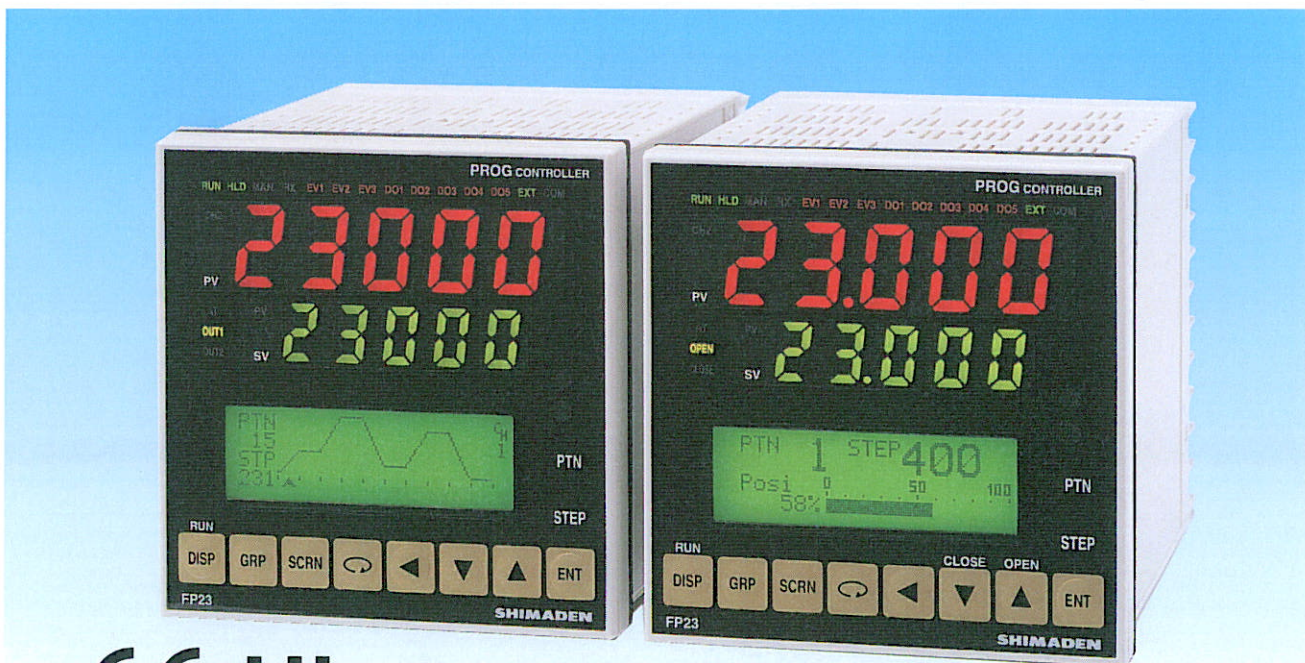


°C	<b>Series FP23</b>
%RH	
<b>SHIMADEN</b>	

# PROGRAMMABLE CONTROLLER



**CE, UL** standard being applied to

### BASIC FEATURES

- 2-channel controller (Basic type: 1-channel controller)**
- Independent 2-loop / 2-input operation control**
- High accuracy  $\pm (0.1\% FS + 1 \text{ digit})$**
- High Sampling Cycle 0.1 sec.**
- High resolution 1/1000 °C display achieved**  
\*Only for R.T.D. input (scale: 0.000~30.000 °C)
- Programmable Max. 400 steps (400 steps x 1 pattern to 20 steps x 20 patterns)**
- Auto-Tuning PID / Expert PID**
- Max. 10 Zone PID control available**
- Independent Universal-Input**
- User Friendly Operation (Menu Driven: 4 Lines LCD Display)**
- Easy Setting & Maintenance via Infrared COM port on the front panel**
- Interface RS-232C/RS-485 (MODBUS / Shimaden)**
- The front dust/splash-proof IP66**
- Universal Power Supply (100~240V AC  $\pm 10\%$ )**
- Sensor power supply**

- 1-output control

## Ordering Information

ITEM	CODE		Specifications	
SERIES	FP23-		96 × 96 DIN size, high-performance programmable controller	
BASIC FUNCTIONS	SS		Universal-input, 1-input/1-output control, 3 event outputs	
CONTROL OUTPUT 1		Y	Contact 1c, contact rating: 240V AC 2.5A/resistive load, 1A/inductive load	
		I	Current 4 ~ 20mA DC, Load resistance: max. 600Ω	
		P	SSR drive voltage output 12V±1.5V DC, Load current: max. 30mA	
		V	Voltage 0 ~ 10V DC, Load current: max. 2mA	
CONTROL OUTPUT 2	N-		None	
HEATER BREAK ALARM (FOR SINGLE-PHASE)		00	None	
		31	Heater break alarm* (heater current 30A with CT)	* Selectable only when Control Output 1 is Y or P
		32	Heater break alarm* (heater current 50A with CT)	
ANALOG OUTPUT 1		0	None	
		3	0 ~ 10mV DC, Output resistance: 10Ω	
		4	4 ~ 20mA DC, Load resistance: max. 300Ω	
		6	0 ~ 10V DC, Load current: max. 2mA	
ANALOG OUTPUT 2/ SENSOR POWER SUPPLY		0	None	
		3	0 ~ 10mV DC, Output resistance: 10Ω	
		4	4 ~ 20mA DC, Load resistance: max. 300Ω	
		6	0 ~ 10V DC, Load current: max. 2mA	
		8	Sensor power supply 24V DC 25mA	
EXTERNAL INPUT/ OUTPUT CONTROL SIGNAL (DI/DO) *1	standard	0	DI 4 points, DO 5 points (start pattern No. switching not available)	
		1	DI 10 points, DO 9 points (start pattern No. switching available)	
		2	DI 10 points, DO 13 points (start pattern No. switching available)	
COMMUNICATION FUNCTION		0	None	
		5	RS-485	Shimaden standard protocol / MODBUS (RTU/ASCII) communication protocol
		7	RS-232C	
REMARKS		0	Without	
		9	With	

\*1 When switching the start pattern No. by DI, 10 points of DI (CODE 1 or 2) are required.

## Optional Accessories

Name	Model	Description
Infra-red Communication Adapter	S5004	USB connector cable (2m), Setup Software (CD-ROM)
Shunt Resistor	QCS002	250Ω ±0.1%, external input resistance at current input
Relay Unit	AP2MC	Converts open collector output to contact output. 2 circuits built-in

Relay Unit Model AP2MC  
(Converts open collector output to contact output. 2 circuits built-in)



Infra-red Communication Adapter Model S5004 with USB connector cable

