



# CRN TECNOPART, S.A.

Sant Roc 30  
 08340 VILASSAR DE MAR (Barcelona)  
 Tel 902 404 748 - 937 591 484 Fax 937 591 547  
 e-mail: [crn@crntp.com](mailto:crn@crntp.com) [http:// www.crntecnopart.com](http://www.crntecnopart.com)



## EW 4800 Series

The EW4800 controllers have flexibility as their first strongpoint. That is, the wide range of regulation functions implemented, power supplies supported and signals acquired by the EW4800 controllers make it possible for them to satisfy a vast range of applications. The EW4800 controllers are devices with 2 intervention points on 2 distinct outputs, both with ON/OFF action, direct and reverse logic PI and PID, with soft-start and autotuning functions and management of 8 different independent process profiles.



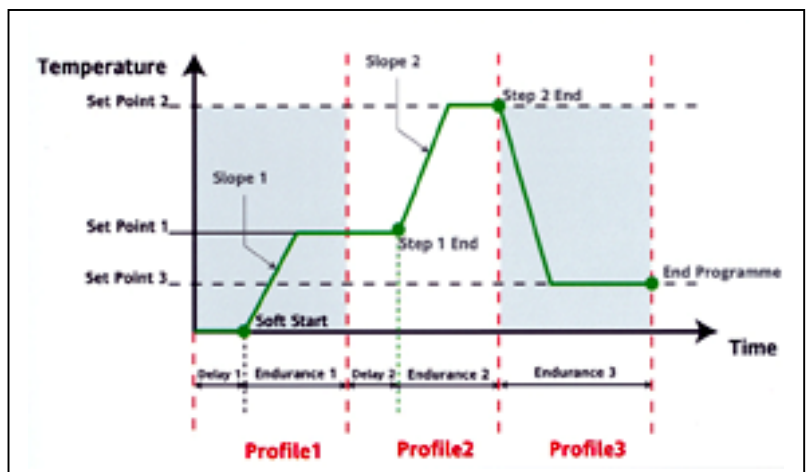
- The STEP function allows us to store two work programs consisting of up to 8 steps each. In this way we obtain a phased operation and higher reliability.
- SOFT START function to obtain from automatically a progressive increase setpoint starting from room temperature until you reach the setpoint value of regulated.
- Function PID with automatic tuning (Auto-tuning), as applicable to a relay, and a SSR output or to an output 4 ... 20mA
- 95...240 Vac or 12...24 Vac / 12...36 Vdc switching type power supply..
- The advantages of the EW4800 range include flexibility and precision in the acquisition of the analogue outputs, thanks to the two types of new generation conversion at 14 and 16 bits.
- A variety of probes, Pt100, NTC, Pt1000 - Tc (J, K, R, S, T) - -0 .. 0..20/4..20mA 1V / 0 .. 5V / 0 .. 10V), thus making their use for wide range of applications.
- \* The models EW4822 Integrated have serial RS-485 connection to the televis system or Modbus. Televis Wireless System allows control the main functions (eg. Start stop cycles, as well as the monitoring and recording temperatures and states, signaling alarms, scheduling parameters and function RVD (Remote Virtual Device)

The instrument is supplied without probe

MODEL	INPUT	OUTPUT	VOLTAGE
EW 4820 T	PTC, NTC, PT 100, PT 1000 TCJ, TCK, TCR, TCS, TCT	2 relay + TTL	95...240Vca or 12..24Vca 12..36Vcc
EW 4820 I / V	0..20mA 4..20mA 0..1V 0..5V 0..10V		
EW 4820 P	PTC, NTC, PT 100, PT 1000 TCJ, TCK, TCR, TCS, TCT	1 SSR + 1 relay + TTL	
EW 4821 Multiprobe	PTC, NTC, PT 100, PT 1000 TCJ, TCK, TCR, TCS, TCT	2 relay + TTL + 1output configurable	
EW 4821 I / V	0..20mA 4..20mA 0..1V 0..5V 0..10V	0..20 / 4..20mA 0..1 / 0..5 / 0..10V	
EW 4822 Multiprobe	PTC, NTC, PT 100, PT 1000 TCJ, TCK, TCR, TCS, TCT	2 relay + TTL + 1output configurable	
EW 4822 I / V output I	0..20mA 4..20mA 0..1V 0..5V 0..10V	0..20 / 4..20mA + RS 485	
EW 4822 I / V output V	0..20mA 4..20mA 0..1V 0..5V 0..10V	0..1 / 0..5 / 0..10V + RS 485	
Connector a BUS ADAPTER			

\* **Management of independent thermal profiles**  
 EW480 series allows you to use two independent custom programs to manage up to 8 thermal profiles each. These programs can be customized thermal cycles according to the value of the point of intervention, the cycle time and the delay for activation, so the device is suitable for demanding applications in the field of process controls.

Example of programme for the management of 3 independent thermal



## FEATURES

	EW 4820	EW 4821	EW 74822
Container	PC+ABS plastic resin body PC+ABS UL94 V-0		
Dimensions	front 48x48 mm, depth 113mm		
Mounting	and panel with drilling template 45x45mm		
Usage temperature	-5 °C...55 °C		
Storage temperature	-20 °C...85 °C		
Ambient humidity in use and in storage	10...90% RH (non-condensing)		
Display	Decimal point selectable by parameter Two 4-digit display + sign		
Analog input	1 input selectable by parameter H00 depending on the model (see the table of probes)		
Range	depending on the probe used (see table probes)		
Accuracy	depending on the probe used (see table probes)		
Resolution	depending on the probe used (see table probes)		
Digital input	1 digital input free of voltage		
Serial output	TTL for Copy Card connection to TelevisSystem and Modbus systems		TTL for Copy Card connection to TelevisSystem and Modbus systems  RS-485 internal connection TelevisSystem or Modbus systems
Digital output	1 SPDT 8(3)A 250Vac 1 SPST 8(3)A 250Vac	1 SPDT 8(3)A 250Vac 1 SPST 8(3)A 250Vac	1 SPDT 8(3)A 250Vac 1 SPST 8(3)A 250Vac
Analog output*	unavailable	0...1V, 0...5V, 0...10V 0...20mA, 4...20mA	0...1V, 0...5V, 0...10V <b>output V</b> 0...20mA, 4...20mA <b>output I</b>
Connections	screws strip conductors <2.5 mm <sup>2</sup> (one conductor per terminal according VDE).		
Consumption	3W max		
Power supply	12...24Vac±10% 50/60Hz /12...36Vdc 95...240Vac ±10% 50/60Hz		

# maximum loads controlled by the analog output

output type	maximum load
0-1 V	20mA with minimum load resistance 50 Ohm
0-5 V	20mA with minimum load resistance 250 Ohm
0-10 V	20mA with minimum load resistance 500 Ohm
0-20mA	350 Ohm
4-20mA	350 Ohm

## PROBES TABLE

Probe	Range	Probe error limits		Resolution	Accuracy
PTC	-55 to 155 °C	-60...155 °C		0,1 °C (0,1 °F)	0,5% end of scale + 1 dígit
NTC	-50 to 110 °C	-55...115 °C		0,1 °C (0,1 °F)	0,5% end of scale + 1 dígit
Pt 1000	-200 to 800 °C	-210...810 °C		0,2 °C	0,5% end of scale + 1 dígit
TCJ	-40 to 760 °C	-50...770 °C		0,6 °C (0,6 °F)	0,5% end of scale + 1 dígit
TCK	-40 to 1350 °C	-50...1360 °C		0,6 °C (0,6 °F)	0,5% end of scale + 1 dígit (over entire scale) 0,3% end of scale + 1 dígit (-40 a 800 °C)
TCS	0 to 1600 °C	-10...1610 °C		0,6 °C (0,6 °F)	
TCR	0 to 1600 °C	-10...1610 °C		0,6 °C (0,6 °F)	
TCT	-40 to 350 °C	-50...360 °C		0,6 °C (0,6 °F)	
Pt 100	-200 to 800 °C	-210...810 °C		0,1 °C (0,1 °F)	0,5% end of scale + 1 dígit (over entire scale) 0,2% end of scale + 1 dígit (-150...300 °C)
V - I	-1999 to 9999	0...1V 0...5V 0...10V 0...20mA 4...20mA	-1...10% -0,20...10% -0,10...3% 0,05...5% -6,25...6,25%	1 dígit if ndt=0 0,1 dígit if ndt=1 0,01 dígit if ndt=2 0,001 dígit if ndt=3	0,5% end of scale + 1 dígit