k-con®

RFFI - AE-200/EW50 INTERFACE

Installation Manual

Instructions for :-

RFFI - AE-200 & EW50 INTERFACE

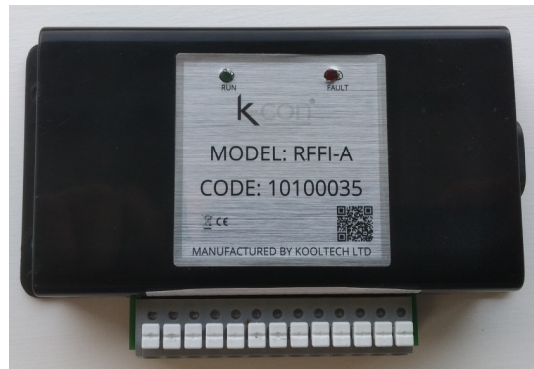(RUN, FIRE & FAULT INTERFACE)

Model : KS10-RFFI-A

Manufactured for
MITSUBISHI ELECTRIC UK

**MITSUBISHI
ELECTRIC**

Contents

Included in RFFI pack

1 x RFFI

1 x PAC-YG10

1 x power lead

Safety Precautions

Safety

For your safety first be sure to read Safety Precautions described below thoroughly and then install the Remote Temperature Sensor correctly.

The following two symbols are used to denote dangers that may be caused by incorrect use and their degree:

⚠ WARNING   This symbol denotes what could lead to serious injury or death if you misuse the Sensor

⚠ CAUTION   This symbol denotes what could lead to personal injury or damage to your property if you misuse the Sensor

After reading this installation manual, keep it in a place where the final user can see it at any time they want to. When someone moves, repairs or uses the Remote Temperature Sensor, make sure that this manual is forwarded to the final user.

⚠ WARNING

Ask your dealer or technical representative to install the unit.

Any deficiency caused by your own installation may result in an electric

Firmly connect the wiring to the specified cables.

Carefully check that the cables do not exert any force on the terminals.

Never modify or repair the Remote Temperature Sensor yourself.

Any deficiency caused by your own modification or repair may result in an electric shock or fire.

Ensure the installation work is carried out correctly following this installation manual.

Any deficiency caused by poor installation may result in an electric

All electrical work must be performed by a licensed technician, according to local regulations and the instructions given in this manual.

Any lack of electric circuit or any deficiency caused by poor installation

Do not move and re-install the Remote Temperature Sensor yourself.

Any deficiency caused by poor installation may result in an electric shock or fire.

Ensure the installation work is carried out correctly following this installation manual.

Any deficiency caused by poor installation may result in an electric

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⚠ CAUTION

Do not use in any special environment.

Using in any place exposed to oil (including machine oil), steam , and sulphuric gas may deteriorate the performance significantly or give

Wire so that it does not receive any tension.

Do not wash with water.

Do not install in any place where acidic or alkaline solution or special spray are often used.

Use wires in compliance with the current capacity.

Do not install in any steamy location such as a bathroom or kitchen.

Avoid any place where moisture is condensed into dew.

Do not touch any PCB (Printed Circuit Board) with your hands or with tools. Do not allow dust to collect on the PCB.

Do not install in any place at a temperature of more than 40°C or less than 0°C or exposed to direct sunlight.

Installation Instructions

Unit Detail

The RFFI interface will allow connection of RFFI & AE-200/EW50 Mitsubishi Electric centralized controller with BMS, fire alarm panel and third party control systems. The RFFI interface will have direct connection between the RFFI & AE-200/EW50. The RFFI interface will allow remote enable/shut down and common run and fault signal outputs.

Connection is available with all RFFI & AE-200/EW50 via CN5. One RFFI interface module is required per AE-200/EW50.

The RFFI interface functions will be as follows via CN5.
Converting 12VDC signal, to volt free common run and fault signals to BMS or third party control system.

Converting 12V DC signal from BMS, Fire alarm panel or third party control systems to remote enable or shut down operation of all indoor fan coils connected to the RFFI/AE-200.

External signal input function

NOTES
* When using a PAC-YG50ECA expansion controller, connect the external input/output adapter to the external input terminal on the expansion controller, not to the RFFI/AE-200.
* Make necessary settings for each expansion controller from the RFFI/AE-200 on the Network Settings window (external input settings).
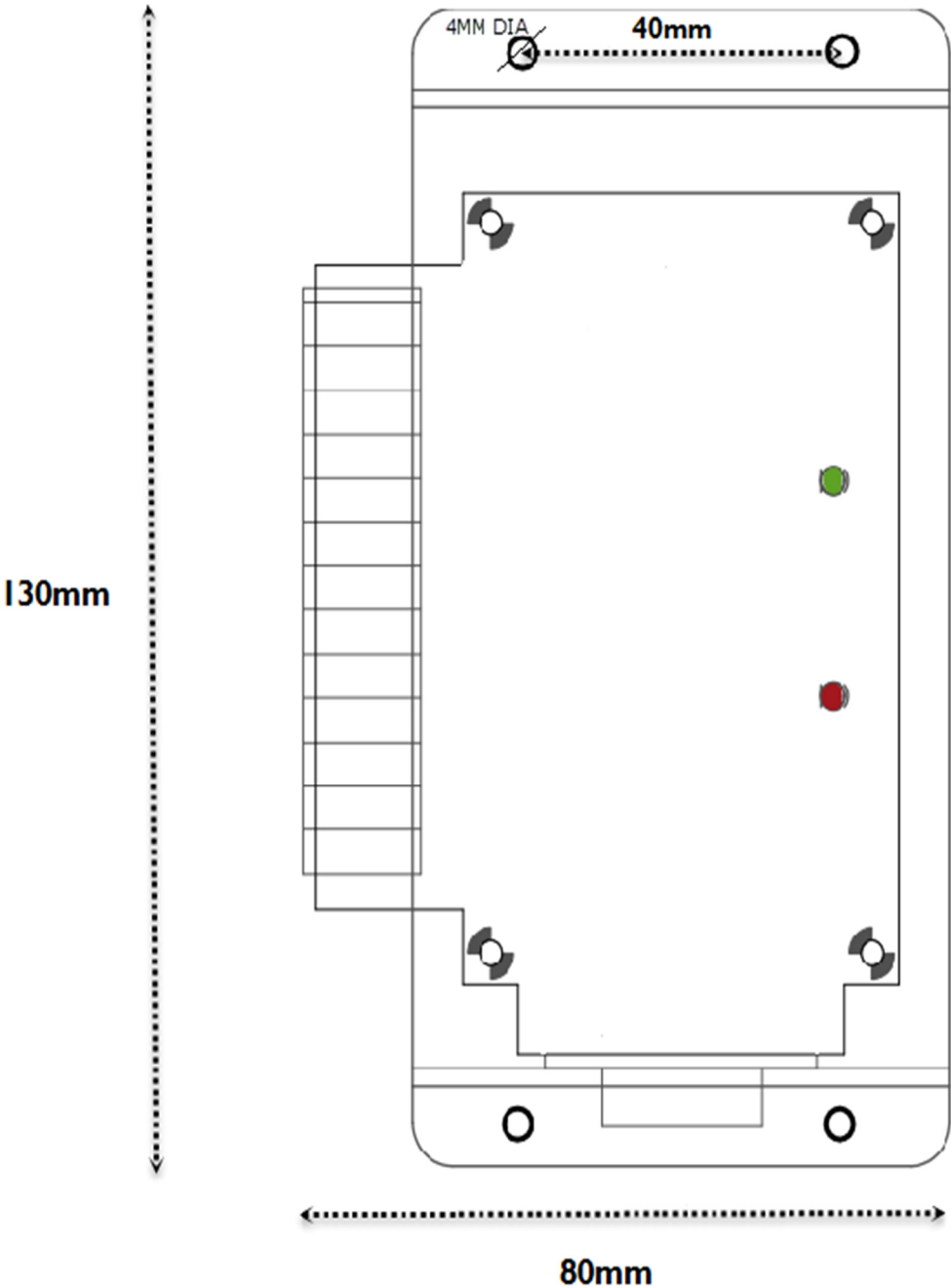
(1) External input
Emergency stop/normal, run/stop and prohibit/enable operation of local remote controllers can be controlled for all air conditioners by using a voltage (12VDC) contact signal from an external source. (Select with an initial settings screen.)

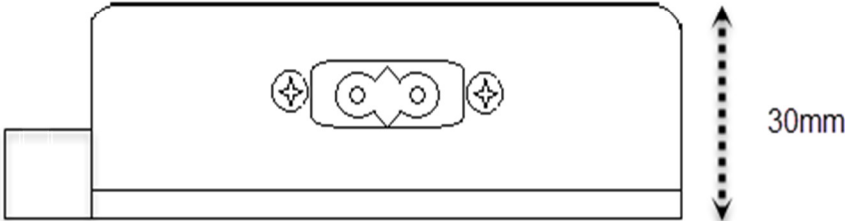| No	External signal input function	Remarks
1	Do not use the external input signal (factory setting)	-
2	Perform emergency stop/normal with level signal	The local remote controller ON/OFF operation, the controller ON/OFF operation, and prohibit/enable change operation will be prohibited
3	Perform ON/OFF with level signal	The local remote controller ON/OFF operation, the controller ON/OFF operation, and prohibit/enable change operation will be prohibited.

* DIDO controller (PAC-YG66DCA) cannot be collectively run or stopped by using the external input function.
But when [Perform emergency stop/normal with level signal] is selected, DIDO controller (PAC-YG66DCA) can be

Installation Instructions

Dimensions

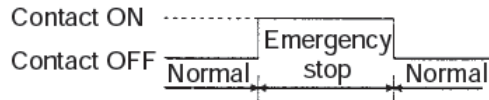4MM DIA   40mm

130mm

80mm

weight: 0.15kg

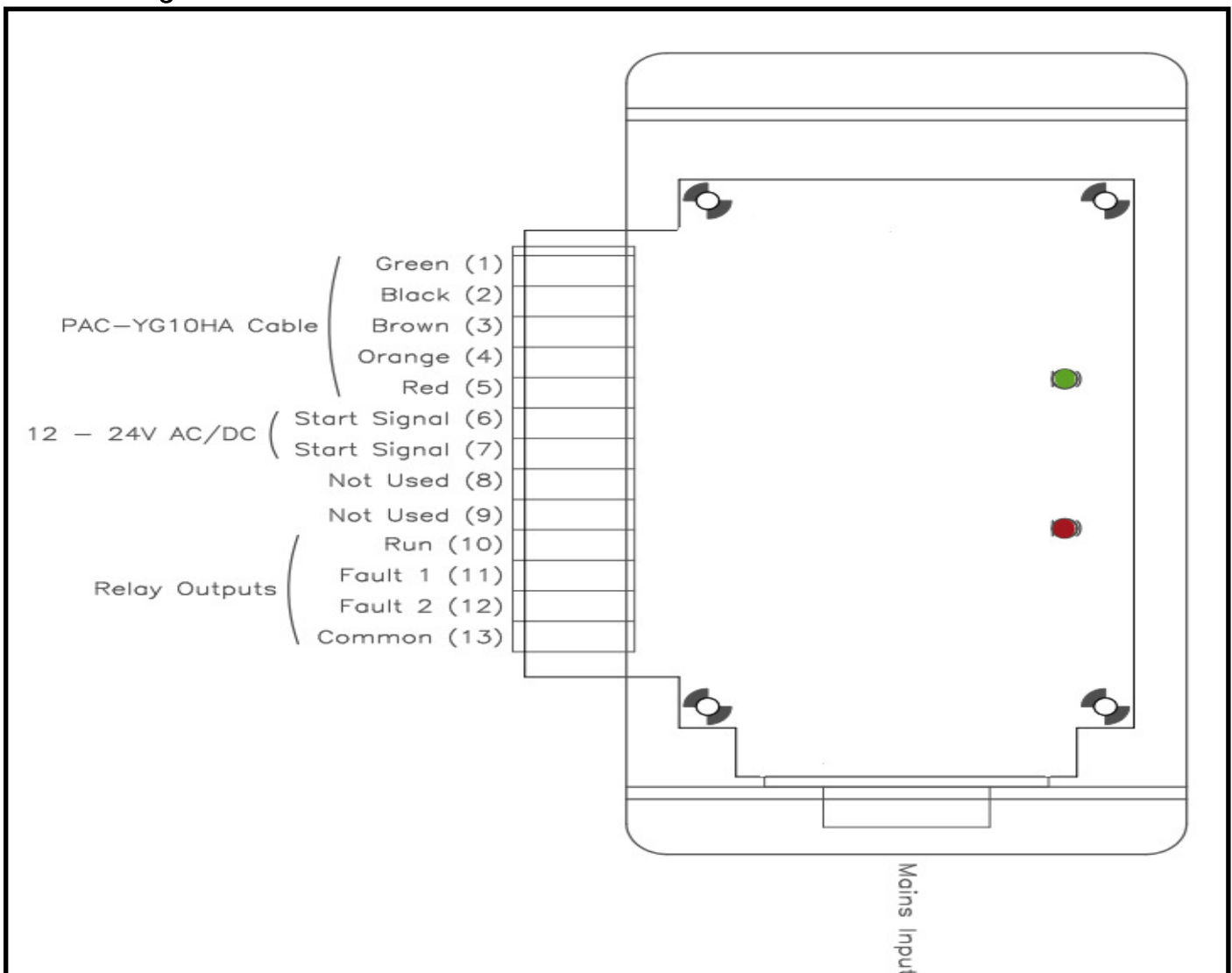30mm

Installation Instructions

For Level Signal

(2) Level signal

Level signal

1   When the emergency stop/normal signal is selected, the status will switch from normal to emergency stop when the external input signal contact changes from OFF to ON, and will change from emergency stop to normal when the contact changes from ON to OFF. Air conditioning units that are stopped will remain off after the emergency stop is cancelled.
Start up each indoor unit to manually restore the previous operation.

2   When the ON/OFF signal is selected, the status will change from OFF to ON when the external input signal contact changes from OFF to ON, and will change from ON to OFF when the contact changes from ON to OFF.

RFFI Wiring

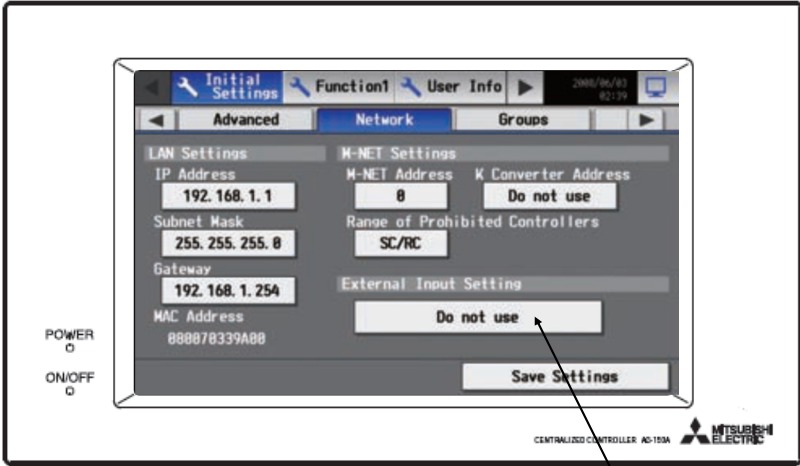## Installation Instructions

Setting the External Input Functions for the RFFI

Display the page needed to perform the AE-200 Initial Setting log in.
(Refer to your Mitsubishi Electric AE-200 Operation Manual.)

Log in using user name initial, password init.

Display/Touch panel

Touch the tabs under initial setting to select "Network".
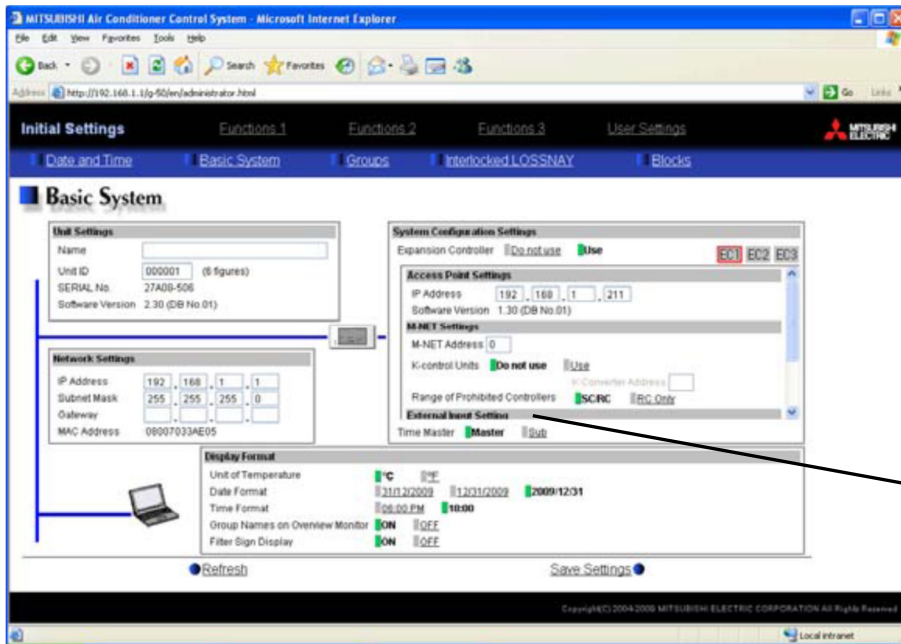Touch external input setting box to select one of the following.

To complete touch "Save Settings"

Installation Instructions

Setting the External Input Functions for the AE-200 (web browser)

Display the page needed to perform the AE-200 basic setting by clicking [Initial Settings]-[Basic System] in the setting menu pane. On this page, you perform the basic setting such as the AE-200 unit name, network setting and M-NET setting. Click [Save Settings] to send setting data to the AE-200 . After the setting data are sent to the AE-200 , a message will appear asking whether or not to restart the AE-200 . Click [OK] to restart the AE-200 to put the changes into effect.

External Input Setting
Set the AE-200 external input setting. Refer to Fig.2 below.

External Input Setting

In the External Input Setting menu, set the AE-200 external input function. By using external input functions, it is possible to stop and run multiple air conditioners connected to the AE-200 via the RFFI.

Note: If PAC-YG50ECA Expansion Controllers are connected, Expansion Controller system selection buttons will appear. Select the desired Expansion Controller, and make the settings for each system. Make the settings with the Expansion Controllers properly connected. Connect the external input signal wires to each controller's external input terminal.
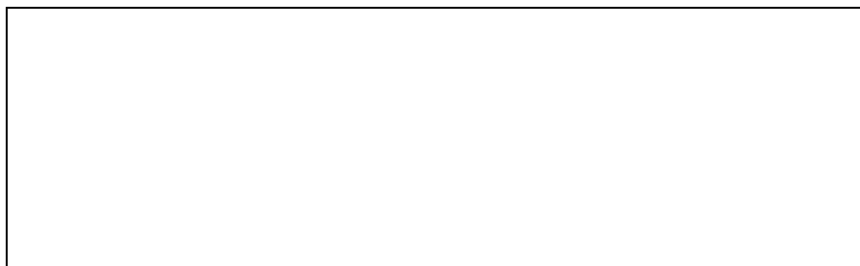
Fig.2

+ Setting not applicable to RFFI

(1) Select [Not in use] when not using the external input function.
(2) Selecting [Emergency stop (Level signal)] makes it possible to stop multiple units by using a level signal. While this stop operation is being performed, operations such as running or stopping units are prohibited on the AE-200 unit or remote control.

To complete touch "Save Settings"

Please be sure to put the contact address/telephone number
on this manual before handing it to the customer.

MITSUBISHI ELECTRIC UK

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