technical data

DS-net

air conditioning systems

VRV®III-S
VRV®III
VRV®II
VRV®-WII

DS-net

1   Features & Outline

The ideal solution for control and management up to 2,000 indoor units
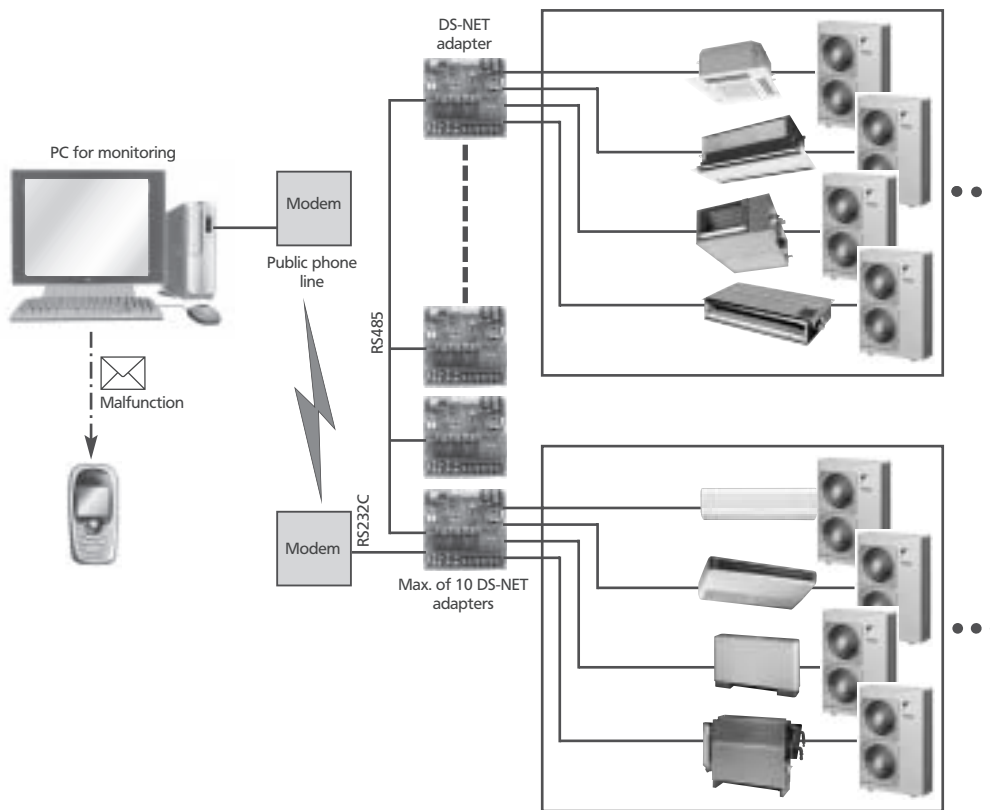
Application area

•   A small commercial area of less than 40 indoor units.

•   Critical applications for centralized monitoring.

System layout

•   Allows monitoring and control of up to up to 50 stores or sites and 2,000 indoor units with just one modem and phone line.

•   Automates daily air conditioning operation in order to free users from the hassle of air conditioning operation/management.

•   The daily schedule setting allows automatic operation afterward.

•   Automates alarm (report messages) for any malfunctions/ errors. Immediate report of any indoor unit breakdown to the servicing company.

•   Automatic report of breakdown/ malfunction information.

•   Minimizes the inconvenience of not having air conditioning via rapid messages.

Functions

•   Schedule setup (Daily schedule)
     - Start/Stop

•   A/C malfunction report
     - Send message to monitoring system

•   Manual operation
     - Start/Stop, Set temperature, Operation mode, Fan speed

•   Status monitoring (Start/Stop, Set temperature, Operation mode, Room temperature, Operation time, Error code)

NOTES

•   DS-net can also be controlled via your mobile phone.

2 Main Functions

DS-NET is a lightweight system that performs the remote error monitoring and remote control of air conditioners installed on sites, such as small-scale stores. Moreover, the adapter units on such sites incorporate local control functions (e.g., back-up and automatic alternating operation functions) besides error monitoring and reporting functions.

The monitor software is in control of up to 50 sites.

Up to 10 DS-NET Adapter units can be connected to each site.

A single DS-NET Adapter unit can monitor and control the air conditioners of up to 4 remote control groups.

The following functions of air conditioners can be monitored and controlled by the monitor software:

| Item	Monitoring	Operation
Start/Stop	o	o
Operating mode (Fan/Cool/Heat)	o	o
Temperature setting (Cool/Heat)	o	o
Air volume setting	o	o
Filter sign	o	o (Reset)
Error code	o	x

O: Possible

X: Impossible

3   Electric wiring

The contact is constant contact. The output conditions are level reading.

• When the forced operation contact is closed, all stopped units are continuously instructed to operate.

• When the forced stop contact is closed, all operating units are continuously instructed to stop.

• Once the forced operation contact is closed, all indoor units which are stopped at that time are instructed to operate, even if the forced stop contact is closed immediately after, the indoor units will operate for a moment and then stop. (This is the same as with the remote control operation.)

The contact is to be purchased locally. The current applied when the contact is ON is approx. DC16V, 10mA. Input is via momentary A-contact. Minimum 1 second is required for turning ON. Please don't clamp with high voltage cable.

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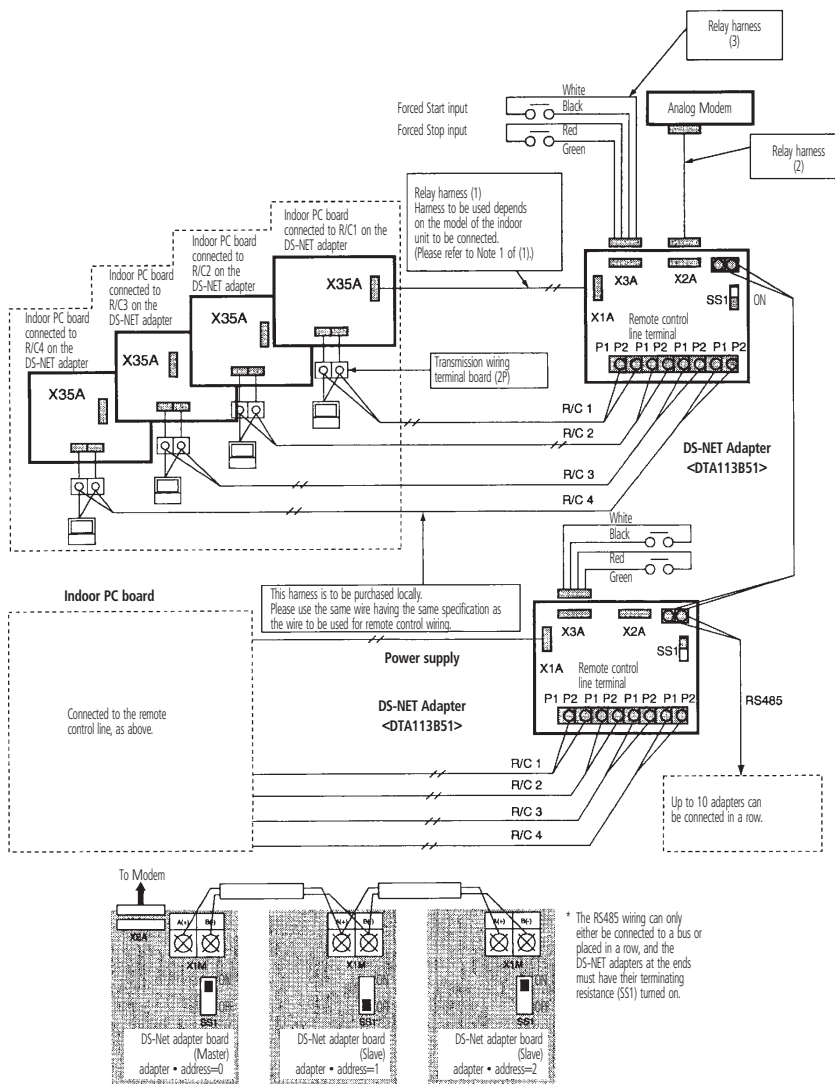
Electrical wiring

Procured on-site sheathed vinyl cord

(VCTF 0.2 mm^2 or 0.3 mm^2)

Important

• The RS485 wiring can only be done in a bus or in a row connection.

• The A (+) and B (-) terminals have polarity which must not be mixed up.

• Turn on SS1 (terminating resistance) for the DS-NET adapters on the end.

• Turn on only two adapters SS1 (terminating resistor), the first and the last, of the group of adapters connected to RS485.

• Once the DS-NET adapter is connected with a modem cable it becomes the master basic circuit board.

• Set the adapter addres of the master basic circuit board to 0.

• Set each adapter address of slave basic circuit boards to 1 up to 10 (max), in order.

• If the adapter address of slave basic circuit boards are not set, all the basic circuit boards will be considered master and communication will not be possible. Be sure to set the adapter address of slave basic circuit boards.

• If the adapter address of slave basic circuit boards are not set on different numbers, different adapters will have same number therefore communication will not be possible.

2

VRV®III-S
VRV®III
VRV®II
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ISO14001 assures an effective environmental management system in order to help protect human•health•and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the•environment.

Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.
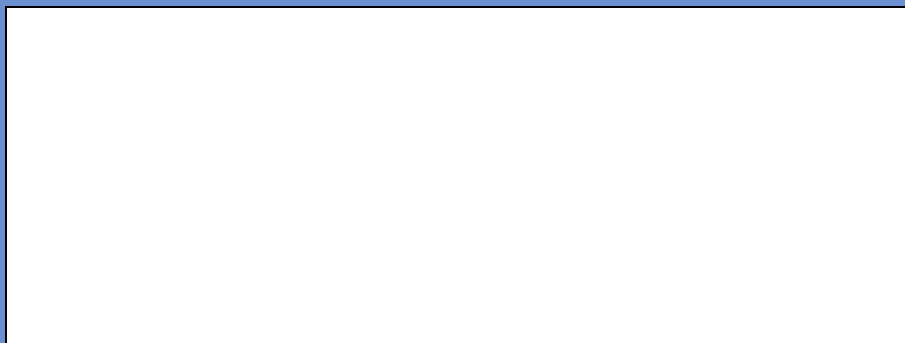
CE

Daikin units comply with the European regulations that guarantee the safety of the product.

VRV products are not within the scope of the Eurovent certification programme.

Daikin equipment is designed for comfort applications. For use in other applications, please contact your local Daikin representative.

DAIKIN EUROPE N.V.

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