Specifications

PV input	Type	Thermocouple, RTD, DC voltage, DC current.
	Range	Refer to the input type and range table.
	Sampling cycle	0.3 seconds
Indication	Method	Digital 4-digit, 7-segment
	Accuracy	±0.3%FS±1 digit
Control output	Model No.	R0 / V0 / C0 / VC / VV / CC
	Control mode	ON/OFF control, time proportional PID, current proportional PID
	1st control output	Relay / Voltage pulse / Current / Voltage pulse / Voltage pulse / Current
	2nd control output	– / – / – / Current / Voltage pulse / Current
	No. of PID groups	4
	PID auto-tuning	Automatic setting of PID values by limit cycle method (selectable from normal type, quick response type or stability tape)
External switch input	No. of inputs	Max. 4 points
	Function	LSP No., PID group No., READY/RUN changeover, timer start/stop, etc.
Event	No. of outputs	Max. 3 points
	Function	Selectable from process variable (PV), set point (SP), deviation value, absolute value, alarm, timer output, heater line break alarm, etc.
Heater line break alarm	No. of inputs	2 points (optional)
Analog output	No. of outputs	Max. 3 points
	Type	Selectable from PV, SP or MV
Communication	Communication system	RS-485
	No. of connectable units	Max. 31 units
	Communication speed	Max. 38400bps
Additional processing		Inspection certificate and traceability certification supported
General	Rated power supply	AC power supply model: 100 to 240Vac 50/60Hz
	Power consumption	Model C25 AC power supply model: 12VA / Model C26 AC power supply model: 12VA
	Standards compliance	CE marking (EN61010–1, EN61326) / cUL (UL61010–1)*
	Weight (mass)	Model C25: 250g, model C26: 300g

*. Varies depending on the model.

Dimensions

● Model C25

(Unit: mm)
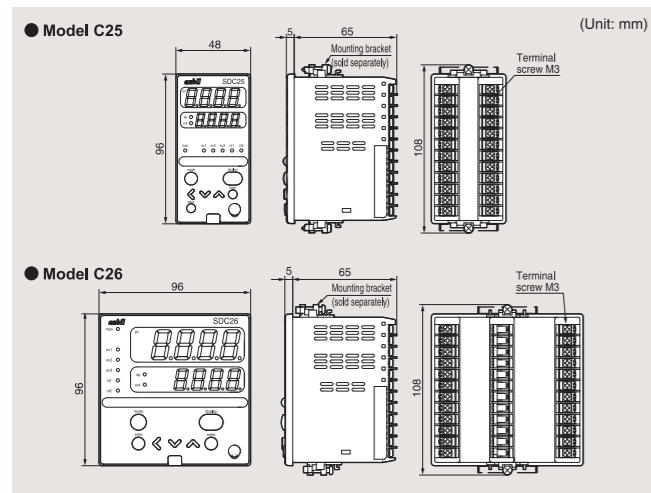
● Model C26

Software (sold separately)

Model No.	Name and specifications
SLP-C35J50	Standard loader for the model C25/26 with loader cable
SLP-C35J51	Standard loader for the model C25/26 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 model C25
81446916-001	Hard cover for the model C26
81446912-001	Terminal cover for the model C25
81446913-001	Terminal cover for the model C26
81409654-001	Mounting bracket (included with the controller)

Product names, model numbers and company names may be trademarks of the respective company.

Selection Guide

I II III IV V VI VII Example: **C25TR0UA1000**

Table	Selection		Description		
I	Basic model No.	C25T	Single Loop Controller (48x96mm size)		
		C26T	Single Loop Controller (96x96mm size)		
II	Control output		**Output 1**	**Output 2**	
		R0	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		
IV	Power supply	A	100 to 240Vac		
		D	24Vac/24Vdc		
V	Option (1)		**EV (DO)**	**Auxiliary output**	
		1	3 points	–	
		2	3 points	Current	
		4*1	Independent 2 points	–	
		5*1	Independent 2 points	Current	
VI	Option (2)		**CT**	**DI**	**Communication**
		0	–	–	–
		1	2 points	4 points	–
		2	2 points	4 points	RS-485
VII	Additional processing	0☐*2	None		
		D☐*2	w/test data		
		Y☐*2	w/traceability certification		

*1. Not selectable with the DC power supply model.
*2. Standards compliance
 ☐=0: CE marking
 ☐=A: CE marking, cUL

Input Type and Range

Sensor	Sensor type	Range (°C)	Sensor	Sensor type	Range (°C)
Thermocouple	K	−200 to +1200	RTD	JP100	−100.0 to +300.0
		0 to 1200		Pt100	−100.0 to +200.0
		0.0 to 800.0		JP100	−100.0 to +200.0
		0.0 to 600.0		Pt100	−100.0 to +150.0
		0.0 to 400.0		JP100	−100.0 to +150.0
		−200.0 to +400.0		Pt100	−50.0 to +200.0
		−200.0 to +200.0		JP100	−50.0 to +200.0
	J	0 to 1200		Pt100	−50.0 to +100.0
		0.0 to 800.0		JP100	−50.0 to +100.0
		0.0 to 600.0		Pt100	−60.0 to +40.00
		−200.0 to +400.0		JP100	−60.0 to +40.00
	E	0.0 to 800.0		Pt100	−40.0 to +60.0
		0.0 to 600.0		JP100	−40.0 to +60.0
	T	−200.0 to +400.0		Pt100	−10.00 to +60.00
	R	0 to 1600		JP100	−10.00 to +60.00
	S	0 to 1600		Pt100	0.0 to 100.0
	B	0 to 1800		JP100	0.0 to 100.0
	N	0 to 1300		Pt100	0.0 to 200.0
	PL II	0 to 1300		JP100	0.0 to 200.0
	WRe5-26	0 to 1400		Pt100	0.0 to 300.0
	WRe5-26	0 to 2300		JP100	0.0 to 300.0
	Ni-NiMo	0 to 1300		Pt100	0.0 to 500.0
	PR40-20	0 to 1900		JP100	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 chromel	0.0K to 360.0°K			0 to 100mV
RTD	Pt100	−200.0 to +500.0			0 to 1V
	JP100	−200.0 to +500.0			1 to 5V
	Pt100	−200.0 to +200.0			0 to 5V
	JP100	−200.0 to +200.0			0 to 10V
	Pt100	−100.0 to +300.0			0 to 20mA
					4 to 20mA

Linear Range: Scaling in the range of −1999 to +9999 Decimal point position changeable

Please read "Terms and Conditions" from the following URL before ordering and use.
https://www.azbil.com/products/factory/order.html

Single Loop Controller
Model C25/26

CE UK CA c UL us KC

Two Process Controller Models with Two Levels of Controllability

Azbil Corporation

FineStyle

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.

Only 5mm thick bezel and easy-to-see panel mounting

5mm → ← 65mm →

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

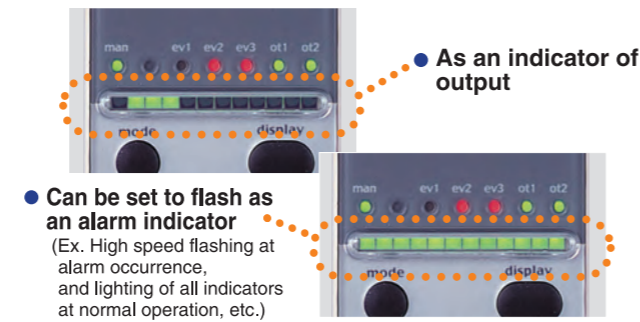The following operations can be easily and quickly accessed by pressing the mode key:
● AUTO/MANUAL, RUN/READY, contact latch cancellation, etc.

AUTO MANUAL …etc
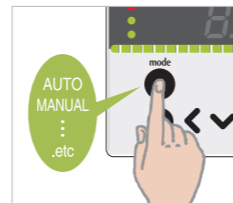
Powerful, multi-status indicator

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

● As an indicator of output

● Can be set to flash as an alarm indicator
(Ex. High speed flashing at alarm occurrence, and lighting of all indicators at normal operation, etc.)

The wide variety of inputs and outputs of the model C25/26 can be used to fulfill various application requirements.

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

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

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

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

Model C26

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.
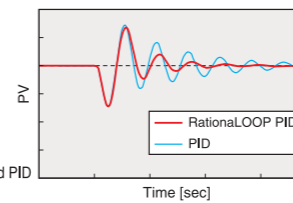

Control
Revolutionary control logic, not just PID and fuzzy logic.

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 RationaLOOP PID and PID

PV — RationaLOOP PID / PID — Time [sec]

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

Just-FiTTER at work

Just-FiTTER coefficient: Small / Just-FiTTER coefficient: Large / PV / Time [sec]
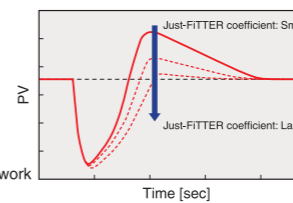
Reliable heat/cool control

Heat/cool control can be customized with the model C25/26. Direct or reverse control outputs can be assigned easily.

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

Control output calculation % → Heating → Output 1
→ Cooling → Output 2

<Heat/cool control function is selected by model number.>
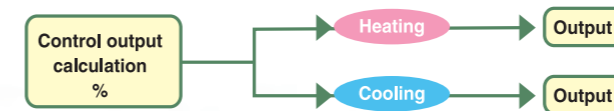
Software
Software functionality provides additional application flexibility.

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

Model C25/26 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.

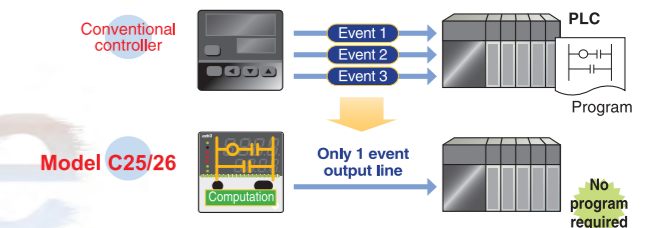Easy hook-up is available with a dedicated connector cable.

Setup display

Monitor display

Dedicated cable

Data acquisition RS-485

Function expanded
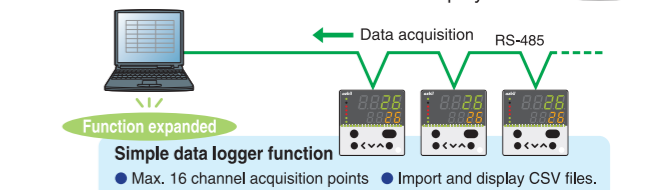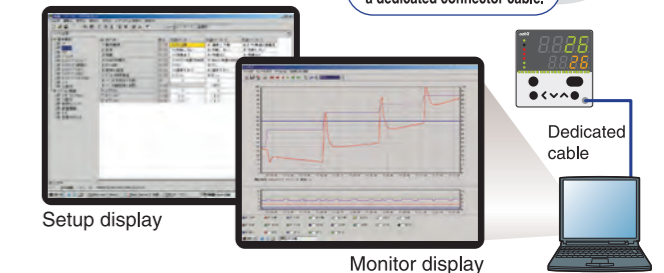
Simple data logger function
● Max. 16 channel acquisition points ● Import and display CSV files.

Up to 3 configurable event outputs available as a standard option

Up to 3 event output points are available with the model C25/26. 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.

Conventional controller → Event 1 / Event 2 / Event 3 → PLC → Program

Model C25/26 → Only 1 event output line → No program required

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