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.

Azbil Corporation
Advanced Automation Company
Tokyo Southern Office changed its name to Azbil Corporation on April 1, 2012.
1-12-2 Kawasaki, Fujisawa
Kanagawa 251-8025 Japan
URL: www.azbil.com

1st Edition: Issued in Mar, 2003
**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.

**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 fault 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.

**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 "Rationaloop PID (Ra-PID)" control logic and the "Just-FITTER" algorithm which is very effective in suppressing overshoot.

- "Rationaloop 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.

Heating and cooling functions

Heating and cooling control can be realized by utilizing a 2nd control output or event output (DV).

**Conventional controller**

3 event outputs available

PC

Program

SDC15

3 event outputs available

**Example**

- Heating and cooling control
  - 2nd control output (DV)

**Digital Inputs (B/I) (optional)**

Setting of limits or Run/Ready switching can be performed remotely by external input digital output.

**3 event outputs (B/D) available**

Various settings can be easily modified from a PC loader.

**Communications (optional)**

An optional RS-485 (driver system) is available.

All models connectable to a PC loader