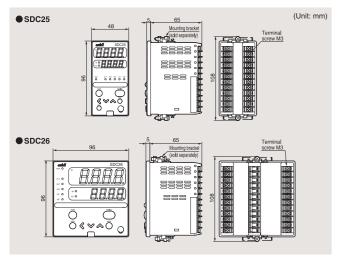
#### Specifications

DV in most	T	The second DTD DO select DO second					
PV input	Туре	Thermocouple, RTD, DC voltage, DC current.  Refer to the input type and range table.					
	Range						
	Sampling cycle	0.3 seconds					
Indication	Method	Digital 4-digit, 7-segment					
	Accuracy	±0.3%FS±1 digit					
Control	Model No.	R0 V0 C0 VC VV CC					
output	Control mode	ON/OFF control, time proportional PID, current proportional PID					
	1st control output	Relay Voltage pulse Current Voltage pulse Voltage pulse Curr					
	2nd control output	Current Voltage pulse Curre					Current
	No. of PID groups	4 Automatic setting of PID values by limit cycle method (selectable from normal type, quick response type or stability tape)					
	PID auto-tuning						
External	No. of inputs	Max. 4 points					
switch input	Function	LSP No., PID group No., READY/RUN changeover, timer start/stop, etc.					
Event	No. of outputs	Max. 3 points  Selectable from process variable (PV), set point (SP), deviation value absolute value, alarm, timer output, heater line break alarm, etc.					
	Function						ition value,
							, etc.
Heater line break alarm	No. of inputs	2 points (optional)					
Analog	No. of outputs	Max. 3 points					
output	Туре	Selectable from PV, SP or MV					
Communication	Communication system						
	No. of connectable units	Max. 31 units					
	Communication speed	Max. 38400bps					
Additional processing	Inspection certificate a	nd traceability certification supported					
General	Rated power supply	AC power supply model: 100 to 240Vac 50/60Hz SDC25 AC power supply model: 12VA SDC26 AC power supply model: 12VA					
	Power consumption						
	Standards compliance						
	Weight (mass)	SDC25: 250g, SDC26: 300g					

<sup>\*.</sup> Varies depending on the model.

#### **Dimensions**



## Software (sold separately)

Model No.	Name and specifications				
01 0 005 150	SLP-C35 standard loader for the SDC25/26				
SLP-C35J50	with loader cable				
SLP-C35J51	SLP-C35 standard loader for the SDC25/26				
SLP-C35J51	without loader cable				

## Optional Devices (sold separately)

Model No.	Name and specifications				
QN206A	Current transformer (5.8mm dia.)				
QN212A	Current transformer (12mm dia.)				
81446915-001	Hard cover for the SDC25				
81446916-001	Hard cover for the SDC26				
81446912-001	Terminal cover for the SDC25				
81446913-001	Terminal cover for the SDC26				
81409654-001	Mounting bracket (included with the controller)				

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Please, read 'Terms and Conditions' from following URL before

http://www.azbil.com/products/factory/order.html

#### **Azbil Corporation**

Advanced Automation Company

Yamatake Corporation changed its name to Azbil Corporation on April 1, 2012.

1-12-2 Kawana, Fujisawa Kanagawa 251-8522 Japan URL: http://www.azbil.com

1st Edition: Mar. 2003-PP

6th Edition: Apr. 2017-AZ



Table	Selection		Description					
I	Basic model No.	C25T	Single Loop Controller (48x96m			size)		
		C26T	Single Loop Controller (96x96m			n size)		
II	Control output		Output 1			Output 2		
		R0	Relay	Relay		_		
		V0	Voltage pulse		-			
		C0	Current		_			
		VC	Voltage pulse		Current			
		VV	Voltage pulse		Voltage pulse			
		CC	Current		Current			
III	Input type	U	Universal (full multi) input					
I۷	Power supply	Α	100 to 240Vac					
		D	24Vac/24Vdc					
	Option (1)		EV (DO) Auxiliary o		iliary output			
٧		1	3 points		-			
		2	3 points	3 points		Current		
		4*1	Independent 2 points Independent 2 points			-		
		5*1				Current		
٧I	Option (2)		СТ		) i	Communication		
		0	2 points 4 po		-	_		
		1			oints	_		
		2	2 points 4 pc		oints	RS-485		
VII	Additional	0 □*2	None					
	processing	<b>D</b> □*2	w/test data					
		Y□*2	w/traceability certification					

<sup>\*1.</sup>Not selectable with the DC power supply model.

## Input Type and Range

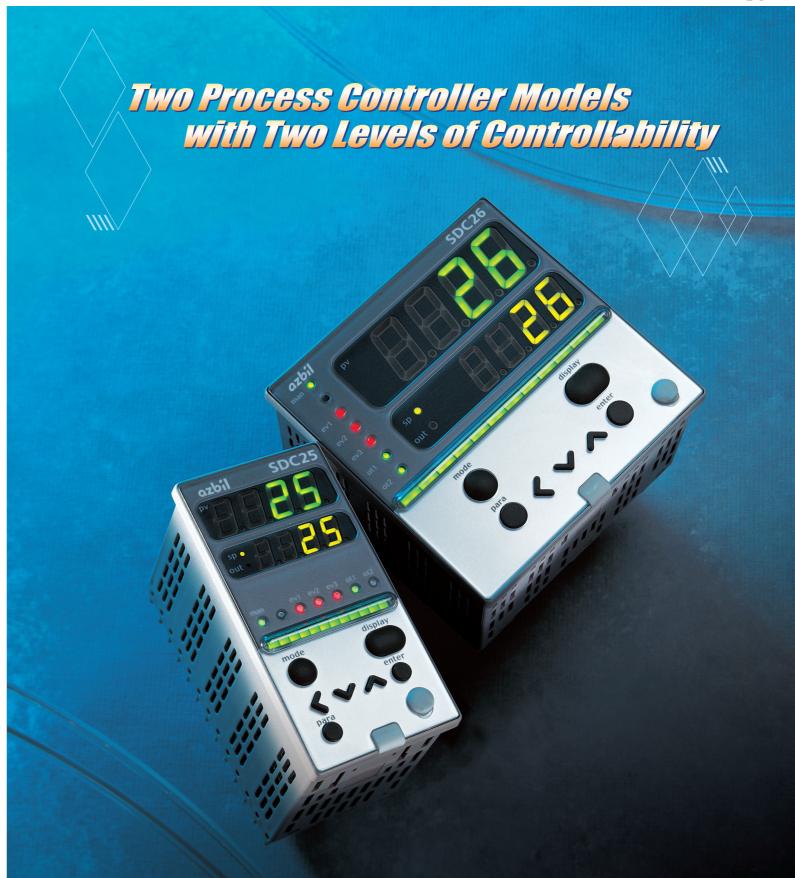
Sensor	Sensor type	Range (°C)	Sensor	Sensor type	Range (°C)
Thermocouple		-200 to +1200	RTD	JPt100	-100.0 to +300.0
	к	0 to 1200		Pt100	-100.0 to +200.0
		0.0 to 800.0		JPt100	-100.0 to +200.0
		0.0 to 600.0		Pt100	-100.0 to +150.0
		0.0 to 400.0		JPt100	-100.0 to +150.0
		-200.0 to +400.0		Pt100	-50.0 to +200.0
		-200.0 to +200.0		JPt100	-50.0 to +200.0
		0 to 1200	to 1200		-50.0 to +100.0
	J	0.0 to 800.0		JPt100	-50.0 to +100.0
	J	0.0 to 600.0		Pt100	-60.0 to +40.00
		-200.0 to +400.0		JPt100	-60.0 to +40.00
	Е	0.0 to 800.0		Pt100	-40.0 to +60.0
		0.0 to 600.0		JPt100	-40.0 to +60.0
	Т	-200.0 to +400.0		Pt100	-10.00 to +60.00
	R	0 to 1600		JPt100	-10.00 to +60.00
	S	0 to 1600		Pt100	0.0 to 100.0
	В	0 to 1800		JPt100	0.0 to 100.0
	N	0 to 1300		Pt100	0.0 to 200.0
	PL II	0 to 1300		JPt100	0.0 to 200.0
	WRe5-26	0 to 1400		Pt100	0.0 to 300.0
	WRe5-26	0 to 2300		JPt100	0.0 to 300.0
	Ni-NiMo	0 to 1300		Pt100	0.0 to 500.0
	PR40-20	0 to 1900		JPt100	0.0 to 500.0
	DIN U	-200.0 to +400.0	Linear	0 to 10mV	
	DIN L	-100.0 to +800.0		-10 to +10mV	
	Golden iron	0.0K to 360.0°K		0 to 100mV	Scaling in the
	chrome <b>l</b>	0.01( 10 000.0 1(		0 to 1V	range of
RTD	Pt100	-200.0 to +500.0		1 to 5V	-1999 to +9999
	JPt100	-200.0 to +500.0		0 to 5V	Decimal point
	Pt100	-200.0 to +200.0		0 to 10V	position changeable
	JPt100	-200.0 to +200.0		0 to 20mA	
	Pt100	-100.0 to +300.0		4 to 20mA	

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# **Single Loop Controller** SDC25/26

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<sup>\*2.</sup>Standards compliance □=0: CE marking □=A: CE marking, cUL



# The new standard for controllers. New easy-to-use functions based on leading-edge concepts.

Integration of a new algorithm, high accuracy (±0.3%FS) and sampling cycle 0.3 seconds. A new type of controller designed for ever-changing demands of industry.

# Hardware

**Ideal design and style with easy-to-use functions.** 

## **Simple design and compact**

Simple design not available in conventional models.

The world's shortest depth of 65mm. Thin bezel of only 5mm. Just fits into narrow mounting locations.



## Rubber keys

Finger-friendly rubber buttons adopted. Unique design enhances ease of operation.



# Operation & Monitoring

Easy-to-see display and reliable operability assured simultaneously.

#### The mode button for easy switching of operational parameters

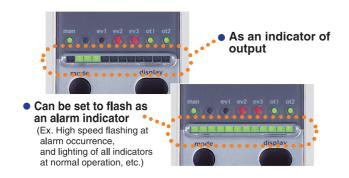
The following operations can be easily and quickly accessed by pressing the mode key:

● AUTO/MANUAL, RUN/READY, contact latch cancellation, etc.



## Powerful, multi-status indicator

Multi-status analog lamp indicator is assignable to several parameters (i.e. alarms, outputs, etc.)



## The wide variety of inputs and outputs of the SDC25/26 can be used to fulfill various application requirements.

#### **Heat/cool function** Heat/cool control with 2nd control output or event output (D/O)

Digital inputs (D/I) (optional) Setting of values or RUN/READY switching can be performed remotely by optional 4-point digital input.



#### **Maximum 3 analog outputs** PV, MV, etc. can be freely assigned.

#### A 2nd control output available

Flexible 2nd output can be used for heat/cool control or an array of application requirements. (Current, voltage pulse)

#### 3 event outputs (D/O)

Three event outputs (D/O) are available as standard function.

#### Communications (optional) An optional RS-485 (3-wire system) is available

All models connectable to a PC loader Various settings and monitoring can be performed from a PC loader



## Control

Revolutionary control logic, not just PID and fuzzy logic,

#### **Greatly improved controllability** ensured with a brand new algorithm

Stable control that is unaffected by disturbances has been realized by including the highly accurate "RationaLOOP PID" control logic and the "Just-FiTTER" algorithm which is very effective in suppressing overshoot.

#### RationaLOOP PID

Hunting is suppressed almost immediately with the addition of RationaLOOP PID to the conventional PID.

Difference between Rational OOP PID and PID

#### Time [sec] Just-FiTTER Just-FiTTER is an algorithm that restricts overshoot within the disturbance response and step response functions.

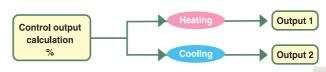
– PID

Time [sec]

#### Reliable heat/cool control

Heat/cool control can be customized with the SDC25/26. Direct or reverse control outputs can be assigned easily.

(Ex.) • Control output at heat control → Output 1 • Control output at cool control → Output 2



<Heat/cool control function is selected bymodel number.>

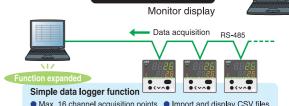
# **S**oftware

Software functionality provides additional application flexibility.

#### New methods of installation, operation, and monitoring utilizing a wide variety of software functions

The SDC25/26 can be conveniently connected to a computer via our PC loader software (connection via dedicated connector cable). The software contains various functions such as parameter settings, trend monitoring and CSV output of acquisition data. Easy hook-up is available with

Dedicate Setup display Monitor display



#### Up to 3 configurable event outputs available as a standard option

Up to 3 event output points are available with the SDC25/26. Additionally, a maximum of 5 internal event points is also provided. These internal events can be assigned to the 3 event outputs using logic operation. The wiring reduction achieved by utilizing these internal events results in labor cost savings for wiring to a PLC or other devices in the system











