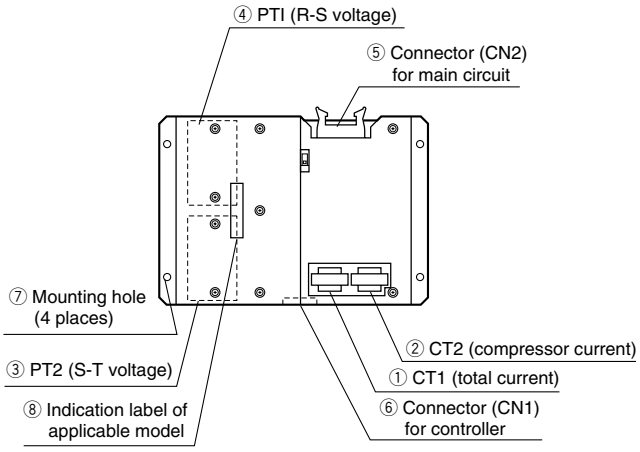
4.2.3 PT and CT board (EC9756)

Two function of the measuring device and protector are integrated on this printed-circuit board. This board works as an interface between the main circuit (high voltage) and the controller.

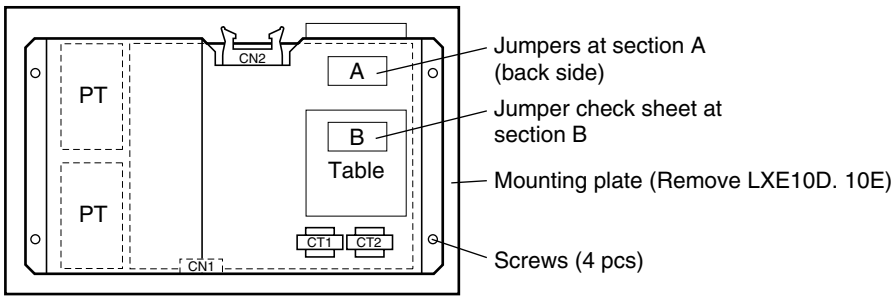


(1) Function

Name	Content
Current measurement (CT1, CT2)	AC 0 to 50A (50/60Hz)
Voltage measurement (PT1, PT2)	AC 150 to 600V (50/60Hz)
Compressor overcurrent protection	Unit with 400V only : 26.0A Unit with 200V and 400V: 15.0A
Phase sequence detection	The phase sequence is detected by sending the voltage waveform to the controller.

(2) Pre-assembly work

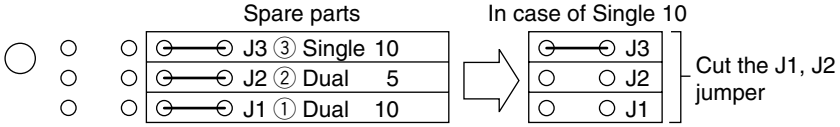
Before installing the PT/CT board (spare parts), cut jumpers and remove the mounting plate for the over current setting.



(2-1) Overcurrent setting

Cut jumpers at section A according to the following chart in order to make the over current setting.

Example: over current setting for 10Hp single power



(2-2) Indication of check marks

After cutting jumpers, indicate check marks on the table B.

CASE	Type	Jumper J1	Jumper J2	Jumper J3
1	Dual 10	⊖—⊖	○ ○	○ ○
2	Dual 5	○ ○	⊖—⊖	○ ○
3	Single 10	○ ○	○ ○	⊖—⊖

Example of check mark indication

CASE	Check
1	
2	
3	✔

(2-3) Removal of mounting plate

Check the following table to see if the mounting plate should be removed. If the mounting plate must be removed, remove the four screws and dismount the mounting plate.

Over current setting and removal of mounting plate

Model		Spare parts	LXE5C	LXE10C	LXE10D	LXE10D LXE10E
Type		———	Dual 5HP	Dual 10HP		Single 10HP
Over current setting value		———	8.5A	15A		26A
Jumpers	J3	⊖——⊖	○ ○	○ ○		⊖——⊖
	J2	⊖——⊖	⊖——⊖	○ ○		○ ○
	J1	⊖——⊖	○ ○	⊖——⊖		○ ○
Mounting plate		Provided	Not to be removed	Not to be removed	To be removed	To be removed

○ ○ : Cut jumper

⊖——⊖ : Do not cut jumper

(3) Replacement procedure

> **⚠ CAUTION**
>
> Be sure that the main power is disconnected.

① Disconnect the wires routed via CT1 and CT2 from the terminals.

※At this time, take care to prevent CT1 and CT2 from being damaged.

② Disconnect the connector (CN1) for the controller and the connector (CN2) for the main circuit.

③ Remove four mounting nuts.

④ After replacing the PT and CT board, connect the lead wired in reverse order of the above removal procedure.

⑤ After checking the wiring once, test-run the system to verify that no trouble is found.