k-con®

KTR53 - 3 WIRE / 5 WIRE INTERFACE PANEL

Installation Manual

Instructions for :- 3 WIRE / 5 WIRE INTERFACE WITH

CN32, CN51 & CN52

Model : KTR53-A / B

Code: 10100335#1/10100335#2

MITSUBISHI ELECTRIC

Contents

Included in pack

1 x KTR53-A / B

1 x 3 wire adapter

1 x 5 wire adapter

Safety Precautions

Safety

For your safety first be sure to read Safety Precautions described below thoroughly and then install the KTR53-A 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 Interface

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 KTR53, 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 KTR53 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 KTR53 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

⚠ 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 KTR53-A/B combines both the Mitsubishi 3 Wire Adapter (PAC-SA89TA) for remote on/off and 5 Wire Adapter (PAC-SA88HA)for remote run and fault alarm and heating and cooling signals. The 3 Wire Adapter for remote on/off is wired through a 12/24vac supply which can be   connected to a run relay or system timer (connected to the indoor unit via a 3 Wire Adapter). The 5 Wire Adapter is used for remote run and fault alarm, the KTR-53A/B creates a volt free signal for remote run and fault alarm out to a third party system; Green and Red LED indicator lights show the run and alarm status of the Mitsubishi Air Conditioning system.

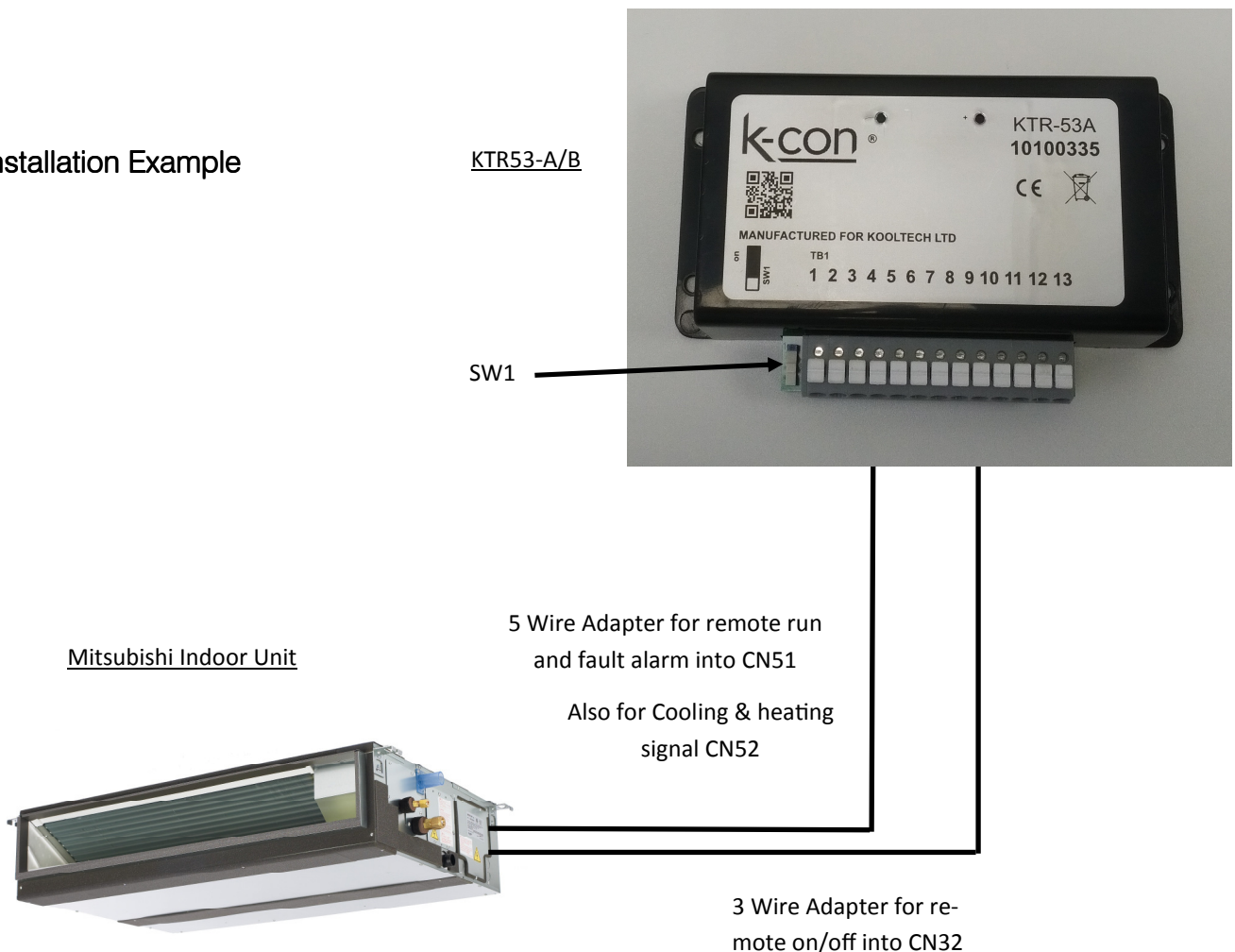As standard the system should be configured in the following format:

1 x KTR53 - A/B interface, 1 x 3 wire adapter 1 x 5 wire adapter

It is not possible to wire the KTR53-A/B between multiple indoor units as this causes communication conflicts especially where a centralised controller is used .

PLEASE NOTE: the on/off terminals on the KTR53-A/B are volt free, and cannot be changed to supply anything other than a volt free signal.

SW1– Either prohibits the local remote on/off button on the PAR-33 or PARUO2 or will allow its operation after a 30 seconds delay from receiving the enable signal.

Installation Example

KTR53-A/B

SW1

5 Wire Adapter for remote run and fault alarm into CN51

Also for Cooling & heating signal CN52

Mitsubishi Indoor Unit

3 Wire Adapter for re-mote on/off into CN32
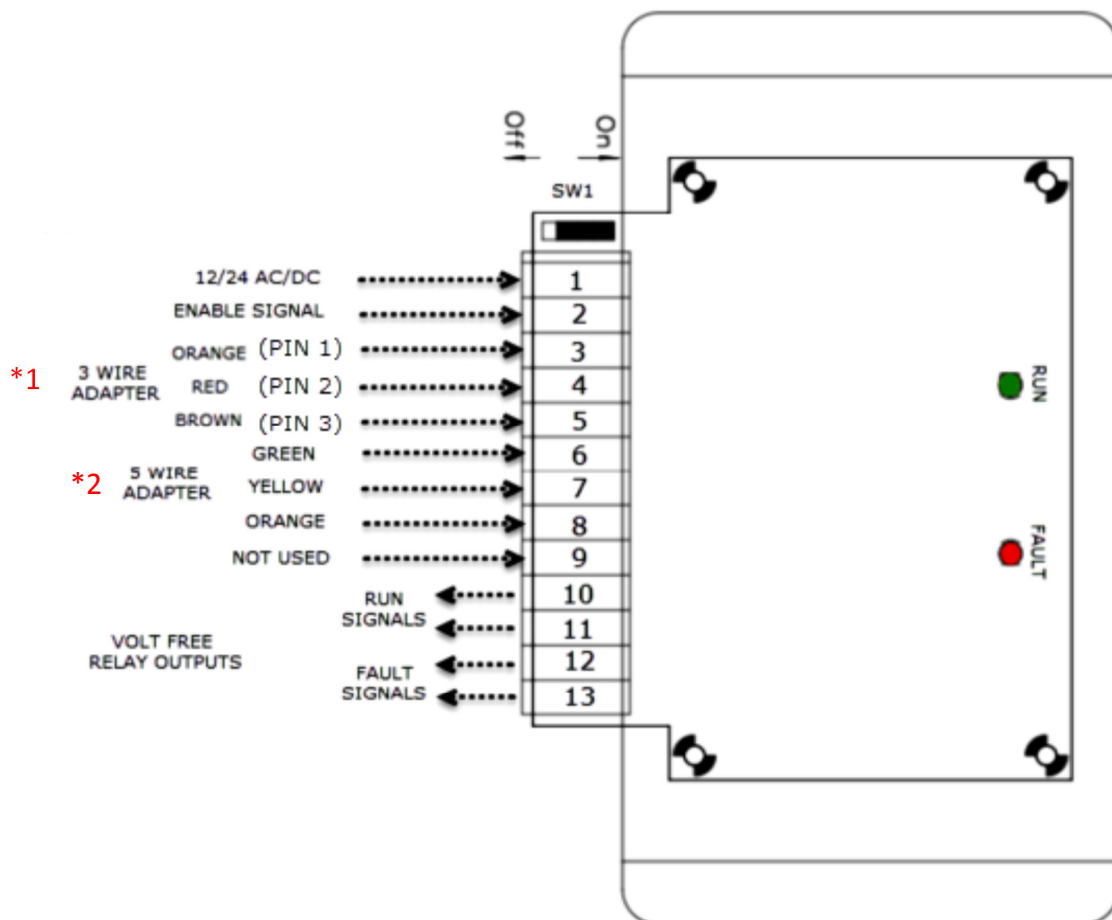
Installation Instructions

Connection to the Indoor - 5 Wire Adapter

Connect the connector of the 5 Wire Adapter to the connector CN51 of the indoor unit. The connector can only be connected in one direction. Do not force the connector.

Connection to the Indoor - 3 Wire Adapter

Connect the connector of the 3 Wire Adapter to the connector CN32 of the indoor unit. The connector can only be connected in one direction. Do not force the connector.
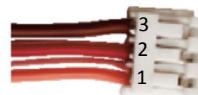
KTR53 Terminal Connections

Wiring Restrictions

Keep the length of the cable connecting to the circuit board on the indoor unit less than 10m. Longer than 10m could cause improper operation.

Note:

*1 The 3 wire adapter (PAC-SA89TA) can vary in colour, so pin numbers should be checked.

*2 The black & red wires on the 5 wire are not used and should be taped up.

Installation Instructions

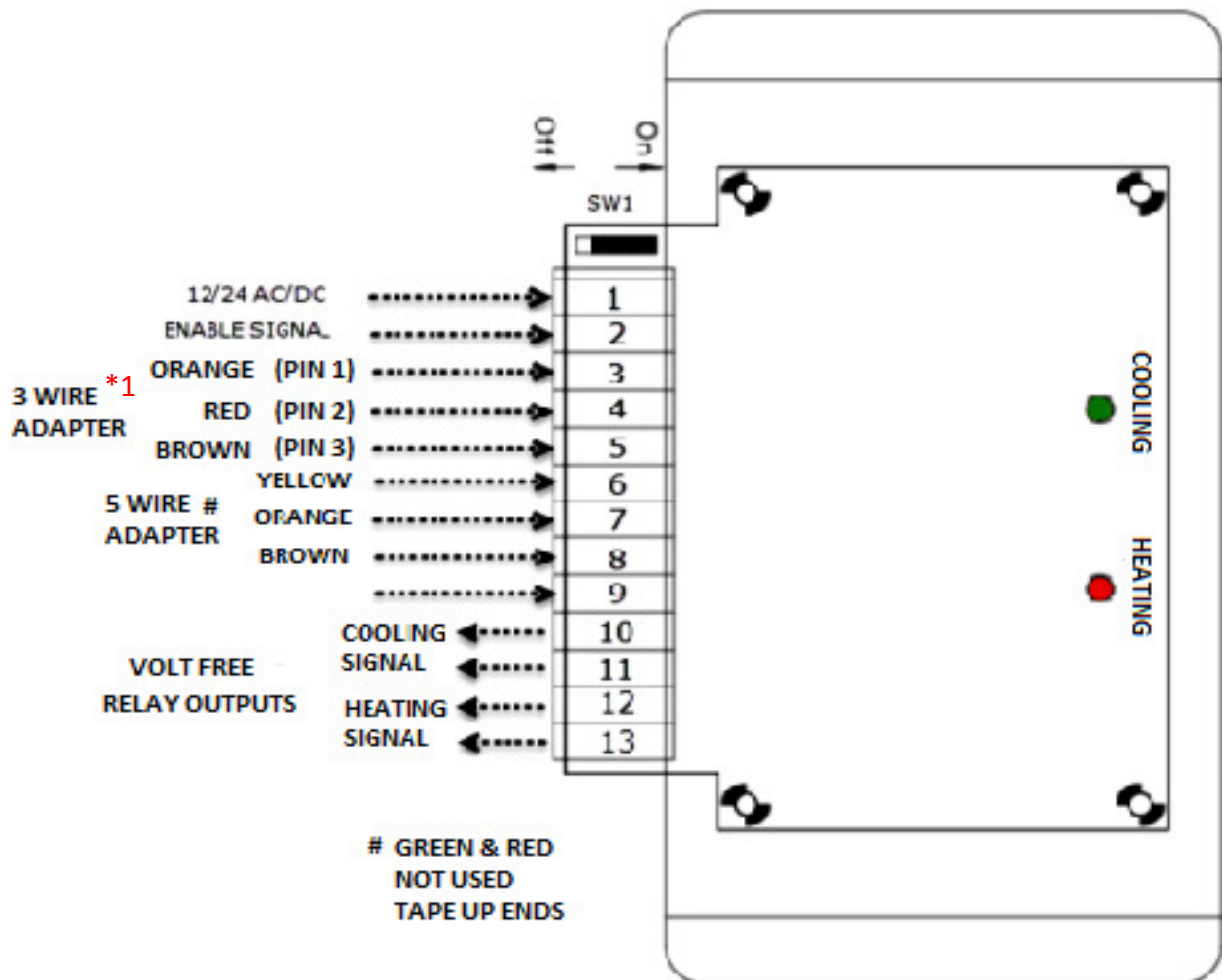## Connection to the Indoor - 5 Wire Adapter Output (CN52)

Connect the connector of the 5 Wire Adapter to the connector CN52 of the indoor unit. The connector can only be connected in one direction. Do not force the connector.

Wiring for Cooling and heating signal.

Yellow = Heating signal, Orange signal = Cooling , Brown = common.

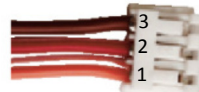(Red & Green not used, please tape up ends of wires.)

KTR53 Terminal Connections

12/24 AC/DC	1
ENABLE SIGNAL	2
3 WIRE *1 ADAPTER ORANGE (PIN 1)	3
RED (PIN 2)	4
BROWN (PIN 3)	5
5 WIRE # ADAPTER YELLOW	6
ORANGE	7
BROWN	8
	9
COOLING SIGNAL	10
VOLT FREE RELAY OUTPUTS	11
HEATING SIGNAL	12
	13

SW1   OFF   ON

COOLING
HEATING

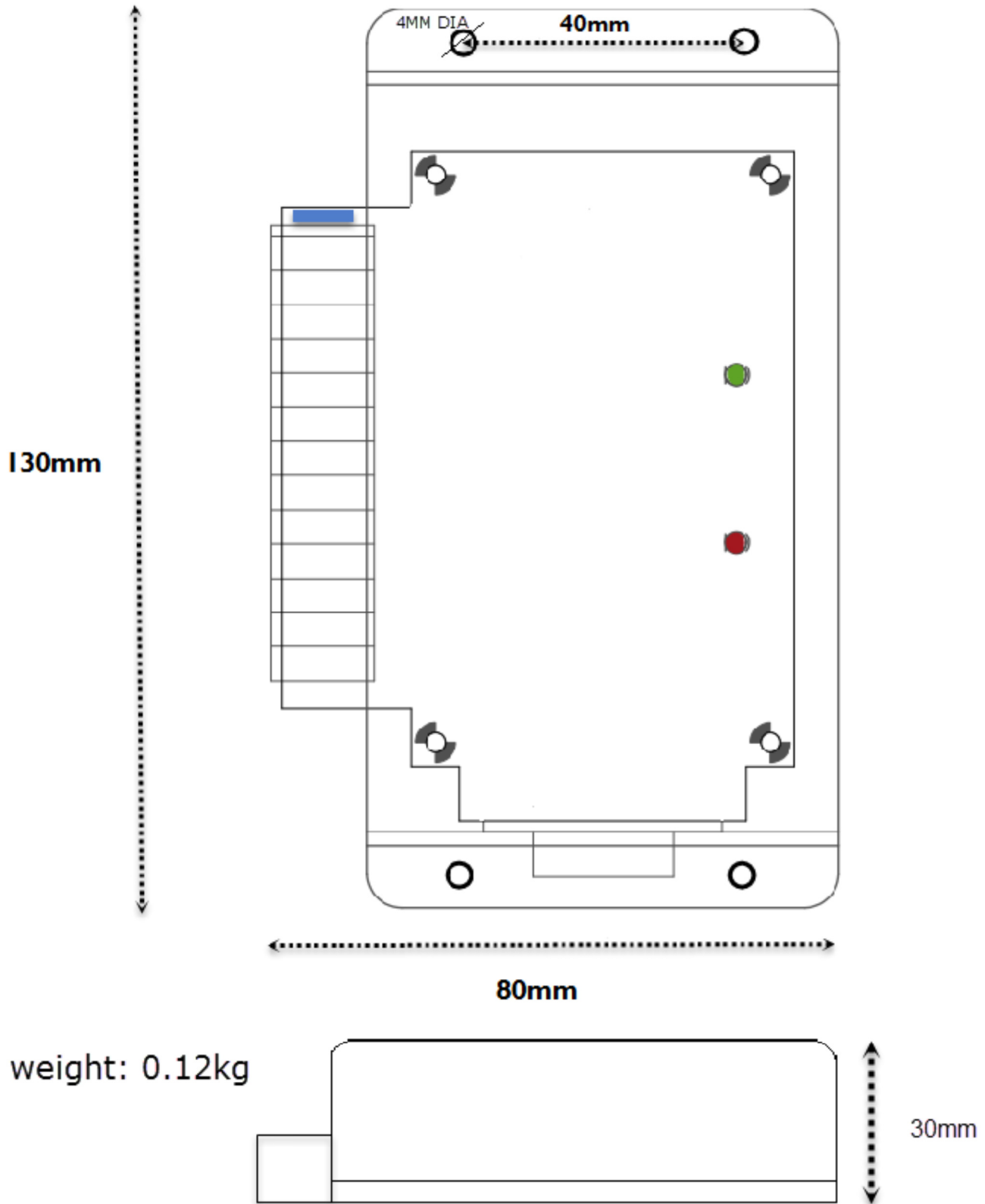# GREEN & RED
NOT USED
TAPE UP ENDS

Keep the length of the cable connecting to the circuit board on the indoor unit less than 10m. Longer than 10m could cause improper operation.

Note:

*1 The 3 wire adapter (PAC-SA89TA) can vary in colour, so pin numbers should be checked.

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Dimensions:

4MM DIA   40mm

130mm

80mm

weight: 0.12kg

30mm

Notes

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

MITSUBISHI ELECTRIC UK