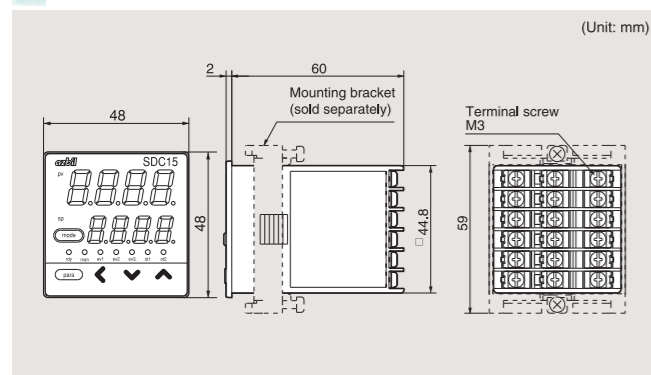


Specifications

PV Input	Type	Input group selectable by model No.(thermocouple, RTD, linear)
	Range	Refer to the PV input type and range table.
	Sampling cycle	500ms
Control Output	Indication accuracy	±0.5%FS±1 digit
	Control mode	ON/OFF, time proportional PID, current proportional PID
	Control action	Selectable by model No. • Relay output: 1c (SPDT) 250Vac 3A • Voltage pulse output: 19Vdc:15% Internal resistance 82Ω Allowable current 24mA max. • Current output: 0 to 20mA, 4 to 20mA (selectable by setting)
Event Output	No. of outputs	3 points
	Control action	Relay output: 1a (SPST)
Digital Input	Type	PV, DEV, loop diagnosis, timer, heater/circuit break and others (32 types in total)
	No. of inputs	2 points
CT Input	Function	Auto/Manual changeover, Run/Ready changeover, set point changeover, latch cancellation plus others (18 types in total)
	Applicable current transformer	Max. 2 inputs Sold separately: 5.8mm dia. (QN206A), 12mm dia. (QN212A)
Communication	Communication system	RS-485 (3-wire system)
	No. of connectable units	Max. 31 units
	Communication speed	Max. 38,400bps
Loader Port	Connection	Dedicated cable
	Connection length	Max. 2m
General	Ambient temperature	0 to 50°C
	Power supply voltage	AC power supply model: 100 to 240Vac DC power supply model: 24Vac, 24 to 48Vdc
	Power consumption	AC power supply model: 12VA max. DC power supply model: 7VA max.(24Vac) 5W max.(24 to 48Vdc)
	Standards compliance	CE marking (EN61010-1, EN61326) cUL (UL61010-1)*
	Weight (Mass)	Panel mounted type: 150g (including dedicated mounting bracket) DIN rail mounted type: 200g (including socket)

*. Varies depending on the model.

Dimensions



Selection Guide

I II III IV V VI VII Example: C15TR0TA0000

Table	Selection	Description			
I	Basic Model No. C15	Digital indicating controller			
II	Mounting	T <input type="radio"/> Panel mounting			
	S <input type="radio"/> Socket mounting				
III	Control output	Output 1	Output 2		
		R0 <input type="radio"/>	Relay, (1a contact only for C15S)	-	
		V0 <input type="radio"/>	Voltage pulse	-	
		VC <input type="radio"/>	Voltage pulse	Current	
		VV <input type="radio"/>	Voltage pulse	Voltage pulse	
		C0 <input type="radio"/>	Current	-	
		CC <input type="radio"/>	Current	Current	
IV	PV input	T <input type="radio"/>	Thermocouple		
		R <input type="radio"/>	RTD		
		L <input type="radio"/>	DC voltage/current		
V	Power supply	A <input type="radio"/>	100 to 240Vac		
		D <input type="radio"/>	24Vdc		
VI	Option (1)	EV (DO)	CT input 2 points	Digital Inputs (DI) 2 points	Communication RS-485
		00 <input type="radio"/>	-	-	-
		01 <input type="radio"/>	3 points	-	-
		02 <input type="radio"/>	3 points	<input type="radio"/>	<input type="radio"/>
		03 <input type="radio"/>	3 points	<input type="radio"/>	<input type="radio"/>
		04*1 <input type="radio"/>	Independent 2 points	-	-
		05*1 <input type="radio"/>	Independent 2 points	<input type="radio"/>	<input type="radio"/>
		06*1 <input type="radio"/>	Independent 2 points	<input type="radio"/>	<input type="radio"/>
VII	Option (2)	0 <input type="checkbox"/>	None	-	-
		D <input type="checkbox"/>	w/ test data	-	-
		Y <input type="checkbox"/>	w/ traceability certification	-	-

*1. Not selectable for 24Vdc model.

*2. Standards compliance
=0: CE marking
=A: CE marking, cUL

Note: For models with Korean S Mark certification, contact the azbil Group.

Input Types and Ranges

Sensor	Sensor type	Range (°C)	Sensor	Sensor type	Range (°C)
Thermocouple	K	-200 to +1200	RTD	Pt100	-200 to +500
		0 to 1200		JPt100	-200 to +500
		0.0 to 800.0		Pt100	-200 to +200
		0.0 to 600.0		JPt100	-200 to +200
		0.0 to 400.0		Pt100	-100 to +300
		-200.0 to +400.0		JPt100	-100 to +300
	J	0.0 to 800.0		Pt100	-50.0 to +200.0
		0.0 to 600.0		JPt100	-50.0 to +200.0
		-200.0 to +400.0		Pt100	-50.0 to +100.0
		0.0 to 600.0		JPt100	-50.0 to +100.0
		0.0 to 1600		Pt100	0.0 to 200.0
		0.0 to 1800		JPt100	0.0 to 200.0
	Linear	E	0 to 1600	Pt100	0 to 500
		T	-200.0 to +400.0	JPt100	0 to 500
		R	0 to 1600	0 to 1V	Scaling in the range of -1999 to +9999
		S	0 to 1600	1 to 5V	
B		0 to 1800	0 to 5V		
N		0 to 1300	0 to 10V		
PL II	0 to 1300	0 to 20mA			
Wre5-26	0 to 2300	4 to 20mA			
DIN U	-200.0 to +400.0				
DIN L	-100.0 to +800.0				

Note 1. The accuracy of the B thermocouple is ±5%FS for a range of 260°C or less, and ±1%FS for 260°C to 800°C.

2. For ranges containing a decimal point, tenths are displayed on the line underneath.

Software (sold separately)

Selection	Software name and specifications
SLP-C35J50	SLP-C35 standard loader for the C15 with loader cable

Optional Devices (sold separately)

Model No.	Part name
81446898-001	Terminal cover
81446391-001	Socket (for the C15S)
QN206A	Current transformer (5.8mm dia.)
QN212A	Current transformer (12mm dia.)
81446442-002	Hard cover
81446443-001	Soft cover
81446403-001	Mounting bracket (included with the C15T, usable for the C15S)

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 Advanced Automation Company

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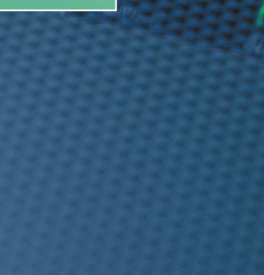
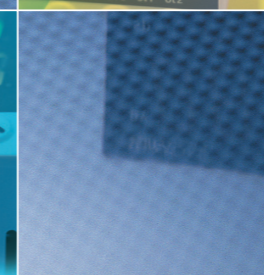
azbil

Single Loop Controller SDC15



Multiple functions packaged in a compact, small-sized controller

The obvious choice for users seeking an easy-to-use and highly accurate controller with all the functions needed for a wide variety of applications.



HARDWARE

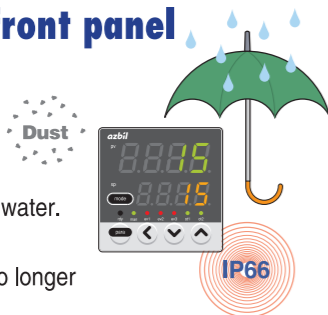
Compact body

The depth of the body is just 60mm, which makes the SDC15 the slimmest controller on the market today. And with the front panel being only 2mm thick, it is easy to install even in confined spaces.



IP66 (NEMA 4X) front panel

The front panel has been rated to IP66 specifications making the device resistant to dust and water. Therefore, finding special locations for installation is no longer necessary.

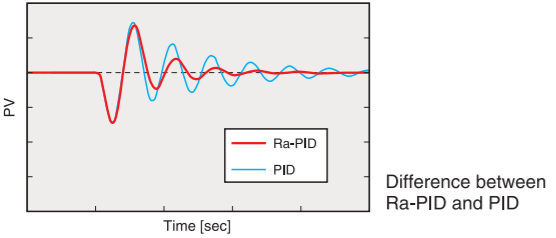


CONTROL

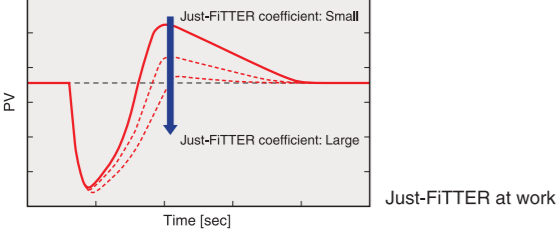
Greatly improved controllability ensured with a brand new algorithm

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

● "Rationalloop PID (Ra-PID)"
Hunting is suppressed almost immediately with the addition of Ra-PID to the conventional PID.



● "Just-FiTTER"
Just-FiTTER is an algorithm that restricts overshoot within the disturbance response and step response functions.

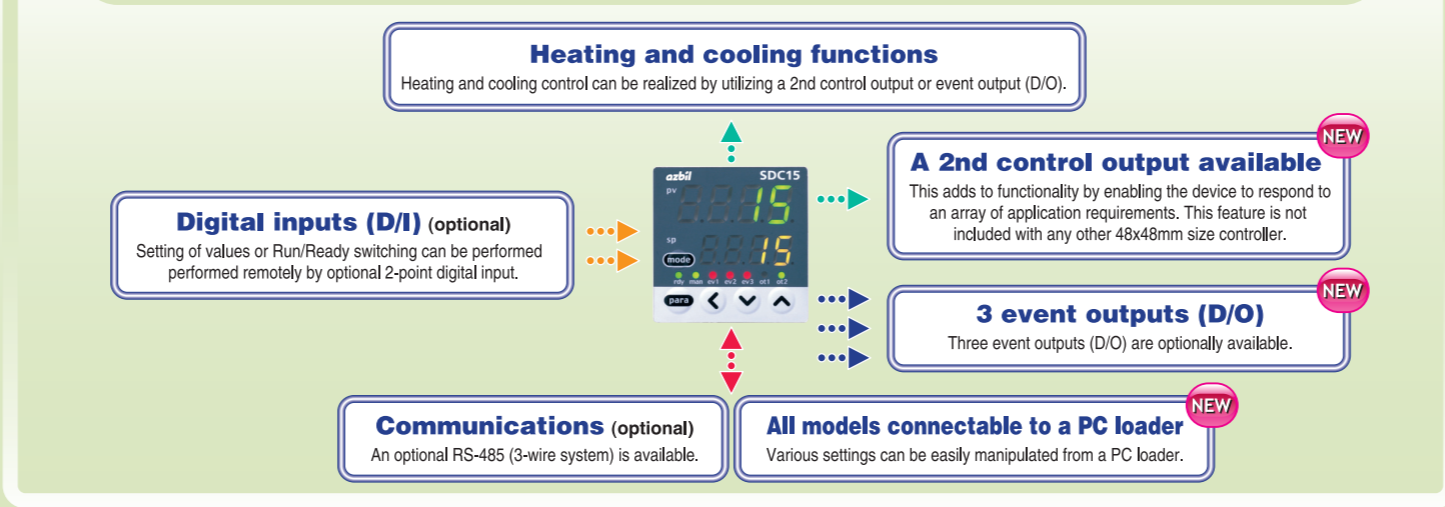


A new algorithm integrated to ensure high-speed and highly accurate control

A next generation small controller sure to change common perceptions of control operations

Ra-PID and **Just-FiTTER** have been included with both having the capabilities to be controlled by a multi-function PC loader. The SDC15 is sure to change conventional perceptions of small sized controllers.

The wide variety of inputs and outputs of the SDC15 can be used to fulfill various application requirements.



OPERATION

Easy-to-view LED display

Verification of SP, PV and event statuses possible at a glance

SP and PV values are indicated by 2 different colors. Run/Ready, event output and MV output statuses are indicated by LED lamps. The status of the operation can thus be quickly confirmed.



Single-touch operation using mode keys

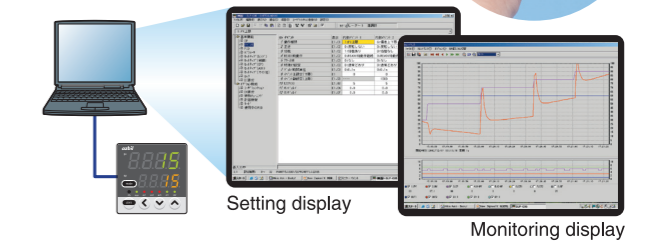
Auto/Manual changeover, Run/Ready changeover or even the latch cancellation function can be assigned to the mode key on the front panel. The task can then be executed simply by the press of a button.



SOFTWARE

PC loader connection to the 48 x 48mm size model possible

The SDC15 can be connected to a PC loader by using a dedicated connector cable. The software contains various parameter settings and trend monitoring functions that facilitate maintenance and operation.



Reduction of wiring work and savings in labor costs ensured with the event configuration function

The SDC15 has an internal event configuration function. Five internal event points can be assigned to each event contact. The number of wires per event outputs can be reduced thus allowing a reduction of connection points for the PLC or devices in the system.

