The SDC40B Digital Indicating Controller is a single loop digital indicating controller for controlling temperature, pressure, flow rates, levels, PH variables, etc.

A compact instrument with PID control and various auxiliary functions, it offers instrumentation with a high level of cost performance. The Smart Loader Package allows the user to design any combination of functions.

### Specifications

**Analog input 1**
- **Input type**: Multi-range of inputs—thermocouple, resistance thermometer detector, DC voltage, and DC current, etc.
- **Input indication accuracy**: ±0.1% FS±1U (under standard conditions; this may be affected by indication value conversion and range.)
- **Sampling cycle**: 0.1 to 0.5 sec. (depends on computation cycle)

**Analog input 2**
- **Input type**: ±20 mA DC, 0 to 5 Vdc
- **Input indication accuracy**: ±0.1% FS±1U (display value conversion under standard conditions)
- **Sampling cycle**: 0.1 to 0.5 sec. (depends on computation cycle)

**Analog input 3**
- **Input type**: ±20 mA DC, 0 to 5 Vdc
- **Input indication accuracy**: ±0.1% FS±1U (display value conversion under standard conditions)
- **Sampling cycle**: 0.1 to 0.5 sec. (depends on computation cycle)

**Digital input**
- **Number of inputs**: 20
- **Connectable output types**: Non-voltage contacts (relay contacts) and open collector (current sink to ground)

**PID control and output unit**
- **Code**: AO1, AO2, AO3
- **Output**: Current output (4 to 20 mA DC)
- **Control action**: Position proportional PID, Current proportional PID

**Number of PID groups**: 8 groups (shared by PID computation units 1 and 2)

**PID auto-tuning**: Neuro & fuzzy (with two degrees of freedom) and smart methods are used in addition to the limit cycle method to set PID auto-tuning.

**Output processor**
- **Analog output (AO1 to AO3)**: MM driving relay contact output
- **Digital output (DO1 to DO8)**: SPST relay contact

**Mode**
- **Normal operating mode, emergency operating mode**

**Communication specifications**
- **RS-485, RS-232C**

**General specifications**
- **Rated power**: AC power supply model: 100 to 240 Vac 50/60 Hz, DC power supply model: 24 Vdc
- **Supply voltage**: 50/60 Hz
- **Power consumption**: Max. 30 VA
- **Weight**: Approx. 900 g

### External dimensions

(Unit: mm)

**Digital Indicating Controller with Multi-Input Computation Function SDC40B**

![External dimensions diagram](image-url)
## Digital Indicating Controller with Multi-Input Computation Function

**Model No. configuration**

### Basic model No. Control output Function Power supply Option 1 Option 2 Addition Description

<table>
<thead>
<tr>
<th>Model No.</th>
<th>2G</th>
<th>5G</th>
<th>4</th>
<th>2G</th>
<th>5G</th>
<th>AB</th>
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<tbody>
<tr>
<td>C40B</td>
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</tbody>
</table>

- **Digital Indicating Controller**
- **Position proportional output**
- **Current output (4 to 20 mA/0 to 20 mA)**

**Input:**
1. Thermocouples, resistance thermometer detector, DC current and DC voltage multi-range inputs
2. 4 to 20 mA/DC or 1 to 5 V/DC
3. 1 to 5 V/DC

**AB**
- 60*: 1 auxiliary output, 12 digital inputs, 8 digital outputs (3 relays and 5 open collectors)
- 09*: 2 auxiliary outputs, 12 digital inputs, 8 digital outputs (3 relays and 5 open collectors)

**Power supply**
- **AC**
  - 100 to 240 Vac 50/60 Hz

**Option 1**
- 06*: Option 06 can be specified only when control output is 2G.
- 09*: Option 09 can be specified only when control output is 5G.

### Optional parts (sold separately)

<table>
<thead>
<tr>
<th>Name</th>
<th>Model No.</th>
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<tbody>
<tr>
<td>Smart Loader Package</td>
<td>SLP-C4BJ70</td>
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<tr>
<td>Smart Loader Package</td>
<td>SLP-C4BJ71</td>
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<tr>
<td>Hard dust-proof cover set</td>
<td>81446083-001</td>
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<tr>
<td>Soft dust-proof cover set</td>
<td>81446084-001</td>
</tr>
<tr>
<td>Terminal cover set</td>
<td>81446084-001</td>
</tr>
</tbody>
</table>

- **Inspection certificate**
- **Supports traceability certification**

The indications on SLP-C4B are basically all in Japanese, but some of the error messages and indications in the design sheet and data trend functions are in English.