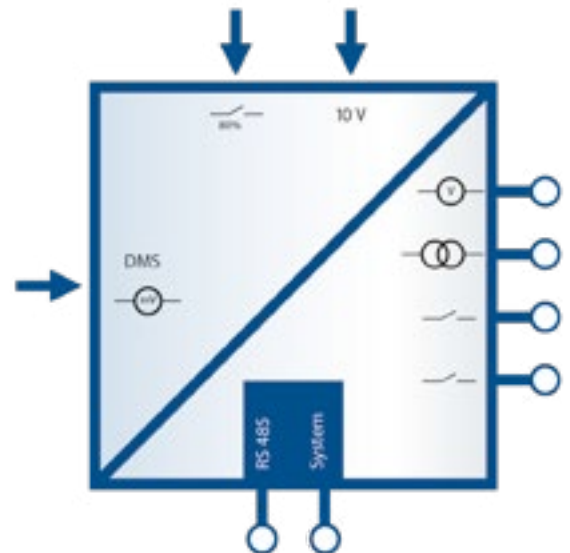
# SG 45 Transmitter

Strain-gauge bridge transmitter, stand alone version for direct connection via RS485 Modbus or system version with buscoupler and inter-module connections permit additional controllers, transmitters and limiters to be fitted without wiring.\*

## Benefits and features

- Special-purpose transmitter for strain gauge input
- 24-bit universal input
- Voltage supply for the strain gauge bridge
- Simple scaling during commissioning
- 4 or 6-wire connection for force measurement
- 2 relay outputs
- CE, UL and cUL

\* There is also the dedicated TB45-2 with dual input if you require a certified limiter.



**Connector**

- 0 Without plug-in connector terminals
- 1 With screw terminal connector
- 2 With spring clamp terminals

**Power Supply & Control Outputs**

- 4 90-260V AC, mA/V/logic +2 relay
- 5 18-30V AC/18.-31V DC, mA/V/logic +2 relay

**Option**

- 0 No option
- 1 RS 485 / MODBUS - protocol
- 2 System interface (only for 24V versions)

**Certification**

- 0 Standard (CE-certification)
- U UL/cUL certified

**Configuration**

- 0 Standard configuration
- 9 Customer-specific configuration

**Option**

- 0 No option
- 1 Option package 1 <sup>(1)</sup>
- 2 Option package 2 <sup>(2)</sup>

**SG45 - 1 0 2 - 2 0 0 9 0 - U 00**

(1) Option package 1: additional universal input INP2, plus: O2-measuring; counter input; functions tare, sample & hold and integrator  
 (2) Option package 2: additional to option package 1: digital input as optocoupler and frequency input / output

[Back to contents page >>>](#)

## RL 400 I/O expansion modules

- RL400 offers a variety of sophisticated I/O modules
- High precision analogue inputs
- Output modules with fast on board signal processing
- Reinforced galvanic isolation
- Linearisation and measured value correction
- Up to 62 modules in a system
- Digital and analogue input & output modules
  - Pt 100 in 2 or 4-wire connection
  - Thermocouples
  - mA/V
  - Relays
  - Potential-free digital inputs
  - NPN/PNP inputs
- CE, UL and cUL



### Analogue Inputs

- 4220 **RL 422-0** Analogue inputs, 4 x I / U / TPS /potentiometer
- 4221 **RL 422-1** Analogue inputs 2 x I/U galv. isolated
- 4230 **RL 423-0** RTD 4 x Pt100 galvanic isolated
- 4231 **RL 423-1** RTD 4 x Pt1000 galvanic isolated
- 4232 **RL 423-2** RTD 4 x Pt100/Pt1000
- 4233 **RL 423-3** RTD 2 x Pt100 galvanic isolated
- 4240 **RL 424-0** 2 x TC galvanic isolated
- 4241 **RL 424-1** 2 x TC / O2 (mV)
- 4242 **RL 424-2** 4 x TC galvanic isolation 2/2
- 4610 **RL 461-0** Combi module, 2 x AI ( $\pm U / \pm I$ , 16 Bit) differential inputs; 2 x AO ( $\pm U / \pm I$ , 12 Bit)

### Digital Inputs

- 4420 **RL 442-0** Digital inputs 2 x 4 24 V DC (pnp /contact, potential-free)
- 4421 **RL 442-1** Digital inputs 2 x 4 24 V DC (npn /contact, potential-free)
- 4422 **RL 442-2** Digital inputs 8 x 1 24 V DC (individual supply)
- 4430 **RL 423-0** 4 x Relay (115/230V AC)

### Connector

- 0 Without terminal blocks
- 1 Screw terminal
- 2 Spring-clamp terminal

### Certification

- 0 Standard (CE-certification)
- U UI/cUL certified

**RL40** - **1** **0** **0** - **0000** **0** - **U** **00**

### Analogue Outputs

- 4310 **RL 431-0** 4 x I / U ( $\pm 10V / \pm 20mA$ , 12 Bit)
- 4610 **RL 461-0** Combi module, 2 x AI ( $\pm U / \pm I$ , 16 Bit) differential inputs; 2 x AO ( $\pm U / \pm I$ , 12 Bit)

### Digital Outputs

- 4510 **RL 451-0** Digital outputs 2 x 4 24 V DC/2A
- 4511 **RL 451-1** Digital outputs 2 x 4 24 V DC/2A (free wheeling diode)
- 4520 **RL 452-0** Relay outputs 4 x 230 V DC/5A

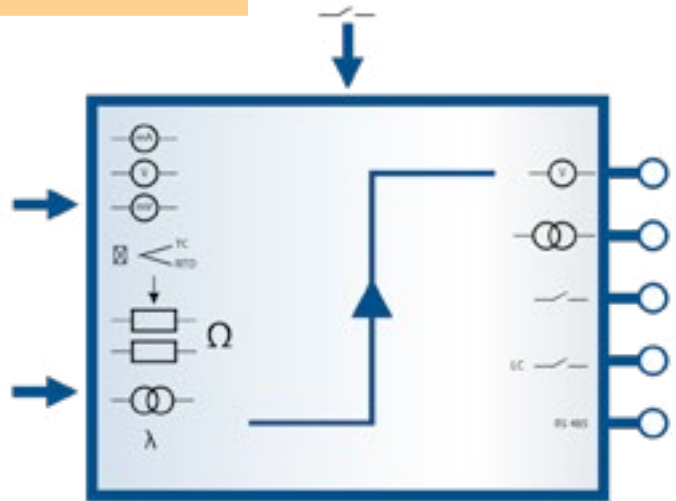
[Back to contents page >>>](#)

# TB 45 Temperature Limiter

The TB 45 temperature monitor/limiter offers a stand alone version for direct connection via RS485 Modbus or system version with buscoupler and inter-module connections which permit additional controllers, transmitters and limiters to be fitted without wiring.

## Benefits and features

- For all thermocouple types and resistive sensors
- Display and operating functions
- Two relay outputs
- Analogue output
- Two universal inputs possible
- Reset via key combination or external contact
- Direct connection of RS 485 Modbus RTU without bus coupler. Inter-module connections permit additional controllers, transmitters and limiters to be fitted without wiring.
- CE, UL, cUL and Type tested to EN 14597



**Option**

- 0 No option
- 1 RS 485 / MODBUS - protocol

**Certification**

- 0 Standard (CE-certification)
- U UI/cUL certified
- D DIN 3440 / EN 14597

**Connector**

- 0 Without plug-in connector terminals
- 1 With screw terminal connector

**Model**

- 1 Standard
- 2 DIN approved limiter with dual-TC input

**Power Supply & Control Outputs**

- 0 90-260V AC, 2 relays
- 1 18-30V AC/18-31V DC, 2 relays
- 2 90-260V AC, mA/V/logic +2 relay
- 3 18-30V AC/18-31V DC, mA/V/logic +2 relay

**Configuration**

- 0 Standard configuration
- 9 Customer-specific configuration

**Input**

- 0 di1 as contact input
- 1 di1 as optocoupler input
- 2 INP2 as universal input, O<sub>2</sub> -measurement, di1 as contact input
- 3 INP2 as universal input, O<sub>2</sub> -measurement, di1 as optocoupler input

**TB45 - 1 0 2 - 1 0 0 9 0 - U 00**

[Back to contents page >>>](#)

# Indicators

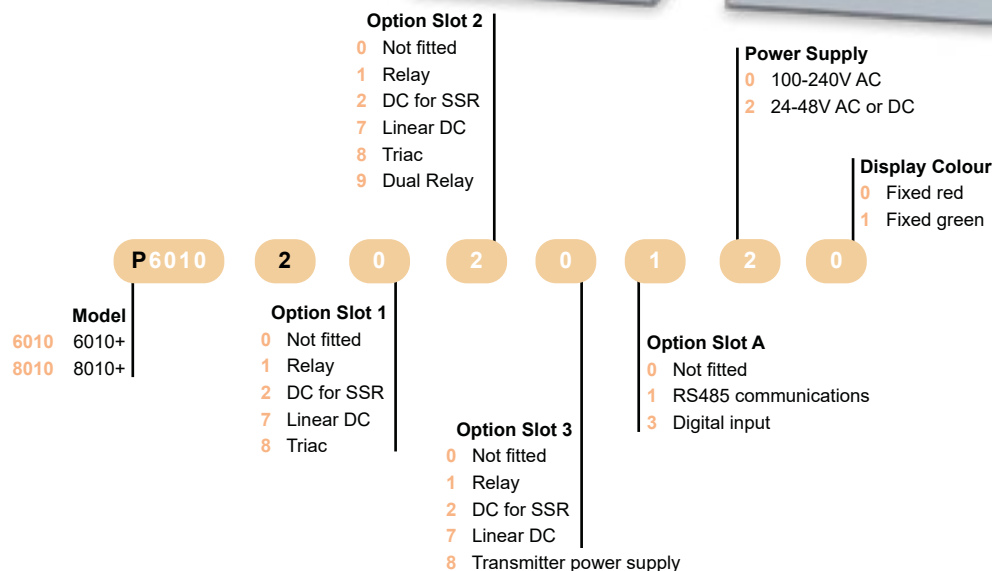
## 6010+ & 8010+ Process and Temperature Indicators

The 6010+ and 8010+ digital panel process indicators are designed for optimal ease of use in a wide variety of temperature and related process applications.

Output options allow for PV retransmission or transmitter power supply and up to 4 alarm relays (latching or non-latching).

### Benefits and features

- 1/16 DIN (48 x 48 x 100mm) and 1/8 DIN (horizontal) (48 x 96 x 110mm) formats (HxWxD)
- Universal input for thermocouple, PT100, mV, V and mA sensors
- Up to 4 outputs
- Output options for SSR driver, triac, relay and linear
- Optional alarms are selectable as latching or non-latching outputs
- PC Configurator with easy to use “wizard” suits both novice and experienced users
- Multi-point scaling and tare features included as standard
- Modbus and ASCII communications
- Red/green single-line 4-digit display
- CE, UL, cUL and CSA



[Back to contents page >>>](#)

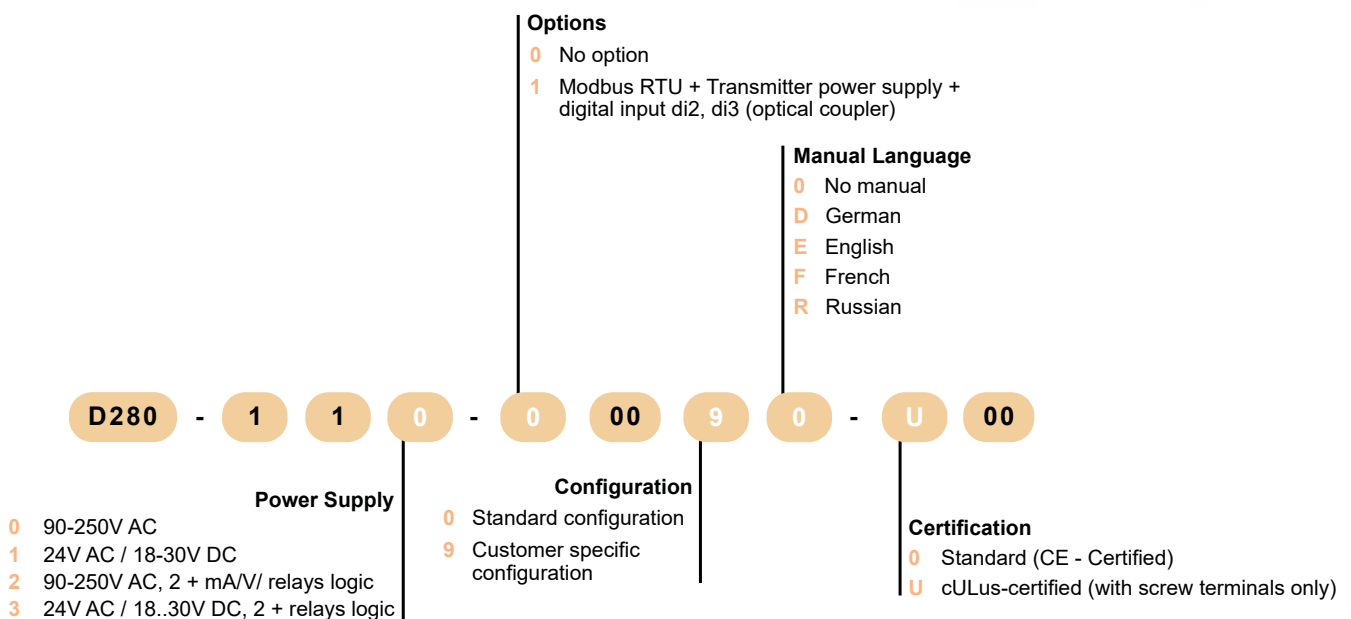
## D280-1 Indicator

The PMA Digital 280-1 indicator ensures a fast reaction time with a scan rate of 100 ms cycle time.

The instrument offers customer-specific linearisation for all sensors (16 segments). The maximum and minimum values are always stored and may be displayed on the front for quick reference. In addition to an indicator the Digital 280-1 can also be used as a signaller, on/off controller, two-point controller or a continuous controller.

### Benefits and features

- 1/8 DIN (horizontal) (48 x 96 x 118mm) format (HxWxD)
- BluePort® front interface and BlueControl® software
- Maintenance manager and error list
- 5-digit, 20mm big display
- Limit signalling functions with hysteresis, discriminator time and rate of change monitor
- On/off-, 2-point- and continuous controller
- Oxygen measurement with high-impedance input
- CE, UL and cUL



[Back to contents page >>>](#)

# EI2410 & EI2041 Temperature and Process Indicators

Compact digital indicators for temperature and process measurement.

EI2410 offers temperature indication within a range of -60 to 150°C using a NTC sensor.

EI2041 rescales linear DC signals to display process data in the required units.

## Benefits and features - EI2410

- 35 x 77 x 71mm format (HxWxD) (29 x 71mm cutout)
- NTC Sensor input
- Zero point shift input calibration
- Temperature units selection °F or °C
- Min and max values can be stored
- Upper and lower adjustable alarm limits
- CE

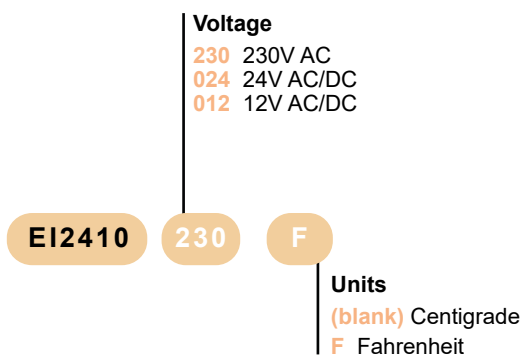


## Benefits and features - EI2041

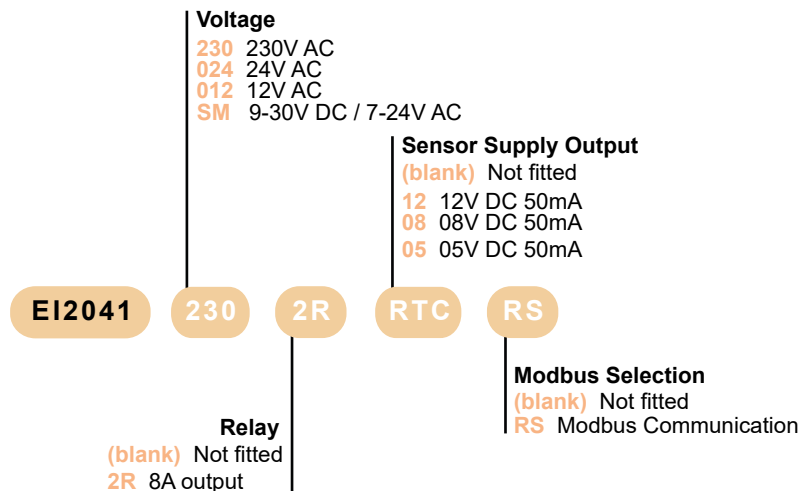
- 35 x 77 x 71mm format (HxWxD) (29 x 71mm cutout)
- Scale adjustable between -1999 and 4000
- Adjustable decimal point 0000, 000.0, 00.00 or 0.000
- Measurement unit display
- Four selectable input types (0-20mA, 4-20mA, 0-1V, 0-10V)
- Adjustable sampling time
- Min and max values can be stored on the display
- Two relay outputs for alarms and signals (optional)
- RS485 Modbus RTU communication protocol feature (optional)
- Selectable independent, deviation and band alarm
- Sensor supply output (optional)
- CE



## EI2410



## EI2041



[Back to contents page >>>](#)



# Limit Devices

## 6700+, 8700+ & 4700+ Limit Controllers

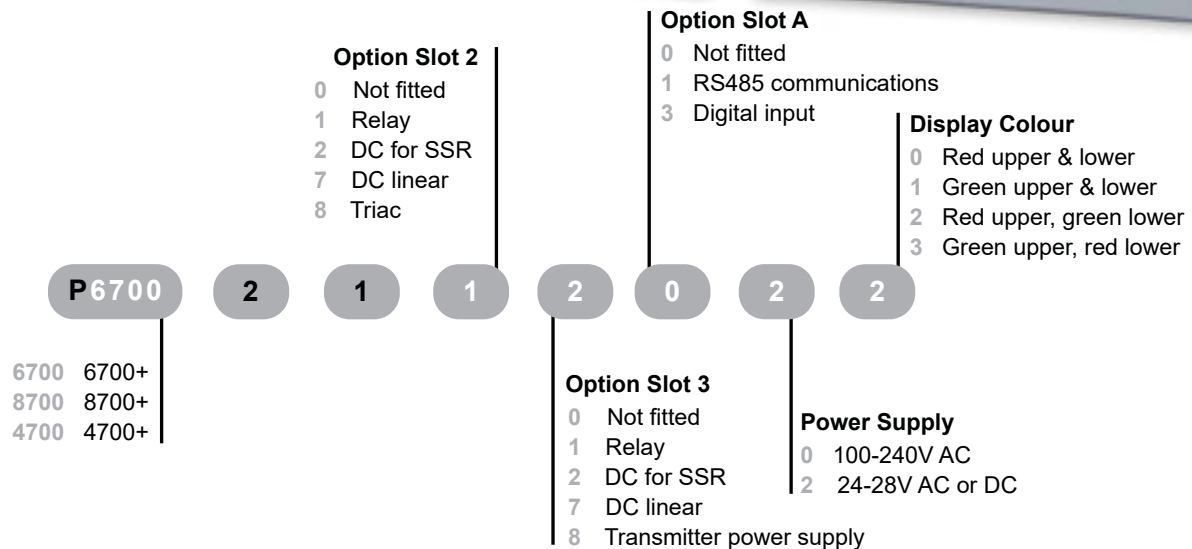
Limit controllers provide a latched relay output which is activated when process parameters either exceed or fall below the desired value, providing a fail safe cut-off which has to then be reset before the process can continue.

LED indication shows when limits have been exceeded and when the relay is latched out.

With a full range of universal sensor input options, the + series range provide a valuable safety control element for most systems.

### Benefits and features

- 1/16 DIN (48 x 48 x 110mm), 1/8 DIN (96 x 48 x 100mm) and 1/4 DIN (96 x 96 x 100mm) formats (HxWxD)
- Universal input for thermocouple, PT100, mV, V and mA sensors
- Modbus communications across the range (as well as West ASCII)
- Configuration via PC
- Up to three outputs
- Improved, easy-to-use HMI
- CE, UL, cUL, FM and CSA



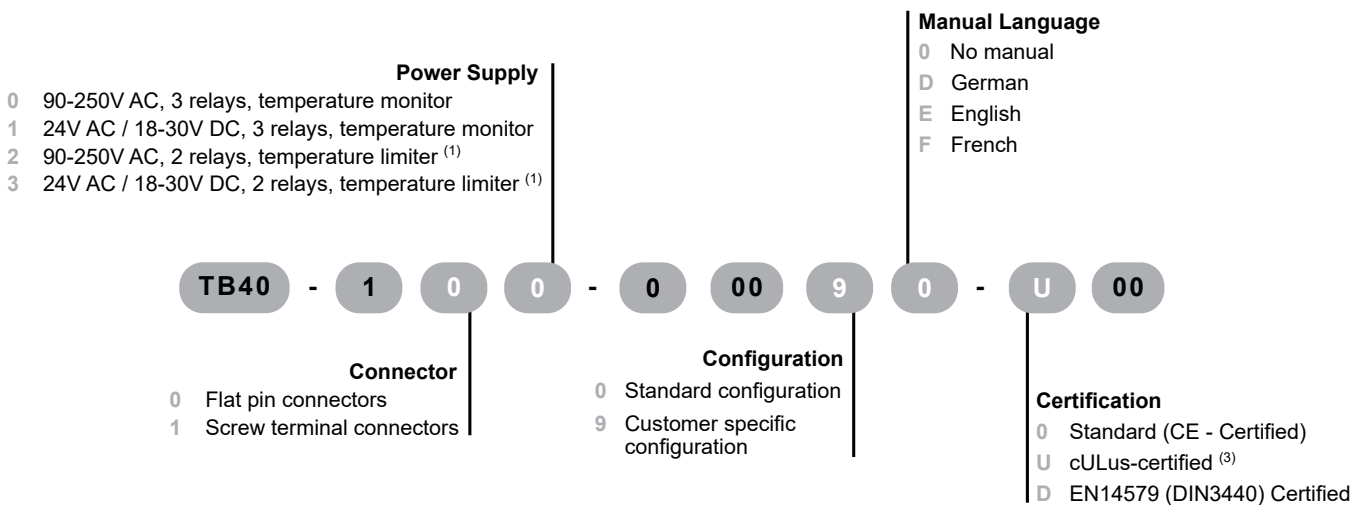
[Back to contents page >>>](#)

# TB 40-1 Temperature Limit Controller

The TB40-1 can be used to protect heating and refrigeration processes. It is suitable for all thermocouple types and resistance type sensors.

## Benefits and features

- 1/8 DIN (96 x 48 x 118mm) format (HxWxD)
- BluePort® front interface and BlueControl® software
- Maintenance manager and error list
- Alarm reset via RESET-key
- Alarm reset via digital input
- CE, UL, cUL and Type tested to EN 14597



(1) TB (EN14597, 2009-1), not available with cULus  
(3) With screw terminals only, not available as Temperature limiter TB (EN14597, 2009-1)

[Back to contents page >>>](#)

# Thermostats

## ET2001 & ET2011 Digital Thermostats

The CAL thermostat range is a complete family of small format devices for basic heating or cooling applications.

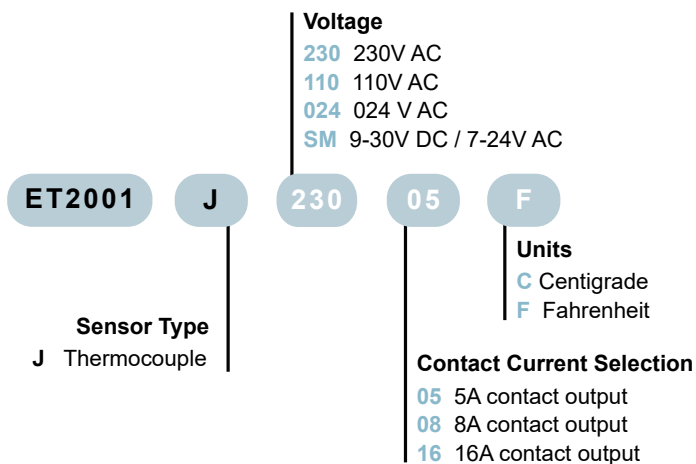
The ET thermostats are cost-effective thermostat devices for both industrial heating or cooling applications, two output version also includes alarm function.

### Benefits and features

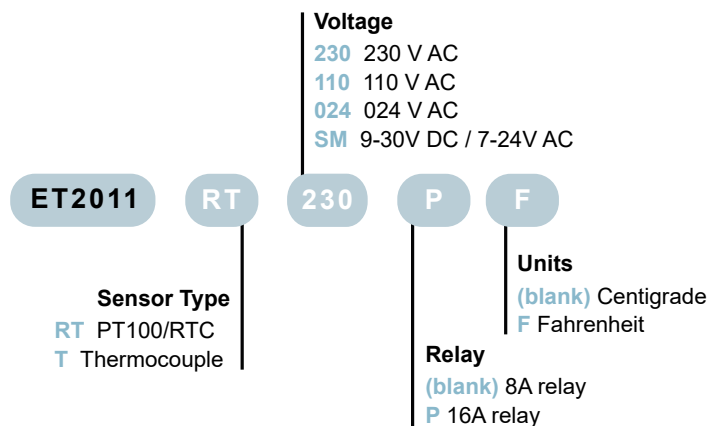
- 35 x 77 x 71mm format (HxWxD) (29 x 71mm cutout)
- Ideal for industrial applications with thermocouple or PT100 temperature sensors
- Range -200 to 1700°C (sensor type dependant)
- Heating or cooling control
- 1 or 2 outputs for control and alarms
- CE



### Single output - Relay



### Two output - Relay & SSR Drive



[Back to contents page >>>](#)

## ET2411 & ET2412 Digital Thermostats

The ET2411 and ET2412 are specifically designed for use with NTC sensors.

The units are easy to configure and use, have a large clear display for good visibility and a compact design that is fast to install.

### Benefits and features

- 35 x 77 x 71mm format (HxWxD) (29 x 71mm cutout)
- Ideal for industrial or commercial applications with NTC temperature sensors
- Range -0 to 150°C
- Heating or cooling control
- 1 or 2 outputs for control and alarms
- CE



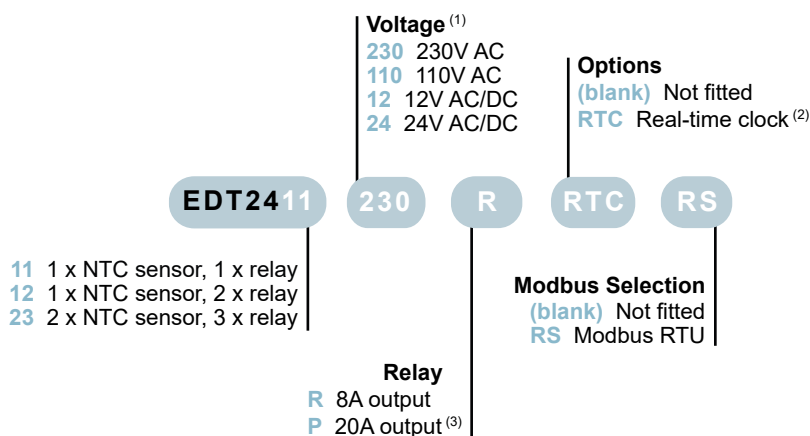
	<b>Voltage</b>			
	230	230V AC		
	110	110V AC		
	024	24V AC/DC		
	012	12V AC/DC		
<b>ET2411</b>	<b>230</b>	<b>05</b>	<b>F</b>	
11 1 x Relay			<b>Units</b>	
12 2 x Relay			(blank) Centigrade	
			F Fahrenheit	
		<b>Relay</b>		
		05 5A output		
		08 8A output		
		16 16A output		

[Back to contents page >>>](#)

The EDT defrost thermostats have additional features to ensure optimum control and performance of a refrigeration system such as compressor protection, defrost control, real-time clock, communications and fast CAL-Key memory programming.

## Benefits and features

- 35 x 77 x 71mm format (HxWxD) (29 x 71mm cutout)
- Compressor, defrost and fan control
- Up to two NTC inputs for main and defrost temperature measurement
- Manual, timed and evaporator temperature defrost modes supported
- CAL-Key for fast configuration
- Real-time clock option
- RS485 communications option
- CE



(1) 9-30V DC, 7-24V AC version is also available as an extra cost option

(2) only available with 8A relay devices

(3) not on EDT2423

[Back to contents page >>>](#)

In the same style as the thermostat range, a digital timer is available for associated monitoring and time-based control.

The ETM2432 is fully adjustable with nine timer modes and designed for easy integration within a control installation to fit the user's needs.

### Benefits and features

- 35 x 77 x 71mm format (HxWxD) (29 x 71mm cutout)
- Dual contact timed output
- External start, reset and hold digital inputs
- HH:MM or MM:SS
- Scale 0:01 to 99:59 minutes  
0:01 to 99:59 hours
- Adjustable increasing and decreasing steps
- Time remaining displayed
- Start/stop control from front panel
- Upper and lower adjustable timer limits
- Audible tones
- CE



#### Voltage

- 230 230V AC
- 24 24V AC/DC
- 12 12V AC/DC
- SM 9-30V DC / 7-24V AC

ETM2432

230

[Back to contents page >>>](#)

# Thyristors

## Relay S - 1PH, 2PH & 3PH Thyristors

Simple on/off firing with a DC logic input, time proportioned burst firing with a DC linear input (basic firing selectable between 4,8 or 16 cycles). These simple units can be connected with Relay PC to manage multi-zone system.

### Benefits and features

- Load type: normal resistance, infrared long and medium waveform
- Inputs: SSR Standard, 0:10V, 4:20mA and heater break alarm are options
- Firing mode: zero crossing, burst firing available with analogue input only
- Operating temperature: 0 to 40°C without derating
- Comply with EMC



<p><b>Current</b></p> <p>030 30A 035 35A 040 40A 060 60A 090 90A 120 120A 150 150A 180 180A 210 210A 280 280A 400 400A 500 500A 600 600A 700 700A</p>	<p><b>Input</b></p> <p>S SSR V 0:10V dc A 4:20 mA</p>	<p><b>Firing</b></p> <p>Z ZC Zero crossing <sup>(4)</sup> 4 Burst firing 4 cycles on at 50% power demand <sup>(5)</sup> 8 Burst firing 8 cycles on at 50% power demand <sup>(5)</sup> 6 Burst firing 6 cycles on at 50% power demand <sup>(5)</sup></p>	<p><b>Fan Voltage</b></p> <p>0 No fan &lt; 120A 1 No fan 110V &gt; 90A 2 No fan 220V &gt; 90A standard version</p>	<p><b>Approvals</b></p> <p>0 CE EMC for European market</p>	<p><b>Manual</b></p> <p>0 No manual 1 Italian 2 English 3 German 4 French</p>
<p><b>Model</b></p> <p>1 1PH 2 2PH 3 3PH</p>	<p><b>Max Voltage</b></p> <p>4 480V 6 600V 7 690V <sup>(1)</sup></p>	<p><b>Control Mode</b></p> <p>0 Open Loop</p>	<p><b>Fuse &amp; Option</b></p> <p>0 No Fuse for all units =&lt; 40A F Fuse + fuse holder Y Fuse + fuse holder + CT H Fuse + fuse holder + CT + HB X Fuse + fuse holder + CT + HB with flat cable connection F Fixed fuses std for all units &gt; 40A <sup>(6)</sup> Y Fixed fuses std + CT H Fixed fuses std + CT + HB</p>	<p><b>Version</b></p> <p>1 Std with one fuse only 2 Units with 2 fuses + fuse holder =&lt; 40A <sup>(7)</sup> E Units with 2 fuses + fuse holder + Safety relay + fuse =&lt; 40A <sup>(8)</sup></p>	
<p><b>Voltage Supply Aux.</b></p> <p>0 No aux. voltage without HB and/or analogue input up to 210A included 4 With HB and/or analogue input on all unit =&lt;210A aux volt 12:24V ac-dc <sup>(2)</sup></p>					
<p><b>RS1 030 4 1 V D 0 Y 0 0 2 1</b></p>					
<p><small>(1) Available on units &gt; 280A (2) For all units &gt; 210A with whichever options and inputs (3) Load voltage must be included in selected auxiliary voltage range for units &gt;210A (4) With 690V the firing is random (5) Available only with analogue input (6) Fixed fuses over 40A (7) If you need one relay S 1PH with 2 fuse &amp; fuse holder. For dimensions see relay S 2PH. This solution can be used up to 40A max (8) If you need one relay S 1PH with 2 fuse &amp; fuse holder + safety relay. For dimensions see relay S 2PH. This solution can be used up to 40A max</small></p>					

[Back to contents page >>>](#)

# Relay M - 1PH, 2PH & 3PH Thyristors

Time proportioned burst firing with a DC linear input, front panel display & RS485 comms as standard.

## Benefits and features

- Load type: normal resistance, infrared short, long and medium waveform, and silicon carbide
- Inputs: 0:10V dc, 4:20mA, 10kpot, SSR, RS485
- Firing mode: zero crossing, burst firing, single cycle, soft start + phase angle and delayed triggering
- Operating temperature: 0 to 40°C without derating
- Control mode: voltage, Vxl power, I and I2
- RS485 port. RTU Modbus protocol
- Comply with EMC



<p><b>Current</b></p> <p>035 35A 040 40A 060 60A 090 90A 120 120A 150 150A 180 180A 210 210A 280 280A 400 400A 500 500A 600 600A 700 700A</p>	<p><b>Input</b></p> <p>S SSR V 0:10V dc A 4:20 mA</p>	<p><b>Firing</b></p> <p>Z ZC Zero crossing C Single cycle SC B Burst firing BF J Soft start + burst firing S+BF D Delayed triggering + burst firing DT+BF P Phase angle PA E Soft start + phase angle S+PA</p>	<p><b>Fan Voltage</b></p> <p>0 No fan &lt; 120A 1 No fan 110V &gt; 90A 2 No fan 220V &gt; 90A Std version</p>	<p><b>Approvals</b></p> <p>0 CE EMC For European Market</p>	<p><b>Manual</b></p> <p>0 No manual 1 Italian 2 English 3 German 4 French</p>
<p><b>Model</b></p> <p>1 1PH 2 2PH 3 3PH</p>	<p><b>Max Voltage</b></p> <p>4 480V 6 600V 7 690V <sup>(1)</sup></p>	<p><b>Control Mode</b></p> <p>0 Open loop 1 Voltage feed back 2 Power feed back 3 Current feed back 4 Voltage to power feed back transfer</p>	<p><b>Fuse &amp; Option</b></p> <p>Y For units =&lt; 40A fuse + fuse holder + CT H Fuse + fuse holder + CT + HB with terminal Y For units &gt; 40A fixed fuse std + CT <sup>(4)</sup> H Fixed fuse std + CT + HB A Control mode retransmission 4:20mA V Control mode retransmission 0:10mV</p>	<p><b>Version</b></p> <p>1 Std with one fuse only 2 Units with 2 fuses + fuse holder =&lt; 40A <sup>(5)</sup> E Units with 2 fuses + fuse holder + Safety relay + Fuse =&lt; 40A <sup>(6)</sup></p>	
<p><b>RM1 035 4 1 V D 0 Y 0 0 2 1</b></p>					
<p><b>Voltage Supply Aux.</b></p> <p>1 90:130V <sup>(3)</sup> 2 170:265V <sup>(3)</sup> 3 230:345V <sup>(3)</sup> 5 300:530V <sup>(3)</sup> 6 510:690V <sup>(3)</sup> 7 600:760V <sup>(3)</sup></p>					
<p><sup>(1)</sup> Available on units &gt; 280A <sup>(2)</sup> For all Units &gt; 210A with whichever options and inputs <sup>(3)</sup> Load voltage must be included in selected auxiliary voltage range for units &gt;210A <sup>(4)</sup> Fixed fuses over 40A <sup>(5)</sup> If you need one relay S 1PH with 2 fuse &amp; fuse holder. For dimensions see relay S 2PH. This solution can be used up to 40A max <sup>(6)</sup> If you need one relay S 1PH with 2 fuse &amp; fuse holder + safety relay. For dimensions see relay S 2PH. This solution can be used up to 40A max</p>					

[Back to contents page >>>](#)



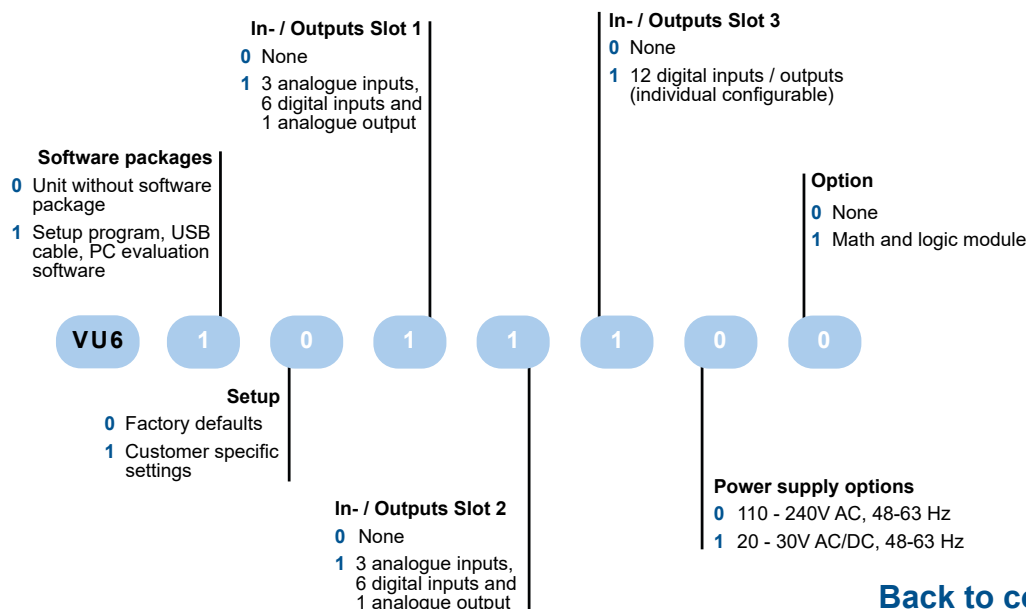
# Paperless Recorders

## DataVU 6 Paperless Recorder

The DataVU 6 paperless recorder features a resistive touchscreen and an intuitive, icon-based operation and visualisation concept that makes it very easy to use. There are different versions of the DataVU 6 available for process data recording. These range from the device version without measuring input in which up to 24 process values are read (master) or received (slave) from external systems via Modbus, through to a device version with six measuring inputs (universal analogue inputs), two analogue outputs, 12 digital inputs, and 12 individually switchable digital inputs/outputs. A version is available with FDA-compliant data recording to the requirements of 21CFR Part 11, more information available on request.

### Benefits and features

- 144 x 144 x 119 mm (H x Bx T)
- Intuitive touch operation
- Brilliant TFT touchscreen (640 × 480, 65536 colors)
- 1 GByte internal data memory
- Up to two analog outputs
- 24 external analog and digital channels via all interfaces (Modbus master/slave)
- Horizontal and vertical line graph
- Up to six customer-specific process screens
- Ethernet interface (standard)
- Integrated web server for online-visualization like at the device
- Batch report recording
- Batch control (start, stop, and texts) even via barcode scanner and interface
- Modbus master function (even with Modbus/TCP)



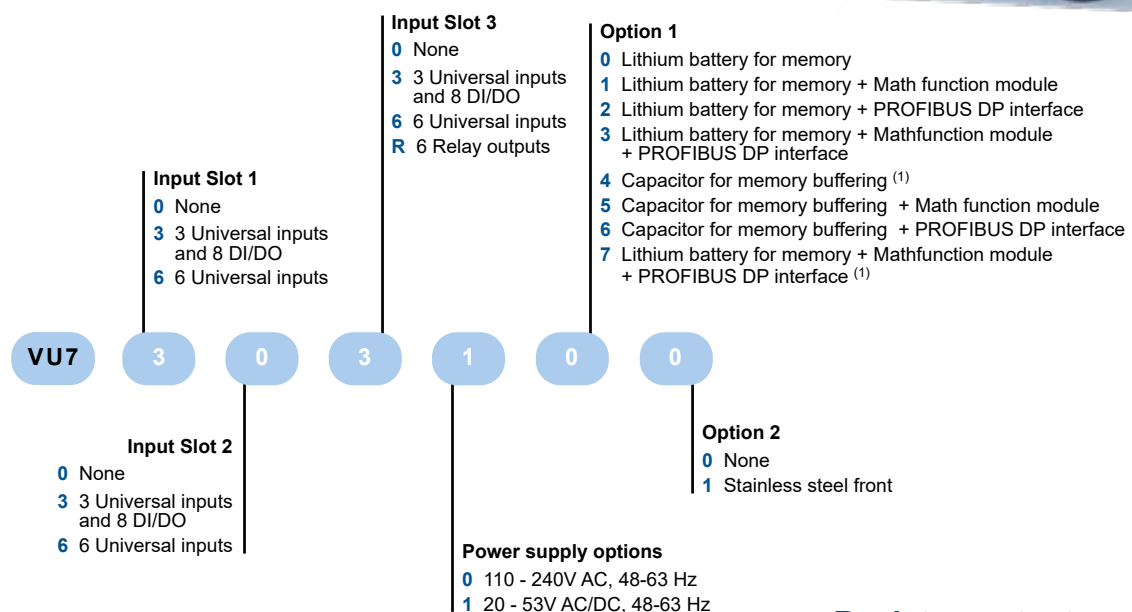
[Back to contents page >>>](#)

DataVU 7 provides advanced flexibility to meet a user's specific requirements without the need to change a process to fit the recorder. If process requirements are subject to change at a later date then the user benefits from the ease with which modifications can be made to the recorder configuration. The recorder is fully scalable - cards can be added to the recorder, facilitating future expansion.

Reporting can be tailored to provide the exact information needed. The DataVU 7 allows reports to be created for daily, weekly, monthly and yearly periods. Furthermore if particular data needs to be evaluated then reports can be created using a custom date range to provide maximum flexibility.

## Benefits and features

- 144 x 144 x 200mm format (HxWxD)
- Enhanced security through password protections, instrument can only be configured by authorised operating personnel
- Fully scalable so additional option cards can be added to the recorder at a later date facilitating future expansion
- PC Evaluation software provides option to run reports on data for a specific period (daily, weekly, monthly, annually and custom)
- Data can be annotated with individual comments via the recorder relating to process events
- Able to withstand humid conditions and meets standards for IP65 ingress protection
- Easy to clean, even with aggressive media
- DataVU 7 is a robust and durable recorder that is ideally suited to challenging and harsh environments



[Back to contents page >>>](#)



**Email:** [enquiries@west-cs.com](mailto:enquiries@west-cs.com)  
**Website:** [www.west-cs.co.uk](http://www.west-cs.co.uk)



**Telephone:** +44 (0)1273 606271  
**Fax:** +44 (0)1273 609990



**Address:** West Control Solutions  
The Hyde Business Park  
Brighton, East Sussex  
BN2 4JU  
United Kingdom