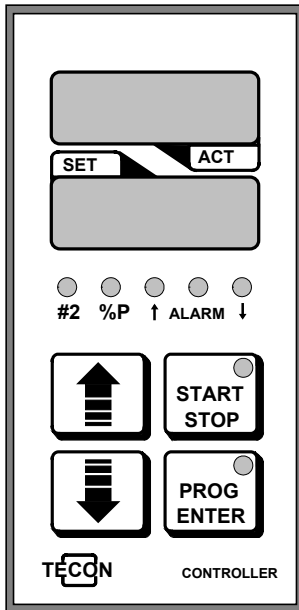


TECON 202 Programmable Controller



The three-term-PID controller TECON 202 is a member of a series of fixed setpoint, programmable and cascade controllers. With 2 sensor inputs, it is designed for sophisticated controlling tasks and is adjustable in large ranges.

With additional programmable in- and outputs and a serial interface it can be used in larger systems.

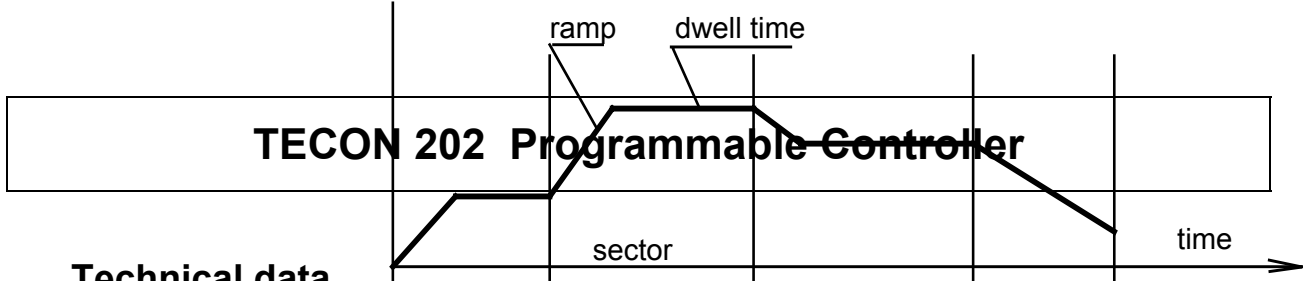
Nominal and actual value, power output and program position can be indicated by key with bright LED digits. The sensor inputs can be adjusted by key to different thermocouples, resistor temperature detectors and current signals. The device contains 2 controller outputs and an alarm relay. One temperature progress can be programmed and, if used with 2 controllers, a constant setpoint offset can be set. 16 program sectors are selectable by key.

The device is connected with plug-in screw terminals.

Connections:

digit. ground	1	N	16		mains
digit. output	2	L	17		230/115 V
digit. input	3	PE	18		50/60 Hz
analog. output 2	4		19		
analog. output 1	5		20		alarm
analog. input	6		21		
analog. ground	7		22		
current sensor 2	8		23		output 2
sensor 2 -	9		24		
sensor 2 +	10		25		
cold junction	11		26		output 1
compensation	12		27		
sensor 1 -	13		28		
sensor 1 +	14	-	29		serial
current sensor 1 ++	15	+	30		interface

Temperature program (4 of 16 sectors)



Technical data

Temperature sensors

Thermocouples

NiCr-Ni (K)

Fe-Co (J)

Pt10Rh-Pt (S)

Pt13Rh-Pt (R)

Nicrosil-Nisil (N)

Pt18Rh-Pt (B)

RTD

Pt 100

Pt 100 with Zener barrier 84 Ohm

Current

4- 20 mA

0- 20 mA

Temp. measurement

Accuracy :

Resolution :

Number of measurements per second

Actual value indication

Display :

Resolution :

Nominal value

Range:

Resolution:

Entry by keys or through analogue signal or via the serial interface

Limit values

analogue input:

High and low limit, deviation from nominal value. Sensor break turns off.

Control system

Output: Relay change-over contact

PID-controlling, 2 independent set of parameters

Proportional band

Lag time

Lead time

Relay interval time

Dead range between heating/cooling

Self adapting on keystroke while heating up.

Controller outputs

Number (available: relay, DC-signal or current)

Relay contact

DC-signal

current

Additional inputs

Analogue: set point

Digital

Additional outputs

2 Analogue outputs

Range

Resolution of the DA-converter

Accuracy

1 digital output

Temperature programs

Number of sectors

Ramp (gradient)

Dwell time

Serial interface

Type

Mains supply

alternately

Ambient temperature

Dimensions

Front frame

Controller exchangeable from the front, mounted in any position.

Mounting depth

Weight

Type of protection

Panel

Enclosure

Safety

EMC

Immunity

Emission

Measuring range:

-200 to 1200 °C

-200 to 750 °C

0 to 1600 °C

200 to 1600 °C

-200 to 1200 °C

200 to 1800 °C

-200 to 750 °C

-200 to 400 °C

-200 - 2000 °C

-200 - 2000 °C

0.3% of the range

32000 points

10

4 digits, LED 7.5mm height

0.1 or 1 °C

programmable

0.1 or 1 °C

1 or 10 mV/°C or 0/4 - 20 mA

230 V AC, 2 A

0 - 999 °C

0 - 9999 s

0 - 999 s

0 - 999 s

0 - 99.9 °C

2

230 V AC, max. 2 A

24 V, internal resistance 1 kOhm

0/4 to 20 mA

programmable, current or voltage

programmable function, 24 V, 8 mA

programmable, current or voltage

-2 to 10 V or 0/4 to 20 mA

8000 points

0.5 % of the range

function programmable, 24 V, 20 mA

16

0 - 999.9 °C/h

0 - 99 h 59 min or infinite

RS 485, 2-conductor

230/115 V, 50/60 Hz, 10 VA, 24 V DC

0 to 50 °C

48 x 96 mm, 5 mm high

125 mm

0.5 kg

IP 64

IP 20

EN 60065

pr EN 50 082-2

EN 50 081-1



subject to changes without notice

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