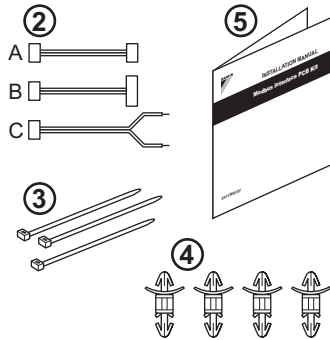
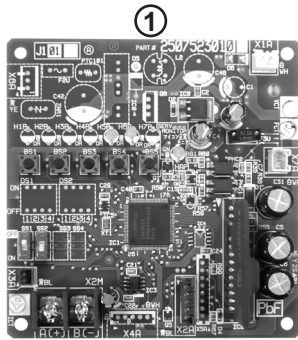




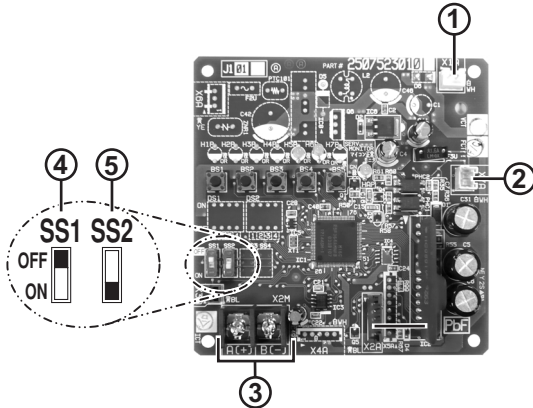
# INSTALLATION MANUAL

## Modbus interface PCB kit

EKFCMBCB7



1



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READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.

KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

IMPROPER INSTALLATION OR ATTACHMENT OF EQUIPMENT OR ACCESSORIES COULD RESULT IN ELECTRIC SHOCK, SHORT-CIRCUIT, LEAKS, FIRE OR OTHER DAMAGE TO THE EQUIPMENT. BE SURE ONLY TO USE ACCESSORIES MADE BY DAIKIN WHICH ARE SPECIFICALLY DESIGNED FOR USE WITH THE EQUIPMENT AND HAVE THEM INSTALLED BY A PROFESSIONAL.

IF UNSURE OF INSTALLATION PROCEDURES OR USE, ALWAYS CONTACT YOUR DAIKIN DEALER FOR ADVICE AND INFORMATION.



ALL FIELD WIRING AND COMPONENTS MUST BE INSTALLED BY A LICENSED ELECTRICIAN AND MUST COMPLY WITH RELEVANT LOCAL AND NATIONAL REGULATIONS.

THE FIELD WIRING MUST BE CARRIED OUT IN ACCORDANCE WITH THE WIRING DIAGRAMS AND THE INSTRUCTIONS GIVEN BELOW.

TAKE CARE NOT TO BEND THE PRINTED CIRCUIT BOARD WHEN INSERTING OR REMOVING THE CONNECTORS.

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THE EQUIPMENT IS NOT INTENDED FOR USE IN A POTENTIALLY EXPLOSIVE ATMOSPHERE.

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**Danger: electric shock**

Switch off all power supply before removing the control box cover or before making any connections or touching electrical parts.

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This is an option kit for a FWF or FWC fan coil unit to switch the unit communication to Modbus RTU (RS485) communication.

Refer to the installation manual of the fan coil unit for details on installing the fan coil unit.

The original documentation is written in English. All other languages are translations of the original documentation.

Never squeeze bundled cables and be sure that the cables do not come in contact with sharp edges.

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**WARNING**

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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# CONTENT OF KIT EKFCMBCB7

See figure 1

- 1 Modbus interface PCB
- 2 Wires  
A: Power supply wire for FWF models  
B: Power supply wire for FWC models  
C: Communication wire
- 3 Tie wraps
- 4 Spacers
- 5 Installation manual

## NAME OF PARTS

See figure 2

- 1 Connector to the fan coil unit PCB for power supply with wire A or B
- 2 Connector to the fan coil unit terminal block for communication (F1/F2) with wire B
- 3 Communication wires from the field
- 4 SS1: Put on OFF position
- 5 SS2: Switch to decide position of Modbus PCB in communication line  
(refer to "[External connection possibility](#)" on page 5)

## SPECIFICATION OF COMMUNICATION WIRES

Specifications field wiring	
Wire type	Twisted pair sheathed cable
Wire size	0.75~1.25 mm <sup>2</sup>
Maximum total wire length	500 m

## INSTALLATION METHOD IN COMBINATION WITH FWF MODELS

The installation box KRP1BA101 is needed.

Mount the installation box and PCB as explained in the installation manual of the KRP1BA101 kit.

See figure 3

- 1 KRP1BA101 Box with Modbus PCB
- 2 Communication wiring (to field)
- 3 Wiring to fan coil unit PCB
- 4 Wire X7A-F1/F2
- 5 Wire X1A-X35A
- 6 Tie wrap
- 7 Hook (supplied with KRP1BA101 kit)

## INSTALLATION METHOD IN COMBINATION WITH FWC MODELS

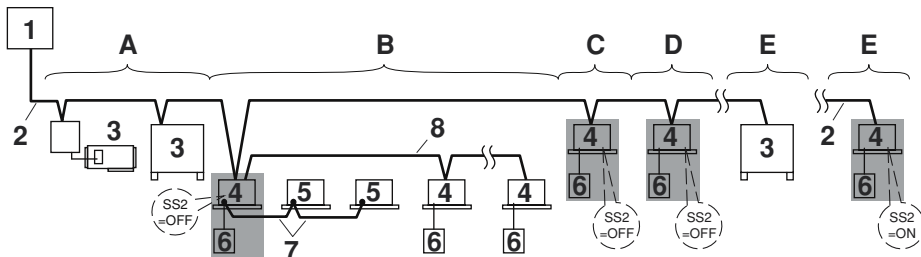
The installation box KRP1H98 is needed.

Install the installation box and PCB in the unit as explained in the installation manual of the KRP1H98 kit. The PCB needs to be mounted on the bottom of the box (see KRP2A52).

See figure 4

- 1 KRP1H98 with Modbus PCB
- 2 Communication wire from field
- 3 Wire X7A-F1/F2
- 4 Wire X1A-X38A
- 5 Tie wrap
- 6 Room for excess cable

## EXTERNAL CONNECTION POSSIBILITY



- |  |  |
|--|--|
| <p><b>A</b> Address zone 1</p> <p><b>B</b> Address zone 2</p> <p><b>C</b> Address zone 3</p> <p><b>D</b> Address zone 4</p> <p><b>E</b> Termination of the Modbus communication line</p> <p><b>1</b> Centralized control system</p> <p><b>2</b> Modbus communication line</p> <p><b>3</b> Fan coil unit with integrated Modbus communication</p> | <p><b>4</b> FWF or FWC unit that needs its own remote controller address</p> <p><b>5</b> FWF or FWC unit that does not need its own remote controller address</p> <p><b>6</b> Remote controller</p> <p><b>7</b> Remote controller communication line</p> <p><b>8</b> Transmission wiring</p> <p><span style="display: inline-block; width: 15px; height: 10px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></span> Fan coil unit that needs a Modbus PCB</p> |
|--|--|

### NOTE



- Each remote controller communication group needs an address set by the wired remote controller. Refer to "[Setting of group number with the wired remote controller](#)" on page 7.
- Maximum 16 remote controller addresses can be connected to a Modbus PCB.
- Maximum 64 remote controller addresses can be used on a central remote controller.

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**NOTE**

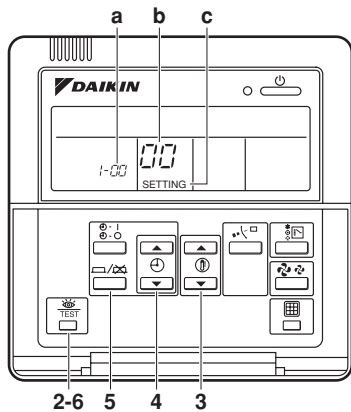
- A Modbus PCB needs to be connected on a FWF or FWC unit which has its own remote controller address.
  - Maximum 8 Modbus PCBs can be connected on a 0.75 mm<sup>2</sup> wire.
  - Maximum 15 FWF or FWC units can be connected on a FWF or FWC unit which has its own remote controller address.
- 






**NOTE**

- The cable terminal (resistor) is integrated in the Modbus PCB and is enabled by means of a DIP switch (SS2).
  - In case the Modbus PCB is used as cable terminal (refer to "E: [Termination of the Modbus communication line on page 5](#)"), the DIP switch SS2 must be set to ON, otherwise it must be set to OFF.
  - DIP switch SS1 must always be set to OFF.
-



## SETTING OF GROUP NUMBER WITH THE WIRED REMOTE CONTROLLER



- 1 Activate power to the centralized control system and to the fan coil unit.
- 2 While in the **normal mode**, hold down the  button for a minimum of 4 seconds. The controller will enter the **field set mode (c)**.
- 3 Select the mode number "00" (b) with the  button.
- 4 Use the  button to select the group number (a) for each group. (The group number increases in the order of 1-00, 1-01, ..., 1-15, 2-00, ..., 4-15.)
- 5 Press the  button to set the selected group number.
- 6 Press the  button to return to the **normal mode**.

The group number set with the wired remote controller is translated to a Modbus address according to the table below

<b>Group number (remote controller address)</b>	1-00	1-01	...	1-15	...	2-15	...	4-15
<b>Modbus address</b>	1	2	...	16	...	32	...	64

# OPERATION AND MAINTENANCE

## What to do before operation

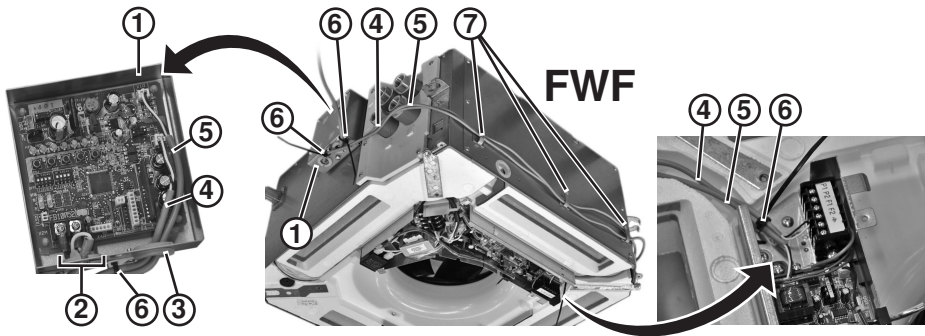


In case of a Modbus integration, before initiating operation, contact your Daikin dealer to get the information that corresponds to your system.

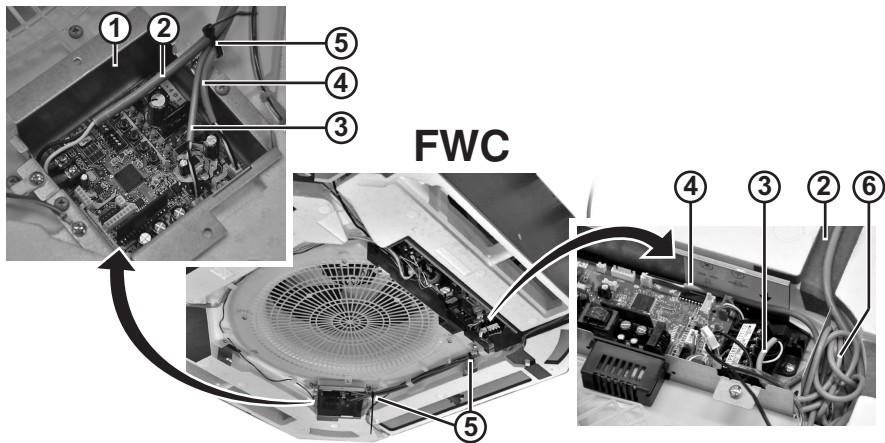
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## Operation and display signals

LED	LED colour	LED is ON	LED is blinking
HAP	Green	CPU error	Normal CPU operation
H5P	Orange	Normal Modbus communication	Modbus communication error
H6P	Orange	Normal fan coil unit communication	Fan coil unit communication error



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