

USER'S OPERATING MANUAL FOR AUTOCLAVE CONTROLLER

(Models: VAC-44)



VAC-44

(48 X 48)

SPECIFICATIONS : -

1. DISPLAY TYPE

: 8 - Digit 7 segment LED

Model no.	VAC-44	Color
Display height (PV)	0.39"	White
Display height (SV)	0.24"	Green

2. STATUS LED'S

Status

HTR : Heater Control Output

P/E : Purge / Exhaust Output Status

EOC : End Of Cycle Status

ST : Soak Timer Running Status

SP : Set Point Status

PR : Pressure Status

3. INPUT

Sensor input

: RTD Pt-100

Resolution

: $\pm 0.1^{\circ}\text{C}$

Accuracy

: $\pm 0.3^{\circ}\text{C}$

Sampling Time

: 125 msec.

LWC for Pt-100

: Built in up to 18E max.

Digital Filter

: 1 to 10 Sec.

4. RELAY OUTPUT

Contact type

: N/O, COM

Contact Rating

: 5A @ 250VAC or 30 VDC

Life expectancy

: > 5,00,000 operations

Isolation

: Inherent

5. SSR DRIVE OUTPUT

Drive Capacity

: 12V @ 30mA.

Isolation

: Non-Isolated.

6. FUNCTION

Output 1

: Heater output (Factory Set)

1) Relay

2) SSR

Output 2

: Purge / Exhaust (Factory Set)

1) Relay

2) SSR

Output 3

: End Of Cycle Output (Factory Set)

1) Relay

2) SSR

Control Action

: ON-OFF/PID (Select)

7. ENVIRONMENTAL

Operating Range

: $0 \sim 50^{\circ}\text{C}$, 5~90% Rh

Storage Humidity

: 95% Rh (Non-condensing)

8. POWER SUPPLY

Supply Voltage

: 90~270VAC, 50/60Hz.

Consumption

: 4W Maximum.

9. PHYSICAL

Housing

: ABS Plastic

INSTALLATION GUIDELINES

1. Prepare the cut-out with proper dimension as shown in figure.
2. Remove clamp from Controller.
3. Push the Timer through panel cut-out and secure the Controller in its place by tightening the side clamp.

SAFETY INSTRUCTION

MECHANICAL

❖ Ambient temperature and relative humidity surrounding the Controller must not exceed the maximum specified limits.

❖ The Controller in its installed state must be protected against excessive electrostatic or electromagnetic interferences.

ELECTRICAL

❖ The Controller must be wired as per wiring diagram & it must comply with local electrical regulation.

❖ The Electrical noise generated by switching inductive loads might create momentary Fluctuation in display, latch up, data loss or permanent damage to the instrument. To reduce this use snubber circuit across the load.

PROGRAMMING



Press and Hold SET & UP Key
Simultaneously for 3 Sec.

Press and Hold SET & DOWN Key
Simultaneously for 3 Sec.

Press & Hold Shift Key
for 3 Sec. in Run Mode

Press SET Key Once in Run Mode

Configuration

Display	Default	Parameter Name	Range
LOCK	15	Lock Code	1 ~ 9999
HSPL	135.0	Higher Setpoint Limit	0.0 ~ 150.0
PwOF	0.0	Process Value Offset	-25.0 ~ 25.0
FLt.1	4	Input Filter	1 ~ 10
Unit	PSI	Unit For Pressure	PSI, KGCM
tunE	Enbl	Auto Tune	Enable, Disable
SP	Enbl	Control Setpoint	Enable, Disable
RsSP	Enbl	Heater Setpoint	Enable, Disable
ExSP	Enbl	Exhaust Setpoint	Enable, Disable
CEsP	Enbl	Cycle End Setpoint	Enable, Disable
ALsP	Enbl	High Alarm Deviation Setpoint	Enable, Disable
SFsP	Enbl	Fail Safe Deviation Setpoint	Enable, Disable
duid	1	Device ID	1 ~ 255
9600	9600	Baud Rate	9600, 1920, 3125, 3840, 7680
o_81	o_81	Parity	n_81, n_82, o_81, o_82, E_81, E_82
LdSP	t0GL	Lower Display Message	Toggle, Timer, SP, PR, Auto, IP2
ULOC	15	User Lock Code	1 ~ 9999

Control List

Display	Default	Parameter Name	Range
LOCK	15	Lock Code	1 ~ 9999
Pb	5.0	Proportional Band	0.0 ~ 99.9 °C
Int	240	Integral Time	0 ~ 3600 Sec.
dt	60	Derivative Time	0 ~ 300 Sec.
CYcE	16.0	Cycle Time	1.0 ~ 100.0 Sec.
CHYS	0.2	Control Hysteresis	0.1 ~ 10.0
AHYS	0.2	Air Hysteresis	0.1 ~ 9.9
HOld	nOnE	Hold Back Strategy	None, Up, Down Both
Hbnd	0.1	Hold Band	0.1 ~ 5.0 Sec
StdL	0	Soak Time Delay	0 ~ 99 Sec
PrFL	Abrt	Power Fail Recovery Method	Abrt, Start, Count

User List

Display	Default	Parameter Name	Range
SP	0.0	Control Setpoint	LSPL ~ HSPL
SOPE	20	Soak Time	1 ~ 999 Min
RsSP	0.0	Air Setpoint	0 ~ SP
ExSP	0.0	Exhaust Setpoint	0 ~ HSPL
CEsP	0.0	Cycle End Setpoint	0 ~ SP
ALsP	0.1	High Alarm Deviation Setpoint	0.1 ~ 10.0
SFsP	0.3	Fail Safe Deviation Setpoint	0.3 ~ 20.0

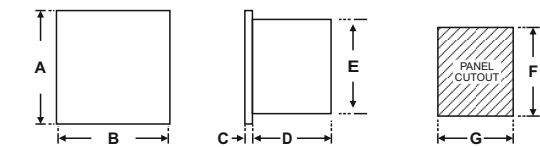
Auto Tunning Mode

Display	Default	Parameter Name	Range
tunE	n0	Auto Tunning Mode	Yes, No

Parameter will display according to below symbols

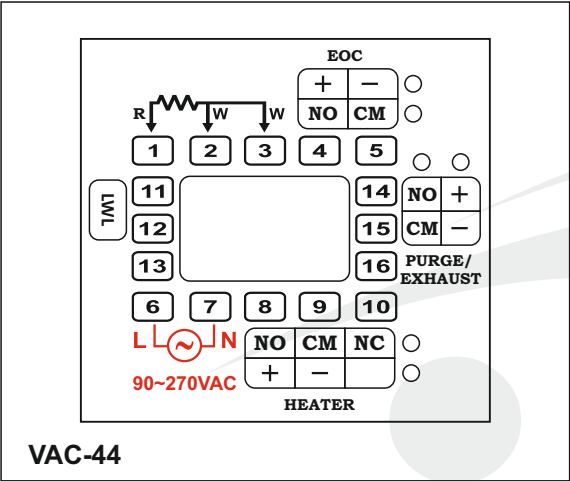
⚙	PB > 0
▲	PB = 0
➤	Factory Set RS-485 Given
◆	Hold Back = Up, Down, Both

OVER ALL DIMENSIONS & PANEL CUT OUT (IN MM)



Dim Model	A	B	C	D	E	F	G	H
VAC-44	48	48	8	75	43	44	44	9

TERMINAL CONNECTIONS :



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