

TOSHIBA INSTALLATION MANUAL

External master ON/OFF control board MODEL:TCB-PCMO3E

Safety Precautions

- Please read this section carefully before installation work to install the accessory parts in the prescribed manner. The precaution given here deal with serious safety issues. It is, therefore, of the utmost importance that they are observed in full.
- The meanings of safety-related symbol are as follows:

⚠ WARNING

This symbol is used to identify action which, if carried out in an incorrect ignoring this indication, could lead to serious personal injury or even death.

⚠ CAUTION

This symbol is used to identify action which, if carried out in an incorrect ignoring this indication, could lead to serious human injury or property damage.

- After installation work has been completed, perform a trial operation of the equipment in order to ensure that it is operating normally, and then hand over to the customer and ask to keep this Safety Precautions and Installation Instruction.

⚠ WARNING

Installation of accessory parts should be performed either by personnel from this dealer where it was purchased or by specialist installation technicians.

- Incorrect installation by unqualified personnel can result in electric shock, fire or abnormal operation.

Reassembling, repair, or modification of this accessory parts is strictly forbidden.

- Failure to follow these directions can result in inflammation, earth leakage or abnormal operation causing electric shock or injury.

Use the specified wires for wiring connect the terminals securely fix. To prevent external forces applied to the terminals from affecting the terminals.

Do not install a location where flammable gasses may be present.

- Fire may break out should flammable gas leak into the vicinity of the parts.

Repair of the accessory parts must also carried out by personnel from dealer where it was purchased.

- Incorrect installation by unqualified personnel can result in electric shock, fire or abnormal operation.

In case of installation of option PC Board, make sure that the means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.

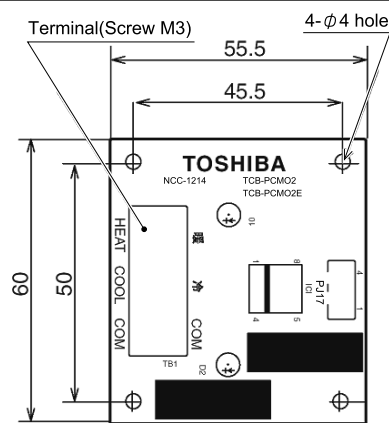
Feature "TCB-PCMO3E" is used for the following external master controls

- Cooling / Heating thermostat input
- Forced - stop signal input

Refer to the "Function/Electric wiring diagram" for feature of the each controls because connecting way is different according to the control.

Dimension

Size(mm):H18 x L55.5 x W60
Weight(g): 20



Accessory parts

No.	Parts name	Q'ty
1	Connection cable	1
2	Support to fix the board	4
3	Earth screw	2
4	Banding band	1
5	Terminal label	1

Wiring

	Length	Size	Type
Wiring	Up to 500m	2-core or 3-core, 0.75mm ²	Shield wire

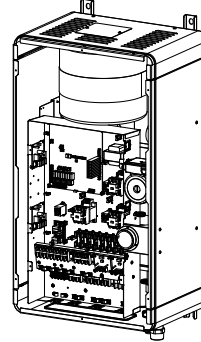
- Refer to the "Electric wiring diagram" when wiring.
- Be sure to use the shield wire to prevent noise trouble, and perform the grounding at both sides of shield wires.

Placing position

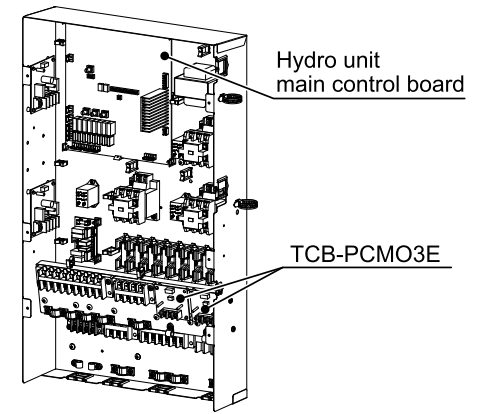
Install this P.C. board on the right side of the terminal placed on the upper side of the electric component box in hydro unit.

Up to 2 "TCB-PCMO3E" can be installed simultaneously in one electric component box.

[Hydro unit]



[Electric component box]



How to install

- Be sure to turn off the power switch before installing.
- Stick the attached terminal label on the board as shown in the figure on the right.

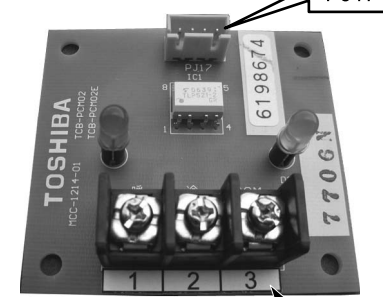
- Place this P.C. board by using 4 supports to fix the board.

There are four installation holes to place the support on the upper side of the electric component box.

- Connect the P.C. board (TCB-PCMO3E) PJ17 and hydro unit main control board CN210 and CN211 with connection cable.

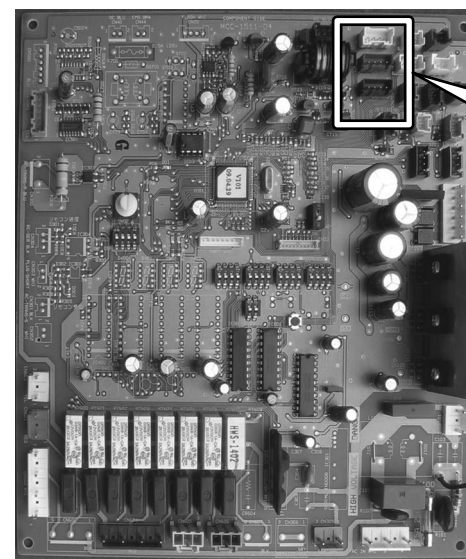
Connector on interface P.C. board is different according to the purpose.

[TCB-PCMO3E]



Terminal label

[Hydro unit main control board]



CN210	Forced - stop signal input
CN211	Cooling / Heating thermostat input

Function / Electric wiring diagram

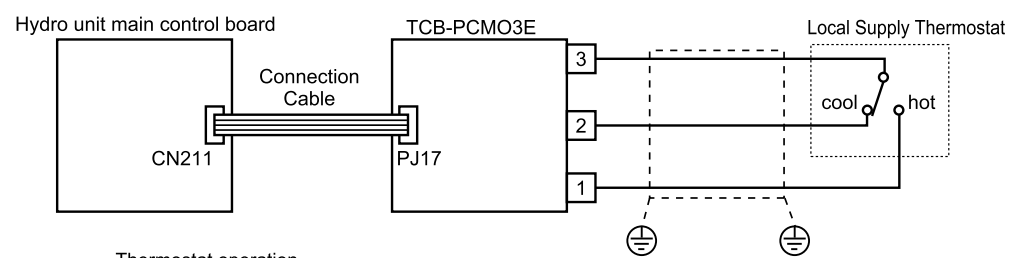
Cooling / Heating thermostat input

● Function

- 3-2 : Room thermostat input for cooling mode
- 3-1 : Room thermostat input for heating mode
- Output enabled when either heating or cooling mode selected on room thermostat. (locally supplied)
- Volt free contacts
- Connection details :
Cooling connection : Terminals 3 & 2 on TCB-PCMO3E (see Schematic below)
Heating connection : Terminals 3 & 1 on TCB-PCMO3E (see Schematic below)

⚠ CAUTION

- Be sure to prepare non voltage continuous point of contact for each terminal.
- Supplementary Insulation must be added to user touchable part of switches.



Thermostat operation

Connection	Cooling		Heating	
	on	off	on	off
2 - 3	open	close	—	—
1 - 3	—	—	close	open

Forced - stop signal input

● Function

- S2 : Emergency shutdown input
- Non-voltage contacts
- Connection details :
Emergency Shutdown : Terminals 3 & 1 on TCB-PCMO3E (see Schematic below)

⚠ CAUTION

- Be sure to prepare non voltage continuous point of contact for each terminal.
- Supplementary Insulation must be added to user touchable part of switches.

