

Enhanced
Version of
Clavex



What is New

- 8 LEDs for Status Indications
- Digital Inputs for Low Water Level Detection & Remote Cycle Start Command
- No Jumper Settings for Input / Output Configuration
- RS485 Serial Port (MODBUS RTU) as Standard
- Plug-in Terminals for Easy Installation
- Reduced Enclosure Depth (94 mm with Terminals)

Features

- RTD Pt100 Input with Settable Resolution (0.1 °C / 1 °C)
- Programmable Input Signal Conditioning (Digital Filter & Zero Offset)
- Programmable Sterilization Timer with Guaranteed Soak Time
- High Temperature Safety Alarm
- Automatic Cycle Abortion at High Temperature Limit
- Computed Saturated Steam Pressure Display
- Independent Air Purging and Sterilization Set-points
- Independent Outputs for Steam Control & Air Outlet Valve
- Front / Remote Sterilization Cycle Start Command
- Universal Supply Voltage : 85~264 VAC, 50/60 Hz
- DIN Standard Dimensions (mm) : 48(H) X 48(W) X 94(D)

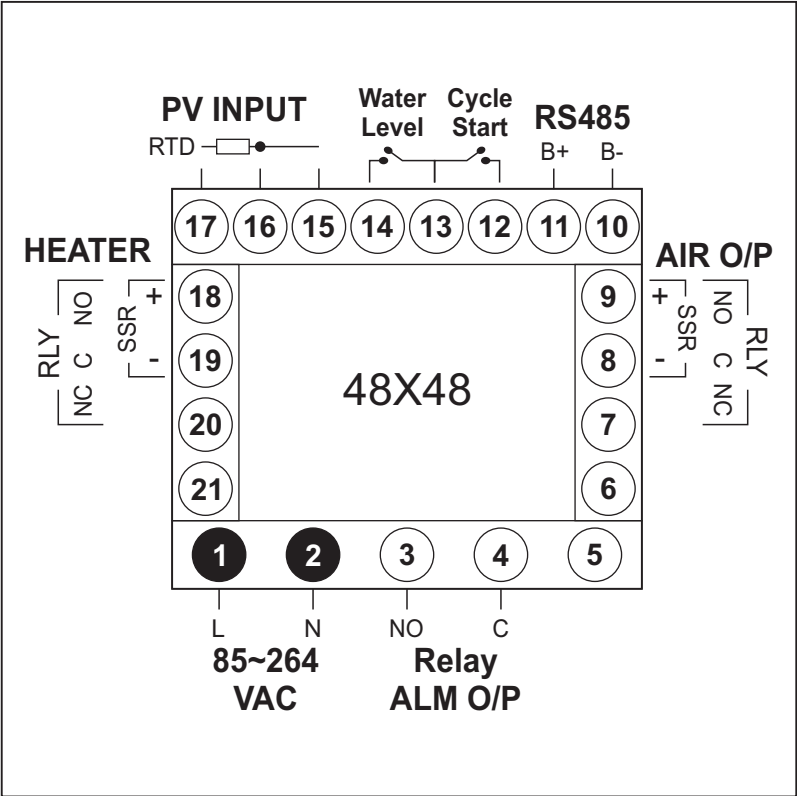
Specifications

Display	
Digital Readouts	2 Rows of 4 digits, 0.36" Bright Green LED, 7 Segment
Status Indicators	8 Red LEDs
Keys	
Type	4 Tactile Push-button Switches
Functions	PAGE, DOWN, UP, ENTER
Sensor / Signal Input	
Type	RTD Pt100, 3 wire
Accuracy	± 0.25% of reading ± 1 LSD
Display Range	-199 to +600°C or -199.9 to 600.0°C
Display Resolution	0.1 / 1°C (Settable)
Zero Offset	User Adjustable over Full Range
ADC	16 Bit (±32,768 Counts), Sigma-Delta (ΣΔ)
Sampling Time	200mS (5 Samples per Second)

Input Resistance	> 8 MΩ
Common Mode Rejection	> 100dB at 50/60 Hz
Signal Conditioning	First Order Analog R-C Low-Pass Filter with Settable Digital Low-Pass Filter
Input Protection	ESD : 8KV EFT : 2KV Surge : 1KV
Sterilization Timer	
Operation Mode	Soak Time at Sterilization Setpoint with Hold Band
Range	1 to 999 Minutes
Power-fail Recovery	Settable : Resume / Reset / Abort
Sterilization Control	
Type	ON-OFF
Mode	Heat Control
Control Parameters	Sterilization Setpoint, Hysteresis
Output	Relay or SSR (Factory Settable)
Air Purging Control	
Control Type	ON-OFF
Control Parameters	Air Outlet Setpoint
Output	Relay or SSR (Factory Settable)
Water Level Monitoring	
Input	Digital Potential-free Contacts Input with programmable OPEN or CLOSE Logic.
Function	Alarm Alert, Cycle Abort & Control Outputs Cut-off on Low Water Level Detection
Input Protection	ESD : 8KV EFT : 2KV Surge : 1KV
Alarms	
Functions	High Temperature Deviation, End-of-Sterilization, Low Water Level
Output	Relay Change-over Contacts
Outputs	
Relay	Contact Type : Potential-free Change-over Contacts Contact Rating : 5A Resistive @ 250 VAC Contact Life : > 5,00,000 Operations at Rated Voltage / Current
SSR Drive	12 VDC @ 30 mA
Serial Communication	
Port	RS485, 2-wire, Half Duplex, Start-Stop Synchronized
Protocol	MODBUS RTU
ID	Settable : 1 to 127
Baud Rate	Settable : 4800, 9600, 19200
Parity	Settable : None, Even, Odd
Max. Distance	1200 Metres

Power Supply	
Type	Switch Mode (SMPS)
Line Voltage	85~264VAC, 50/60Hz
Consumption	7VA Max
Physical	
Mounting	Plug-in with Panel Mounting Clamps
Overall Dimensions	48(H) X 48(W) X 94(D), mm
Panel Cutout	45(H) X 45(W), mm
Terminals	Screw Type, Plug-in Male / Female
Weight	200 gm, max
Environmental	
Operating Ambient	0~55°C & 5~90%RH Non-condensing
Storage Temperature	-10 to +70 °C
EMC Standards	EN50081-2 & EN 50082-2 Generic Stds for Industrial Environment
Safety Standards	Meets EN61010, Installation Catagory II
Atmospheres	Not Suitable for use in Corrosive or Explosive Atmospheres. The Panel in which the Instrument is Mounted must be free of Electrically Conductive Pollution.

Back Panel Terminations



Ordering Code

Model		Heater Output		Air Valve Output		Alarm Output	
CP	Clavex Pro	1	Relay	1	Relay (Std)	1	Relay (Std)
		2	SSR (Std)	2	SSR		

Std : Supplied as Standard

Example Code CP - 2 - 1 - 1
Heater Output SSR, Air Valve Output Relay, Alarm Output Relay