

# ROOTIN Product Bulletin (国内地区销售版本)

## UVC-LED COMMERCIAL DISINFECTING SYSTEM 商用消毒系统

- ※ 15" UVC-LED Disinfection System  
15 英寸 UVC-LED 消毒系统
- ※ Advanced commercial grade system  
高级商用级系统
- ※ Over 3X the life compared to standard bulbs  
寿命是普通灯泡的 3 倍以上
- ※ Rugged design with shatterproof and waterproof LED  
坚固设计, 防碎防水无汞 LED
- ※ Kills mold, mildew, viruses and bacteria on and around your HVAC coil  
可快速杀灭暖通空调盘管上及周围的霉菌、霉斑、病毒和细菌
- ※ Stops foul and musty odors like dirty sock smell  
可以消除难闻和霉味, 比如脏袜子的味道
- ※ Reduces harmful biofilm on the coil and surrounding area  
减少线圈及周围区域的有害生物膜
- ※ Integrated mode switch for two run modes  
两种运行模式的集成模式切换
- ※ Air flow switch to power only when system is running  
空气流量开关仅在系统运行时通电
- ※ 10,000 hour LED timer to notify when replacement is needed  
1 万小时 LED 定时器, 用于提示何时需要更换
- ※ Easy install with adjustable mounting brackets  
安装简便, 配有可调节安装支架
- ※ Commercial grade magnets included  
包含商用级磁铁
- ※ 208-480VAC high voltage installation  
208-480VAC 高压安装
- ※ Optimum 265nm wavelength for germicidal capabilities 采用  
杀菌能力的最佳 265 纳米波长



### Specifications

Input Voltage:	110/120-240/277VAC
输入电压:	110/120-240/277VAC
Run Time:	10,000 hours
运行寿命:	1 万小时
Power:	50W/50/60Hz
功率:	50 瓦/50/60 赫兹
Wavelength:	265nm
波长:	265 纳米
UV Type:	UVC-LED
UV 类型:	深紫外 LED
Dimensions:	14.4L x 3.5H x 3.5W
外形尺寸:	长 14.4 英寸*高 2.5 英寸*宽 3.5 英寸
Weight:	1 lbs.
重量:	1 磅
Surge Protection:	Internal surge protection
浪涌保护:	内部保护
Mode Options:	Continuous mode or air flow sensor mode
Mounting:	Various internal mounting options
安装方式:	各种内部安装选项
Warranty:	Three years from the date of installation
保修:	自安装之日起三年

## Description

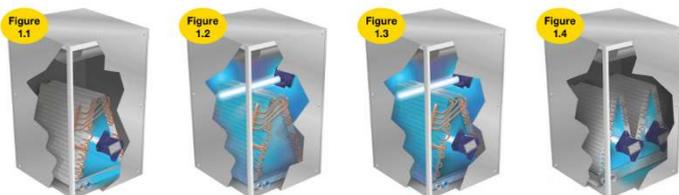
The ROOTIN HK-25W-265NM-42P is a 15" UVC-LED disinfecting system designed for use in commercial HVAC systems. The LED lights have 10,000 hours of run time and with an integrated air flow sensor the ROOTIN HK-25W-265NM-42P can last up to 5 times longer than traditional UV bulbs. The HK-25W-265NM-42P comes with an integrated 10,000 hour LED timer to notify when a replacement is required. The ROOTIN HK-25W-265NM-42P is designed to kill mold, mildew, bacteria, and other harmful biological growth in the HVAC system and on the evaporator coil. The system will also help reduce foul and musty odors like dirty sock smell and will even help keep the drain line from clogging due to buildup in the condensate line.

### 描述

ROOTIN HK-25W-265NM-42P 是一款 30 英寸的 UVC-LED 消毒系统，专为商用 HVAC 系统设计。LED 灯的使用寿命为 1 万小时，并且配备了集成的气流传感器，ROOTIN HK-25W-265NM-42P 的使用寿命可比传统紫外灯长 5 倍。HK-25W-265NM-42P 带有集成的 10,000 小时 LED 定时器，可在需要更换时提醒用户。ROOTIN HK-25W-265NM-42P 旨在杀死 HVAC 系统及蒸发器盘管上的霉菌、霉斑、细菌及其他有害生物生长。该系统还可帮助减少如脏袜子味等难闻和霉味，并有助于防止冷凝水管因沉积物堵塞。

## Application

ROOTIN HK-25W-265NM-42P is designed to treat any commercial HVAC system with no maintenance for up to 10,000 hours of treatment life. The system can easily be installed using the adjustable mounting brackets and commercial grade magnets. If the ROOTIN HK-25W-265NM-42P is being installed in a system where the magnet can not be used than use the supplied hardware to mount the ROOTIN to your system. The powerful LED light should be installed in a location where it is fully shining on the evaporator coil to provide complete treatment.



ROOTIN HK-25W-265NM-42P 旨在处理任何商业 HVAC 系统，处理寿命最长可达 1 万小时，无需维护。该系统可通过可调安装支架和商用级磁铁轻松安装。如果在无法使用磁铁的系统中安装 ROOTIN HK-25W-265NM-42P 请使用随附的硬件将 ROOTIN 安装到您的系统上。强力 LED 灯应安装在能够完全照射蒸发器线圈的位置，以提供完整的处理效果。

### IMPORTANT

- ◎ Only qualified technicians should install this product
- ◎ Install in accordance with relevant building codes
- ◎ Read instructions and safety instructions carefully before installation

### 重要提示

- ◎ 仅有资质的技术人员方可安装本产品
- ◎ 安装须符合相关建筑规范
- ◎ 安装前请仔细阅读说明书和安全说明

**WARNING: PROTECT EYES FROM UV LIGHT. TURN OFF UNIT OR DISCONNECT ALL POWER BEFORE SERVICING.**  
**MOUNTING LOCATION**

Before installing the ROOTIN HK-25W-265NM-42P, it is necessary to determine the optimal mounting location inside the air system. Consider an installation location that will allow the ROOTIN UVC LED light to shine on the greatest surface area of the coil. For enhanced antimicrobial effect, multiple ROOTIN UVC-LED lights can be installed in the system. Below are various placement options for the ROOTIN LED.

**警告：保护眼睛免受紫外线照射。在维护前，请关闭设备或断开所有电源。**

### 安装位置

在安装 ROOTIN HK-25W-265NM-42P 之前，有必要确定空气系统内部的最佳安装位置。请考虑一个安装位置，使 ROOTIN UVC LED 灯能够照射到线圈的最大表面积。为了增强抗菌效果，可以在系统中安装多个 ROOTIN UVC-LED 灯。以下是 ROOTIN LED 的各种放置选项。

## MOUNTING INSTRUCTIONS – Using Provided Magnets

### ☆STEP 1:

Confirm power is off to the system. Remove the access panel to the air handler.

### ☆STEP 2:

Remove the “A” panel on the evaporator coil to gain access to the center of the coil.

### ☆STEP 3:

Using the ROOTIN's integrated magnet, attach the ROOTIN to the metal “A” panel on the far side of the evaporator coil. For a “W” or “N” shaped coil, install a second ROOTIN inside the second section of coil. See example image in Figure 1.4.

### ☆STEP 4:

Run the wires down the cabinet, cut a small access hole for the wires if one does not exist.

### ☆STEP 5:

Replace the “A” panel on the evaporator coil that was previously removed.

## 安装说明 – 使用随附磁铁

### ☆步骤 1:

确认系统电源已关闭。拆下空气处理器的检修面板。

### ☆步骤 2:

拆下蒸发器盘管上的“A”面板，以便接触盘管的中心部分。

### ☆步骤 3:

使用 ROOTIN 装置自带的磁铁，将 ROOTIN 固定在蒸发器盘管另一侧的金属“A”面板上。对于“W”型或“N”型盘管，在盘管的第二部分内部安装第二个 ROOTIN。参见图 1.4 中的示例图片。

### ☆步骤 4:

将电线沿柜子下走，如果没有小的接线孔，就切一个用于电线的开孔。

### ☆步骤 5:

更换之前已拆下的蒸发器盘管上的“A”面板。

## ROOTIN installed inside the coil using the provided hardware

### ☆STEP 1:

Confirm power is off to the system. Remove the access panel to the air handler.

### ☆STEP 2:

Drill a 1 ¼” hole in the “A” plate of the evaporator.

### ☆STEP 3:

Insert the supplied grommet into the hole drilled into the “A” plate.

### ☆STEP 4:

Insert the LED bulb in the grommet which is placed inside of the drilled 1 ¼” opening.

### ☆STEP 5:

Secure the ROOTIN to the “A” plate using the provided hardware.

### ☆STEP 6:

Secure the adjustable brackets using a phillips head screwdriver and the included 7mm socket to ensure the brackets are locked in place.

Continue to the wiring instructions to complete installation of the HK-25W-265NM-42P.

## 安装说明 – 使用自攻螺丝安装硬件

### ☆步骤 1:

确认系统电源已关闭。拆下空气处理器的检修面板。

### ☆步骤 2:

在蒸发器的“A”板上钻一个 1 ¼英寸的孔。

### ☆步骤 3:

将提供的垫圈插入钻在“A”板上的孔中。

### ☆步骤 4:

将 LED 灯泡插入放置在钻好的 1 ¼英寸开口内的衬套中。

### ☆步骤 5:

使用提供的硬件将 ROOTIN 固定到“A”板上。

For a “W” or “N” shaped coil, install a second inside the second section of coil after drilling the 1 ¼” hole in the second panel, inserting the grommet, and securing the. See example image in Figure 1.4.

对于“W”型或“N”型线圈，在第二面板上钻 1¼英寸的孔、安装垫圈并固定后，将第二个安装在线圈的第二部分中。参见图 1.4 中的示例图片。

**WIRING DIRECTIONS**

☆STEP 1:

Connect the ROOTIN to 110-277VAC power using the white (neutral) and black (hot) wires. The ROOTIN HK-25W-265NM-42P can be wired to 110-277VAC input and connected to the door interlock switch so the ROOTIN powers down if the door/access panel is open. See figure 1.5 below for wiring diagram. Wire the ROOTIN to continuous power, do not connect to the blower relay. See Step 2 for option modes to cycle the ROOTIN with the fan.

☆STEP 2:

Set the ROOTIN power switch to "ON" for constant run mode. Set the power switch to "CYCLE" to run only when the fan is running and The integrated air flow sensor activates the ROOTIN to power on. (The cycle mode is recommended for longer service life for most applications.) When first turning on the ROOTIN in CYCLE mode (air flow sensor mode) the LEDs will stay illuminated up to 120 seconds for an initial calibration. After the calibration period the ROOTIN LEDs will turn off, and will then only turn back on when the fan is running and there is continuous airflow.

☆STEP 3:

Replace the access panel to the unit.

☆STEP 4:

Place the provided WARNING/INSTALL DATE sticker on the exterior of the unit.

☆STEP 5:

Add the date of installation using permanent marker on the sticker.

☆STEP 6:

Restore power to the unit.

**接线说明**

☆步骤 1:

使用白色 (中性线) 和黑色 (火线) 将 ROOTIN 连接到 110-277VAC 电源。ROOTIN HK-25W-265NM-42P 可以接入 110-277VAC 输入, 并连接到门互锁开关, 以便在门/访问面板打开时 ROOTIN 会断电。请参见下图 1.5 的接线图。将 ROOTIN 接入连续电源, 不要连接到鼓风机继电器。有关与风扇同时循环 ROOTIN 的选项模式, 请参见步骤 2。

☆步骤 2:

将 ROOTIN 电源开关设置为“开 (ON)”以进入持续运行模式。将电源开关设置为“循环 (CYCLE)”仅在风扇运行时运行, 并且内置的气流传感器会激活 ROOTIN 开机。(在大多数应用中, 建议使用循环模式以延长使用寿命。) 首次在循环模式 (气流传感器模式) 下开启 ROOTIN 时, LED 灯会保持亮起, 最长可达 120 秒以进行初始校准。校准结束后, ROOTINLED 灯将关闭, 并且只有在风扇运行且有持续气流时才会再次亮起。

☆步骤 3:

将设备的检修面板复位复原。

☆第 4 步:

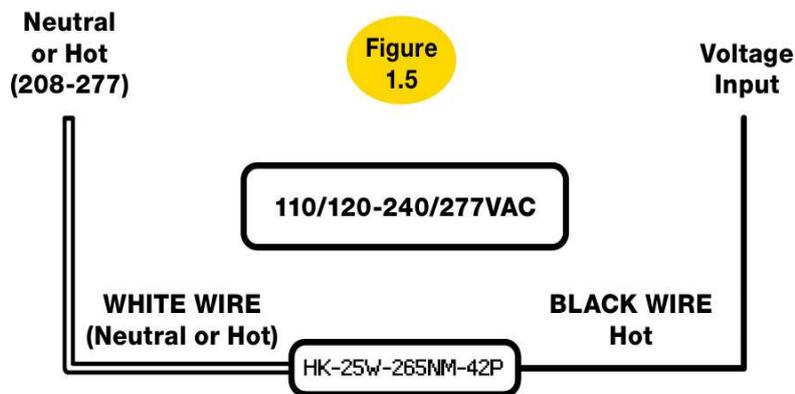
将提供的警告/安装日期贴纸贴在设备外部。

☆第 5 步:

使用永久性马克笔在贴纸上填写安装日期。

☆第 6 步:

恢复设备的电源。



## INSTALLING SIGHT GLASS

### ☆Step 1:

Find a proper location on the outside of the ductwork where you will be able to see the ROOTIN's 10,000 hour timer LED. The LED timer is located on the endcap of the ROOTIN HK-25W-265NM-42P.

### Step 2:

Drill a 1/2" hole through the ductwork.

### Step 3:

Firmly press the provided sight glass into the hole for your viewport.

## REPLACING THE HK-25W-265NM-42P – 10,000 Hour Run Timer

The ROOTIN HK-25W-265NM-42P needs to be replaced after 10,000 hours of run time. The HK-25W-265NM-42P is equipped with a run timer and LED that will notify you when it needs to be replaced. When the HK-25W-265NM-42P hits 10,000 hours of run time, the red LED on the endcap of the ROOTIN will change from solid red to blinking red. A blinking red LED means the HK-25W-265NM-42P is no longer providing complete disinfecting capabilities and needs to be replaced.

## IMPORTANT

Some materials inside the air system (including filter media, flex duct, wiring etc.) may not be UV light resistant. Use reflective tape to cover these components.

## LIMITED WARRANTY

The ROOTIN offers a limited warranty for three years or 10,000 hours of run time that covers any defects in material or workmanship under normal use. For a valid warranty your ROOTIN must be registered through ROOTIN on the date of installation. If you make a claim during the warranty period, you must provide proof of purchase and proof of proper installation by a licensed contractor for the warranty to be valid. The ROOTIN warranty does not cover labor, return shipping charges, damage from improper installation or improper voltage usage. The ROOTIN warranty begins on the date that the unit was installed. Installation of your ROOTIN by any person other than a licensed contractor will void the warranty.

## 安装视窗

### 步骤 1:

在风管外侧找到一个合适的位置，以便您能够看到 ROOTIN 的 1 万小时计时器 LED。计时器 LED 位于 ROOTIN HK-25W-265NM-42P 的端盖上。

### 步骤 2:

在风管上钻一个 1/2 英寸的孔。

### 步骤 3:

将提供的视窗牢固地接入孔中作为观测窗口。

## 更换 HK-25W-265NM-42P – 1 万小时运行计时器

ROOTIN HK-25W-265NM-42P 在运行 10,000 小时后需要更换。HK-25W-265NM-42P 配备了运行计时器和 LED，会在需要更换时提醒您。当 HK-25W-265NM-42P 运行达到 1 万小时时，ROOTIN 端盖上的红色 LED 将从常亮红色变为闪烁红色。闪烁红色 LED 表示 HK-25W-265NM-42P 已经无法提供完整的消毒功能，需要更换。

## 重要提示:

空气系统内部的一些材料（包括过滤材料、柔性管道、线路等）可能不耐紫外线。请使用反光胶带覆盖这些部件。

## 有限保证:

ROOTIN 提供三年或 1 万小时运行时间的有限保修，涵盖在正常使用下的材料或工艺缺陷。为了获得有效保修，您的 ROOTIN 必须在安装当天通过 ROOTIN 注册。如果在保修期内提出索赔，您必须提供购买凭证和经许可承包商的正确安装证明，保修才能生效。ROOTIN 保修不包括人工费用、退货运费、不当安装或不当电压使用造成的损坏。ROOTIN 保修自设备安装之日起生效。任何非许可承包商安装您的 ROOTIN 将导致保修失效。