

technical data

CDX-J



Concealed Ceiling, Inverter Controlled Unit

air conditioning systems

Split Sky Air

Split - Sky Air



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.



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



Daikin Europe N.V. is participating in the EUROVENT Certification Programme. Products are as listed in the EUROVENT Directory of Certified Products.

Specifications are subject to change without prior notice

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For capacity tables, please refer to part II: outdoor units

Note: R-22 cooling only models, which are produced after 01/07/2002, cannot be sold inside countries that follow the European Regulation n^2 2037/2000 EE of 29/09/2000.

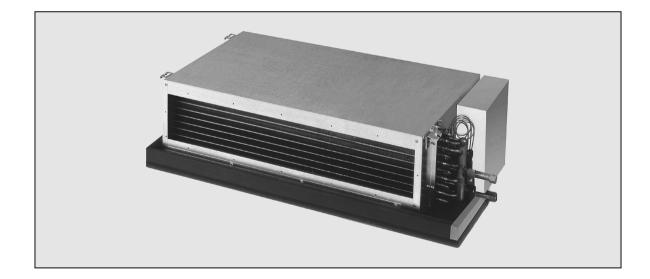
1 Features



- 1
- Lightweight and compact
- Blends unobtrusively with any interior decor: only the suction and discharge grilles are visible
- Leaves maximum floor and wall space for furniture, decoration and fittings
- Fits flush into each ceiling
- Extremely quiet in operation both indoors and outdoors

Inverter control

- Maximum comfort and efficiency
- Start-up time reduced by one third
- Detects changes in room or outdoor conditions and adjusts the indoor temperature to compensate within seconds. Rapid response reduces power consumption by 30%
- Up to 7 indoor units can be connected to 1 Multi outdoor unit. All indoor units are individually controllable with remote control and do not need to be installed in the same room. They operate simultaneously within the same cooling or heating mode.
- The remote control has a 24 hour timer
- Up to 5 indoor units can be operated from a single centralised control
- This indoor model can also be started / stopped by the signal receiver of the remote control, mounted near the unit





















Opt











CDX

5 steps

2 Specifications



| NOMINAL CAPACITY and NOMINAL INPUT | | | | | | | | | |
|------------------------------------|---------|----|------------|------------|------------|------------|--|--|--|
| For indoor units only: | | | | | | | | | |
| INDOOR UNITS | | | CDX25JV1NB | CDX35JV1NB | CDX50JV1NB | CDX60JV1NB | | | |
| NOMINAL INPUT | Cooling | kW | - | - | - | - | | | |
| | Heating | kW | - | - | = | - | | | |

| | oor units + outdoor units: | | | | | | | |
|----------------------|----------------------------|-----------|---|--|---|---------------------------------------|--|--|
| INDOOR UNITS | | | CDX25JV1NB | CDX35JV1NB | CDX25JV1NB | CDX35JV1NB | | |
| OUTDOOR UNITS | | | 4MX80HV1NB | 4MX80HV1NB | 4MX80HV1NB | 4MX80HV1NB | | |
| NOMINAL CAPACITY (3) | Cooling (1) | kW | For capacities and power input in mult | i model application, see chapter MX-H | For capacities and power input in mult | i model application, see chapter MX-H | | |
| | Heating (2) | kW | For capacities and power input in mult | i model application, see chapter MX-H | For capacities and power input in multi model application, see chapter MX- | | | |
| NOMINAL INPUT | Cooling | kW | For capacities and power input in mult | i model application, see chapter MX-H | For capacities and power input in multi model application, see chapter M. | | | |
| | Heating | kW | For capacities and power input in mult | i model application, see chapter MX-H | For capacities and power input in multi model application, see chapter MX-H | | | |
| INDOOR UNITS | | | CDX25JV1NB | CDX35JV1NB | CDX50JV1NB | CDX60JV1NB | | |
| OUTDOOR UNITS | | | 4MX80HV1NB | 4MX80HV1NB | 4MX80HV1NB | 4MX80HV1NB | | |
| NOMINAL CAPACITY (3) | Cooling (1) | kW | | For capacities and power input in mult | ti model application, see chapter MX-H | | | |
| Heating (2) kW | | kW | For capacities and power input in multi model application, see chapter MX-H | | | | | |
| NOMINAL INPUT | Cooling | kW | For capacities and power input in multi model application, see chapter MX-H | | | | | |
| | Heating | eating kW | | | For capacities and power input in multi model application, see chapter MX-H | | | |

| TECHNICAL SPEC | CIFICATIONS | | | | | | |
|---------------------|--------------------------------------|--------|--------|------------------|----------------|----------------|----------------|
| INDOOR UNITS | | | | CDX25JV1NB | CDX35JV1NB | CDX50JV1NB | CDX60JV1NB |
| DIMENSIONS | Unit | Н | mm | 260 | 260 | 260 | 260 |
| | | W | mm | 900 | 900 | 900 | 900 |
| | | D | mm | 580 | 580 | 580 | 580 |
| WEIGHT | Unit | | kg | 23 | 23 | 24 | 24 |
| SOUND LEVEL | Sound pressure | high | dB(A) | 39/40 | 39/40 | 42/42 | 44/44 |
| | (cooling/heating) (4) | low | dB(A) | 36/36 | 36/36 | 39/38 | 41/40 |
| | Sound power (cooling/heating) (5) | | dB(A) | 55/56 | 55/56 | 58/58 | 60/60 |
| FAN | Air flow rate (cooling/heating) | high | m³/min | 13.0/13.0 | 13.0/13.0 | 13.0/13.0 | 14.5/14.5 |
| | | medium | m³/min | 12.0/12.0 | 12.0/12.0 | 12.0/12.0 | 13.0/13.0 |
| | | low | m³/min | 11.0/11.0 | 11.0/11.0 | 11.0/11.0 | 11.5/11.5 |
| | Speed (cooling/heating) | steps | | 5 steps and auto | | | |
| | | high | rpm | 960/960 | 960/960 | 1,000/1,000 | 1,120/1,120 |
| | | low | rpm | 830/830 | 830/830 | 860/860 | 910/910 |
| | Туре | | | Sirocco fan | | | |
| | Qty x motor output | | W | 1 x 47A-23 | 1 x 47A-23 | 1 x 47A-23 | 1 x 47A-23 |
| HEAT EXCHANGER | Туре | | | Ø 7 Hi-XA tube | Ø 7 Hi-XA tube | Ø 7 Hi-XA tube | Ø 7 Hi-XA tube |
| | Rows x stages x fin pitch | | mm | 2 x 10 x 1.75 | 2 x 10 x 1.75 | 3 x 10 x 1.75 | 3 x 10 x 1.75 |
| TEMPERATURE CONTROL | | | | | Microcomp | uter control | |
| PIPING CONNECTIONS | | liquid | mm | ф6.4 | ф6.4 | ф6.4 | ф6.4 |
| | | gas | mm | ф9.5 | ф12.7 | ф12.7 | ф15.9 |
| | | drain | mm | ф27.2(3/4В) | ф27.2(3/4В) | ф27.2(3/4В) | ф27.2(3/4В) |
| Insulation Material | Heat insulation tape | | | | Both liquid a | nd gas pipes | |

For outdoor units Multi model application See chapter MX-H

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2 Specifications



2

| ELECTRICAL SPECIFICATIONS | | | | | | | | | | |
|---------------------------|-------------------------|---------|---|-----------------------------------|------------|------------|------------|--|--|--|
| For indoor unit | s only: | | | CDX25JV1NB | CDX35JV1NB | CDX50JV1NB | CDX60JV1NB | | | |
| CURRENT | Nominal running current | cooling | A | See chapter MX-H: Electrical data | | | | | | |
| | | heating | A | | | | | | | |
| | Max. running current | cooling | А | | | | | | | |
| | | heating | A | | | | | | | |

| For combination | n indoor units + outdoor unit | s: | | CDX25JV1NB | CDX35JV1NB | CDX25JV1NB | CDX35JV1NB | |
|-----------------|-------------------------------|---------|---|-----------------------------------|-----------------|---------------------|------------|--|
| | | | | 2MX52HV1NB | 2MX52HV1NB | 3MX68HV1NB | 3MX68HV1NB | |
| CURRENT | Nominal running current | cooling | A | | | | | |
| | | heating | A | | | | | |
| | Maximum running current | cooling | A | | Coo chantar MAV | III Floatrical data | | |
| | | heating | A | See chapter MX-H: Electrical data | | | | |
| | Starting current | cooling | A | | | | | |
| | | heating | А | | | | | |
| | | | | CDX25JV1NB | CDX35JV1NB | CDX50JV1NB | CDX60JV1NB | |
| | | | | 4MX80HV1NB | 4MX80HV1NB | 4MX80HV1NB | 4MX80HV1NB | |
| CURRENT | Nominal running current | cooling | А | | | | | |
| | | heating | A | 7 | | | | |
| | Maximum running current | cooling | A | | Coo chantar MAV | III Floatrical data | | |
| | | heating | A | See chapter MX-H: Electrical data | | | | |
| | Starting current | cooling | A | | | | | |
| | | heating | А | <u> </u> | | | | |

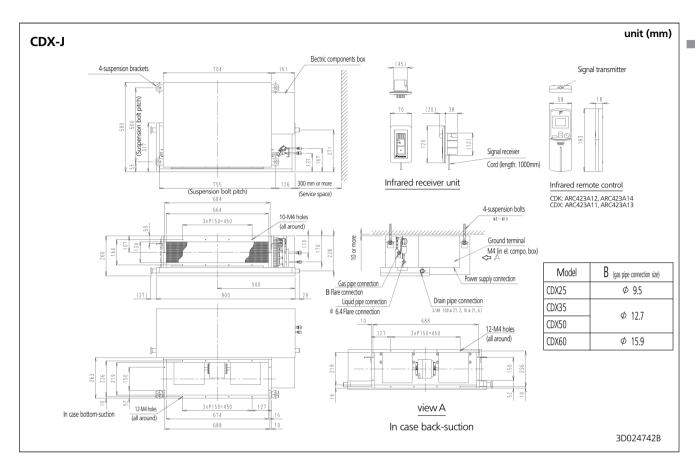
| For indoor units only: | | CDX25JV1NB | CDX35JV1NB | CDX50JV1NB | CDX60JV1NB | |
|------------------------|-----------|------------|------------|------------|------------|-----|
| POWER SUPPLY | | | V1 | V1 | V1 | V1 |
| NOMINAL DISTRIBUTION | Phase | | 1~ | 1~ | 1~ | 1~ |
| system voltage | Frequency | Hz | 50 | 50 | 50 | 50 |
| | Voltage | V | 230 | 230 | 230 | 230 |

NOTES

- Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB * outdoor temperature 35°CDB * refrigerant piping length: 7.5m
- Nominal heating capacities are based on: indoor temperature 20°CDB * outdoor temperature 7°CDB/6°CWB * refrigerant piping length 7.5m
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value, depending on the distance and acoustic environment. For measuring conditions: please refer to item 6 of this chapter.
- The sound power level is an absolute value indicating the "power" which a sound source generates.

3 Dimensional drawings

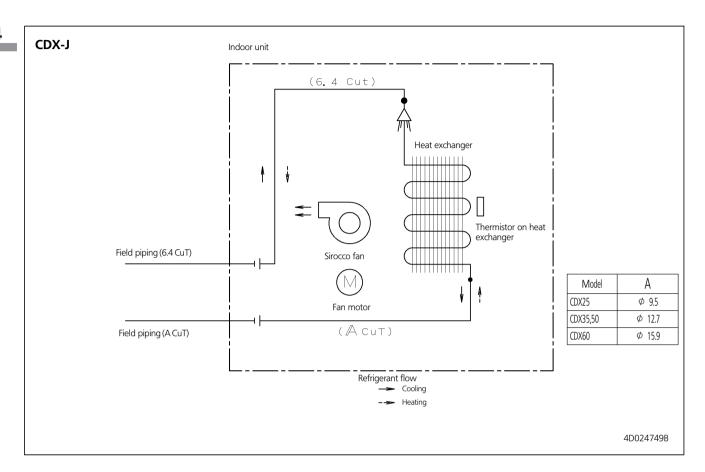




4 Piping diagrams

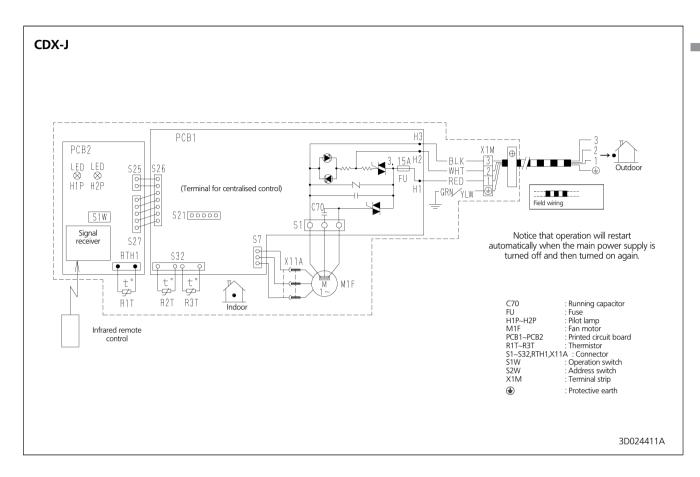


4



5 Wiring diagrams





6 Sound level

6-1 Sound level data



6

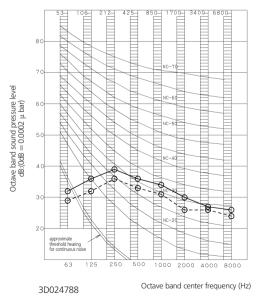
Heat pump

6-1

| Model | | 230V | | | |
|------------|-------------------------|---------------------|-----------------------|------------|---------|
| Iviouei | 50Hz Measuring location | | Sound power level (H) | | |
| | H (cooling/heating) | M (cooling/heating) | L (cooling/heating) | | |
| CDX25JV1NB | 39/40 | 37/38 | 36/36 | | 55 / 56 |
| CDX35JV1NB | 39/40 | 37/38 | 36/36 | | 55 / 56 |
| CDX50JV1NB | 42/42 | 40/40 | 39/38 | 2 D | 58 / 58 |
| CDX60JV1NB | 44/44 | 42/41 | 41/40 | Microphone | 60 / 60 |

6–2 Sound pressure spectrum

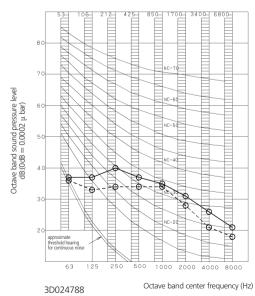
CDX25~35JV1NB (Cooling)



Legend

O--O 50Hz, 230V (H) O---O 50Hz, 230V (L)

CDX25~35JV1NB (Heating)



Notes:

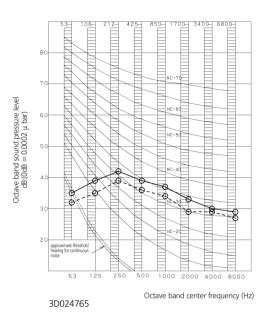
- 1. Operation sound is measured in an anechoic chamber.
- Operation sound differs with operation and ambient conditions.

Sound level

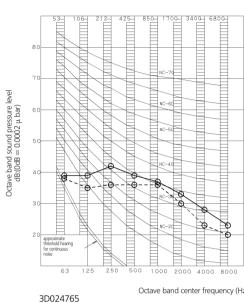
Sound pressure spectrum



CDX50JV1NB (Cooling)

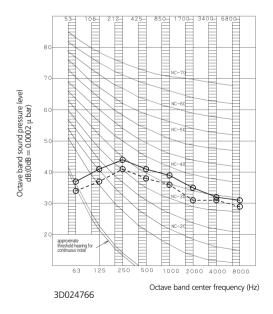


CDX50JV1NB (Heating)

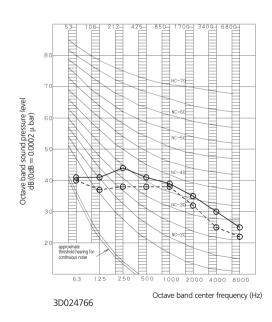


Octave band center frequency (Hz)

CDX60JV1NB (Cooling)



CDX60JV1NB (Heating)



Legend

50Hz, 230V (H) 50Hz, 230V (L)

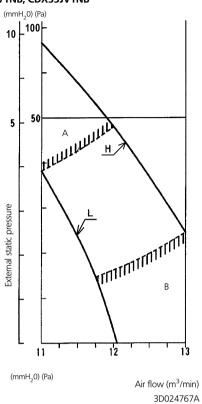
Notes:

- 1. Operation sound is measured in an anechoic chamber.
- 2. Operation sound differs with operation and ambient conditions.

7 Fan characteristics



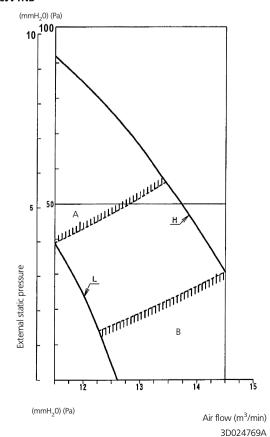
CDX25JV1NB, CDX35JV1NB



CDX50JV1NB (mmH₂0) (Pa) A Air flow (m³/min)

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CDX60JV1NB



 $\label{eq:A} A = \mbox{Upper limit of external static pressure (standard ESP)} \\ B = \mbox{Lower limit of external static pressure (standard ESP)}$

10

Accessories 8

8-1 Standard accessories



| Clamp metal | Insulation for fitting | Sealing pad | Screws for duct flanges | Infrared remote control |
|-------------|-------------------------------|---------------------------|-------------------------|-------------------------|
| 1 | 1 of each | Large and small 1 each | 1 set | 1 |
| | For gas pipe For liquid pipe | Large Small | Opposite | |

| 2 | |
|------------------|-----------------------|
| Screw M4 x 25 | (Other) |
| IVIT A 23 | Operation manual |
| 8 | a lastallation manual |

| Remote control holder | AAA dry-cell batteries | | Receiver kit | | | | | |
|-----------------------|---------------------------|----------------------------|------------------|--------------------------|------------------|---|--|--|
| 1 | 1 | 1 set | 1 | 1 | 2 | | | |
| | | Faceplate; faceplate frame | Decorative cover | Insulated mounting frame | Screw M4 x 25 | (Other) Operation manual Installation manual | | |

8-2 Optional accessories

| | Option name | CDX25~60J |
|---|---|-----------|
| 1 | Centralised control board-up to 5 rooms 💥1 | KRC72 |
| 2 | Wiring adaptor for time clock/remote control ※ 2 (normal open pulse contact/normal open contact) | KRP413A1S |
| 3 | Interface adapter for room air conditioners (DIII-NET) | KRP928A2S |
| 4 | Anti-theft protection for remote control | KKF917A4 |
| 5 | Central remote control | DCS302B51 |
| 6 | Unified ON/OFF control | DCS301B51 |
| 7 | Schedule timer | DST301B51 |

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X1 Wiring adapter is also required for each indoor unit.

X Wiring adapter supplied by Daikin. Time clock and other devices: field supply. €

9 Control systems

9–1 Infrared remote control



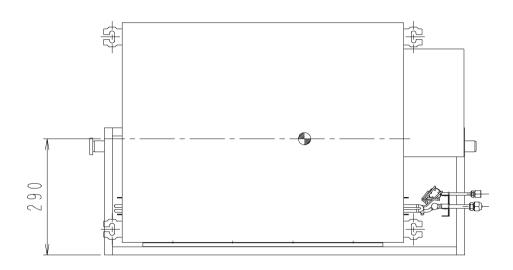
Transmitter It sends signals to the indoor unit. **Display** On/Off button Display the current () ON/OFF Open the settings. In this Press it once to start operation. To stop it, press it once again. illustration, each section 000 is shown with all its TEMP displays ON for the purpose of explanation. TIME Some models may not TEMPERATURE/TIME adjustment show all its indications. **buttons** Change the temperature or time setting. AMPM ①-〇 OFF TIMER ھر **CLOCK button OFF TIMER button** амрм ҈ ᠿ-ON TIMER CANCEL ON TIMER button 🐉 FAN **TIMER CANCEL button** \$. \$. £ MODE It cancels the timer setting. $\overline{\mathbb{A}}$ **MODE** selector button * **₩** & **FAN setting button** It selects the operation mode It selects the air flow rate setting. POWERFUL CDX دي **POWERFUL** button Auto • Dry 🗱 : Cool 🎉 : Heat

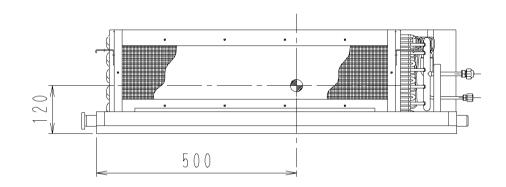
10 Center of gravity



CDX-J

10





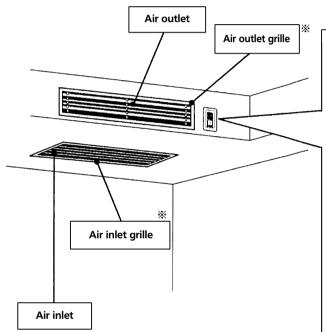
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11 Installation

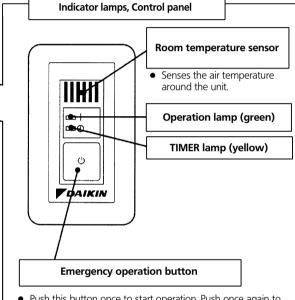


11

Indoor unit



- There are models which are not equipped with the air filter inside of the unit.
- Clean the air filter periodically.
- * Appearance of the air outlet grille and air inlet grille may differ with some models.



- Push this button once to start operation. Push once again to stop it.
- This button is useful when the infrared remote controller is missing.

| | Mode | Temperature setting | Air flow rate |
|-----|------|---------------------|---------------|
| CDX | AUT0 | 25 ℃ | AUT0 |

• In the case of multi system operation, there are times when the unit does not activate with this button.

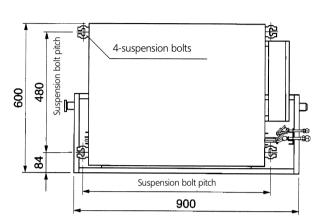
11 Installation



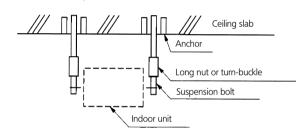
• Relation of the unit to the suspension bolt positions

• Install the suspension bolts

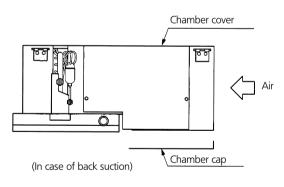
(Use M10-size bolts for the suspension bolts.) In order to reinforce the ceiling bearing the weight of the unit, use anchors when installing onto an existing ceiling or use sunken inserts, sunken anchors or other commercially available parts when installing onto a new ceiling.



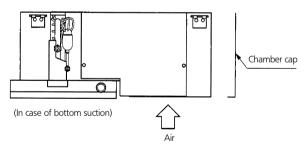
(Installation example)



• Mount chamber cap



Note: All of the above parts are commercially available.



 When two indoor units are installed in one room, the two remote controls can be easily set for different addresses.

