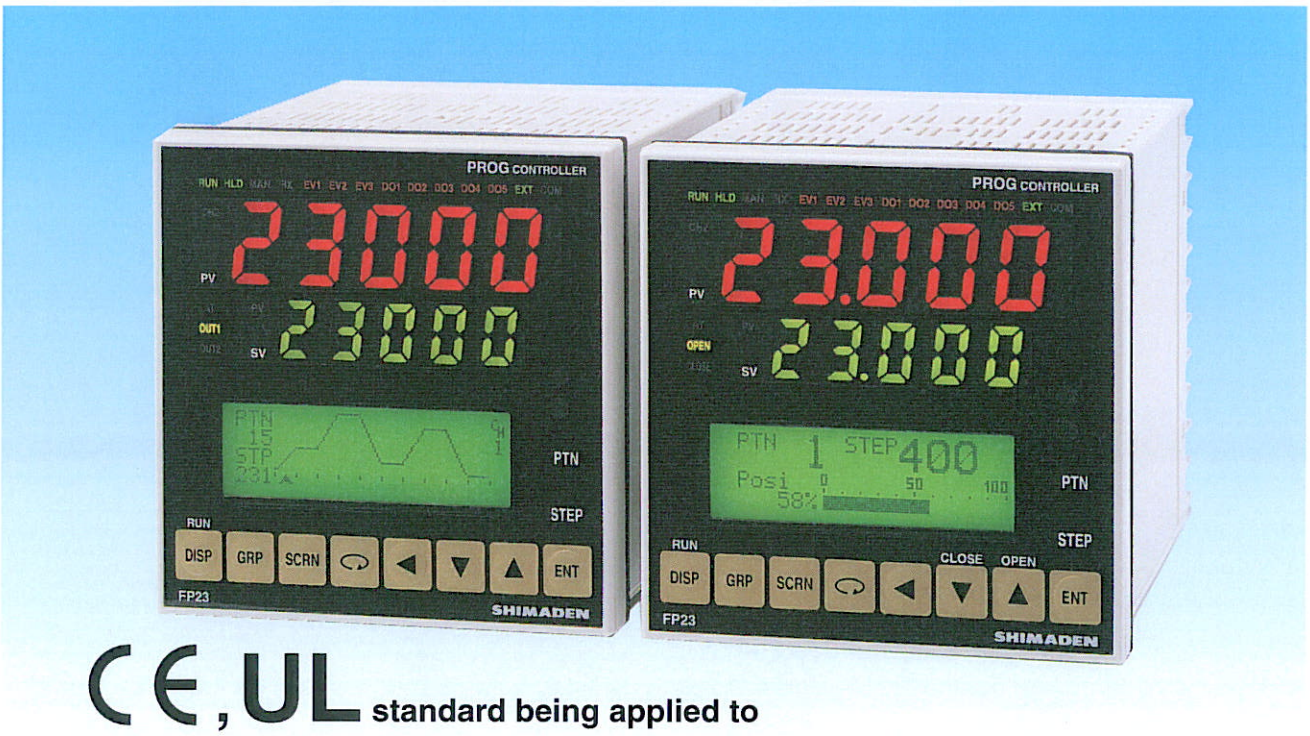
°C
%RH
SHIMADEN

Series FP23

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 ± (0.1% FS + 1 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 ±10%)*
- ☐ *Sensor power supply*

1-input Specification

- 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