TOSHIBA

Air Conditioning

VN Unit Heater Controls

THE CONFIGERATION CODES AS DETAILED IN THIS MANUAL MUST BE SET FAILURE TO DO THIS COULD RESULT IN BUILDING DAMAGE

VN Unit Heater Controls Description and Contents

This manual covers the VN unit heater options. Each of the components are ordered and supplied separately.

RBC-VNMC (HE1) Heater Controller

The controller will enable the pre-heater if the temperature falls below the value set in configuration item 67 (Please see the Table 1) the heater will operate for a fixed period of time set in configuration item 68 (Please refer to Table 2). The heater will only operate when the Heat Exchange Unit is operating and will provide a 30 second run on time to remove any residual heat.

Contents:

Control Panel
Installation/Operating Manual.

RBC-VNMH1, RBC-VNMH2, RBC-VNMH3 & RBC-VNMH4 Heat Exchanger unit Heater Batteries

The heater batteries are available in three sizes for use with your selected VN unit. The heater batteries can be used as a pre-heater.

Model	Heater Size	Duct Diameter	VN Model
RBC-VNMH1	1x1Kw Heater	100	VN-M150HE
RBC-VNMH2	1x1Kw Heater	150	VN-M250HE & VN-M350HE
RBC-VNMH3	2x1Kw Heater	200	VN-M500HE & VN-M650HE
RBC-VNMH4	2x1Kw Heater	250	VN-M800/1000HE & VN-M1000HE(HE1)

Contents:

Heater Battery.
Airflow Pressure Switch
Installation/Operating Manual.

RBC-VNMC(HE1) Heater Controller

Installation Operating Instructions

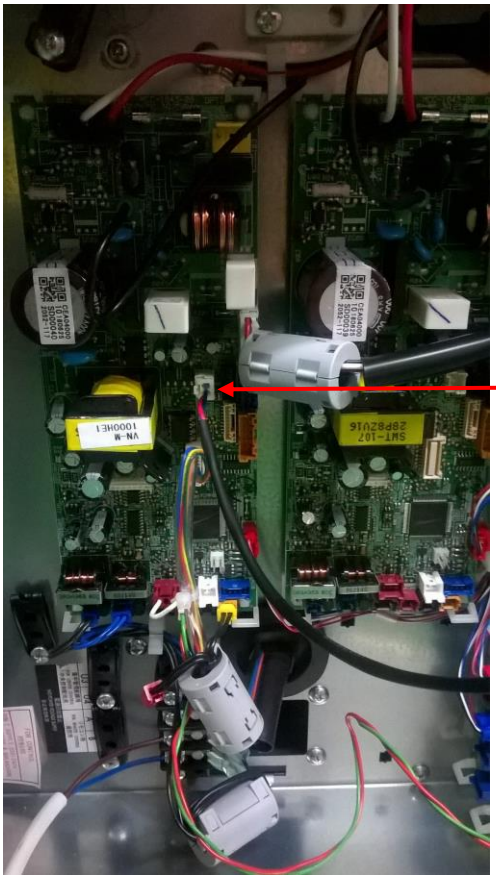
Installation

THE HEATER CONTROLLER AND THE HEAT EXCHANGE UNIT MUST BE SUPPLIED FROM THE SAME PHASE

The controller must be used with the correct RBC-VNMHX heater battery for the selected Heat Exchange unit.

The controller should be mounted adjacent to the Heat Exchange unit and duct heater.

The controller is Class 1 and must be Earthed.



Connect the controller as per the wiring diagram on page 6

DN code Configuration

Connect a remote controller and set the DN codes as required. To access the DN codes Press the Test Set and Cl. You can then press the temperature up and down arrows to select the code to be modified. Once the selected code has been updated press the SET button to register the change and then the Spanner button to exit.

THESE CONFIGERATION CODES MUST BE SET
FAILURE TO DO THIS COULD RESULT IN BUILDING DAMAGE

Set DN Code 67 to the required on temperature.

Output ON temp setting

DN[*1]	ON temp[℃]
0	N/A(factory setting)
1	0 or Less
2	-1 or Less
3	-2 or Less
4	-3 or Less
5	-4 or Less
6	-5 or Less
7	-6 or Less
8	-7 or Less

Table 1

Set DN Code 68 to the required heater operation time.

Output ON time setting

DN[*2]	ON time[h]
0	1(factory setting)
1	2
2	3
3	4
4	5
5	6

Table 2

Heater Operation

When the unit air on sensor in the unit reaches the value set in (Table 1) the heater will be enabled. The heater will operate for the time set in (Table 2) at the end of this time the heater will switch off. If the unit air on value is still below the set value in Table 1 the process stars again. if it is above the heater remains OFF. Should the temperature significantly rise the heater will turn off.

RBC-VNMH1, RBC-VNMH2 RBC-VNMH3 & RBC-VNMH4 Heat Exchanger unit Heater Batteries

Installation Instructions

The electric heater is of resistance type care should be taken to ensure the heater is correctly mounted in the ductwork system with the terminal box accessible. The heater should not be mounted near to materials that can be damaged by heat. Recommended one-meter minimum of duct before the VN unit.

The heaters are supplied in different sizes depending on the VN unit that has been selected.

The heaters are fitted with two thermal cut-outs. The cut-outs are to be wired in series with the airflow switch. The thermal cut-outs are of the manual reset type and their purpose is to ensure the power supply is disconnected in the event of an over-heat condition.

THE SAFETY CIRCUITS MUST BE CONNECTED, FAILURE TO DO THIS COULD RESULT IN SERIOUS BUILDING DAMAGE.

Wiring

The wiring should be under-taken by a competent electrician taking into account current IEE wiring regulations. The wiring should be in accordance with the supplied wiring diagram on page 5. Local isolation should be included where necessary. It is important that the cables connected to the heaters are insulated with suitable heat protective sleeving.

Air Flow Switch

The airflow switch that is provided is to be connected into the safety circuit as indicated on the wiring diagram on page 5**.** The airflow pressure switch ensures the heater will not operate without the fan in the VN unit operating. The airflow switch should be set up in accordance with the supplied installation instructions.

Wiring diagram