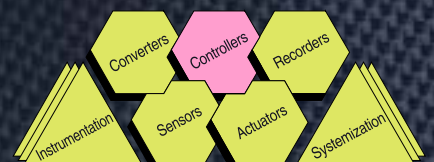


Super DigitroniK Line **SDC23M/24M** Digital Indicating Controller

Simpler, so easier to use.

User-friendly design.



SimpleStyle

**Many easy-to-use functions, integrated into 1 unit.
User-friendly design.**

Integration of a new algorithm, high accuracy ($\pm 0.5\%$ FS) and speed sampling cycle of 0.3 seconds.



Operation & Monitoring: High visibility and usability.

Large and easy-to-use dual seven-segment displays

Reliable visibility assured even from a distance. Process value (PV), set-point (SP) and other values are clearly indicated on two displays.



Customizable parameter key

The SDC23M/24M offers user customization of the "para" key. A maximum of 8 parameters can be assigned. This key is used to access and monitor frequently used parameters without navigating the menus.

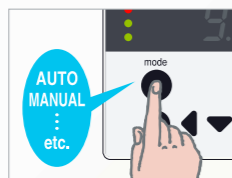


Max. 8 parameters can be assigned

Mode key for easy change of operation modes

The following operation modes can easily be switched by pressing the mode key:

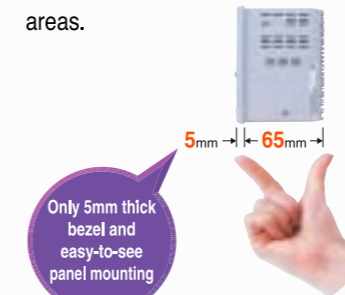
- AUTO/MANUAL, RUN/READY, remote SP/local SP, contact latch cancellation, etc.



Hardware: User friendly design, for easy installation.

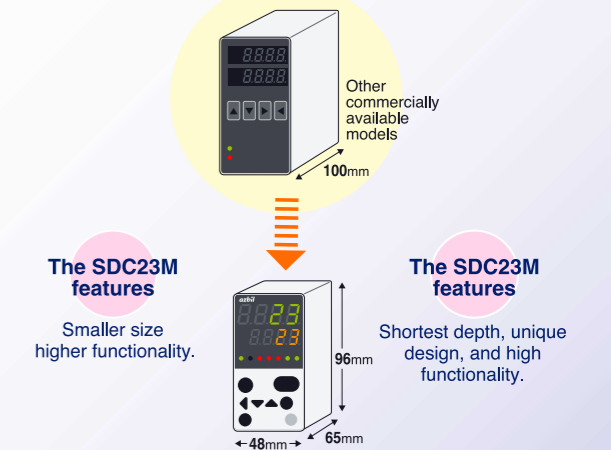
Simple design and compact

Simple design not available in conventional models. The shortest depth in the world – 65mm. Ultra thin bezel of 5mm fits in the tightest mounting areas.



SDC23M/24M vs other commercially available models

- Comparison with other commercially available models



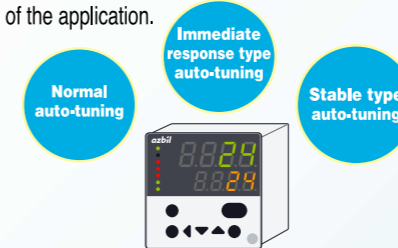
Control: Optimum control with new algorithms and advanced auto-tune technology.

Three separate auto-tuning features

The SDC23M/24M includes the following three types of auto-tuning as standard functions:

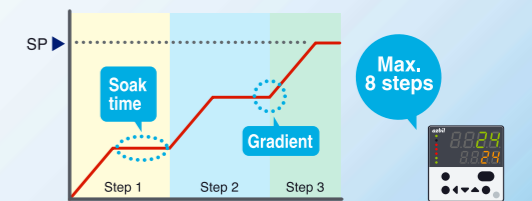
- Normal AT (auto tuning)
- Immediate response auto-tuning is suitable for heating systems with fast responding heater designs.
- Stable auto-tuning is suitable for systems involving a slow response heater design.

Better control characteristics can be obtained, based on the variables of the application.



Programmable recipe control

Maximum of 8 set points (SP) can be set in the SDC23M/24M. Each SP has soak time and gradient settings, enabling a maximum of 8 steps (16 segments) of programmable recipe control.



Software: Create new methods of application and operation using a wide variety of software functions.

PC loader (connection to PC via dedicated cable) used to set parameters and monitor values

The SDC23M/24M can be conveniently connected to a PC via our loader software. Easy connection is provided via a dedicated connector cable. The software contains various functions such as parameter settings, trend monitoring and CSV output of acquired data.



Specifications

PV input	Type	Thermocouple, RTD, DC voltage, DC current		
	Range	Refer to the input type and range table		
	Sampling cycle	0.3 s		
Indication	Method	Digital 4-digit, 7-segment		
	Accuracy	±0.5%FS±1 digit		
Control output	Model No.	R0	V0	C0
	Control mode	ON/OFF control, time proportional PID, current proportional PID		
	Control output	Relay	Voltage pulse	Current
	PID auto-tuning	Automatic setting of PID values by limit cycle method (selectable from normal type, quick response type or stability tape)		
Event	No. of outputs	3 max. (internal 8)		
	Function	Selectable from PV, SP, deviation value, absolute value, alarm, timer output, heater line break alarm, etc.		
Options	Inspection certificate and traceability certification supported			
General	Rated power supply	100 to 240Vac 50/60Hz		
	Power consumption	9VA max.		
	Approvals	CE marking (available soon)		
	Weight (mass)	SDC23M : 160g, SDC24M : 210g		

Input Type and Range

● Sensor Inputs

Sensor	Sensor type	Range (°C)	Range (°F)
Thermocouple	K	-200 to +1200	-300 to +2200
		0 to 1200	0 to 2200
		0.0 to 800.0	0 to 1500
		0.0 to 600.0	0 to 1100
		0.0 to 400.0	0 to 700
		-200.0 to +400.0	-300 to +700
	J	0 to 800	0 to 1500
		0 to 600	0 to 1100
	E	-200 to +400	-300 to +700
		0 to 600	0 to 1100
	T	-200.0 to +400.0	-300 to +700
	R	0 to 1600	0 to 3000
	S	0 to 1600	0 to 3000
	B	0 to 1800	0 to 3300
N	0 to 1300	0 to 2300	
PL II	0 to 1300	0 to 2200	
	0 to 1400	0 to 2400	
WRe5-26	0 to 2300	0 to 4200	
	0 to 1400	0 to 2400	
RTD	Pt100	-200 to +500	-300 to +900
		-200 to +200	-300 to +400
		-100 to +300	-150 to +500
		-50.0 to +200.0	-50 to +400
		-50.0 to +100.0	-50 to +200
		0.0 to 200.0	0 to 400
		0 to 500	0 to 900
		0 to 200	0 to 400

● Linear Inputs

Sensor	Sensor type	Range
Linear	0 to 1V	Scaling in the range of -1999 to +9999 Decimal point position changeable
	1 to 5V	
	0 to 5V	
	0 to 10V	
	0 to 20mA	
	4 to 20mA	

⚠ RESTRICTIONS ON USE

This product has been designed, developed and manufactured for general-purpose application in machinery and equipment. Accordingly, when used in applications outlined below, special care should be taken to implement a fail-safe and/or redundant design concept as well as a periodic maintenance program.

- Safety devices for plant worker protection
- Start/stop control devices for transportation and material handling machines
- Aeronautical/aerospace machines
- Control devices for nuclear reactors

Never use this product in applications where human safety may be put at risk.

Selection Guide

I II III IV V VI VII VIII IX X Example : C23MTR0SA1000

Table	Selection	Description
I	Basic model No.	C23M Digital Indicating Controller (48x96mm size)
		C24M Digital Indicating Controller (96x96mm size)
II	Mounting	T Panel mounting
III	Control output	R0 Relay
		V0 Voltage pulse
		C0 Current
IV	Input type	S Thermocouple, RTD
		L Linear
V	Power supply	A AC power
VI	Option (1)	1 3 events
VII	Option (2)	0 None
VIII	Additional processing (1)	0 None
IX	Additional processing (2)	0 None
X	Additional specifications	None None
		M001 Step operation model

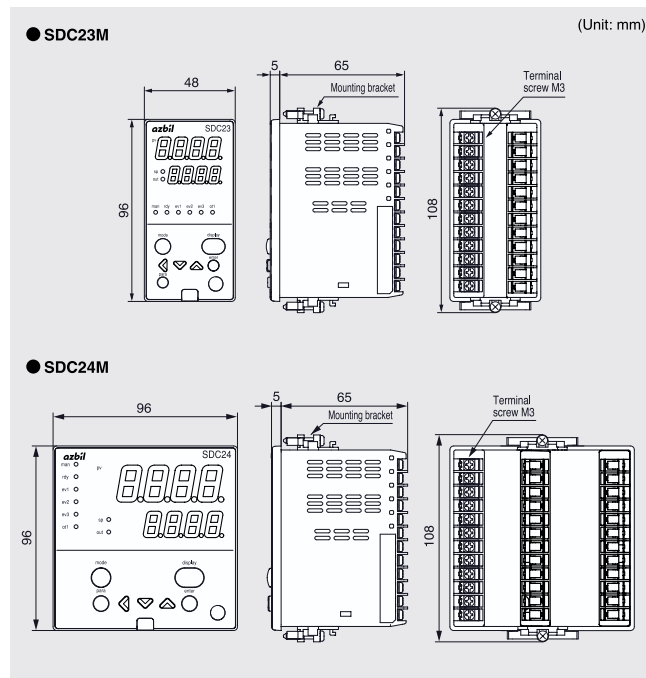
Software (sold separately)

Model No.	Name and specifications
SLP-C35C50	SLP-C35 standard loader with loader cable

Optional Devices (sold separately)

Model No.	Name and specifications
81446915-001	Hard cover for the SDC23M
81446916-001	Hard cover for the SDC24M
81441121-001	Soft cover for the SDC23M
81441122-001	Soft cover for the SDC24M
81446912-001	Terminal cover for the SDC23M
81446913-001	Terminal cover for the SDC24M
81409654-001	Mounting bracket (included with the controller)

Dimensions



Specifications are subject to change without notice.

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