JohnPoint®
約翰點子 空調自動控制專家

iCN-653(TH) Brushless Motor Standalone Temperature Controller

Incoming Call Memory Type | Incoming Call Power-On Type | Incoming Call Power-Off Type

NEW

- Energy-saving temperature upper and lower limit lock :
  Air Conditioning : Lower temperature limit locked at 35°C
  Heating : 15°CUpper temperature limit locked
  (Estimated energy savings of up to 10% for the system)
- Power management options :
  Can be flexibly applied to various power-on startup systems.
- Three-core wiring from panel to control box.

Flagship Model / Feature Specific Options

- Keycard Function (Customizable indoor temperature power-saving mode)
- Four-pipe, electric heating system distribution meets the diverse needs of hotels, hospitals, dormitories.

iCN-653TH
(Touch Type)

iCN-653
(Button Type)

※Please scan this QR code for the user manual.

Function Key Explanation

- Temperature Display Range : 0.0°C~50.0°C, displayed in increments of 0.5°C
- Temperature Setting Range : 15°C~35°C, minimum increment of 0.5°C
- Default mode : Air conditioning mode, automatic fan speed, set temperature 26°C
- Applicable to : Central chilled water systems, direct expansion systems
- Return air outlet temperature sensing

Power Key	⏻	Press once to control power on/off.
Mode Key	M	• In the power-on state, press once to select the operating mode : Air conditioning, fan, heating. • In the power-off state, hold for 3 seconds to enter the function options.
Fan Speed Key		• In the power-on state, press once to select the fan speed state : Auto, high, medium -high, medium, medium-low, low. • In fan mode, auto fan speed is not available. • In the power-on state, in air conditioning mode, press and hold for 5 seconds to activate the sleep function.
Temperature Setting Key	⌄ ⌃	In the power-on state, press once to adjust the set temperature by +/-0.5°C, hold down to accelerate adjustment.

1. When setting the temperature, the word "SET" will appear to the left of the set value. Temperature settings are as follows :
   - For cooling : The lowest setting can be adjusted to the lower limit lock of the cooling minimum set temperature, and the highest setting can be adjusted to the upper limit lock of the cooling maximum set temperature.
   - For heating : The lowest setting can be adjusted to the lower limit lock of the heating minimum set temperature, and the highest setting can be adjusted to the upper limit lock of the heating maximum set temperature.
2. After setting is completed, if no action is taken within 5 seconds, the settings will be saved and the display will return to room temperature.
3. In fan mode, temperature cannot be set.
4. Pressing both the temperature setting keys (▲ and ▼) simultaneously allows setting the timer function from 0 to 24 hours.
5. Within the function options, you can select/adjust various options or settings.
6. While the unit is powered off, simultaneously holding down both the temperature setting keys (▲ and ▼) for 5 seconds allows setting/unsetting the button lock state. In the locked state, only power on/off and setting of the timer function from 0 to 24 hours are allowed.

Parameter Table and Factory Values

	Parameter	Code	Factory Value	Parameter Setting Range
1.	Cooling maximum set temperature upper limit lock	cH	35.0 ℃	Cooling minimum set temperature lower limit lock ~ 35.0 ℃
2.	Cooling minimum set temperature lower limit lock	cL	15.0 ℃	15.0 ℃ ~ Cooling maximum set temperature upper limit lock
3.	Heating maximum set temperature upper limit lock	hH	35.0 ℃	Heating minimum set temperature lower limit lock ~ 35 ℃
4.	Heating minimum set temperature lower limit lock	hL	15.0 ℃	15 ℃ ~ Heating maximum set temperature upper limit lock
5.	Valve (three-way valve/compressor) delay protection time	Pd	0 (no delay)	0 (no delay), 1 (1 minute), 2 (3 minutes)
6.	Temperature compensation setting	tc	0.0 ℃	-5.0~5.0℃
7.	Panel backlight	bL	30 (seconds)	30 (seconds), -- (always on)
8.	Panel button sound	bu	on with button sound	on (with button sound) oF (without button sound) Note : This item is invalid for iCN-653.

Function option description

1. When the controller is in the shutdown state, hold down the mode key (M) for 3 seconds to enter the basic function options.
2. After entering the basic function options, the LCD displays cH. Press the (▲ or ▼) key to cycle through the main options: cH, cL, hH, hL, Pd, tc, bL, and bu.
3. After the main option is displayed on the LCD, press the mode key (M) to enter each sub-option.
4. After entering each sub-option, the LCD displays the current parameter value. Press the (▲ or ▼) key to change the parameter, then press the mode key (M) to confirm the change and return to the main option.
5. During the sub-option stage of this operation, if the mode key (M) is held down for more than 3 seconds or if there is no action from any key for more than 20 seconds, the changed settings will be stored in the EEprom (permanent memory), and the adjustment function will be exited, displaying the room temperature on the LCD.

Control Box

Perfect all-in-one control driver, integrating power supply, control, drive, and communication into one unit.

- Model :
  iCN-M1 (Single motor output)
  iCN-M11 (Dual motor output)
- Size :
  168x143x65mm
- Input Voltage :
  AC 220V · 50/60Hz (Single-phase)
- Output Contacts :
  Host chain contacts : 1A/250VAC
- There is built-in active PFC function (Optional)

DC Motor

DC Variable Frequency Technology, operates ultra-quietly, incorporating DC variable frequency sensorless drive technology.

Single-Axis Motor/60W

Double-Axis Motor/120W

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