



# VT20 Fuzzy PID Controller

## VT30 Programmable Controller

### Feature:

- T/C, RTD, Linear Input selectable,
- Fuzzy enhanced PID Control.
- Auto / Manual Bumpless Transfer,
- Universal Power supply : 90-264V AC, 50/60Hz.  
DC / AC 24V is also available for option,
- 2 Alarm output.
- Standby and Latch mode can be combined with 6 different alarm function.
- Even Alarm.( VT30)
- Two 8-segment (Ramp & Soak) profiles, ( VT30)
- Output 2 for cooling control. (Option)
- Retransmission or RS-485 communication(MODBUS RTU) is available for option.
- 4~20mA remote set point input.

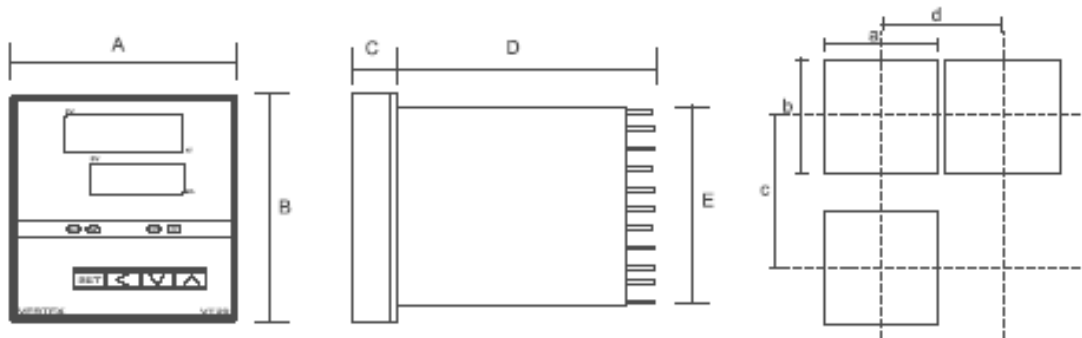


Specifications	
<b>Input</b>	Thermocouple: J, K, T, E, B, R, S, N, C RTD: DIN PT-100; JIS PT-100 Linear: 4~20mA; 0~50mV; 1~5V; 0~10V...
<b>Accuracy</b>	T/C±1°C; RTD±0.2°C; Linear±3mV
<b>Sampling Time</b>	0.5 sec.
<b>Control</b>	Proportional Band: 0.0~300.0% F.S Integral Time: 0~3600 sec. Derivative Time : 0~900 sec. Hysteresis: 0.0~200.0 or 0~2000 Cycle Time: 0~100 sec.
<b>Output Cycle Time</b>	Relay 15 sec. Pulsed Voltage to Drive SSR: 1sec. Continuous Current (Voltage): 0 sec.
<b>Output</b>	Relay Contact Output: 10A/ 240 VAC (Resistive load) Pulsed Voltage Output to Drive SSR: DC 0/24V (Resistive 250Ω min.) Current Output: 4~20mA (Resistive 600Ω max.) Continuous Voltage Output: 0~50mV; 1~5V; 0~10V.... (Resistive 600Ω min.)
<b>General</b>	Rated Voltage: AC 90~264V 50 / 60Hz; DC 24V Ambient Temperature: 0~50°C Ambient Humidity: 0~90 % Consumption: Less than 5VA

Input		
Type	Temperature	Range
J	-50°C ~ 1000°C	-58°F~ 1832°F
K	-50°C ~ 1370°C	-58°F~ 2498°F
T	-270°C ~ 400°C	-454°F~ 752°F
E	-50°C ~ 1000°C	-58°F~ 1832°F
B	0°C ~ 1800°C	32°F~ 3272°F
R	-50°C ~ 1750°C	-58°F~ 3182°F
S	-50°C ~ 1750°C	-58°F~ 3182°F
N	-50°C ~ 1300°C	-58°F~ 2372°F
C	-50°C ~ 1800°C	-58°F~ 3272°F
DPT	-200°C ~ 850°C	-328°F~ 1652°F
JPT	-200°C ~ 600°C	-328°F~ 1112°F
LINE		-1999 ~ 9999

Alarm Modes	
Process High Alarm	Process Low Alarm
Deviation High Alarm	Deviation Low Alarm
Band High Alarm	Band Low Alarm
Time Signal Output (VT30)	

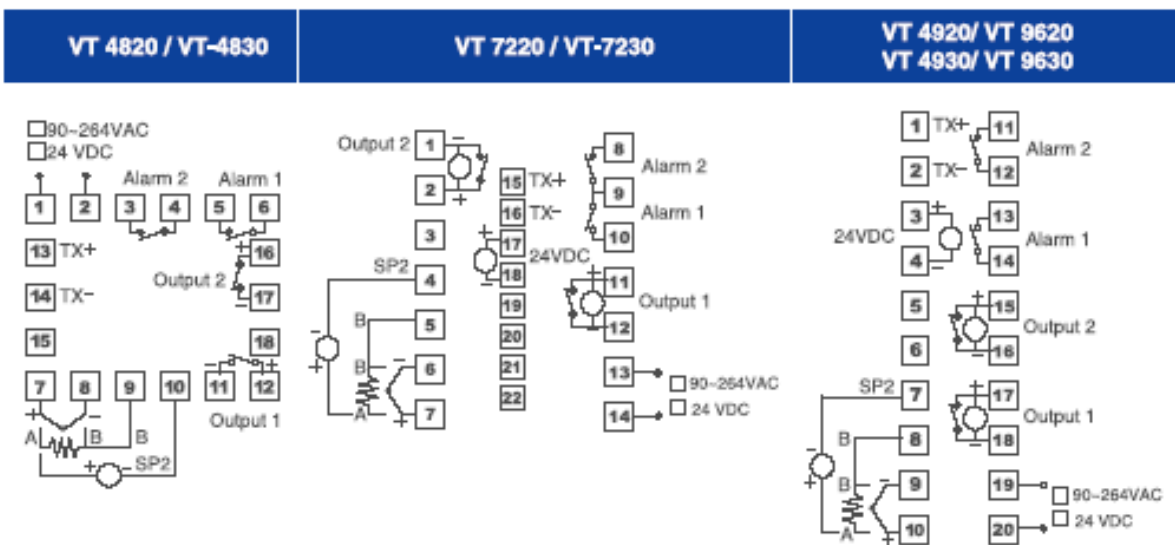
## Dimension



(Unit: mm)

PANEL CUTOUT :	Model	A	B	C	D	E	a	b	c	d
	VT-4820(30)	48	48	6	100	45	45 <sup>+0.5</sup>	45 <sup>+0.5</sup>	60	48
	VT-4920(30)	48	96	9	80	91	45 <sup>+0.5</sup>	92 <sup>+0.5</sup>	120	48
	VT-7220(30)	72	72	9	80	67	68 <sup>+0.5</sup>	68 <sup>+0.5</sup>	90	72
	VT-9620(30)	96	96	10	80	91	92 <sup>+0.5</sup>	92 <sup>+0.5</sup>	120	96

## Wiring Diagram



## Ordering Information

VT	□	□	□	□	□	□	□	□	□	□	□	□		
	Size	Code	Series	Code	Input	Code	Output 1	Code	Output 2	Code	Selection	Code	Power Supply	Code
	48mmx48mm	48	VT20	20	T/C	T	(Heating)		None	N	None	N	AC 90-264V	A
	72mmx72mm	72	VT30	30	RTD	D	Relay	R	Relay	R	RS-485	C	50/60 Hz	
	48mmx96mm	49			Linear	L	SSR	P	SSR	P	Retransmission	R	DC 24V	D
	96mmx96mm	96					4-20mA DC	M	4-20mA DC	M	Remote Set			
							Continuous Voltage	V	Continuous Voltage	V	Setpoint (SP2)	P		
											Master	M		
											Slaver	S		