



Features:

- Dual display, 4 digits, 7 segments LED display
- TC / RTD input, analog universal input
- PID, PID Autotune, ON-OFF, time proportional
- Auto/manual control bumpless transfer
- 0.2% F.S measuring accuracy
- Bar graphic display indication
- °C/°F display selectable
- Alarm standby function
- Soft-start function for analog output
- Optional features
 - Remote setpoint
 - Motorized valve control
 - RS485 Modbus RTU Communication
 - Master/Slave communication
 - PV/SV Re-transmission
 - AUX power
 - Preheating function
 - Multi group of setting point

Technical Specifications

Ordering Information

FT100 without Auto/manual switch key
FT101 with auto/maual switch key

FT100 (48mm*48mm)(Width*Height)	1	2	3	*4	5	6	7
FT101 (48mm*48mm)(Width*Height)							
FT400 (48mm*96mm)(Width*Height)							
FT500 (96mm*48mm)(Width*Height)							
FT700 (72mm*72mm)(Width*Height)							
FT900 (96mm*96mm)(Width*Height)							

1: Main output

R	Relay output
V	SSR Drive/Voltage pulse output
D	4-20mA output
T	Single phase TRIAC zero-crossing trigger
H	Single phase SCR zero-crossing trigger
K	Three phase TRIAC zero-crossing trigger
L	Three phase SCR zero-crossing trigger
C	Three phase SCR phase angled trigger

2: Number of Alarms

1	1 alarm
2	2 alarms
3	3 alarms

3: Power Source

96	85~265Vac 50/60HZ
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4: Process Value or Setting value Re-transmission output

N	Without Re-transmission
P42	PV Re-transmitted as 4-20mA
P010	PV Re-transmitted as 0-10Vdc
S42	SV Re-transmitted as 4-20mA
P010	SV Re-transmitted as 0-10Vdc

5: Communication

N	Without Communicaiton
K	With Modbus RTU RS-485 communication

6: Remote SV or Position Feedback

N	Without Remote SV or Position Feedback
A	Remote SV(4-20mA)
B	Remote SV(0-20mA)
C	Remote SV(0-10mA)
D	Remote SV(0-5Vdc)
E	Remote SV(0-10Vdc)
F	Remote SV(1-5Vdc)
G	Remote SV(2-10Vdc)
R	3 wire potentiometer position feedback

7: Auxiliary Power Supply

N	Without auxiliary power
24	24VDC Auxiliary Power Supply

Example: FT100-R-1-96-NNNN(FT100, size 48mm*48mm, Relay output, 1 alarm ,85~265Vac source, no additional features)

Display

Digits	4 digits 7 segments LED, Dual display
LED Indicators	OP1, OP2, AT, AL1, AL2, AL3, MAN, COM, PRG

Input Specifications

Inputs	Thermocouple(K, J, R, S, B, T, E, N, Wu3_Re25) RTD(PT100) DC Analog Inputs(2-10Vdc, 1-5Vdc, 4-20mA) (0-10Vdc, 0-5Vdc, 0-20mA) (0-50mV, 0-20mV)
Sampling time	500ms
Input Filter(FTC)	0 to 66(1-30 normal, 31-60 enhanced)
Resolution	1/0.1° for TC/RTD only Decimal point position selectable: 1/0.1/0.01/0.001 for analog input
Temperature Unit	°C/°F Selectable
Indication Accracy	For TC inputs: 0.2% of F.S. ± 1° For R & S type TC inputs: 0.5% of F.S. ± 2° (20 min of warm up time for TC inputs) For RTD inputs: 0.2% of F.S. ± 1° For Analog input: ± 0.5%. ± 1 digit (F.S.=Full Scale)

Output Specifications

Main Control Output	1 main output, heating or cooling selectable
Contact Rating(SPST)	5A @ 250Vac Resistive Load(Main Output) 3A @ 250Vac Resistive Load(Alarm output)
Current	0/4 to 20mA DC(loop impedance: 500Ω max.)
SSR Drive	12V DC(20mA)
Retransmission	
Current	4 to 20mA DC(loop impedance: 500Ω max.)
Voltage	0 to 10Vdc(Load resistance: 10KΩ Min)

Supply Voltage

Supply Voltage	85~265Vac 50/60HZ
Power Consumption	6VA max @230Vac

Environmental Specifications

Temperature	Operating: 0 to 50°C(32 to 122°F) Storage: -20 to 75°C(-4 to 167°F)
Humidity(non-condensing)	95%RH
Weight	0.17kg
Protection	Dust proof for front plate

