## This is compact
## temperature controller featuring large variety of functions.

👍 PICK UP

AS ONE ORIGINAL

TC-3000A



Display

Back Side

3 Laboratory Furniture

4 Life Science and Analysis

5 Bottles and Containers

6 Laboratory Related Tools and Fixtures

7 Cleaning and Sterilization

8 Safety Protection Supplies

9 Clean Environment Equipment

A Balances

B Thermometers and Hygrometers

C Data-Loggers and Recorders

D Water and Soil Analysis

E Air and Gas Analysis

F Natural Environment Analysis

G Electrical Measuring Equipment

H Physical Property Measuring Equipment

I Microscopes

J Fiber Scopes and Loupes

K Lasers / Optical Equipment

L Measuring Tools

## DIGITAL TEMPERATURE CONTROLLER

| Order No. | Model No. | Temperature Setting Range | Min. Display Unit | JPY | Ref.No |
|-----------|-----------|---------------------------|-------------------|-----|--------|
| N 1-4597-21 | TC-1000A | −20.0～500.0℃ | 0.1℃ | ¥ 24,000 | 039470 |
| N 1-4597-22 | TC-2000A | | | ¥ 30,000 | 039470 |
| N 1-4597-23 | TC-3000A | | | ¥ 36,000 | 039470 |
| 1-4597-11 | Pt100Ω Sensor | | φ4.0×200mm | ¥ 7,200 | 039460 |
| 1-4594-12 | Output Lead Wire (for alarm output) | | 1.5m | ¥ 4,000 | 039470 |
| N 1-4594-26 | Communication Cable | USB Cable | 2.0m | ¥ 2,500 | 039470 |
| 1-5200-21 | Sensor Protective Tube | For φ4mm(FEP) | | ¥ 1,500 | 039470 |

### ■ Feature

< TC-1000A・2000A・3000A Common Feature > ● Device is equipped with 4 types of timers (ON・OFF・ON/OFF・SET). ● Temperature controller also features self-diagnostic functions such as heater malfunction detection and sensor malfunction detection. ● Controller regulates temperature accurately with integrated microprocessor PID control system.
< TC-2000A・3000A Common Feature > ● These controllers are equipped with repeat function and programming function that allows you to input up to 8 steps for temperature and time. < TC-3000A > ● With dedicated software (CD-ROM) that comes as standard feature and is used for data storage and communication, possible to easily manage testing data on your computer (communication cable is sold separately). ● Device comes with alarm signal output function as standard feature, allowing you to stop other equipment or to start reserve system if error occurs.

### ■ Specification

| Model No. | TC-1000A | TC-2000A | TC-3000A |
|-----------|----------|----------|----------|
| Display Accuracy | F・S±0.5% | | |
| Control Method | Microprocessor PID control | | |
| Display Method | LCD Digital Display (simultaneous display of setting/measured temperature・heater output bar graph display) | | |
| Sensor | K Thermocouple (standard)・Pt100Ω (option) | | |
| Safety Function | Self Diagnosis Function (heater failure detection・sensor failure detection)・Circuit Protector | | Self Diagnosis Function (upper/lower temperature error detection・heater failure detection・sensor failure detection)・Circuit Protector |
| Additional Function | — | Timer Function : Setting Range/1minute～99hours 59minutes (1minute unit)・Set Value Memory Function・Key Lock Function・Auto Tuning Function | |
| | | — | Program Function : (1) No. of Steps/Max. 8-steps (2) No. of Repetitions/Max. 9999 (3) Set Resolution/0.1℃ in Temperature・1minute in time (4) Time Setting Range/1minute～99hours 59minutes (1minute unit) |
| | | — | Upper/Lower Temperature Alarm・Data Storage・Communication Function : PC Output (USB) External Temperature Sensor Support・Alarm Signal Output |
| Power Supply | AC100V 50/60Hz | Control Output (3P AC100V MAX12A) | |
| Dimensions | 147×150×112mm | | |
| Accessories | K Thermocouple (φ4.0×200mm)×1 | | |

## THERMOSTAT

AS ONE ORIGINAL

| Order No. | Model No. | Setting Temperature Range(℃) | Sensor Type | JPY | Ref.No |
|-----------|-----------|------------------------------|-------------|-----|--------|
| 1-6123-01 | TJA-450K | 0 ～399 | Thermocouple(K) | ¥ 30,000 | 039470 |
| 1-6123-02 | TJA-450P | 0.0～ 99.9 | Pt100Ω | ¥ 32,000 | 039470 |
| 1-6124-01 | TJA-550K | 0 ～500 | Thermocouple(K) | ¥ 35,000 | 039470 |
| 1-6124-02 | TJA-550P | 0.0～200.0 | Pt100Ω | ¥ 37,000 | 039470 |
| 1-5200-21 | Sensor Protection Tube | for φ4 mm(FEP) | | ¥ 1,500 | 039470 |
| 1-5196-22 | | for φ3.2mm(FEP) | | ¥ 1,500 | 039470 |

TJA-450 Type

Back Side

### ■ Specification

| Model No. | TJA-450K | TJA-450P | TJA-550K | TJA-550P |
|-----------|----------|----------|----------|----------|
| Control Method | ON/OFF Control (2-positions method) | | PID Control (auto tuning) | |
| Display Accuracy | ±1% (FS)+1digit or 3℃, whichever the larger | | SV±3% or 3℃, whichever the larger | |
| Setting Method | 3-digit Digital Switch Setting | | Sheet Key-touch Method | |
| Connecting Capacity | MAX15A (under resistance load) | | MAX10A (under resistance load) | |
| Attached Sensor | K Thermocouple φ3.2×200mm (stainless sheath (SUS304)) Cable Length 1.9m | Pt100Ω φ4×200mm (stainless sheath (SUS304)) Cable Length 1.9m | K Thermocouple φ3.2×200mm (stainless sheath (SUS304)) Cable Length 1.9m | Pt100Ω φ4×200mm (stainless sheath (SUS304)) Cable Length 1.9m |
| Output Terminal | 3P Outlet、M4 Bis Terminal | | | |
| Power Supply | AC100V 50/60Hz | | | |
| Dimensions | 135×150×94mm | | | |

TJA-550 Type

Back Side

### ■ Feature

● Equipped with 2 output terminals of 3P receptacle and terminal stop.
● TJA-450 series temperature setting can be done easily and precisely by just pressing the DIP switch.

● TJA-550 series temperature control system allows highly accurate temperature control with PID control (auto tuning equipment).
● TJA-550 series temperature display adopts PV/SV two-level display which shows measured values and set values at a glance, preventing setting mistakes and so on.

● AS ONE Original i-CUBE　Incubators for sanitary inspection, reagent storage and various incubation.

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