

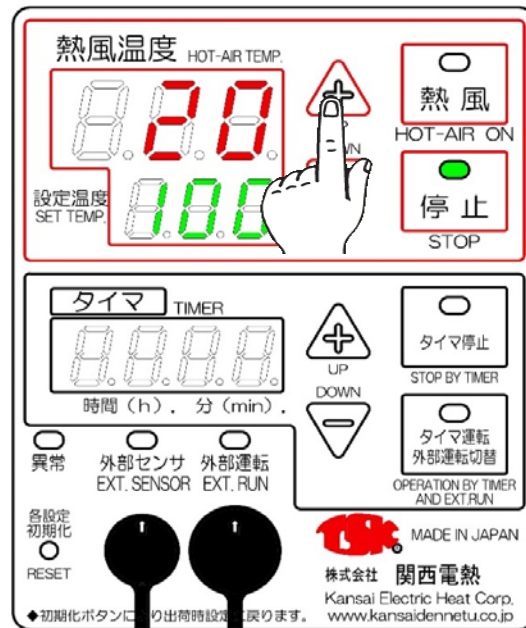
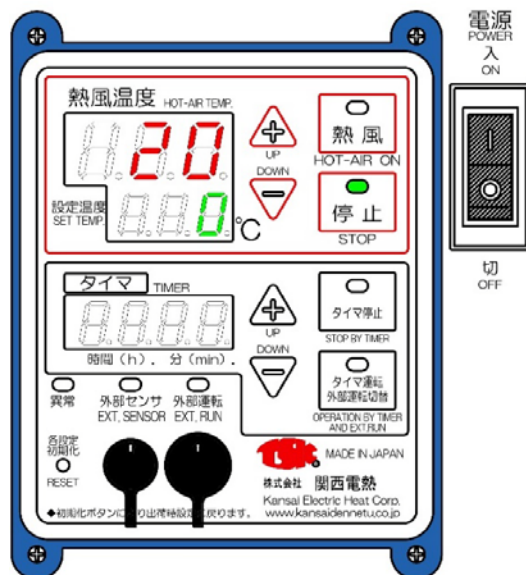
MULTI-DRYER HAS series

MANUAL

***Each setting is retained even if the power switch is turned off.**

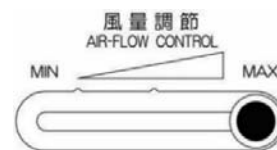
- ① Turn on the factory power supply (primary power supply) and turn on (ON) the power switch of the main unit.
- ② Use the up and down keys to set any hot air temperature.

The current temperature is displayed in the hot air temperature section, and "0" is displayed in the set temperature section.

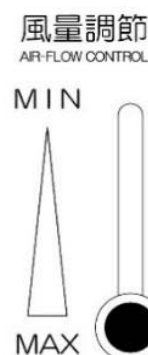


- ③ When you press the hot air switch, the hot air lamp (orange) lights up and hot air operation starts.
- ④ Adjust the air volume with the slide shutter (damper) if necessary.

《 HAS-12・22 》 horizontal slide type

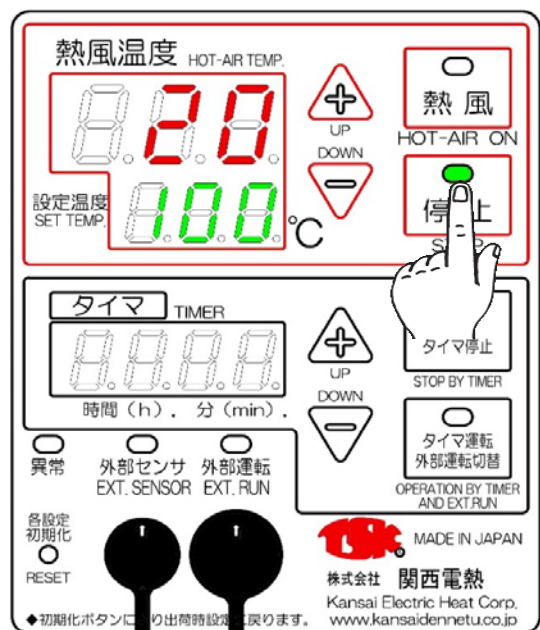


《 HAS-17T・27T, HAS-38 》 Vertical slide type



If the air volume is large, the set temperature may not be reached to the temp you require, so refer to the performance curve described in the catalog and use only the appropriate air volume.

- ⑤ When the stop switch is pressed, the hot air lamp (orange) goes out, the stop lamp (green)



After use, turn off the power switch and turn off the factory power supply (primary power supply). Immediately after use, there is residual heat in the main body and discharge port, so make sure that it has cooled sufficiently before storing it.

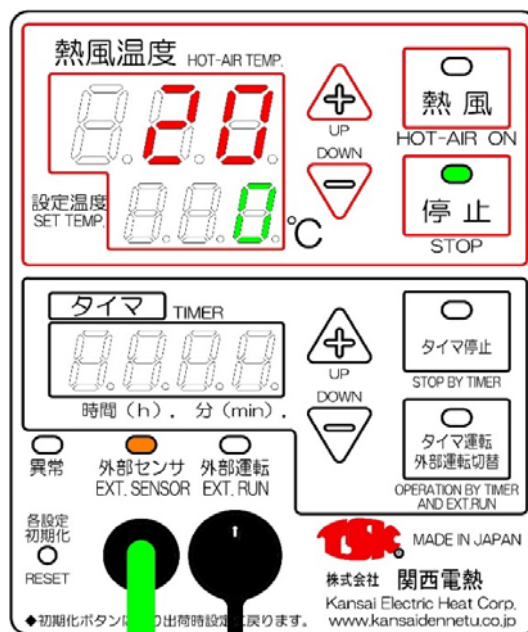
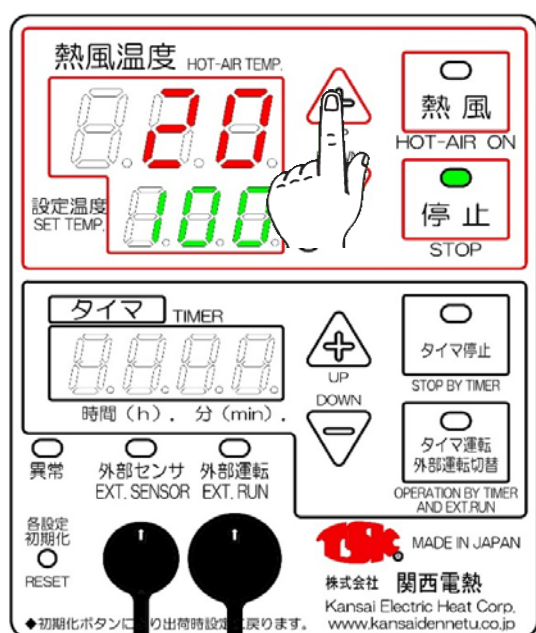
〈caution〉 Stop the operation with the stop switch, and then turn off the factory power supply (primary power supply).

Do not stop the operation of the multi-dryer with an electromagnetic contactor provided on the primary side of the multi-dryer. The surge voltage damages internal electronic devices.

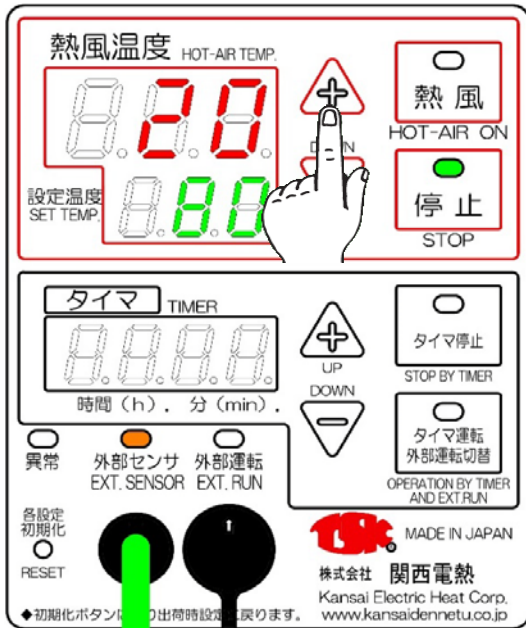
2. When Using an External Sensor (Optional)

- The temperature at a remote location can be controlled by an external sensor. Insert the external sensor KX350AP into the external sensor socket on the main unit operation panel, and fix it firmly with the attached band (for the fixing, refer to the instruction manual attached to the external sensor KX350AP).
 - Be sure to use the dedicated external sensor KX350AP for the external sensor.
 - When using an external sensor, the hot air temperature setting in the set temperature section is the setting of the external sensor position, and the hot air temperature indication in the hot air temperature section is the temperature of the external sensor position.
- ① Set the hot air temperature while stopped.
Since this set temperature is the upper limit temperature of the discharge port of the multi-dryer, set the temperature in consideration of the set temperature of both the external sensor and heat dissipation from the piping, etc. (If there is no upper limit on the discharge port temperature, set it to 300 °C).
 - ② Remove the cap of the external sensor socket, align the arrow and insert the external sensor KX350AP (the external sensor is an automatic setting type by mounting).

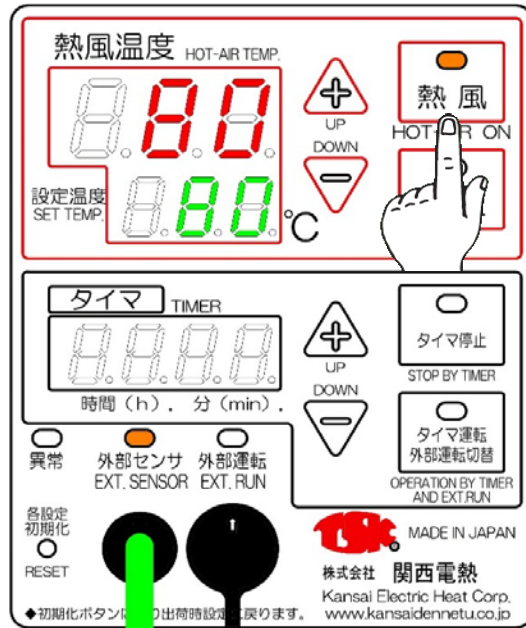
The external sensor lamp (orange) lights up and "0" is displayed in the set temperature section.



- ③ Set the temperature of the place controlled by the external sensor.



- ④ When the hot air switch is pressed, the hot air lamp (orange) lights up and hot air operation starts at the set temperature of the external sensor.



If the external sensor is removed during operation, the abnormal lamp (red) lights up and the external burnout is abnormal (hot air temperature display:

---, set temperature display Tc0) is displayed, so be sure to remove the external sensor in the stopped state.

Please give me. This external sensor burnout display can be canceled by pressing the stop switch.

When using an external sensor, you can also use the intermittent operation mode function for the purpose of saving energy (the multi-dryer automatically operates and stops with respect to the set temperature of the external sensor temperature). For details, refer to the instruction manual on our website.

5 When Using External Operation

- The multi-dryer can be started, stopped, and the heater can be turned on / off by an external signal.
- For external operation, the optional cable with connector for external operation HR30-7P is required.
- ※ During external operation, the hot air switch is disabled. Also, the timer function cannot be used.
- ※ External operation and external sensor can be used together, but be sure to set the external sensor before setting the external operation. If you set the external operation first and attach the external sensor, it will be detected as abnormal (the abnormal lamp and the external sensor lamp will blink).
- ※ Press the stop switch to reset the external operation. It cannot be released by turning the power switch on / off and turning on / off the factory power supply (primary power supply).
- ※ As an option, a cable with a connector for external operation and a remote operation switch are also available.

- ① Configure the multi-dryer operation / stop circuit using an external signal with an external operation cable.

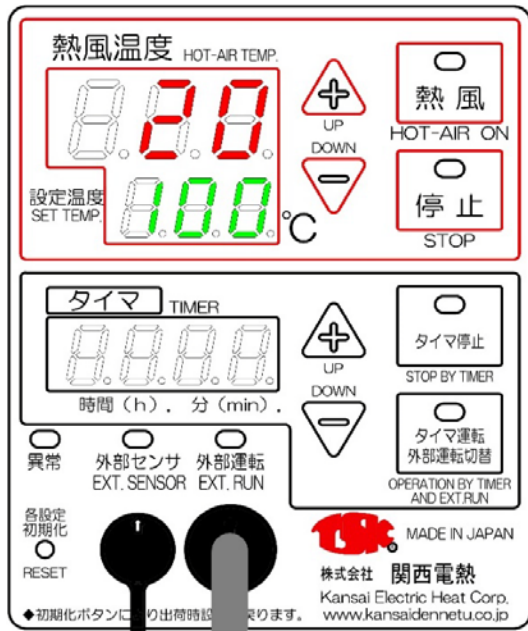
《Shut down》 : operationON/OFF 1 — COM 11 OFF
 ※Heater on / off 4—COM 11 is turned on / off regardless of whether the operation is stopped.

《Blower operation》 : operationON/OFF1 — COM 11 ON
 heater ON/OFF 4 — COM 11 OFF
 《Hot air operation》 : operationON/OFF1 — COM 11 ON
 heater ON/OFF 4 — COM 11 ON

※* Operation on / off 1—When COM 11 is OFF, operation is stopped.

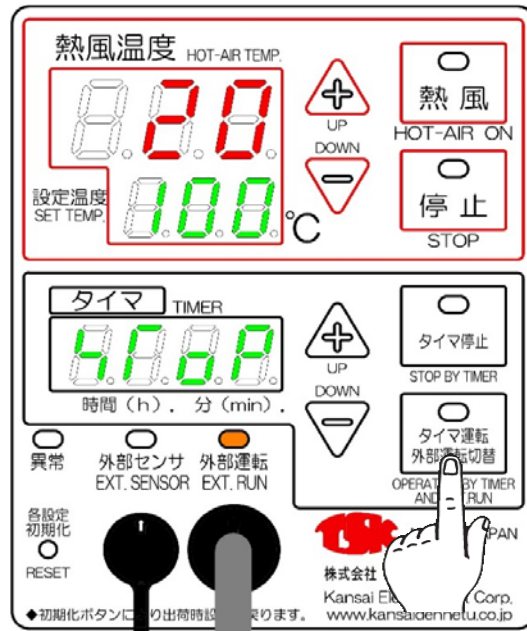
CAUTION: DO NOT APPLY VOLTAGE BETWEEN [operationON/OFF1—COM11]. ALSO,BETWEEN [operationON/OFF4—COM11]. It may cause malfunction or failure.

- ② Remove the cap of the external operation socket and insert the cable with the external operation connector by aligning the arrows with the stop state and the operation on / off-COM of the cable with the external operation connector turned off.



- ③ Timer operation Press and hold the external operation selector switch (5 seconds or longer).

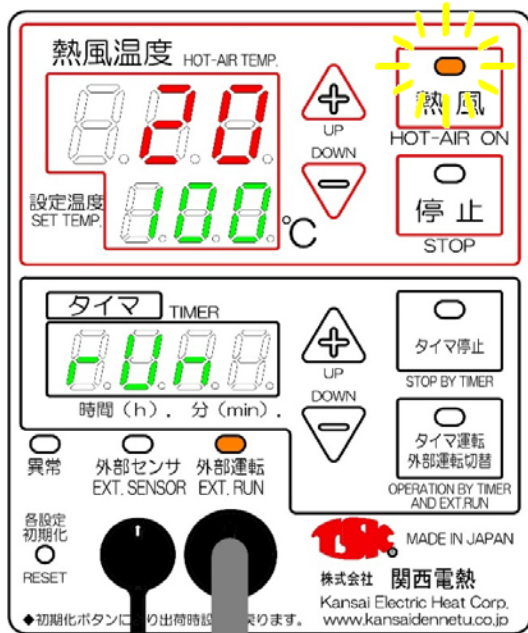
The external operation lamp (orange) lights up, and "StoP" is displayed on the timer.



※ The hot air temperature can be set in either of the above ② and ③ states.

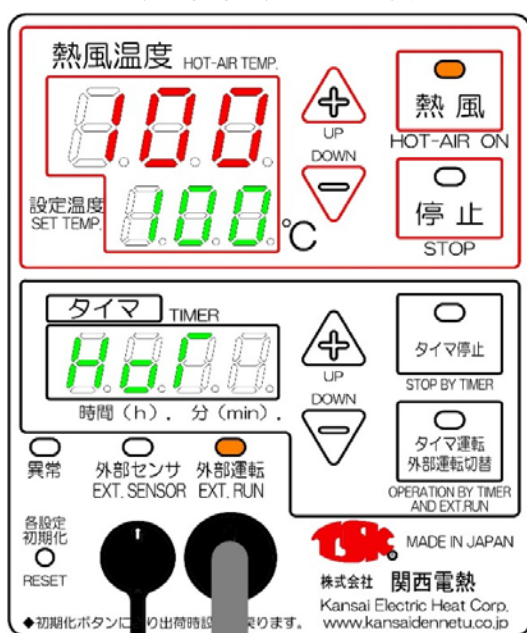
- ③ Turn on / off 1-COM. Blower operation is started.

The hot air lamp (orange) flashes and "rUn" is displayed on the timer.



- ④ With the operation on / off 1-COM turned on, turn on the heater on / off 4-COM. Start hot air operation.

The hot air lamp (orange) lights up and "HoT" is displayed on the timer.



※ If you want to stop the operation and operate the hot air without blowing the air, turn on / off the operation on / off 1-COM while keeping the operation on / off 1-COM ON.

- If the external operation is turned off, a waiting time of 5 seconds will occur until the operation is restarted.
 - When switching from hot air operation to stop and performing hot air operation again
 - "HoT" display flashes on the timer, and hot air operation starts after 5 seconds.
 - When switching from blower operation to stop operation and performing blower operation again
 - The "rUn" display flashes on the timer, and the ventilation operation starts after 5 seconds.
- ※ When switching from hot air operation to blower operation and then switching to hot air operation again, there is no waiting time.

4. When using abnormal output

- Each abnormality of the multi-dryer can be output.
- When outputting an abnormality, the optional cable with connector for external operation HR30-7P is required.
- ① Remove the cap of the external operation socket while the operation is stopped, align the arrows, and insert the cable with the external operation connector.
- ② Please perform hot air operation. When an abnormality occurs in the multi-dryer, the abnormal output 3-abnormal output 10 of the cable with an external operation connector turns ON (non-voltage contact signal, contact capacity 30V AC / DC).

《 Output error 》

• overheat	When the inside of the heater and the heater case become abnormally high temperature
• Outlet temperature upper limit	When the outlet temperature exceeds the upper limit
• Blower abnormality	When the blower is overloaded (HAS-37T, 47T only)
• Abnormal temperature inside	When the internal temperature of the multi-dryer exceeds + 65 ° C
• External sensor burnout	When the external sensor is disconnected when using the external sensor
• Discharge sensor burnout	When the discharge port sensor is disconnected
• Overheat prevention sensor burnout	When the overheat prevention sensor is disconnected
• Internal temperature sensor burnout	When the internal temperature sensor of the multi-dryer is broken
• Outlet sensor minus display	When the outlet temperature sensor drops below -15 ° C
• Overheat prevention sensor minus display	When the overheat prevention sensor drops below -15 ° C
• Internal sensor minus display	When the internal temperature sensor drops below -10 ° C
• External sensor minus display	When the temperature of the external sensor drops below -15 ° C when using the external sensor

※ For the display of the multi-dryer and the operating status when each abnormality occurs, refer to the multi-dryer instruction manual.

※ Contact capacity is more than DC5V 10mA, less than DC30V 1A (Unvoltage point of contact signal output). In case of abnormality, this terminal becomes ON.

5. Timer operation

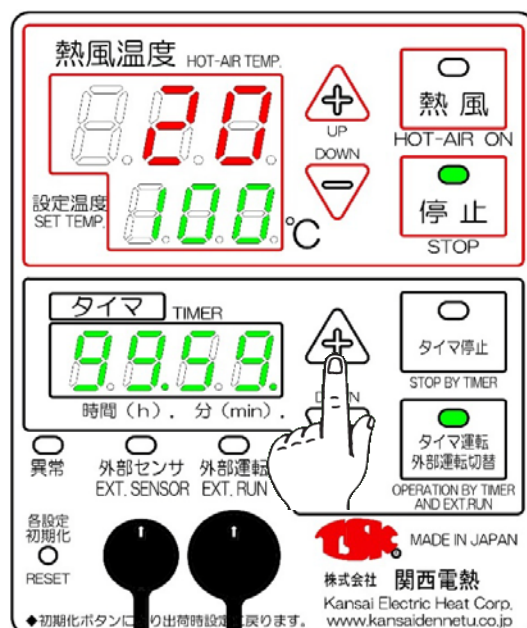
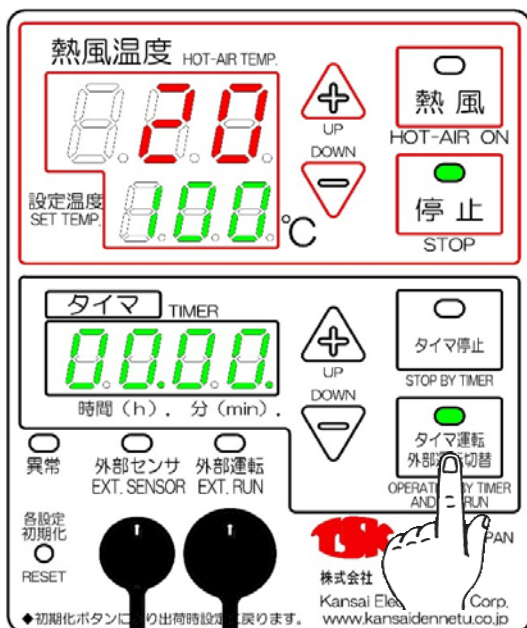
● Timer operation (operation when the time comes)

- ① In the stopped state, after setting the hot air temperature, press the timer operation external operation changeover switch.

The timer operation lamp (green) lights up, and "00.00." is displayed on the timer section.

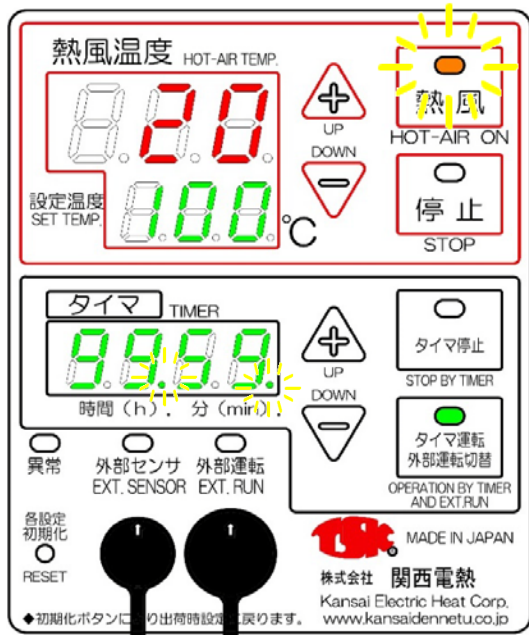
- ② Use the UP and DOWN keys to set any time.

When the timer stops blinking, the setting is complete (the maximum timer time setting is 1000 hours).



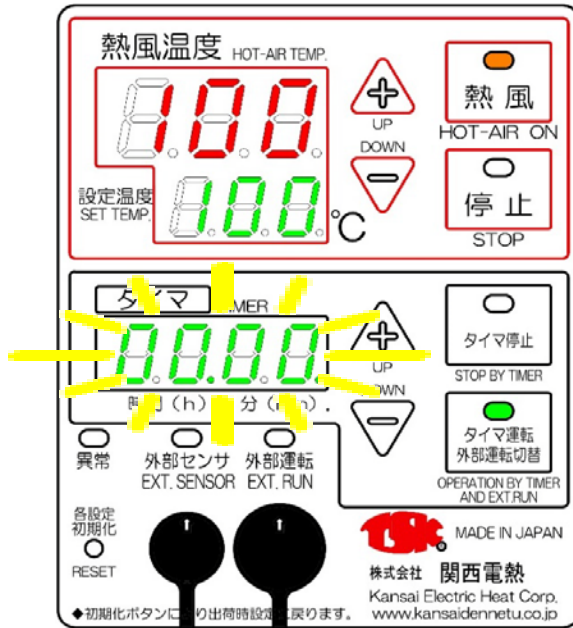
- ③ Press the hot air switch. The dot on the timer flashes and the countdown starts.

The hot air lamp (orange) flashes at the same time as the dots on the timer flash.



- ④ Hot air operation will start after the time is up.

The hot air operation lamp (orange) flashes, and "00.00." Flashes on the timer section.

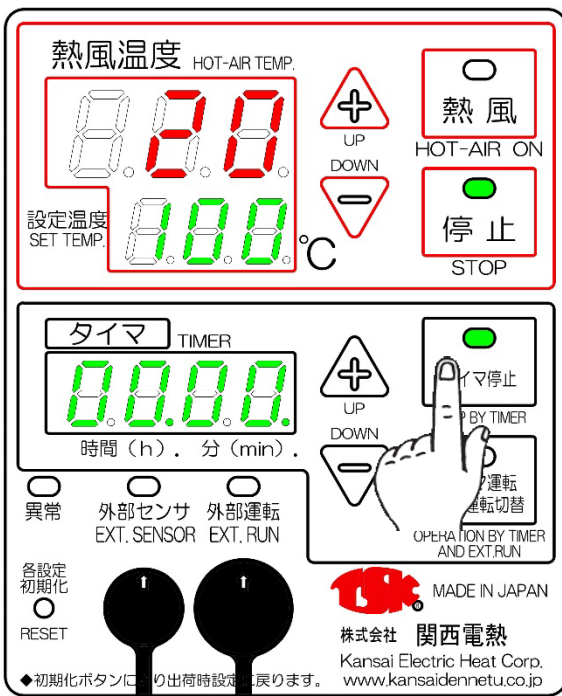


- ※ Operation after the time-up can be stopped by pressing the stop switch. However, the timer setting is memorized (the timer setting is memorized even when the power switch or the primary side power is turned off).
- ※ If you press the stop switch during the time count, the time count will be stopped, and if you press the timer operation switch again, the time count will be performed from the beginning.

● Timer stop (stops when the time comes)

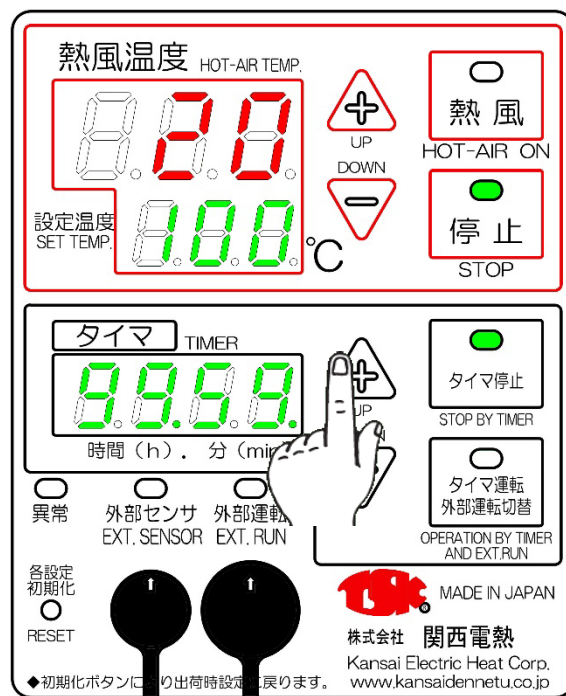
- ① In the stopped state, set the hot air temperature and then press the timer stop switch.

The timer stop lamp (green) lights up, and "00.00." Is displayed on the timer section.



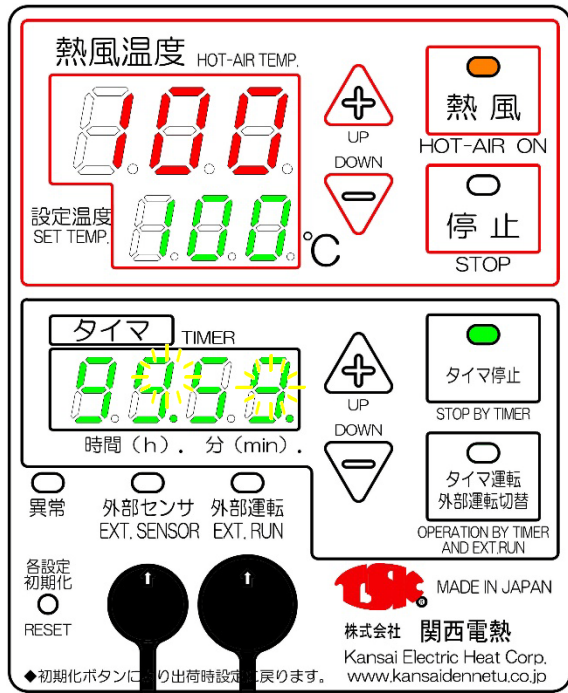
- ② Use the UP and DOWN keys to set any time.

When the timer stops blinking, the setting is complete (the maximum timer time setting is 1000 hours).



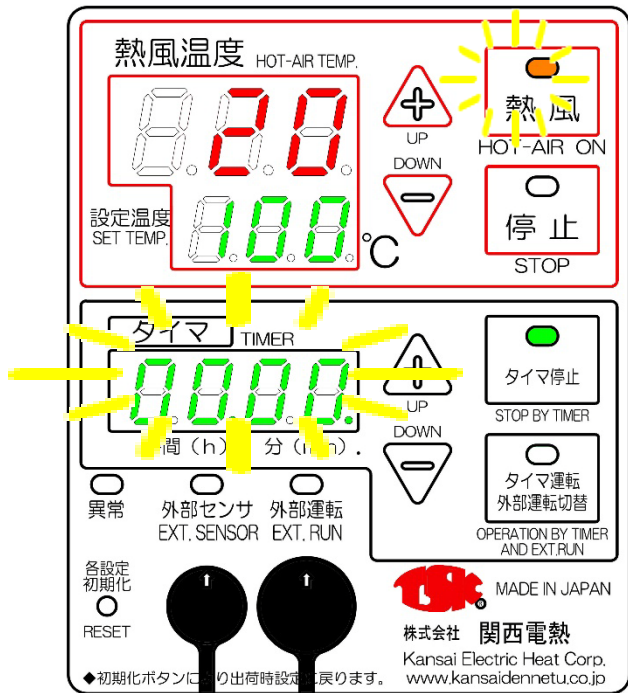
- ③ Press the hot air switch. Hot air operation is started, and at the same time, the dot on the timer flashes and the countdown starts.

The hot air lamp (orange) lights up at the same time as the dots on the timer flash.



- ④ Hot air operation will stop after the time is up.

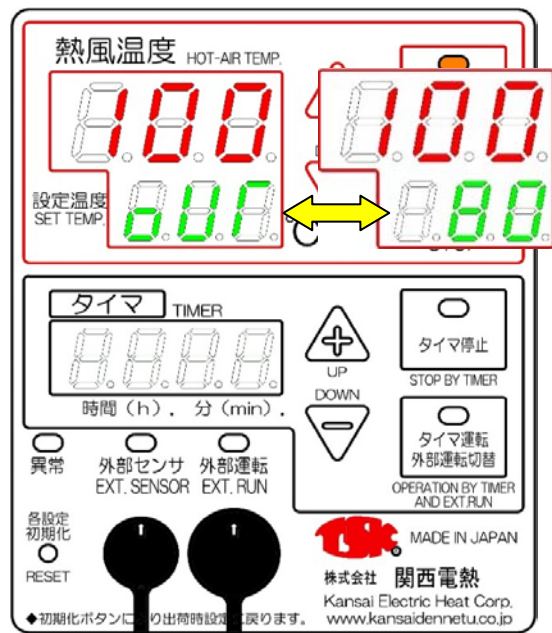
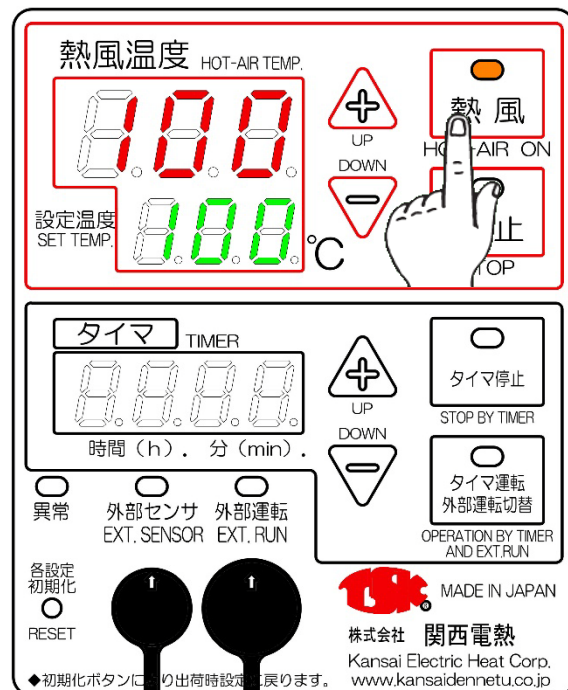
The hot air operation lamp (orange) lights up, and "00.00" Flashes on the timer.



- ※ The timer time setting is memorized even if the stop switch is pressed (the timer setting is memorized even when the power switch or the primary power is turned off).
- ※ If you press the stop switch during the time count, the time count will be stopped, and if you press the timer stop switch again, the time count will be performed from the beginning.

6. Output display

- The current heater output can be displayed and checked while the multi-dryer is operating. Please use it for data on the amount of heat used.
- ① Press and hold the hot air switch (5 seconds or more) during hot air operation.
- ② "OUT" and the output amount (%) are displayed alternately in the set temperature section.



- ※ Press the hot air switch again to end the output display.

Please download the instruction manual of the multi-dryer from our website.

Homepage www.kansaidennetsu.co.jp

《Instruction manual contents》

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| 2. Piping | 6. Other abnormalities |
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| 4. Intermittent operation | Warranty |



HOT-AIR
GENERATOR

manufacturer



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