**Multi-loop Controller with Multifunction Display**

**Model C7G**

The next stage in controller evolution

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**Additional display unit (sold separately)**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Part name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>C7D-400D00</td>
<td>Additional display unit for multi-loop controller with multifunction display</td>
<td>1</td>
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<tr>
<td>C7D-600D00</td>
<td>Integrated mounting</td>
<td>2</td>
</tr>
<tr>
<td>C7D-700D00</td>
<td>English, Japanese</td>
<td>3</td>
</tr>
<tr>
<td>C7D-800D00</td>
<td>Noise</td>
<td>4</td>
</tr>
<tr>
<td>C7D-900D00</td>
<td>No special support</td>
<td>5</td>
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</tbody>
</table>

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**Optional parts**

- SLP-C7 Smart Loader Package (free version)
- SLP-C7 Smart Loader Package (paid version)
- Power terminal cover (10 covers included)
- Integrated-mounting kit *2
- microSD card (for replacement)
- CLOCK block (for replacement) *3
- MOTOR block (for replacement) *3
- Current transformer (dia. 5.8 mm)
- Current transformer (dia. 12 mm)
- Voltage transformer (200 V AC)

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**Parts (sold separately)**

- SLP-C7FJ91
- SLP-C7-J91
- 81447704-001
- 84503167-001
- 84502552-001

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**Accessories**

- Standard gasket
- Display and mounting screws (dia. 5 mm)
- Gaskets for securing terminals
- Integrated mounting bracket
- Display and mounting screws (dia. 5 mm)
- Integrated mounting cable

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Please read “Terms and Conditions” from the following URL before ordering and use.

https://www.azbil.com/products/factory/order.html

Ethernet is a registered trademark of XEROX Corporation.
module is a trademark and the property of Schneider Electric SE, its subsidiaries and affiliated companies.
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Azbil Corporation
Advanced Automation Company

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Ethernet Corporation changed its name to Azbil Corporation on April 1, 2012

1-12-2 Kawana, Fujisawa
Kanagawa 251-8522 Japan

URL: https://www.azbil.com
A Significantly Enhanced Role for Digital Indicating Controllers

This PID controller handles up to four loops with a top sampling cycle of 10 ms at an accuracy of 0.1% F.S. In addition, its separable structure, compact data storage, and health index* function make it useful in ways that conventional controllers cannot match.

Multi-loop Controller with Multifunction Display
Model C7G

Meet a variety of needs!

- **[NEED A]** High-level waterproofing for moist environments
- **[NEED B]** Easy-to-read settings and alarms with no difficult codes
- **[NEED C]** Flexible installation in small spaces
- **[NEED D]** A device powered from the PC during setup
- **[NEED E]** High-speed, smart Ethernet connection
- **[NEED F]** Data saved even if a problem occurs
- **[NEED G]** Prediction of equipment faults to prevent sudden problems
- **[NEED H]** Easy selection of model No. and specifications

Excellent usability
We developed the hardware from the user’s viewpoint in order to achieve a high level of usability.

- Better usability and readability of display
- Separable structure
- Screwless-clamp terminal block

Seamless coordination with other equipment maximizes value
Ethernet as a standard interface provides high-speed communication with a variety of devices. RS-485 is also a standard feature, allowing improved flexibility in network construction. A PLC link function, which provides an easy Ethernet connection with Mitsubishi Electric’s PLC, is also available.

Diagnostic and management information for problem-solving
The advanced C7G, in addition to faster and more reliable process control, is capable of detecting warning signs of trouble with connected equipment through the use of its data-processing technology.

- Faster speed
- Compact data storage
- Data processing

Advance warning of problems
Health index function

Note: Diagrams are for illustrative purposes. The actual product may differ.
Excellent usability

Excellent usability and readability
- 3.5-inch full dot matrix LCD offers crystal-clear display of values and graphs during control operation.
- Touch panel provides user-friendly operability. If lost, just press the home button.

Withstands a variety of environments
- Display unit features an IP67 protection rating. Resistance to dust and water drops allows use in a range of environments.
- Resistive touch-panel is easy to operate in cleanrooms, etc., where gloves are worn.

Clarity at a glance—set for full name display of C7G alarms and settings
Parameter settings and gauge alarms can be displayed by name rather than by code number, reducing the need to refer to the manual during setup and alarm handling. Both English and Japanese are available and can be seamlessly switched during operation.

Selectable home screen
One controller handles up to 4 loops. The C7G breaks the single-loop controller mold by allowing users to select the required number of loops. The loops that are displayed on the screen can also be changed through home screen settings.

- Sample display 1 -
  - English
  (Controller alarm indication)

- Sample display 2 -
  - Japanese
  (Parameter settings indication)

Easily identify the cause of alarms
The hierarchical design of the alarm screen allows easy identification of the location and cause of generated alarms.
[Example: sensor input error]

Graphs are helpful in trial-run adjustments
Control status can be conveniently checked on a graph while making trial-run adjustments.
FEATURE 01

Excellent usability

Separable display allows for flexible positioning.

Display unit
Since power is supplied from the main unit, separate power wiring is not needed for displays installed less than 30 meters from the main unit. (A separate power supply is required for distances from 30 to 100 meters.)

Additional display unit block
Unlike conventional controllers, a second display can be added. The home screen of each display unit can be customized as desired.

Insert wire. Spring-type terminals are that easy!
Spring-type terminals simplify wiring and improve reliability. They can be connected by simply inserting the bootlace ferrules. The spring clamp method achieves reliable electric contacts.

- Much simpler than conventional wiring methods.
- No more hassles after inserting the wire.

Configuration without a power supply
Parameters can be loaded and stored with the Smart Loader Package when the main unit is connected to a PC with a MicroUSB cable.

POINT 01
Simplified panel cutout mounting holes
Panel mounting requires only round holes. The tools previously required to make panel cutouts are not needed, allowing much simpler mounting.

POINT 02
Conventional panel cutouts also OK
As with conventional controllers, integrated mounting of the display unit attached to the main unit is also fine.

Smart Loader Package*
The free version* of the Smart Loader Package can be downloaded from our webpage.


- Free version (SLP-C7FJ91) Includes configuration, monitoring, and Health Index functions.
- Paid version (SLP-C7-J91) Includes additional functions not available in the free version (advanced monitoring function and Health Index screen).

Note: Diagrams are for illustrative purposes. The actual product may differ.
The C7G is equipped with pattern operation functions. The same pattern operation can be used for up to 4 loops, or individual patterns operations can be executed. Functions that are needed for pattern operations, like PV start and guaranteed soak, are of course available.

### Overview of pattern operation specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patterns and segments</td>
<td>16 patterns, 16 segments per pattern</td>
</tr>
<tr>
<td>Segment setting method</td>
<td>Set by set point (SP) and time.</td>
</tr>
<tr>
<td>Time units</td>
<td>0.01 s, 0.1 s, 1 s, 1 min</td>
</tr>
<tr>
<td>Operation modes</td>
<td>Pattern operation (Pattern SP), Constant-value operation (LSP/RSP)</td>
</tr>
</tbody>
</table>

### Pattern operation functions

- **Segment events**: 1 to 16
- **Host communication**: Pattern settings and segment settings can be read and written.

#### Diagram of pattern operation

**Case example**

Multiple loops (up to four) can be controlled simultaneously with just one C7G unit, instead of using a group of conventional controllers receiving analog signal outputs from a pattern generator as remote set point (SP) inputs.

**Multi-loop pattern operation**

- **Loop 1**: Pattern Operation
- **Loop 2**: Constant-Value Operation
- **Loop 3**: Constant-Value Operation
- **Model C7G**: Pattern generator
- **Conventional**: Controller 1, Controller 2, Controller 3

**Note**: Diagrams are for illustrative purposes. The actual product may differ.
FEATURE 02
Value is maximized by seamless coordination with other equipment

Comes standard with two communication ports

Both Ethernet and RS-485 support is a standard feature. With high-speed (Ethernet) communication and serial (RS-485) communication, a high degree of flexibility is ensured for equipment-internal instrumentation networks and controller-controller instrumentation networks.

FEATURE 03
Diagnostic and management information for problem-solving

The controller displays and records changes in heater resistance to show the heater’s condition.

Heater voltage and current is measurable from the voltage transformer (VT) input and current transformer (CT) input and is displayed as RMS values. Based on the values measured for VT input and CT input, heater resistance can be calculated, monitored (displayed/transmitted), and recorded.* The state of a heater whose resistance characteristics vary depending on the temperature environment is easier to know by recording* the resistance together with the temperature control status.

*The controller’s CDS (compact data storage) function is used for recording.

Example of instrumentation:

VT input

RMS voltage (V)

CT input

RMS current (A)

R = RMS voltage ÷ RMS current

Resistance (Ω)

Note: Diagrams are for illustrative purposes. The actual product may differ.

Even easier instrumentation with a Smart device gateway model NX-SVG

Our Smart device gateway model NX-SVG allows easy instrumentation using Ethernet.

Data transfer can be easily configured by simply setting the source and target devices. Easy setup of data transmission is achieved without requiring communication programs by PLC ladder programming.
Diagnostic and management information for problem-solving

**Compact data storage (CDS)**

Compact data storage is Azbil’s new technology for effective data recording. It can record necessary data at fixed intervals and also record just the required pieces of data, thus allowing controllers to achieve data processing and management at FA control layer.

- **For example, data storage in batches**
- **Data storage in 10 ms (fastest mode)**
  - Control output and process data such as temperature, pressure, flow rate, and resistance are extracted at speeds of up to 10 ms and stored.
  - When data is collected through network communication, rapid variations can occur that cause some data to be lost, but the model C7G saves data to an SD card so that nothing is lost.

**Recording method**

- **Custom**
  - This is a simplified data recording method that allows users to register and record up to 40 pieces of data as desired. CDETUM or RING mode can be selected for data accumulation. Here, data in CSV file format is accumulated in microSD memory cards.
- **Standard**
  - This method is used with our proprietary primary data processing technology, “Health index.” Recorded data cannot be used by controllers of other models. Data is recorded in batches or during temperature rises (step change) and processed by way of the “health index.”

**How to use**

The health index is an approximation of control loop condition. By storing data in batches and comparing it with initial values, equipment status changes can be detected before a failure occurs.

**Advance warning**

The health index is based on our proprietary data processing technology.

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**Process diagnosis (Health index function)**

Loop characteristics are quantified using process data for control. Loop soundness is monitored to detect status changes. Quantified data is provided for edge computing that in turn contributes to promotion of IoT services.

- **Kp/Tp calculation block diagram**
  - Transfer function
  - Heating control can be expressed by the following approximation formula:
  
  \[ P = K_p \exp(-L_p \cdot s)/(1+T_p \cdot s) \]
  
  - \( P \): Process gain
  - \( K_p \): Process gain
  - \( T_p \): Time constant
  - \( L_p \): Waste time

  - Normalized responsiveness is calculated with the following formula:
  
  \[ \frac{\Delta PV_{\text{max}}}{\Delta PV_{\text{max}}} \]
  
  By comparing the maximum amount of process change in a transient response (\( \Delta PV_{\text{max}} \)) and the same value for the model installed in the controller (\( \Delta PV_{\text{m}} \)), the value of “Process gain (Kp) – time constant (Tp)” is calculated as the Health Index (control loop quality). The health index is calculated while CDS is activated, and is then stored on the microSD memory card. (Depending on processing conditions, calculation may sometimes not be possible.)
## Specification

### Display unit (including Additional display unit) (C7D-___-___)
- **Screen specifications**: 3.5 in. (QVGA LCD)
- **Operation buttons**: Touch panel (resistive) and 3 hardware buttons
- **Display power source**: Max. 12 Vdc when the display is in the display state and 0 V when the unit is in the standby state
- **Protective rating**: IP67 (front of display unit)
- **Interface language**: English (selectable by setting)
- **Service life of LCD**: 5 years (at ambient temperature of 25 °C and brightness setting 4, for lifetime of backlights (brightness setting 4))

### Digital Input / DO (Digital Output) block
- **DI (Digital Input) block**
  - **No. of DI**: 12
  - **Decoded output**: 0 to 5 V or 0 to 10 V range: 5 µA max. (under standard conditions)
  - **Number of Inputs**: 1 to 5 V or 0 to 5 V range: 10 µA max. (under standard conditions)
  - **Type**: 12 V DC ±15/−10 % (under standard conditions)
  - **Scaling**: 0 to 4 digits after the decimal point are displayed. Values are displayed so that the entire value does not exceed 5 digits. (Note: Resolution varies depending on the range.)
- **DO (Digital Output) block**
  - **No. of control type**: 4 types max. (configurable by the loop type setting)
  - **Range type**: See Table of input types and ranges
  - **Sampling cycle**: 10 ms, 50 ms, 100 ms (factory default: 50 ms)
  - **Decimal point position**: 4 loops after the decimal point are displayed. Values are displayed so that the entire value does not exceed 5 digits. (Note: Resolution varies depending on the range.)
  - **Min. OFF time / ON time**: 1/16000 min.
  - **Function assignment**: Select an event status or a standard bit code
  - **Service life of LCD**: 60000 h (under standard conditions)
  - **Reference plane**: ±10 ° (main unit, and main unit and display unit in integrated mounting), no restriction for main unit and display unit in standard mounting

### Clock function (block) (with buzzer)
- **Clock function**: Hours, minutes, seconds, calendar (years 2000 to 2099, supports leap years)
  - **Display power source**: Max. 12 Vdc when the display is in the display state and 0 V when the unit is in the standby state
  - **Reference plane**: ±10 ° (main unit, and main unit and display unit in integrated mounting), no restriction for main unit and display unit in standard mounting
  - **Number of PID groups**: 8 groups per loop

### Analog input processing unit
- **SP (Local SP)**
  - **Number of SP groups**: 8 groups per loop

### Analog input / DI (Digital Input) block
- **AI (Analog Input) block**
  - **Compatible output type**: Non-voltage contacts or open collector (diode type)
  - **Function assignment**: RES0000 mode selection, LTERR0 mode selection, SP group selection, SOS output, etc.
- **DO (Digital Output) block**
  - **Output type**: Open collector (diode type)
  - **Function assignment**: Select an event status or a standard bit code
- **Temperature**
  - **Input type**: Full scale range for thermocouple, resistance temperature detector (RTD), DC current, and DC voltage
  - **Reference point**: Thermocouple: 0 °C (under standard conditions), ±1.3 °C (ambient temperature 30 °C, under standard conditions; except for ambient temperature)
  - **Repeatability temperature drift**: ±0.2 °C (ambient temperature 30 °C, under standard conditions)
  - **Measurement range**: 0.1 °C to 10 °C, 1 °C to 100 °C, and 100 °C to 1000 °C (under standard conditions)
  - **Detectable position error**: ± 2 °C after the decimal point are displayed. Values are displayed so that the entire value does not exceed 5 digits. (Note: Resolution varies depending on the range.)
  - **Resolution**: 0.1 °C to 10 °C, 1 °C to 100 °C, and 100 °C to 1000 °C (under standard conditions)
  - **Scaling**: 0 to 50000 °C (when the display range is 1 °C, maximum 6 digits after the decimal point, reserve six decimal points)

### Motor drive output block
- **Motor drive output relay**
  - **Contact configuration**: See the CT (current) input for the AC-2 block
  - **Contact rating**: 250 VAC, 5 A; 280 VAC, 1 A; 250 VDC, 5 A; 280 VDC, 1 A
  - **MMR (Motor feedback INPUT)**
    - **Allowable power/encoder**: 150 to 2000 W (fully loaded maximum)

### DI (Digital input) block
- **Compatible output type**: Non-voltage contacts or open collector
- **Function assignment**: RES0000 mode selection, LTERR0 mode selection, SP group selection, SOS output, etc.
- **Number of connections**: 4 contacts

### DO (Digital output) block
- **Compatible output type**: Open collector (diode type)
- **Function assignment**: Select an event status or a standard bit code

### Power supply
- **Power consumption**: 3-Wire system (wiring resistance included) 100 to 2500 W
- **Voltage range**: 3-Wire system (wiring resistance included) 100 to 2500 W

### Communication
- **Communication types**: RS-485
- **Transmission line type**: Multidrop (up to 31 slave stations for 1 host station)

### Pattern functions
- **Number of patterns and segments**: 16 patterns, 16 segments per pattern
- **Segment setting method**: See with set point (SP) setting
- **Time units**: min, h, d, n, s, µs
- **Function**: Guaranteed scale (analog and digital), PV start, Alarm, Cyclic operation, Pattern link, etc.

### Event operations
- **Maximum number of events**: 1 to 5 events
- **Function assignment**: 8 groups, 10 breakpoints

### Ethernet
- **Transmission line type**: twisted pair (10BASE-T/100BASE-TX/T3 Ethernet)
- **Power consumption**: Dedicated PC loader: 12 VDC ±10 %, 3 W
- **Protocol**: Modbus RTU

### Display unit
- **Color display unit in standard mounting**: Red
- **Color display unit in integrated mounting**: Black
- **Shape**: Touch panel (resistive) and 3 hardware buttons
- **Languages**: English/Japanese (switchable by setting)
- **IP rating**: IP67 (front of display unit only)

### Power supply
- **Power consumption**: 3-Wire system (wiring resistance included) 100 to 2500 W
- **Voltage range**: 3-Wire system (wiring resistance included) 100 to 2500 W
- **Transmission line type**: Multidrop (up to 31 slave stations for 1 host station)

### Data storage
- **SD memory**: microSD/SD card compatible (SD-G (the compact data storage cards index functions)

### General specifications
- **Memory backup**: 500000 points (1 million bytes-words cycle read), for parameters settings
- **Dedicated PC loader**: 500000 points (1 million bytes-words cycle read), for parameters settings
- **Cable**: USB to Micro USB (Type A) cable (USB 2.0 supported, 5 m) or Ethernet cable
- **Power supply**: When connected with a USB cable, the device can be powered by the PC and the parameter settings can be changed.

### Control unit
- **Control operation**: PID control (proportional band, integral time, derivative time), dead band, feedback, analog input, and digital output (OGO control, proportional action, direct action, and reverse action)
- **PID Control**: Proportional band (P): 0 to 10, Integral time (I): 0 to 999999.99 s, Derivative time (D): 0 to 999999.99 s, Dead band (DB): 0 to 999999.99 s

### Overview of the unit
- **General specifications**: Memory backup: 500000 points (1 million bytes-words cycle read), for parameters settings

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**Note:** For details, refer to specification sheet No. CP01-501-1E.
## Specification

### Input types and ranges

<table>
<thead>
<tr>
<th>Input type</th>
<th>Range type No.</th>
<th>Sensor</th>
<th>Range</th>
<th>Accuracy</th>
<th>Effective resolution</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>-200 to +1,200 °C</td>
<td>±0.1 % FS ± 1 digit **</td>
<td>0.1 °C</td>
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<td>K</td>
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<td>K</td>
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<td>Pt100</td>
<td>-200 to +500 °C</td>
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<tr>
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<td>Pt100</td>
<td>0 to +50 °C</td>
<td>±0.1 % FS ± 1 digit</td>
<td>0.1 °C</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>Pt100</td>
<td>0 to +300 °C</td>
<td>±0.1 % FS ± 1 digit</td>
<td>0.1 °C</td>
</tr>
<tr>
<td></td>
<td>67</td>
<td>Pt100</td>
<td>0 to +300 °C</td>
<td>±0.1 % FS ± 1 digit</td>
<td>0.1 °C</td>
</tr>
<tr>
<td></td>
<td>96</td>
<td>Voltage (V)</td>
<td>1 to 5V</td>
<td>±0.1 % FS ± 1 digit</td>
<td>0.1 °C</td>
</tr>
<tr>
<td></td>
<td>97</td>
<td>Voltage (V)</td>
<td>0 to 5V</td>
<td>±0.1 % FS ± 1 digit</td>
<td>0.1 °C</td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>Voltage (V)</td>
<td>0 to 10V</td>
<td>±0.1 % FS ± 1 digit</td>
<td>0.1 °C</td>
</tr>
<tr>
<td></td>
<td>99</td>
<td>Current (mA)</td>
<td>0 to 200mA</td>
<td>±0.1 % FS ± 1 digit</td>
<td>0.1 °C</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>Current (mA)</td>
<td>0 to 200mA</td>
<td>±0.1 % FS ± 1 digit</td>
<td>0.1 °C</td>
</tr>
<tr>
<td></td>
<td>101</td>
<td>Voltage (V)</td>
<td>-10 to +10V</td>
<td>±0.1 % FS ± 1 digit</td>
<td>0.1 °C</td>
</tr>
</tbody>
</table>

*1. For -200 to 0 °C, ±0.2 % FS ± 1 digit
*2. For 0 to 100 °C, ±0.1 % FS ± 1 digit
*3. For 0 to 100 °C, ±0.1 % FS ± 1 digit
*4. For 0 to 100 °C, ±0.1 % FS ± 1 digit
*5. For 2 to 200 °C, ±0.4 % FS ± 1 digit
*6. For 2 to 200 °C, ±0.4 % FS ± 1 digit

### Resistance temperature detector (PT100)

| Part names and functions
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Display unit</td>
</tr>
<tr>
<td>Power indicator (green in normal switch)</td>
</tr>
<tr>
<td>LCD touch panel</td>
</tr>
<tr>
<td>Display change button</td>
</tr>
<tr>
<td>Display connector</td>
</tr>
<tr>
<td>Power supply terminals</td>
</tr>
<tr>
<td>Status indicator</td>
</tr>
<tr>
<td>microSD memory card</td>
</tr>
<tr>
<td>Main unit</td>
</tr>
<tr>
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<tr>
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</tr>
<tr>
<td>Status indicator</td>
</tr>
<tr>
<td>microSD memory card</td>
</tr>
</tbody>
</table>

### External dimensions and mounting (Unit: mm)

#### Standard mounting

- Display unit, additional display unit
- Main unit
- Power indicator
- LCD touch panel
- Display change button
- Display connector
- Power supply terminals
- Status indicator
- microSD memory card
- microSD memory card

#### Integrated-mounting

- Display unit, additional display unit
- Main unit
- Power indicator
- LCD touch panel
- Display change button
- Display connector
- Power supply terminals
- Status indicator
- microSD memory card
- microSD memory card

---

1/90000 or better

0.01 °C
**Specification**

**Model selection**

<table>
<thead>
<tr>
<th>Main unit</th>
<th>I/O slot</th>
<th>Other</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C G A</td>
<td>7 8 9 10 11 12 13</td>
<td></td>
<td>Multi loop controller with multifunction display</td>
</tr>
<tr>
<td>C</td>
<td>5 6 7 8 9 10 11 12 13</td>
<td></td>
<td>Continued</td>
</tr>
<tr>
<td>C</td>
<td>5 6 7 8 9 10 11 12 13</td>
<td></td>
<td>Communication interface for USB, USB, RS-232C (sink output, source input)</td>
</tr>
<tr>
<td></td>
<td>5 6 7 8 9 10 11 12 13</td>
<td></td>
<td>Integrated mounting included</td>
</tr>
<tr>
<td></td>
<td>5 6 7 8 9 10 11 12 13</td>
<td></td>
<td>Integrated mounting included</td>
</tr>
</tbody>
</table>

**Model selection (models with motor output)**

<table>
<thead>
<tr>
<th>Main unit</th>
<th>I/O slot</th>
<th>Other</th>
<th>Description</th>
</tr>
</thead>
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<td></td>
<td>5 6 7 8 9 10 11 12 13</td>
<td></td>
<td>Integrated mounting included</td>
</tr>
</tbody>
</table>

**Symbol**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Block name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-P</td>
<td>Voltage pulse output</td>
<td>Voltage pulse output (12 V DC) × 1</td>
</tr>
<tr>
<td>A-C</td>
<td>Analog current output</td>
<td>Input terminals for the current transformer (CT) for detecting heater burnout, overcurrent, and short circuit are included × 2</td>
</tr>
<tr>
<td>A</td>
<td>Analog input</td>
<td>Voltage pulse output (10 VDC) × 1</td>
</tr>
<tr>
<td>D</td>
<td>Digital input</td>
<td>Input for the current transformer (CT) for measuring current and the voltage transformer (VT) for measuring voltage are included (1 each)</td>
</tr>
</tbody>
</table>

**Recommended models**

**Block layout example**