Innovation Style

An innovative next generation controller

Integration of a new algorithm, high accuracy (±0.1%FS) and high speed sampling cycle 0.1 seconds. Advanced functions improve stability and disturbance response.

Hardware

User friendly design provides for easy installation.

Simple design and compact

Simple design not available in conventional models.
The shortest depth in the world - 65mm.

Rubber key

Finger-friendly buttons and operational keys improve operability and adds a unique look and design.

The SDC35 features

Small in size allows higher functionality.

Optimum control with new algorithms and advanced Auto-Tune technology.

Greatly improved controllability ensured with a brand new algorithm

Stable control that is unaffected by disturbance has been realized by including the highly accurate ‘Rational Loop PID’ control logic and the ‘Just-FITTER’ algorithm (effective in suppressing overshoot).

Rational Loop PID

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

Difference between Rational Loop PID and PID

Just-FITTER

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

Programmable recipe control

Maximum of 8 set points (SP) can be set in the SDC35/36. Each SP has soak time and gradient settings, allowing a maximum of 8 steps (16 segments) of programmable recipe control.

Communications (optional)

All models connectable to a PC loader

An optional RS-485 (MODBUS) interface is available.

Digital Inputs (DI) (optional)

Functionality can be expanded by connecting an optional digital input.

RSP (optional)

An external RSP can be connected.

Motor drive

Motor proportional output 2-way, 1-way and 3-way.

Voltage output

1 to 5V, 0 to 5V, 0 to 10V outputs are available.

Heat/cool function

Heat/cool controller with 2nd control output or event output (DO).

A 2nd control output available

Flexible 2nd output can be used for heating/cooling control in an array of application requirements.

Communications (optional)

An optional RS-485 (MODBUS) interface is available.

The wide variety of inputs and outputs of the SDC35/36 can be used to fulfill multiple application requirements.
Large and easy-to-use dual seven-segment displays

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

Customizable parameter key

The SDC35/36 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.

Mode key for easy change of operation modes

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

- AUTO/MANUAL
- RUN/READY
- remote (if equipped)
- control (if equipped, etc.)

Software

Creating new methods of installation and operation utilizing a wide variety of software functions.

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

2. The SDC35/36 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 acquisition data.

Simple to use data logging function

Data logging with the PC loader from one or several SDC35/36 can be accomplished via communications.DOWNLOAD status can be logged simultaneously.

Event configuration functionality enables wiring reduction yielding labor cost savings

In the SDC35/36, a maximum of 8 internal event points are provided. These internal events can be assigned to 3 event outputs using logic operations. The event output reduction in wiring yields labor cost savings and flexibility when expanding instrumentation.

Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Thermostats, PTC, DC voltage, DC current, etc.</td>
</tr>
<tr>
<td>Range</td>
<td>Various to suit application and usage conditions</td>
</tr>
<tr>
<td>Forming cycle</td>
<td>DC voltage</td>
</tr>
<tr>
<td>Indication</td>
<td>Various (Digital, Analog)</td>
</tr>
<tr>
<td>Control output</td>
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Input Type and Range

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<tr>
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</tr>
<tr>
<td>PT100</td>
<td>-200°C to +800°C</td>
</tr>
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Weight (kg) | 3.6 to 4.5 kg

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**Selection Guide**

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<td>SLP-08540</td>
<td>BLU-SCB standard board for the SDC0526 with sensor cable</td>
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<td>SLP-08541</td>
<td>BLU-SCB standard board for the SDC0526 without sensor cable</td>
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- Not selectable with the DC power supply model.
- CE marking is not applicable when the R1 control output is selected.
- Selectable from 1 to 5V, 0 to 5V, or 0 to 10V.
- Standards compliance:
  - CE marking
  - UL, UL Marking, cUL.

**Software (sold separately)**

- Name and specifications:
  - SLP-08540: BLU-SCB standard board for the SDC0526 with sensor cable
  - SLP-08541: BLU-SCB standard board for the SDC0526 without sensor cable

**Optional Devices (sold separately)**

- Model No.: Name and specifications:
  - QN108A: Current transformer (200/5A)
  - QN1124: Current transformer (200/5A)
  - 9144055-901: Hand cover for the SDC05
  - 9144056-901: Hard cover for the SDC05
  - 9145129-901: Soft cover for the SDC05
  - 9145130-901: Soft cover for the SDC05
  - 9144052-901: Terminal cover for the SDC05
  - 9144056-901: Terminal cover for the SDC05
  - 9144056-901: Mounting bracket (jacks and the control unit)

**Dimensions**

- SDC05
- SDC06

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**Memo**

- [ ] CE marking
- [ ] UL, UL Marking, cUL.

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