

Installation and Operating Instructions

安装使用说明书



Ventilating Fan 换气扇

Model No. 코号

24CURB 24CHRVB 24CHRB

READ AND SAVE THESE INSTRUCTIONS

Thank you very much for purchasing this KDK product.

Please read these instructions especially "Safety Instructions" and "Installation Cautions" carefully before attempting to install, operate or service the KDK product. Failure to comply with instructions could result in personal injury or property damage.

Please explain to users how to operate and maintain the product after the installation, and this booklet should be presented to users.

Please retain this booklet for future reference.

阅读并保管好此说明书

感谢您购买本KDK产品。

安装、使用和维护 KDK 产品前,请仔细阅读本安装使用说明书,特别是"安全指引"和"安装注意事项"部分。

不遵照此说明书进行操作有可能导致人员受伤或财产损失。

安装完成后,请向顾客说明如何使用和维护本产品,并将此说明书交给顾客保管。 请妥善保管好此说明书以备日后参考。

SAFETY INSTRUCTIONS

安全指引

Please observe strictly 请务必遵守

- Disconnect the power supply until blade is stationary before cleaning and maintenance. 在清洁和维护前,请确保换气扇的电源已经关闭且扇叶停止转动。
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

本设备不适合身体、感官或精神能力下降,或缺乏经验和知识的人员(包括儿童)使用,除非负责其安全的人员对其使用设备进行了监督或指导。应监督儿童确保其不玩耍本设备。

- If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.

 如果电源软线损坏,为避免危险,必须由制造厂商,其维修部或类似的专业人员更换。
- The product must be mounted on to the ceiling which is enough strong, If the ceiling is not enough strong it must be reinforced for it to be strong enough.

 产品必须安装在足够坚固的天花板上,如果天花板不够坚固,则必须加固以使其足够坚固。

SAFETY INSTRUCTIONS

安全指引

Please observe strictly 请务必遵守

The following explanations must always be observed in order to prevent harm to users or other people and prevent damage to property.

为了避免给您及其它人造成伤害,这里我们列出了以下安全注意事项,请务必遵守,各种标志的含义请参照以下内容。

■ The following displays are classified and explained to what extent harm or damage occurs when the display details are ignored and the unit in question is wrongly used.

无视或错误理解这些标志,会产生下列两种情况。



Warning 警告 This indication means: Must be treated seriously that this may result in death or serious injury.

本标志所表示的内容为"可能造成人员重伤或伤亡"。



Caution 注 意 This indication means: Must be treated seriously that this may result in injury or physical damage.

本标志所表示的内容为"可能造成人身伤害和其它物品损害"。

The types of details to be observed are classified and explained in the following illustrated displays. (Below are the series of illustrated displays)

需要遵守的详情类型进行了分类,并在以下插图显示中进行了说明。(以下为插图显示系列)





This type of pictorial symbol indicates a "Prohibited" action that must be avoided.

此標誌表示為禁止事項





This type of pictorial symbol indicates a "Compulsory" action that must be performed.

此標誌表示強制事項

INSTALLATION CAUTIONS

安装注意事项



Warning

The product must be grounded. 必须接地。



Otherwise, it may cause electric shock when there is any trouble or electric leakage. 当出现故障或漏电时, 可能会触电。

Do not install the power switch in bathroom. 禁止将电源开关安装在浴室内。



Otherwise, it may cause a short circuit, thus resulting a fire.

否则可能会导致短路,导致火灾。

Do not install the product as the method which is not approved in the instruction. 禁止使用本说明书指定以外的方法讲行安装。



Otherwise, the product may fall down and it may cause injury.

否则产品可能会掉落,导致受伤。

Do not operate the product other than the voltage in name plate.

禁止使用额定电压以外的电源。



Otherwise, it may damage the product or cause fire.

否则可能会导致损坏本产品,导致火灾。

藝告

Do not install the fan out of the window and wall. 禁止将换气扇安装干窗外或墙壁外。



Otherwise, the product may get wet in the rain and cause short circuit.

否则产品可能会淋雨,导致短路。

Please install an all-pole switch which the contact separation is more than 3 mm (all-pole switch).

安装时,须在供电线路中安装其触电 开距不少于3 mm的全极断开装置(全极开关)。



Otherwise, it may cause a short circuit, thus resulting a fire.

否则可能会导致短路,导致火灾。

Wiring is required to follow the local wiring regulations.

器具应按照国家布线规则进行安装。



Otherwise, it may cause fire.

否则可能会导致火灾。

Installation should be done by authorized person. The product should be installed firmly.

必须由专业人员进行安装,必须牢固地安装产品。



Otherwise, the product any fall down and it may cause injury.

否则产品可能会掉落,导致受伤。

INSTALLATION CAUTIONS

安装注意事项



Caution

The special-purpose or dedicated parts, such as mounting fixtures, must be used if such parts are provided.

有安装五金件等专用零部件时,应使用专用 零部件。



Otherwise, the product may fall down and it may cause injury.

否则产品可能会掉落,导致受伤。

The product must be installed tightly. 机体安装必须牢固。



Otherwise, it may injure person caused by product's falling off.

否则机体可能会掉落,导致受伤。

注意

Components must be installed tightly. 部品安装必须牢固。





Otherwise, it may injure person caused by product's falling off.

否则部品可能会掉落,导致受伤。

■ The lowest surface of this product should be installed above 2.3 m from the floor after installation

安装完成后产品最底面至地面的距离必须大于 2.3 m。



Avoiding any accident 防止意外



Do avoid the back-flow of gas into the room from the open flue of flammable gas or other open-fire appliances.

必须避免气体从敞开的气道或其他明火设 备同流讲室内。



Otherwise, it may cause fire.

否则可能会导致火灾。

■ Do not reconstruct this product. 禁止对本产品进行改造。



Otherwise, it may cause damage to the product or injury.

否则可能会导致产品损伤或人身伤害。

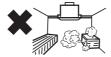
INSTALLATION REQUIREMENTS

安装要求

Please observe the following requirement. Otherwise, it may cause the product aging and breakdown. 请遵守以下安装要求事项,否则有可能会导致机体老化或发生故障。

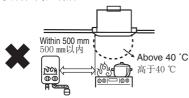
Do not install the product where there is steam.

请勿安装在有蒸汽的场所。



Do not install the product in places with high temperature.

请勿安装在高温场所。

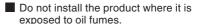


Be sure to provide an appropriate opening for air intake.

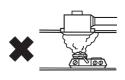
请设置通风口。



- Please set a square inspection hole of at least 45 cm.
 - 请设置一个45 cm以上的方形 点检口。



请勿安装在油烟过多的场所。



■ Do not install onto slanting ceiling. 请勿安装在倾斜的天花板上。



Prevent the water condensed in the duct pipe flow back into the body.

防止水诵讨安装管道倒流。

Please don't carry out the following ductworks.

请勿执行以下管道系统。

Ductwork (1), (2), and (3) will increase the duct resistance, and ductwork (4) will cause turbulence and airflow collisions. These ductwork configurations may cause the product to operate under a condition where the inlet and/or outlet openings arealmost blocked. This may not only increase levels of vibration and noise but also reduce the air volume and adversely affect the motor.

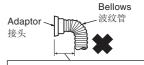
管道系统(1)、(2)和(3)会增大管道阻力,而管道系统(4)会造成湍流和气流碰撞。这些管道系统配置可能会造成产品在进气口和/或出气口几乎完全堵塞的情况下运行。这不仅会增大振动和噪音,还会降低风量,并对电机产生不利影响。

(1) Bending extremely 严重弯曲 (2) Bending repeatedly 反复弯曲

(3) Making duct diameter too small 使管道直径太小



(4) Bending very near to the adaptor 弯曲非常靠近接头



Separate 1m or more from the adaptor. 从接头分开1 m或以上。





■ Do not install the product in the place with many dust. 请勿安装在灰尘较多的场所。

■ The product is not provided with, all-pole switch and leakage protection switch. Please purchase them in market. 本产品没有附带电源全极开关和漏电保护开关,需用户另购。

SUPPLIED ACCESSORIES

包装附件清单

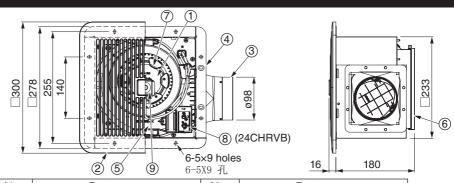
The following attachments are enclosed in the packing box of ventilating fan. Be sure to check if they are complete after unpacking, and if anything is missed, contact our After-Sales Service Center or the dealer. 随换气扇产品包装箱有以下附件,开箱后请清点是否齐全,如不齐全,请于客户咨询服务中心或经销商联系。

| No. 序号 | Drawing 图样 | Name and purpose 名称及用途 | Quantity 数量 |
|-----------|---------------|--------------------------------------------------------------------------------------------|----------------|
| 1) | <u>⊲шш</u> ⊕ | Self-tapping screw (use to fix the frame and adaptor assembly) 自攻螺丝 (用于固定框架和接头组合) | 6 |
| 2 | | Louver 面罩 | 1 |
| 3 | | Installation and operating instructions 安装使用说明书 | 1 |

PARTS NAME AND DIMENSIONS

部件名称及尺寸



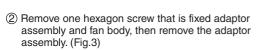


| No. 序号 | Part name 部件名 | No. 序号 | Part name 部件名 |
|-----------|--------------------------|-----------|-------------------------------------------|
| 1 | Blade 扇叶 | 6 | Wiring box 接线盒 |
| 2 | Louver 面罩 | 7 | Motor 马达 |
| 3 | Adaptor Assembly 接头组合 | 8 | Selector and Humidity sensor 转换器和湿度传感器 |
| 4 | Fan body 机身 | 9 | Motion sensor location 动作传感器位置 |
| 5 | Casing 护套 | | |

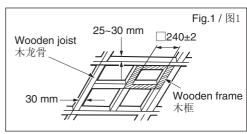
安装方法

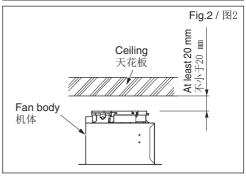
- 1. Fan body installation Method 1 install with wooden joist.
- 1. 机体的安装 方法一 使用木龙骨安装
- ① Construct the wooden frame and attach it horizontally to the wooden joist. (Fig.1) 在木龙骨上水平搭建木框(图1)。

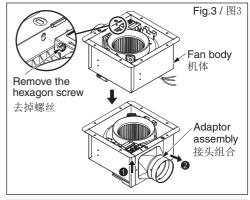
The distance between the top of fan body and ceiling should not be less than 20 mm. (Fig.2) 注意应保持机体项部和天花板的距离不小于20 mm (图2)。

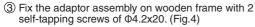


取下固定接头组合和机体的一颗螺丝, 按图示方法拆下接头组合(图3)。









按图示将接头组合紧靠木框固定, 并用自攻螺丝 ϕ 4. 2x20 (2颗) 固定 (图4)。

IMPORTAN 重要 Adaptor assembly

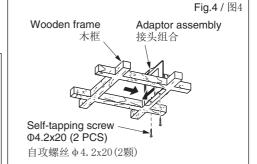
Adaptor assembly should not fix at an angle. 固定接头组合时要注意不能和木框之间有角度











安装方法

4 Connect the power cord (included earth) of fan body to lead wire in accordance with the wiring diagram. (Fig.5)

根据接线示意图,将机体电源线(包括地线) 连接到供电电源线上(图5)。

Fia.5 / 图5 Power cord 电源线 Lead wire from power source PVC coated cord (60227 IEC 53); 3x0.75 mm² 供由电源线 Fan body 机体

Notice 提示事项

Wiring should be firmly connected without any loose. Connection example. (Fig.6)

电源线连接处必须牢固,不能有松动。 电源连接方法(图6)。

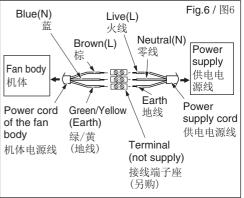
- It is required to use terminal (not supply) that complies IEC 60998. 要求使用符合IEC60998的接线端子座(另购)。
- Make sure all connections are fastened firmly after wiring is finished.

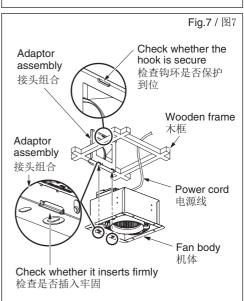
接线完成后, 必须检查所有连接是否牢固。

(5) Make the power cord pass through the wooden frame, push the fan body into wooden frame, to fix the fan body and adaptor assembly. (Fig.7) 将电源线穿过木框,将机体推入木框, 使机体与接头组合固定(图7)。

Notice 提示事项

- Power cord should reserve more than 400 mm. otherwise main body is hard to disassembly when maintenance.
 - 电源线要有400 mm以上的预留,否则维修时机 体难以拆卸。
- When the fan body is pushed into the wooden frame, be careful not to pinch the power cord. 机体推入木框时, 请注意不要夹伤电源线。





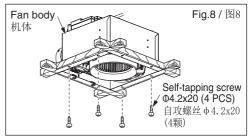
安装方法

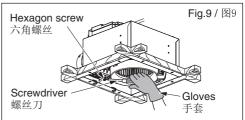
⑥ Fix fan body firmly with 4 self-tapping screws Φ4.2x20.(Fig.8)

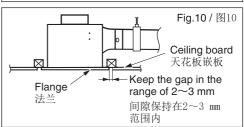
用自攻螺丝 φ 4. 2x20 (4颗) 将机体牢固的固定 (图8)。

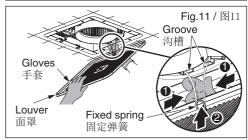
- ⑦ Fix adaptor assembly and fan body firmly with hexagon screw removed in step ②. (Fig.9) 用步骤②中拆下的螺丝将机体与接头组合牢固的固定起来(图9)。
- After finishing installation, please confirm whether fan body and adaptor assembly are installed firmly. 安装完成后,请确认机体与接头是否完全安装牢固。
- 8 Connect duct. → refer to page 12 2. Connect duct 连接管道。→参考第12页 2. 管道连接
- ⑨ Install ceiling board, keep the gap of flange and ceiling board in the range of 2~3 mm. (Fig.10) 安装天花板嵌板,使法兰与天花板嵌板的间隙保持在2~3 mm范围内(图10)。
- ⑩ Insert the fixed spring of louver assembly into the groove, install the louver to the fan body. (Fig.11) 将面罩组合上的固定弹簧装入沟槽内,将面罩装在机体上(图11)。

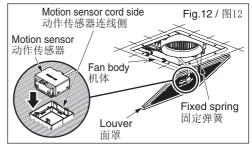
- ft Insert the motion sensor on the louver assembly as shown. (Fig. 12) 按照图示将动作传感器装入面罩 (图12)。
- ② Ilnsert the other spring into the groove as shown and install the louver to the fan body. 再将面罩上另一侧的固定弹簧装入沟槽,完成对面罩的安装。











安装方法

- Fan body installation Method 2 install with anchor bolt
- 1. 机体的安装 方法二 使用地脚螺栓安装
- ① Secure the suspension bracket (not supply) with screws (not supply) (Fig.13).

用螺丝(另购)固定悬吊支架(另购)(图13)。

Notice 提示事项

The screw length is 8 mm.

自攻螺丝长度为8mm。

Suspension bracket must be made of metal with sufficient strength.

悬挂支架必须由具有足够强度的金属制成。

| Model No. 型号 | 24CURB 24CHRB | 24CHRVB |
|--------------------------|------------------|---------|
| Net weight 净重 [kg] | 2.8 | 2.9 |

② Install the fan body on the anchor bolt.

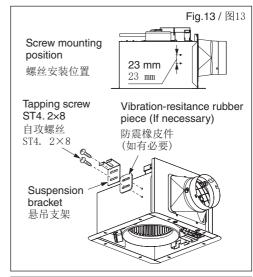
The distance between the top of fan body and ceiling should not be less than 20 mm. (Fig.14)
Anchor bolt (M8-M10, not supply) refer to the following form.

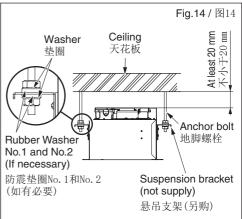
将机体安装在地脚螺栓(M8-M10另购)上。 注意应保持机体顶部和天花板的距离不小于20 mm (图14)。

③ Connect power cord. → refer to page 9
1. Fan body installation Method 1 install with wooden joist ④.

连接电源线→参考第9页 1. 机体的安装方法一 使用木龙骨安装 ④

④ Install the louver. → refer to page 10 安装百叶窗。 → 参考第10页





安装方法

2. Connect duct

2. 管道连接

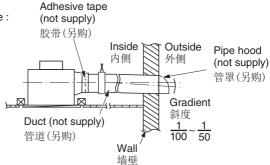
① Insert the duct (not supply) into the adaptor and secure it with adhesive tape (not supply) tightly. Suspend the duct from the ceiling so that no force is applied to the fan body. Install the duct horizontally with a gradient downwards to the outside. And the outlet of duct shall be located to avoid the rain ingress.

将管道(另购)装入接头组合上,然后用胶带(另购)粘紧密闭,防止漏风。将管道悬挂在天花板上,以防止外力施加于机体。管道水平向下倾斜的安装到外侧,其出口应设置在避免雨水进入的地方。

Notice 提示事项

The minimum diameter of the wall hole : α 116 mm

墙壁的最小开口尺寸为:116 mm。



② Insert the pipe hood or vent cap (optional accessories) on the outer wall. 将管盖或管罩(需要另外选购) 安装到墙外。

| Pipe hood 管罩 | MCX100K | |
|-----------------|---------|--|
| Vent cap 管盖 | VCX100K | |

TEST RUN

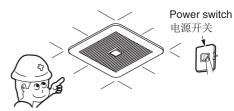
试运转

Please check whether all kinds of anomalies below happen after connecting power. (When motion sensor is detected, fan runs)

在接通电源后,检查一下是否发生以下各种异常现象。 (当动作传感器感应到用户运动时,扇叶开始运转)

- Blades doesn't run properly. 扇叶不正常的运转。
- Blades is clockwise rotation. 扇叶顺时针旋转。
- Blades have abnormal vibration or noise.
 发生不正常的声音或震动。





MAINTENANCE

日常使用及维修



Warning 警告

■ Do not directly spray this product with water and other liquids.

禁止用水及其他液体直接喷射、清洁本产品。



Otherwise, it may cause short circuitor electric shock.

否则可能会导致短路或触电。

■ Do not let water flow into the motor. 禁止让水进入电动机。



Otherwise, it may damage the product or cause fire.

. 否则可能会损坏本产品或导致火灾。 Once flammable gas leaks, do not start any function of this product.

当发生煤气泄漏时,禁止开启本产品的任何功能。



Otherwise, it may generate sparkle and this leads to explosion.

否则可能会产生电火花而引起爆炸。

If you will not use this product any more, remove the product.

如果以后不打算再使用本产品,不得放置不管, 而应予以拆除。



Otherwise, the product may fall down and it may cause injury.

万一掉落,可能会导致受伤。

MAINTENANCE

日常使用及维修



Warning 警告

This product is applicable to living rooms, washrooms and other places where the humidity is not too high.

本产品须安装在起居室、卫生间等湿度不太高的场所。



Otherwise, it may lead to short circuit or electric shock.

否则可能会引起短路或触电。



Caution 注意

■ Please wear the gloves when cleaning the product.

清洁时请带上手套。



Otherwise, it may cause damage. 否则可能会导致受伤。



Cleaning Precautions

清洁提示事项

- Never immerse blade or other resin parts in hot water over 60 °C. 请勿把塑料部品浸入高于60 ℃的水中。
- Never use petrol, benzene thinner or any other such chemicals for cleaning the product. 请勿使用汽油、苯、稀释剂或其他诸如此类的化学品擦拭换气扇。

MAINTENANCE

日常使用及维修

Clean product

清洁产品

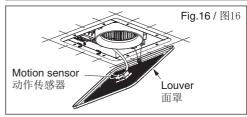
(1) Remove the louver. (Fig.15) 拆下面罩(图15)。



Groove

沟槽

2 Remove the motion sensor. (Fig.16) 去掉动作传感器(图16)。



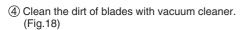
Fixed spring

Fig.15 / 图15

(3) Clean Louver. (Don't put into hot water. Use non-abrasive kitchen detergent, wipe dry with clean cloth) (Fig.17)

The Louver should be dry after cleaning.

用水冲洗面罩,干净的面罩请用柔软的干布擦干或 风干(图17)。



使用吸尘器清除扇叶上的污物(图18)。



(5) Wipe the dust off the fan body with a soft cloth moistened with kitchen detergent, and then clear it with a clean soft cloth. (Fig.19)

使用软布沾上厨房用洗涤剂后擦掉扇叶上的污物,



再用干净软布擦净(图19)。



(6) Finally, install the louver again. →refer to page 10 最后,重新装上面罩。→参考第10页

SELECTOR INDICATION (24CHRVB only)

调节器指示

■ Humidity selector range from around 45% to 95%. Factory setting is around 85%. (Fig.20)

湿度传感器湿度感应范围为45%~95%。出厂预设为85%。(图20)

Humidity timer selector range of positions from 0 to 6h. Factory setting is 1 hour. (Fig.20)

湿度传感器延时设定范围为0~6h,出厂预设为1h。(图20)

Humidity timer selector position OFF. (Fig.21)
 Humidity sensor OFF follows motion sensor operation.

湿度传感器延时设定为0FF。(图21) 当延时设定为0FF时,换气扇只有在动作传感器感应到用户运动时进行 运转。



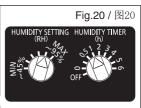


Fig.21 / 图21



OPERATION

运转

Motion sensor detectible condition. delay time is 15 minutes.

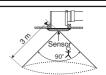
动作传感器感应条件。延时设定为15分钟。

The following case may reduce sensitivity of the motion sensor.

以下情况可能会导致动作传感器感应不良。

- Little movement by occupants. 用户非常轻微的活动。
- A room temperature is close to body temperature. 室内温度非常接近人体温度。





The distance that motion can be detected is limited to 3 m. The field of view of the sensor is 90°. (Room temperature is 25°.)

| Human activity | INSIDE | OUTSIDE |
|-------------------|--------|----------------------------------------------|
| Fan activity | | Remains running until 15 minntes has passed. |

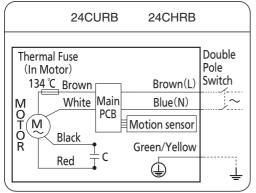
- Humidity sensor detectible condition. (24CHRVB only)
 - ① Humidity setting selector is stepless change between 45 %RH \sim 95 %RH.
 - 2 The humidity detected by sensor may differ from the value on your hygrometer.
 - ③ The product may turn on and off cause by the unstable environment humidity, you can improve it by adjusting the humidity setting selector.

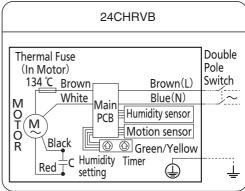
湿度传感器感应条件。(仅对于24CHRVB)

- ①湿度传感器的设定范围为45%~95%。
- (2) 湿度传感器感应湿度可能会和湿度计有出入。
- ③根据环境的湿度变化,用户可以选择更换湿度传感器感应范围。

WIRING DIAGRAM

电气原理图





SPECIFICATIONS

规格

| Model No. 型号 | Voltage 电压 [V] | Frequency 频率 [Hz] | Power consumption 耗电量 [W] | Air delivery 风量 [m³/h] | Noise 噪音 [dB] | Static pressure 静压 [Pa] | Net weight 净重 [kg] |
|-----------------|----------------------|-------------------------|------------------------------------|------------------------------|---------------------|-------------------------------|--------------------------|
| 24CURB | 220 | 50 | 11 | 140 | 25 | 100 | 2.8 |
| 24CHRB | 220 | 50 | 17 | 200 | 32 | 100 | 2.8 |
| 24CHRVB | 220 | 50 | 17 | 200 | 32 | 100 | 2.9 |

[■] Insulation class B IP code :IPX2

■ B级绝缘 IP代码: IPX2

The above specification may be changed without further notice.

上述参数如有变动,恕不另行通知。

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