



Process Controller CL400

- Field configurable input. (TC, pt100, 4... 20 mA, Volts.)
- Optional Isolated 4... 20mA, 0... 10v outputs
- Optional RS485 Communications
- Simple operation by means of alphanumeric menus.
- Universal switching power supply, 85... 275 VAC.
- Service and 5 years guarantee.



Replaced by CL20

www.arian.cl/ingles/controllers.htm

General Description

Designed to be completely field configured, the plant engineer selects: input type, control algorithms, alarms, output type, action to take in case of thermocouple rupture and the readings to be given by the instrument. Its versatility allows CL400 controller to satisfy a lot of applications, diminishing the number of different instruments in the plant.

Inputs

It can be configured for thermocouples, PT100 or standard 4... 20mA and 0..10 Volts inputs with adjustable limits. A/D conversion is 16 bit resolution.

Outputs

Has 2 control outputs (relays or voltage for SSR). The first control normally for heating, the second for cooling or alarm according to its configuration. Optional analog 4... 20mA and 0... 10v (isolated galvanically) output repeats a selected parameter like the process variable, Set point, output percentage, etc.

Control

The CL400 configuration menu allows the plant engineer to select the input, control algorithms, alarms and output type. Available control algorithms are PID (with PWM or analog output) , several ON/OFF configurations and alarms.

Allows to preset a set point ramp to facilitate the start up of some systems. Whenever Set point is changed, it will not vary instantaneously, it will go to its new value with the speed prefixed in degrees/minute. In similar form, when activating the instrument, the initial Set point will take the value from the first measured temperature, and will be changing gradually according to the ramp, until its prefixed final value.

Also is possible the operation in open loop by means of the "Manual" mode. In this case the outputs are governed directly from the frontal keyboard. This option is useful for the starting of systems until they acquire his operation conditions.

The parameters menu is destined to the machine operator, contains according to the preprogrammed configuration, the variables that the operator can alter or handle. If it is desired, the access to this menu can be restricted.

Digital Communication

It has optional RS485 serial communications that allows to connect in network up to 32 instruments reporting to a PC computer or simply to send to a printer periodically.

Also it is possible to connect with PLC's by means of a BASIC module or other that can maintain the communication protocol in a serial port.

Power supply

The instrument has a current mode switching power supply that allows an ample rank of input voltages. Simultaneously makes the instrument extremely resistant to spikes and fluctuations of voltage network.

Technical Specifications.

Input	TC rupture protection:	It makes prefixed action and warning.
	Thermocouples (100 ohm max.):	J (-59, 760) °C
	Degrees Celcius or Farenheit	K (-103, 1372) °C
		T (-86, 400) °C
		R (0, 1768) °C
		S (0, 1768) °C
		B (0, 1820) °C
RTD:	PT100 (-136, 450) °C	
Adjustable:	4... 20 mA, 0... 20 mA, 0... 5 V, 1...5 V, 0...10 V, 0...50 mV	
Control	Control 1:	P, PID, On/Off, 2On/Off, Limit contact (Lict), Limit comparator(LcP), dual PID and manual mode operation.
	Control 2:	dOn/Off, On/Off, 2On/Off, alarm modes : dLcP, Lict, Lcp.
	Set point:	allows a Set point ramp.
Outputs	2 controls:	relays 250VAC/3A. or output of voltage for SSR.
	Communications: (optional).	RS485, Connection to PC, printer or PLC.
	Analogous: (optional).	0... 20mA, 4... 20mA, 0... 10 V Galvanically Isolated.
Power Supply	Switching, current mode.	
	Ac :	85... 275 Vac, 7 W, 45... 65 Hertz.
	Dc Option :	20... 50 Vdc, 7 W.
Construction	Aluminum and Polycarbonate	IP65
	Total Dimensions:	DIN 1/8; 96 x 48 x 175 mm.
	Panel cut:	92 x 45 mm.
	Weight:	300 grams.

Operation temperature:

0... 50 °C.

PART CODES:

Model:

CL400

Basic controller.

Opcionals:

- 420
- 485
- DC

isolated 4..20mA and 0..10V output
RS485 serial communications.
20.. 60 Vdc power supply.

FOR MORE INFORMATION:

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