

導管式抽氣扇

VENTILATING FAN

Original type: 標準型

VD-10Z4T□, VD-10Z4T□-S, VD-10Z4T□-N, VD-15Z4T□, VD-15Z4T□-S, VD-15Z4T□-N,
VD-15ZP4T□, VD-15ZP4T□-N, VD-18Z4T□, VD-20Z4T□, VD-20ZP4T□, VD-23Z4T□,
VD-23ZP4T□, VD-23ZPP4T□

Delay timer type: 延時定時型

VD-10Z4T□-D, VD-15Z4T□-D, VD-15ZP4T□-D

說明書及安裝程序

MANUAL AND INSTALLATION PROCEDURE

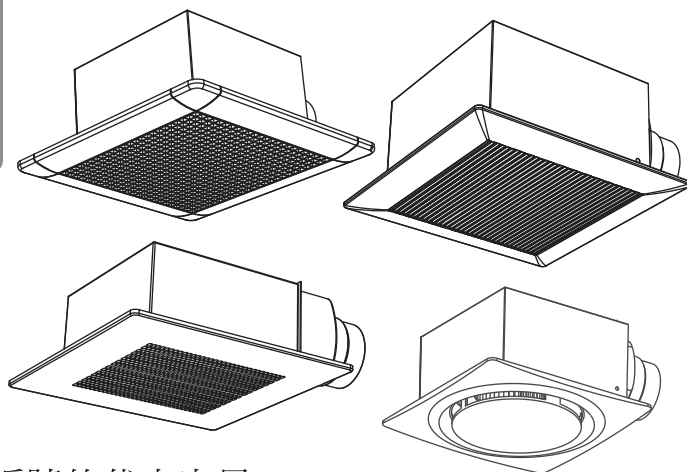
產品外觀 / PRODUCT APPEARANCE

附加配件

ADDITIONAL PART

螺絲 (9顆)

SCREW (9 PCS)



註：□ 乃開發編號的代表字母

REMARK：□ IS THE ALPHABET OF DEVELOPMENT NUMBER

說明書可在網頁上查閱：

Instruction manuals are available on the company website：

Singapore <https://www.mitsubishielectric.com.sg>

Malaysia <http://www.mitsubishielectricmalaysia.com>

Australia <http://www.mitsubishielectric.com.au>

Hong Kong

<http://hk.mitsubishielectric.com>

Brunei

<http://www.tskelectric.com>

New Zealand

<https://www.bdt.co.nz/home>

安裝及操作前，請先細閱本說明書，以確保安全。

FOR SAFETY, PLEASE READ THIS MANUAL PRIOR TO INSTALL AND OPERATION

安全須知 / ESSENTIAL SAFETY PRECAUTIONS



警告

WARNING

違規可引致死亡或受傷。

Failure to comply could result in death or severe personal injury.

禁止



1. 若發現電線或其他組件損壞，切勿使用本通風扇，否則可能引致火警或觸電。

2. 若導風板、扇葉等各組件尚未裝妥，切勿啟動本機，否則可能引致身體受傷。

3. 若本機或其通電組件被沾濕，切勿使用，否則可能會因觸電而受傷。

4. 若手部沾水，切勿觸碰本機或其通電組件。

5. 切勿改動本機，否則可能引致嚴重受傷。

6. 清潔或維修本機前，請確保拔除電源插頭。

1. Do not use the ventilator when damages found on wire or other components. This may cause fire and electric shock.

2. Do not switch on the ventilator when the assembling is not completed with all components such as airguide and propeller as bodily injury may result.

3. Do not use the ventilator or its electrical components when they are wet as injury from electric shock may result.

4. Do not contact the ventilator or its electrical components when your hands are wet.

5. Do not modify the ventilator as severe injury may result.

6. Be sure to unplug the ventilator from the main supply prior to cleaning or repairing the ventilator.



注意

CAUTIONS

違規可引致受傷或樓房損毀。

Failure to comply could result injury or damage to property.

1. 為免造成危險，切勿以手指或其他物件觸碰本機扇葉或其他正在轉動之組件。

2. 切勿在本機上使用任何強力清潔劑或溶劑，否則可能會令塑料組件變形或其他組件受損。

3. 切勿把本機安裝於靠近氣爐體或電爐等熱源的地方、高濕度或存放大量溶劑的地方，否則可能會令本機損壞或引起火警。

4. 兒童應在成人陪同下使用本機，以確保安全。

5. 不論本產品是否正在運作，請指導並確保兒童不會把玩本機，避免發生意外。

6. 不要把抽氣扇作為把氣體引入房間之用。

7. 通過剩餘電流裝置（RCD）供電，浪湧電流保護在30mA以下

漏電斷路器等剩餘電流裝置（RCD）

8. 由於燃燒氣體的回流，排氣扇可能會對燃燒氣體或其他燃料的器具（包括其他房間的器具）的安全運行產生不利影響。這些氣體可能會導致一氧化碳中毒。安裝排氣扇（如隔扇或管道扇）後，應由合資格人員測試煙氣器具的操作，以確保不會發生燃燒氣體回流

9. 若無法啟動抽氣扇或電源線受損，不應自行修理，必須送交三菱電機經銷商或維修服務中心修理。

1. It is dangerous to insert fingers or object into the ventilator propeller or rotating component.

2. Do not use harsh cleaners or solvents on the ventilator as this may cause deforming on plastic components and damaging other components.

3. Do not install the ventilator at the location of heat source such as gas/electric fire nearby; location of high humidity, location of solvent dampness, as fan damage or fire may result.

4. 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.

5. Children should be supervised to ensure that do not play with the appliance.

6. Do not use the fan in the back flow of gases into the room.

7. The ventilating fan is to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30mA

The RCD sample such as ELCB (Earth-leakage circuit breaker)

8. Exhaust fans may adversely affect the safe operation of appliances burning gas or other fuels (including those in other rooms) due to back flow of combustion gases. These gases can potentially result in carbon monoxide poisoning. After installation of an exhaust fan such as a partition fan or a duct fan the operation of flued gas appliances should be tested by a competent person to ensure that back flow of combustion gases does not occur

9. If the ventilating fan can't operate or the supply cord is damaged, it must only be repaired by your MITSUBISHI ELECTRIC dealer or service center.



安裝注意事項 / INSTALLATION CAUTIONS

1. 安裝本機及組裝零部件前，請細閱說明書。

2. 安裝前請諮詢維修服務中心或銷售代理商的意見。

3. 請安裝於能承托本機重量及震動的穩固天花上。

4. 安裝時不要讓金屬風管或其他金屬零部件接觸木框架的導電物料。

5. 附加風管蓋有助防止昆蟲、雀鳥或雨水進入本機。

6. 請勿把通風扇及控制鍵安裝於浴室或高濕度的地方，否則可能引致電線短路。

7. 不要把本機安裝於：

• 放置大量燃油、化學品或滿佈塵埃的地方。

• 可能出現氣體倒流的房間，或靠近燃氣或明火器具的地方。

1. Before installation and assembling the Ventilator, please study the manual.

2. The installation might be suggestion from Service Center or Sales Agency.

3. To be install with stable ceiling to bear the weight and vibration of Ventilator.

4. To be installed metal pipe by do not install metal parts contact with conductive material which be coated on the wooden.

5. The Accessory pipe hood more available to protect insect or bird and rains.

6. Do not install the ventilator and control switch in bathroom or high humidity area may cause electric short-circuit.

7. Do not install the fan in:

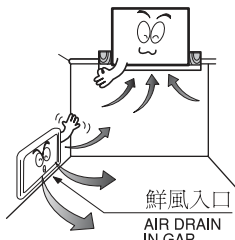
- Area containing high amount of oil, chemical, dust,

- The back-flow of gases into the room the open fuel of gas or other open fire appliances

9. 若把本機安裝於高溫環境中，可能會令馬達等部件的絕緣體效能下降而引致漏電。缺乏潤滑的旋轉軸及馬達亦可能因此變得更熱。為免出現以上情況，請勿把本機安裝於高溫環境中。
9. In case of installation at high temperature area, the capacity of insulator parts such as motor, capacity might drop and be cause of electric leakage. Moreover, not well-done lubricated shaft might be hotter as well as motor. To protect those conditions do not install the product at the high temperature area.



11. 於密封的大廈或無法排氣的地方，應安裝孔道讓鮮風流入。
11. In the closed building or unable to exhaust the air area, the hole should be installed to drain in the fresh air.

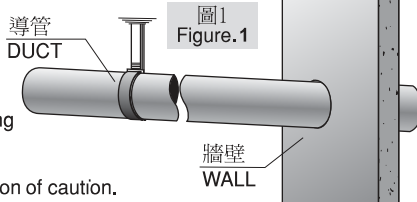


安裝方法/INSTALLATION

1 選擇安裝位置及鑽排氣孔的牆壁 TO SELECT INSTALLATION AREA AND WALL FOR DRILLING THE AIR-EXHAUSTED HOLE

把排氣孔導管接連至附加導管，並把附加導管加固於天花上，以防止負荷過重。導管直徑為100 毫米 (VD-10/15) 或150 毫米 (VD-18/20/23)，以氯乙炔、鋁或鋼製造。安裝前，請細閱安裝注意事項。

To install duct from the air-exhausted hole to additional duct by fixing it with ceiling to protect the overload. Diameter of duct is 100 mm (VD-10/15) or 150 mm (VD-18/20/23) made from vinyl chloride, aluminium, steel. Before Installation Please carefully read Installation of caution.



2 安裝通風扇 VENTILATING FAN INSTALLATION

本機共有兩個安裝方法。
There are two methods to install the product.

- 為免觸碰扇葉，請把通風扇安裝在高於地板 2.3 米之處。
- To prevent the contact with the propeller, install the ventilating fan above 2.3 m from the floor.

A. 以橫樑固定 / A. Fixed by beam (A1) 按表1的尺寸，製作一個如圖2 所示附有主橫樑及輔助橫樑的框架。
To make a frame with beam and sub beam as Figure.2 and dimension in Table 1.

表1/ Table 1

| 型號 Model | 尺寸A Dimension A | 尺寸B Dimension B | 型號 Model | 尺寸A Dimension A | 尺寸B Dimension B |
|--|--------------------|--------------------|--|--------------------|--------------------|
| VD-10Z4T□ VD-10Z4T□-S VD-10Z4T□-N VD-10Z4T□-D | 180 | 25-30 | VD-18Z4T□ | 280 | 40 |
| VD-15Z4T□ VD-15Z4T□-S VD-15Z4T□-N VD-15Z4T□-D | 260 | 30-40 | VD-20Z4T□ VD-20Z4T□ | 315 | 45 |
| VD-15Z4T□-D | | | VD-23Z4T□ VD-23Z4T□ VD-23Z4T□-N VD-23Z4T□-D | 395 | 45 |

單位: 毫米 / Unit : mm.

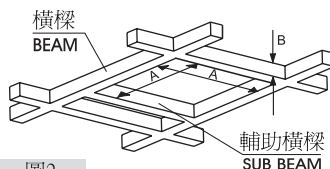
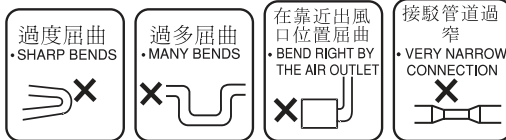


圖2
Figure. 2

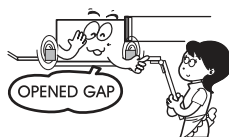
10. 安裝附加導管時必須稍微傾斜，比牆身排煙風管位置高1 毫米/100 毫米，以防止雨水流入。
10. Should inclined install smoke pipe by additional duct higher than smoke pipe on the wall 1mm/100 mm to protect the rain water.



應避免風管屈曲如下：
Should avoid pipe bending as follows:



12. 安裝位置的天花應有可供打開的缺口，以便進行檢查。
12. The installed ceiling should be easy to check from opened gap.
13. 假如安裝不夠穩固，可能會令本機產生震動或響聲。
13. In case of loosen installation, It's might occur vibration or loud noise.



(A2) 按圖3所示，依箭咀方向拆下附加導管。

To take off additional duct as the arrow direction as Figure.3

附加導管

ADDITIONAL DUCT

機身

BODY

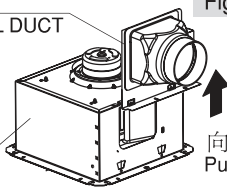


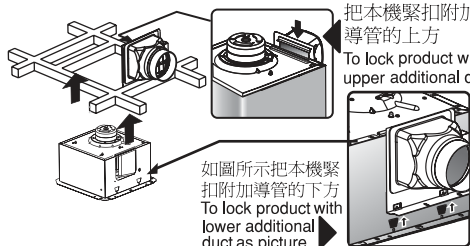
圖3
Figure.3

向上推
Push up

(A4) 要把本機接連附加導管，請按圖5所示把機身上推，直至機身掛鉤緊扣在附加導管的鎖定位上。

To install the product with additional duct and push product until lock point of additional duct lock hook of product as Figure.5

圖5
Figure.5



把本機緊扣附加導管的上方
To lock product with upper additional duct.

如圖所示把本機緊扣附加導管的下方
To lock product with lower additional duct as picture.

(A3) 把附加導管的邊鋒部分安裝在輔助橫樑，並把附加導管固定到主導管上，然後按圖4所示用螺絲把附加導管固定在輔助橫樑的位置“A”。

To install the wing of additional duct under sub beam and fix additional duct with main duct. Then fix additional duct with sub beam at "A" position with screw as Figure.4

備註 / REMARK

若使用氯乙烯導管，由本機至末端導管的傾斜度不應大於7度。

In case of vinyl chloride duct, the inclination from the product to ended-duct should not greater than 7 degree.

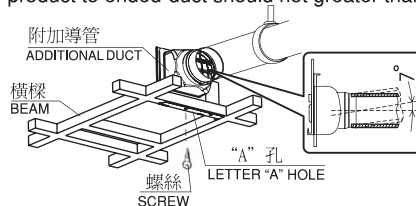


圖4
Figure.4

(A5) 檢查安裝是否正確，然後按圖6所示用8顆螺絲把本機固定在橫樑上。

To check the completeness and install product with beam by screwing with 8 screws. as Figure.6

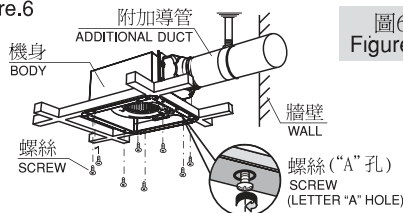


圖6
Figure.6

B. 以吊鉤螺帽安裝

The installation by using hook nut.

共有兩個方法，分別是利用L形固定片及輔助框架。

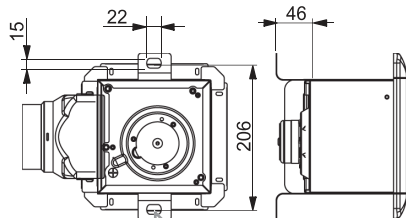
There are two methods, using L fix plate, and sub frame

(B1) L 形固定片方式 / L fix plate method

(B1.1) 按圖7、8及9所示，在天花裝設吊鉤螺帽，並於本機上安裝 L 形固定片。

To set hook nut with ceiling and install L fix plate with the product as the Figure.7, 8 and 9

型號 / Model :
VD-10Z4T□, VD-10Z4T□-S, VD-10Z4T□-N, VD-10Z4T□-D



P-03TK2
(附加零部件)
(ADDITIONAL PART)

圖7
Figure.7

型號 / Model :
VD-15Z4T□, VD-15Z4T□-S, VD-15Z4T□-N, VD-15Z4T□-D
VD-15Z4T□, VD-15Z4T□-S, VD-15Z4T□-N, VD-15Z4T□-D

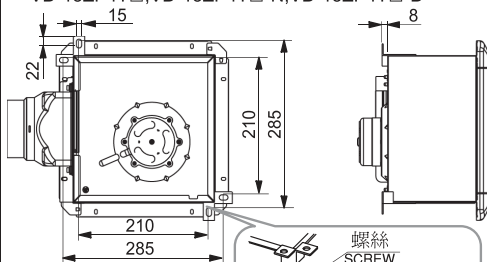


圖8
Figure.8

螺絲
SCREW
L 形固定片
L fix plate
P-05TK
(附加零部件)
(ADDITIONAL PART)

Table 2

各型號的L形固定片位置尺寸表列如下：
shown dimension of position of “L” Fix
plate each model as followed

單位:毫米 / Unit:mm.

| 型號 MODEL | 尺寸 Dimension A | 尺寸 Dimension B | 尺寸 Dimension C |
|--|----------------------|----------------------|----------------------|
| VD-18Z4T□ | 304 | 100 | 100 |
| VD-20Z4T□ VD-20ZP4T□ | 341 | 100 | 100 |
| VD-23Z4T□ VD-23ZP4T□ VD-23ZPP4T□ | 418 | 70 | 130 |

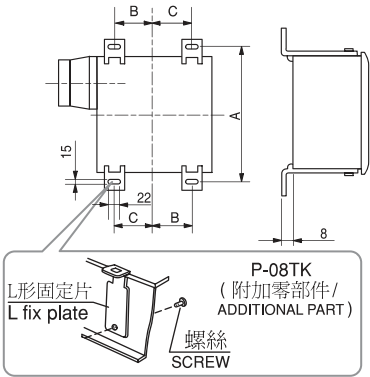


圖9
Figure.9

(B1.2) 把本機固定在吊鉤螺帽上，並如右邊的圖 10 所示水平地安裝本機。

To fix the product with hook nut and horizontal install the product as right picture. as Figure.10

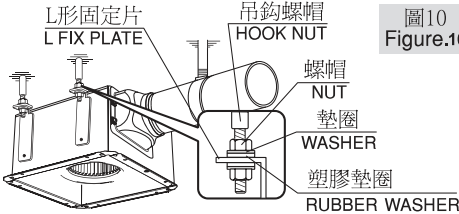


圖10
Figure.10

(B2) 使用輔助框架/ To use SUB FRAME

(B2.1) 在天花裝設吊鉤螺帽，並於機身安裝輔助框架。

Install HOOK NUT with the ceiling and install sub frame with the Body.

- VD-10Z4T□, VD-10Z4T□-S, VD-10Z4T□-N, VD-10Z4T□-D
VD-15Z4T□, VD-15Z4T□-S, VD-15Z4T□-N, VD-15Z4T□-D
VD-15ZP4T□, VD-15ZP4T□-N, VD-15ZP4T□-D
的輔助框架 (圖11)

- The sub frame of model
VD-10Z4T□, VD-10Z4T□-S, VD-10Z4T□-N, VD-10Z4T□-D
VD-15Z4T□, VD-15Z4T□-S, VD-15Z4T□-N, VD-15Z4T□-D
VD-15ZP4T□, VD-15ZP4T□-N, VD-15ZP4T□-D
Figure.11

- The sub frame of model VD-18Z4T□, VD-20Z4T□, VD-20ZP4T□, VD-23Z4T□, VD-23ZP4T□, VD-23ZPP4T□
Figure.12 and dimension in Table 3

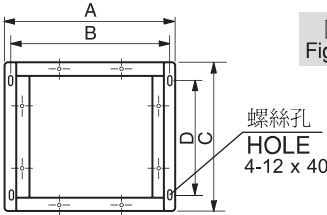


圖12
Figure.12

⚠ 注意/CAUTION

- 應使用 2 個中央螺絲孔。
- 2 Central holes to be used.

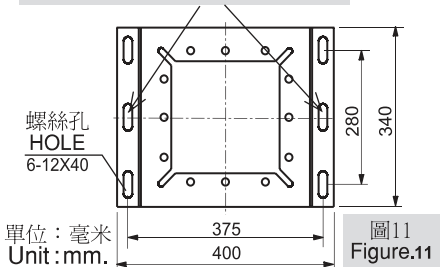


圖11
Figure.11

Table 3

各型號的輔助框架尺寸表列如下
shown each SUB FRAME model dimension

單位:毫米 / Unit : mm.

| 型號 MODEL | 輔助框架 SUB FRAME | 尺寸 Dimension A | 尺寸 Dimension B | 尺寸 Dimension C | 尺寸 Dimension D |
|--|-------------------|----------------------|----------------------|----------------------|----------------------|
| VD-18Z4T□ | P-280 TW | 415 | 385 | 350 | 300 |
| VD-20Z4T□ VD-20ZP4T□ | P-315 TW | 450 | 420 | 385 | 300 |
| VD-23Z4T□ VD-23ZP4T□ VD-23ZPP4T□ | P-395 TW | 540 | 510 | 475 | 350 |

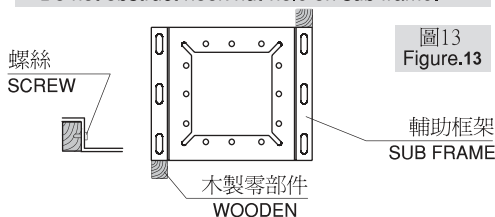
(B2.2) 按圖13所示，用螺絲在輔助框架上裝設2個木製零部件。

To set 2 wooden parts with sub frame by using screws as the Figure.13

⚠注意/CAUTION

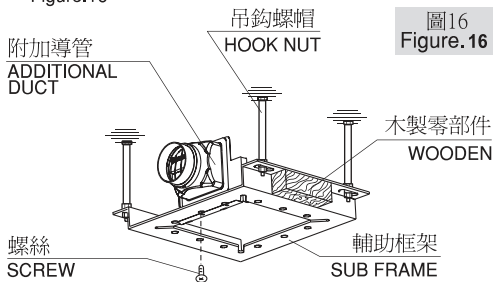
：不要阻礙輔助框架上的吊鈎螺帽小孔。

Do not obstruct hook nut-hole on sub frame.



(B2.5) 把本機的正面朝向牆壁上用以排氣的排氣孔，並按圖16所示在輔助框架的“A”孔裝上螺絲把附加導管固定。

To set the product by turning the front to open air hole to exhaust the air from the wall and fix the additional duct with sub frame by screwing through "A" letter hole as Figure.16

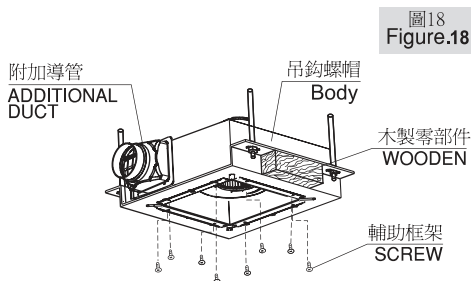


(B2.7) 按圖18所示，把本機安裝至附加導管，並利用8顆螺絲把本機固定在輔助框架上。

To install product with additional duct and fix the product with sub frame by tightening 8 screws with sub frame as Figure.18

建議/SUGGESTION

本機必須與附加導管妥善接駁，以防漏氣。
The product must be completely assembly with additional duct to protect air leakage.



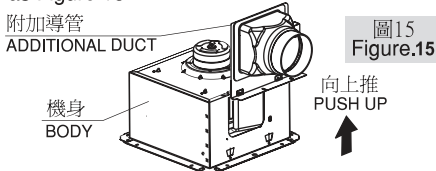
(B2.3) 按圖14所示，把輔助框架安裝到天花板上的吊鈎螺帽。

To Install sub frame to ceiling with Hook nut as the Figure.14



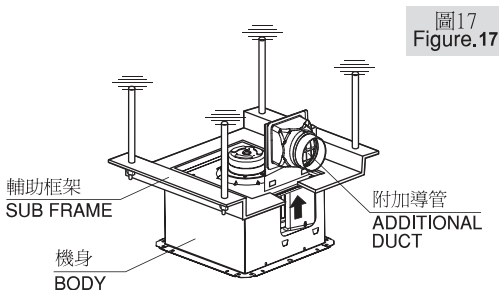
(B2.4) 按圖15所示，從本機拆下附加導管。

To separate additional duct from the product as Figure.15.



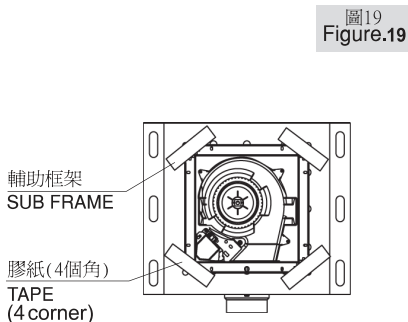
(B2.6) 按圖17所示，利用本機的機身掛鉤及附加導管的鎖定位，把本機接連附加導管。

To set the product with additional duct with hook of product and additional duct Figure.17



(B2.8) 把本機固定在輔助框架後，按圖19所示用膠布密封輔助框架上的4個小孔。

After the product is fixed with sub frame, tape 4 holes on sub frame as Figure.19



(B2.9)

裝上天花蓋板後，按圖20所示鉗上釘子，以防止輔助框架移位。

After installed ceiling board, to hammer from the inside for protecting the slide of sub frame and ceiling as Figure.20 and dimension in Table 4

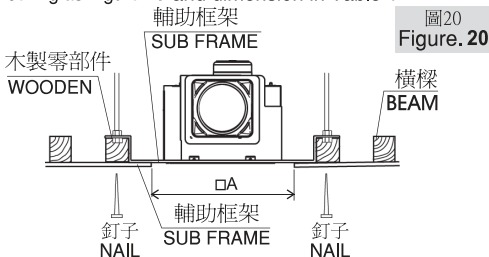


圖20
Figure. 20

單位：毫米
Unit:mm.

Table 4

| 型號名稱 MODEL NAME | □ A |
|--|-----|
| VD-10Z4T□ VD-10Z4T□-S VD-10Z4T□-N VD-10Z4T□-D | 223 |
| VD-15Z4T□ VD-15Z4T□-S VD-15Z4T□-N VD-15Z4T□-D | 303 |
| VD-15ZP4T□ VD-15ZP4T□-N VD-15ZP4T□-D | 303 |
| VD-18Z4T□ | 308 |
| VD-20Z4T□, VD-20ZP4T□ | 345 |
| VD-23Z4T□, VD-23ZP4T□ VD-23ZPP4T□ | 438 |

3 從機身安裝風管連接排氣管 TO INSTALL PIPE FROM BODY TO WELL EXHAUST PIPE

按圖21所示，在排氣管及附加導管的接駁位置加上鋁質膠布，以防漏氣。

To adhere aluminium tape at connecting point between exhaust pipe and additional duct to protect air leakage as Figure.21

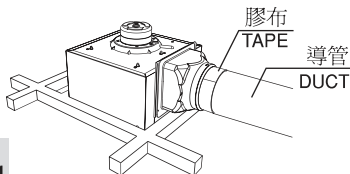


圖21
Figure 21

4 額外配件（並不包括在本機內） ADDITIONAL PART(NOT INCLUDE ON PRODUCT)

L 形固定片、輔助框架、導管（鐵、塑料、鋁、不銹鋼）、風管蓋。

“L” fix plate, Sub frame, Duct (Iron, plastic, Aluminium, Stainless steel), Hood.

5 必須安裝導線 TO INSTALL LEAD WIRE SHOULD BE DONE AS NECESSARY

⚠ 安裝導線注意事項

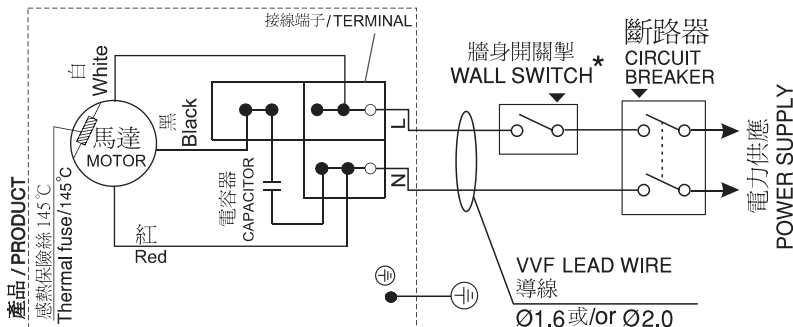
1. 安裝本機及導線前應諮詢維修服務中心或專業技術人員的意見。
2. 安裝本機及組裝零部件前，請細閱說明書。
3. 安裝導線時務必小心，否則可能引致短路。
4. 在風管內安裝導線應使用標準的管道配件（可到五金店選購），然後連接至接線端子。

⚠ LEAD WIRE INSTALLATION CAUTION

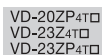
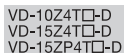
1. Fan and lead wire installation should be suggested by service center or specialize technician.
2. Before installation and Assembling the fan please read installation manual carefully.
3. Installation leadwire carefully, in case missing occure may cause circuit-shorten.
4. Installing lead wire in pipe should be use the standard piping accessories (available from hardware store), and then connect to the terminal.

接線圖及導線接駁 / TERMINAL DIAGRAM AND LEAD WIRE CONNECTION

各型號組別圖示如下 / Separate each model group as followed :



通風扇主機 /
VENTILATOR MAIN UNIT:



8

安裝用的導線尺寸 / Leadwire size for installation

1. 必須使用室內接線用的 $\varnothing 1.6$ 或 $\varnothing 2.0$ VVF 電線。
 2. 若要安裝地線，必須使用最少 1.0mm^2 的地線，並須由專業技術人員連接至接地棒。
1. Must use indoor wiring VVF cable $\varnothing 1.6$ or $\varnothing 2.0$
 2. In case of install ground wiring must install ground at least 1.0mm^2 and must install to Industrial Standard Ground Rod by specialized technician.

備註 / Remark:

1. 斷路器應安裝於方便操作及關閉的位置。
 2. 斷路器各接線端子應設有接點間隔，並按接線規定在第三類電壓過高情況下全面切斷電源。
1. Installation location of circuit breaker should be easy to operation and shut off.
 2. The circuit breaker shall have a contact separation in all poles and provide full disconnection under overvoltage category III condition in accordance with the wiring rules.

注意 / CAUTION

請留心接駁電線，把其中一條供電線，尤其是水線，接駁至“N (COM)”端子。

Pay attention to connect the wire, 1 wire from power supply especially common wire connect with the "N(COM)" terminal.

接線器與電線接駁程序 /

General connector and electric line procedure

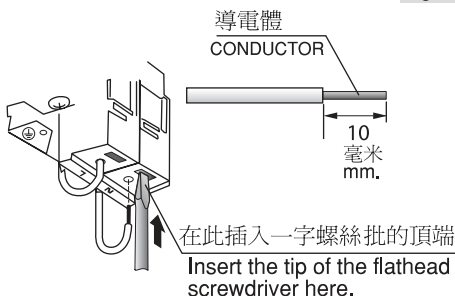
- 把導線絕緣膠剝掉約 10 毫米。
 - 把電線拉到離本機約 150 毫米處。
 - 把電線與接線板分開，然後按下接線板的紅色按鈕，並用螺絲批拉出各電線。
- To peel off lead wire 10 mm.
 - To pull wiring approx. 150 mm from the product.
 - To separate wiring from connecting board, then push red button on connecting board and pull each wiring with Screw Driver.

注意 / CAUTION

請勿把地線連接氣體喉管、水管、避雷針或電話線，否則可能引致觸電。

Do not connect the ground wire to Gas duct, Water pipe, Lightning rod or Telephone line because may occur electric shock.

圖23
Figure.23

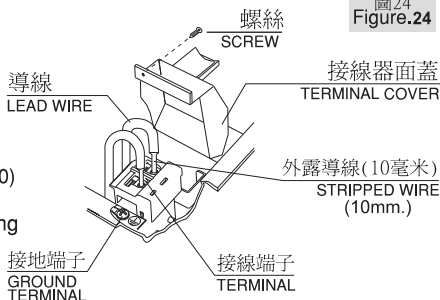


接線器安裝方法 / Lead wire connector method

1. 型號 / Model : VD-10Z4T□, VD-10Z4T□-S, VD-10Z4T□-N
(見圖 / as Figure. 24)

- (1) 鬆開螺絲並打開面蓋，把VVF電線 ($\varnothing 1.6$ 或 $\varnothing 2.0$) 穿進橡膠接線鈕，直至完全通過為止。
 - (2) 本機乃用於潮濕環境，故應安裝地線。
 - (3) 關上面蓋，並旋緊螺絲。
- (1) Remove screw and unlock cover, weave VVF ($\varnothing 1.6$ or $\varnothing 2.0$) through rubber button until it can be completely passed.
 - (2) The product is used in high humidity area, the ground wiring should be installed.
 - (3) To lock the cover and fix to screw.

圖24
Figure.24



2. 型號 / Model : VD-15Z4T□,VD-15Z4T□-S,VD-15Z4T□-N,VD-15ZP4T□,VD-15ZP4T□-N

(見圖 /as Figure. 25)

- (1) 鬆開螺絲並打開面蓋，把VVF電線 (Ø1.6 或 Ø2.0) 穿進橡膠接線鈕，直至完全通過為止。
- (2) 本機乃用於潮濕環境，故應安裝地線。
- (3) 關上面蓋，並旋緊螺絲。
- (1) Remove screw and unlock cover, weave VVF (Ø1.6 or Ø2.0) through rubber button until it can be completely passed.
- (2) The product is used in high humidity area, the ground wiring should be installed.
- (3) To lock the cover and fix to screw.

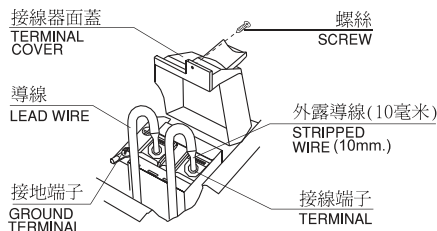


圖25
Figure.25

3. 型號 / Model : VD-10Z4T□-D,VD-15Z4T□-D,VD-15ZP4T□-D

將產品連接到帶有家用電氣接線的牆身開關

(電纜VVF Ø1.6 或 Ø2.0) 根據連接

圖作為這些型號的安裝，並使用關閉端連接器完成 (圖.26)

Connect line from product to wall switch with home electrical wiring

(Cable VVF Ø1.6 or Ø2.0) follow

as the connection diagram for these

model and use close end

connector to finishing

(as figure.26)

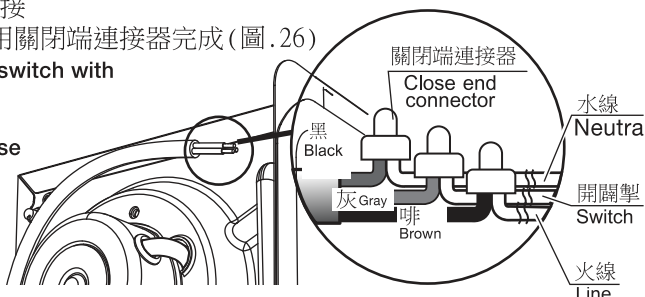


圖26
Figure.26

4. 型號 / Model: VD-18Z4T□,VD-20Z4T□(見圖/as Figure.27)

- (1) 鬆開螺絲並打開面蓋，把VVF電線 (Ø1.6 或 Ø2.0) 穿進橡膠接線鈕，直至完全通過為止。
- (2) 本機乃用於潮濕環境，故應安裝地線。
- (3) 關上面蓋，並旋緊螺絲。

- (1) Remove screw and unlock cover, weave VVF (Ø1.6 or Ø2.0) through rubber button until it can be completely passed.
- (2) The product is used in high humidity area, the ground wiring should be installed.
- (3) To lock the cover and fix to screw.

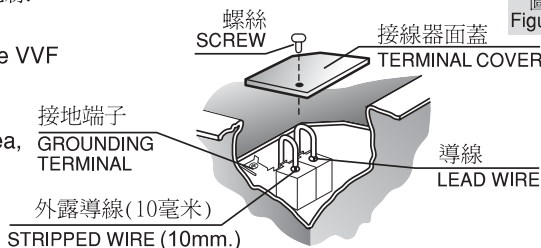


圖27
Figure.27

5. 型號/Model: VD-20ZP4T□, VD-23Z4T□, VD-23ZP4T□, VD-23ZPP4T□ (見圖/as Figure.28)

(1) 鬆開螺絲並打開面蓋，把 VVF 電線 (Ø1.6、Ø 2.0)

穿進橡膠接線鈕，直至完全通過為止。

(2) 本機乃用於潮濕環境，故應安裝地線。

(3) 關上面蓋，並旋緊螺絲

(1) Remove screw and unlock cover, weave VVF (Ø1.6, Ø2.0) through rubber button until it can be completely passed.

(2) The product is used in high humidity area, the ground wiring should be installed.

(3) To lock the cover and fix to screw.

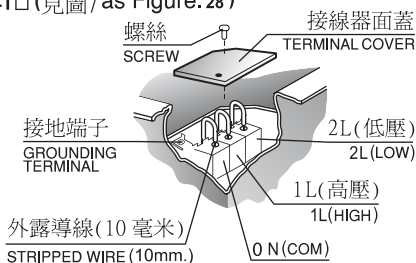


圖28
Figure.28

6 安裝天花蓋板 TO INSTALL CEILING BOARD AND CEILING

⚠ 注意/CAUTION

- 在本機與天花蓋板之間預留約 2-3 毫米的縫隙。
- 為免觸碰扇葉，請把通風扇安裝在高於地板 2.3 米之處。注意

• To leave a gap between the product and ceiling board approx. 2-3 mm.

• To prevent the contact with the propeller, install the ventilating fan above 2.3 m from the floor.

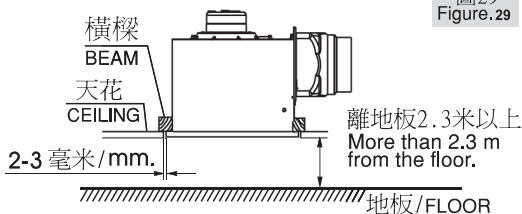


圖29
Figure.29

7 安裝格柵 TO INSTALL GRILLE

如圖29所示，按著格柵兩旁的彈簧，把彈簧插進機身的橢圓形小孔，然後放開彈簧，把格柵推入直至與機身扣緊。

To hold grille's spring of both side and insert to elliptical hole of product then, release spring and push cover to fix with the product as Figure.30.

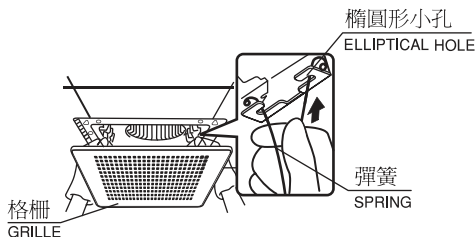
備註/Remarks:

VD-15Z4T□-S、VD-18Z4T□、VD-20Z4T□、
VD-20ZP4T□、VD-23Z4T□、VD-23ZP4T□、VD-23ZPP4T□
等型號的格柵可透過轉換彈簧而作 90° 旋轉。

Grille of VD-15Z4T□-S, VD-18Z4T□, VD-20Z4T□,
VD-20ZP4T□, VD-23Z4T□, VD-23ZP4T□, VD-23ZPP4T□
can be reverse 90° by changing SPRING.

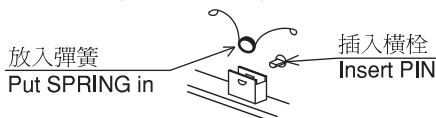
組裝彈簧與格柵/Spring grille assembling

圖30
Figure.30

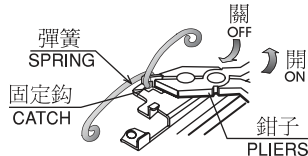


型號/MODEL:

VD-10Z4T□, VD-10Z4T□-S, VD-10Z4T□-N, VD-10Z4T□-D
VD-15Z4T□, VD-15Z4T□-S, VD-15Z4T□-N, VD-15Z4T□-D
VD-15ZP4T□, VD-15ZP4T□-N, VD-15ZP4T□-D



型號/MODEL: VD-18Z4T□, VD-20Z4T□, VD-20ZP4T□ VD-23Z4T□, VD-23ZP4T□, VD-23ZPP4T□



使用方法 / USAGE

適用於 / For VD-10Z4T□, VD-10Z4T□-S, VD-10Z4T□-N, VD-10Z4T□-D

VD-15Z4T□, VD-15Z4T□-S, VD-15Z4T□-N, VD-15Z4T□-D, VD-15ZP4T□, VD-15ZP4T□-N, VD-15ZP4T□-D

⚠ 注意 / CAUTION

- 請勿在本機上使用任何噴霧劑，例如：殺蟲劑、噴髮膠等，否則塑料零部件可能受損或變形。

- Do not apply any kind of spray (insecticide, hair dressing, detergent) otherwise the plastic parts might be damaged or deformed.

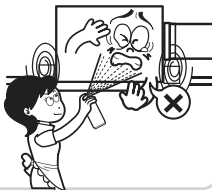


圖31
Figure.31

- 本機部分零部件乃用塑料製造，請勿接近可燃燒的物體，否則可能引致塑料零部件變形或溶化。

- Various parts are made from plastic material, do not bring flammable objects to be near them that they might possibly be deformed or melted.



圖32
Figure.32

操作程序 / OPERATING PROCEDURE

備註：開關掣應安裝於容易操作及關上掣鈕的位置。

Remark : Installation location of switch should be easy to operate and shut off.

下列型號設有排氣量選擇鍵：

Air volume selector is available

Only this followed model :

VD-20ZP4T□, VD-23Z4T□, VD-23ZP4T□

VD-23ZPP4T□

**For model





VD-10Z4T□-D, VD-15Z4T□-D, VD-15ZP4T□-D

等型號，通風扇會運作 10 分鐘後停止

the fan will be operated for 10 Min. and then stop.

- 本產品不包括開關掣，顧客可從市面選購。

- Switch boarded exclude the product, Use switch which be sold generally.

| 開始排氣 START TO EXHAUST THE AIR | 停止排氣 STOP TO EXHAUST THE AIR |
|--|--|
| 牆身開關掣 / Switch on the wall. | 牆身開關掣 / Switch on the wall |
| <div>關 OFF</div>  <div>開 ON</div> | <div>關 OFF</div>  <div>開 ON</div> |
| 把排氣量選擇鍵調至「高」 SET THE AIR VOLUME SELECTOR SWITCH TO "HIGH." | 把排氣量選擇鍵調至「低」 SET THE AIR VOLUME SELECTOR SWITCH TO "LOW." |
| <div>低 LOW</div>  <div>高 HIGH</div> | <div>低 LOW</div>  <div>高 HIGH</div> |

保養方法 / MAINTENANCE

1. 清潔前必須把開關掣關上或把斷路器拉下，並不要沾濕馬達或其他通電零部件。
2. 清潔本機時，請用沾有清水或中性清潔劑的抹布，別讓水滴到通電零部件，然後用乾布抹乾。
3. 切勿使用任何化學品清潔塑料零部件，以免損害本機。
4. 假如格柵積有大量灰塵，會令風量減少，並造成響聲。要避免出現以上情況，應經常清潔格柵。
5. 要拆下格柵，請按第 11 頁的圖 30 所示，把格柵拉下，然後擠壓彈簧並把它從橢圓形小孔取出。
6. 不使用本機時，請關上電源。

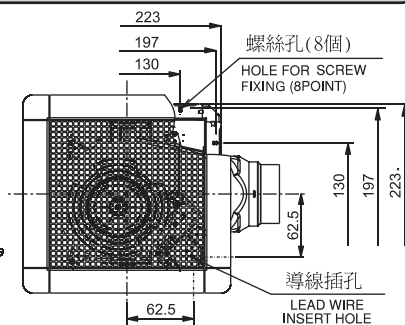
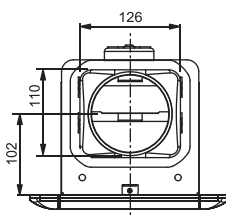
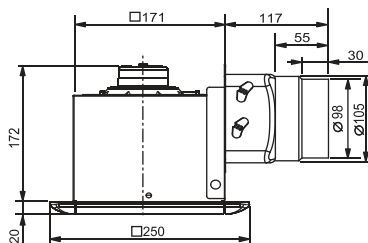
1. Be always turn switch off or pull the circuit breaker down before cleaning and mustn't wet the motor or other electrical parts.
2. Cleaning the dirty part with water/neutral detergent damped-cloth to protect water dripping into electrical part, and then wipe with a dry cloth.
3. Do not use any chemical to clean the plastic part it may cause damage to product.
4. In case of intensive dirt on the grille, the air blow will be less causing loud noise. To protect such condition, should often clean the grille.
5. To remove the grille, pull the grille, then squeeze the spring and take it from the elliptical hole of fix spring as Figure.30 in page 11.
6. Disconnect the power supply when not in use.

產品維修 / REPAIRING OF PRODUCT

1. 不論任何情況，切勿對產品進行修改。產品拆卸及維修必須交由經核准的維修人員負責。
(否則可能會引致火警、漏電或受傷)
 2. 必須採用由維修服務中心或銷售代理商供應的正版後備零部件。
 3. 切勿修改任何通電部分，否則可能引致受傷。
1. This product must not be assembled under any circumstances. Only authorized repair technicians are qualified to conduct disassembly and repairs.
(Failure to heed this warning may result infire, electric shock or injury.)
 2. Must use genuine spare part from Service center or Sales Agency.
 3. Do not modify any electric part, if failure to heed this warning may cause injury.

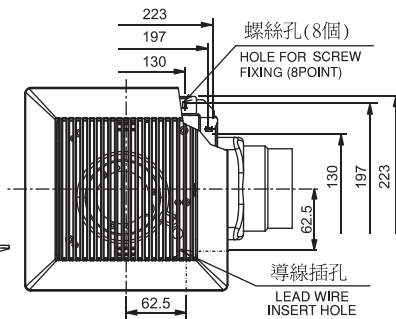
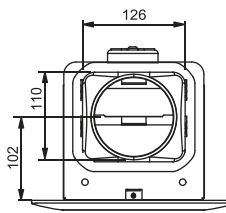
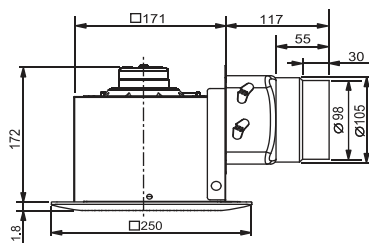
產品尺寸 / DIMENSIONS

型號 / MODEL : VD-10Z4T□, VD-10Z4T□-D



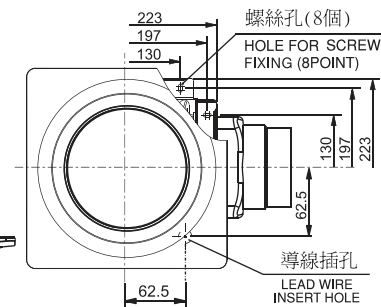
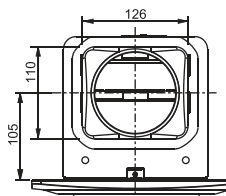
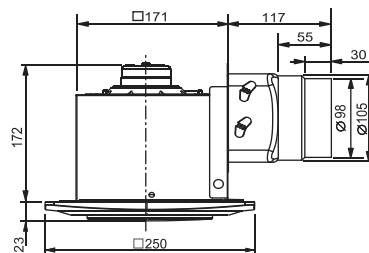
單位：毫米 / Unit: mm.

型號 / MODEL : VD-10Z4T□-S



單位：毫米 / Unit: mm.

型號 / MODEL : VD-10Z4T□-N



單位：毫米 / Unit: mm.


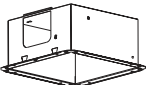


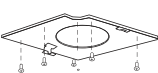
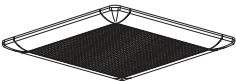
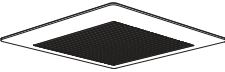

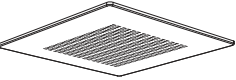
尺寸表 5 : VD-18Z4T□, VD-20Z4T□, VD-20ZP4T□, VD-23Z4T□, VD-23ZP4T□, VD-23ZPP4T□ 各部分尺寸

Table 5 : Each part dimension of model

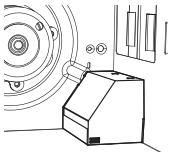
VD-18Z4T□, VD-20Z4T□, VD-20ZP4T□, VD-23Z4T□, VD-23ZP4T□, VD-23ZPP4T□

| Model | A | B | C | □D | E | F | G | H | □J | K | L | □M | N |
|-------------|-------|-----|-----|-----|-------|-----|-----|-----|-----|-------|-------|-----|-----|
| VD-18Z4T□ | 99.5 | 230 | 292 | 308 | 111.5 | 230 | 292 | 243 | 334 | 135 | 67 | 270 | 276 |
| VD-20Z4T□ | 118 | 200 | 332 | 345 | 130 | 200 | 332 | 243 | 380 | 135 | 85.5 | 307 | 313 |
| VD-20ZP4T□ | 118 | 200 | 332 | 345 | 130 | 200 | 332 | 248 | 380 | 135 | 85.5 | 307 | 313 |
| VD-23Z4T□ | 157.5 | 300 | 410 | 424 | 169.5 | 300 | 410 | 232 | 474 | 135 | 110.5 | 386 | 392 |
| VD-23ZP4T□ | 157.5 | 300 | 410 | 438 | 169.5 | 300 | 410 | 278 | 474 | 161.5 | 110.5 | 386 | 392 |
| VD-23ZPP4T□ | 157.5 | 300 | 410 | 438 | 169.5 | 300 | 410 | 278 | 474 | 161.5 | 110.5 | 386 | 392 |

零部件事名稱 / PART NAME

| 編號 NO. | 零部件事名稱/ PART NAME | 圖片 / PICTURE | 型號 / MODEL | |
|-----------|----------------------------|---|--|--|
| | | | 塑料 / PLASTIC | 金屬 / METAL |
| 1 | 附加導管 ADDITIONAL DUCT |  | — | 所有型號 ALL MODEL |
| 2 | 機身 BODY |  | — | 所有型號 ALL MODEL |
| 3 | 扇葉 SIROCCO FAN |  | VD-10Z4T□, VD-10Z4T□-S VD-10Z4T□-N, VD-10Z4T□-D VD-15Z4T□, VD-15Z4T□-S VD-15Z4T□-N, VD-15Z4T□-D VD-15ZP4T□, VD-15ZP4T□-N VD-15ZP4T□-D | VD-18Z4T□, VD-20Z4T□ VD-20ZP4T□, VD-23Z4T□ VD-23ZP4T□, VD-23ZPP4T□ |
| 4 | 導風板 AIR GUIDE |  | — | — |
| 5 | 面蓋 ORIFICE |  | — | VD-18Z4T□, VD-20Z4T□ VD-20ZP4T□, VD-23Z4T□ VD-23ZP4T□, VD-23ZPP4T□ |
| 6 | 格柵 GRILLE |  | VD-10Z4T□, VD-15Z4T□ VD-15ZP4T□, VD-10Z4T□-D VD-15Z4T□-D, VD-15ZP4T□-D | — |
| | |  | VD-10Z4T□-S, VD-15Z4T□-S | — |
| | |  | VD-10Z4T□-N VD-15Z4T□-N VD-15ZP4T□-N | — |
| | |  | — | VD-18Z4T□, VD-20Z4T□ VD-20ZP4T□, VD-23Z4T□ VD-23ZP4T□, VD-23ZPP4T□ |

零部件名稱 / PART NAME

| 編號 NO. | 零部件 名稱/ PART NAME | 圖片 / PICTURE | 型號 / MODEL | |
|-----------|------------------------------------|---|--|------------|
| | | | 塑料 / PLASTIC | 金屬 / METAL |
| 7 | 延時定時設備 DELAY TIMER EQUIPMENT |  | VD-10Z4T□-D, VD-15Z4T□-D, VD-15ZP4T□-D | — |

備註：以下型號不設面蓋 **REMARK** : NO ORIFICE (No. 5) IN THIS FOLLOWED MODEL
VD-10Z4T□, VD-10Z4T□-S, VD-10Z4T□-N, VD-10Z4T□-D, VD-15Z4T□, VD-15Z4T□-S,
VD-15Z4T□-N, VD-15Z4T□-D, VD-15ZP4T□, VD-15ZP4T□-N, VD-15ZP4T□-D

SPECIFICATION / 規格

| MODEL / 模型 | VD-10Z4T□ VD-10Z4T□-S | VD-10Z4T□-D | VD-10Z4T□-N | VD-15Z4T□ VD-15Z4T□-S | VD-15Z4T□-D | VD-15Z4T□-N | VD-15ZP4T□ | VD-15ZP4T□-D |
|---|--------------------------|-------------|-------------|--------------------------|-------------------------|-------------------------|-------------------------|--------------|
| Rated Voltage & Frequency 速率電壓和頻率 | 220-240 V / 50 Hz | | | | | | | |
| Air Delivery (m³/h) 空運 (m³/h) | 100-110 | 100-110 | 100-110 | 157-182 | 157-182 | 155-175 | 217-240 | 217-240 |
| Product Weight (kg) 產品重量 (kg) | 2.2 | 2.2 | 2.2 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 |
| Rated Current (A) 額定電流 (A) | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.08-0.09 | 0.09 |
| Rated Power Consumption (W) 額定功耗 (W) | 9-11 | 11-13 | 9-11 | 12-14 | 14-16 | 12-14 | 17-20 | 19-22 |
| Rated Speed Revolution (RPM) 額定轉速 (RPM) | 900-980 | 900-980 | 1,000-1,080 | 670-750 | 670-750 | 840-900 | 870-950 | 870-950 |
| MODEL / 模型 | VD-15ZP4T□-N | VD-18Z4T□ | VD-20Z4T□ | VD-20ZP4T□ | VD-23Z4T□ | VD-23ZP4T□ | VD-23ZPP4T□ | |
| Rated Voltage & Frequency 速率電壓和頻率 | 220-240 V / 50 Hz | | | | | | | |
| Air Delivery (m³/h) LO/HI 空運 (m³/h) LO/HI | 217-240 | 335-365 | 440-480 | 370-420/ 510-550 | 360-390/ 580-630 | 450-490/ 715-770 | 600-660/ 860-900 | |
| Product Weight (kg) 產品重量 (kg) | 3.4 | 5.8 | 6.5 | 7.4 | 8.6 | 9.7 | 9.7 | |
| Rated Current (A) LO/HI 額定電流 (A) LO/HI | 0.08-0.09 | 0.15-0.17 | 0.20-0.22 | 0.16-0.18/ 0.26-0.28 | 0.16-0.18/ 0.35-0.37 | 0.26-0.30/ 0.43-0.46 | 0.50-0.52/ 0.58-0.59 | |
| Rated Power Consumption (W) LO/HI 額定功耗 (W) LO/HI | 17-20 | 34-42 | 42-50 | 37-42/ 53-62 | 37-43/ 75-87 | 59-67/ 95-107 | 105-115/ 125-140 | |
| Rated Speed Revolution (RPM) LO/HI 額定轉速 (RPM) LO/HI | 990-1,050 | 600-650 | 730-790 | 610-670/ 840-890 | 440-480/ 650-720 | 600-660/ 930-980 | 805-885/ 1,085-1,140 | |

註：產品規格如有更改，恕不另行通知。

Remark: Product specifications are subject to change without notice.