

# ROOTIN Product Bulletin (国内地区销售版本)

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

- ※ 30" UVC-LED Disinfection System  
30 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

## Indoor Air Quality Products 室内空气质量产品

### HK-50W-265NM-96P



### Specifications

Input Voltage:	208-480VAC
输入电压:	208-480VAC
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:	30"L x 1.5"H x 2.5"W
外形尺寸:	长 30 英寸*高 1.5 英寸*宽 2.5 英寸
Weight:	3.5 lbs.
重量:	3.5 磅
Surge Protection:	Internal surge protection
浪涌保护:	内部保护
Mode Options:	Continuous mode or air flow sensor mode
模式选项:	连续模式或气流传感器模式
Treatment Size:	Up to a 12-ton HVAC coil, or up to 4'x4' coil per single HK-50W-265NM-96P
处理尺寸:	单台 HK-50W-265NM-96P 可处理容量高达 12 吨的 HVAC 盘管, 或最大 4'x4' 的盘管

## Description

The ROOTIN HK-50W-265NM-96P is a 30" 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-50W-265NM-96P can last up to 5 times longer than traditional UV bulbs. The HK-50W-265NM-96P comes with an integrated 10,000 hour LED timer to notify when a replacement is required. The ROOTIN HK-50W-265NM-96P 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-50W-265NM-96P 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-50W-265NM-96P 的使用寿命可比传统紫外灯长 5 倍。HK-50W-265NM-96P 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-50W-265NM-96P 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-50W-265NM-96P 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-50W-265NM-96P 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-50W-265NM-96P 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-50W-265NM-96P 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-50W-265NM-96P, 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-50W-265NM-96P 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:**

Locate a magnetic surface across from the evaporator coil where you will install the HK-50W-265NM-96P.

**☆STEP 3:**

Adjust the included mounting brackets to the desired angle.

**☆STEP 4:**

Attach the HK-50W-265NM-96P to the magnetic surface using the included magnets.

**☆STEP 5:**

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-50W-265NM-96P.

**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:**

找到蒸发器盘管对面的磁性表面，这是安装 HK-50W-265NM-96P 的位置。

**☆步骤 3:**

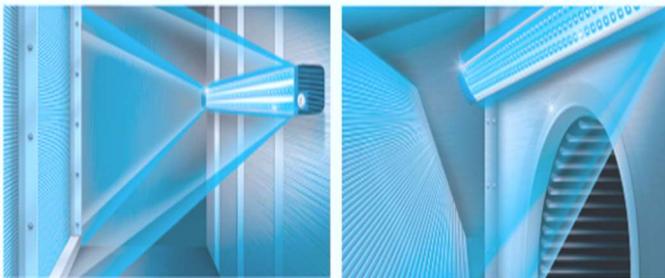
将随附的安装支架调整到所需角度。

**☆步骤 4:**

使用随附磁铁将 HK-50W-265NM-96P 固定在磁性表面上。

**☆步骤 5:**

使用十字螺丝刀和随附的 7mm 套筒固定可调支架，以确保支架锁定到位。继续按照接线说明完成 HK-50W-265NM-96P 的安装。

**MOUNTING INSTRUCTIONS – Using Self Tapping Hardware****☆STEP 1:**

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

**☆STEP 2:**

Locate a surface across from the evaporator coil where you can install HK-50W-265NM-96P with sheet metal screws.

**☆STEP 3:**

Using a Philips screwdriver remove the provided magnet from the adjustable bracket.

**☆STEP 4:**

Adjust the included mounting brackets to the desired angle.

**☆STEP 5:**

Secure the HK-50W-265NM-96P to the desired location through the holes in the adjustable mounting bracket 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-50W-265NM-96P.

**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:**

找到蒸发器线圈对面的一个表面，可以通过金属螺丝安装 HK-50W-265NM-96P。

**☆步骤 3:**

使用十字螺丝刀，从可调支架上取下提供的磁铁。

**☆步骤 4:**

将随附的安装支架调节到所需角度。

**☆步骤 5:**

使用提供的硬件，通过可调安装支架上的孔将 HK-50W-265NM-96P 固定到所需位置。

**☆步骤 6:**

使用十字螺丝刀和随附的 7mm 套筒固定可调支架，确保支架锁定到位。继续按照接线说明完成 HK-50W-265NM-96P 的安装。

## WIRING DIRECTIONS

### ☆STEP 1:

Connect the ROOTIN to high voltage 208-480VAC power using the white (neutral) and black (hot) wires. Connect the green (ground) wire to a proper ground source. See figure 1.3 below. Step 1A: The ROOTIN can be wired directly to the HVAC system power or add a transformer as needed. Wire the ROOTIN to continuous power, do not connect to the blower relay. Step 1B: For safety, ensure the black (hot) wire is wired through the unit's door interlock switch as shown in Figure 1.3. This will ensure the HK-50W-265NM-96P does not power on when the door is opened and the safety switch is engaged.

### ☆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.)

### ☆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 连接到高压 208-480VAC 电源。将绿色（接地线）连接到适当的接地线。见下图 1.3。步骤 1A: ROOTIN 可以直接接入 HVAC 系统电源，也可以根据需要添加变压器。将 ROOTIN 连接到持续电源，勿连接到鼓风机继电器。步骤 1B: 为安全起见，确保黑色（火线）通过装置的门联锁开关接线，如图 1.3 所示。这将确保在打开门并触发安全开关时，HK-50W-265NM-96P 不会通电。

### ☆步骤 2:

将 ROOTIN 电源开关设置为“ON”，以持续运行模式。将电源开关设置为“CYCLE”，则仅在风扇运行且集成空气流量传感器激活 ROOTIN 通电时运行。（大多数应用建议使用循环模式以延长使用寿命。）

### ☆步骤 3:

将设备的检修面板复位复原。

### ☆第 4 步:

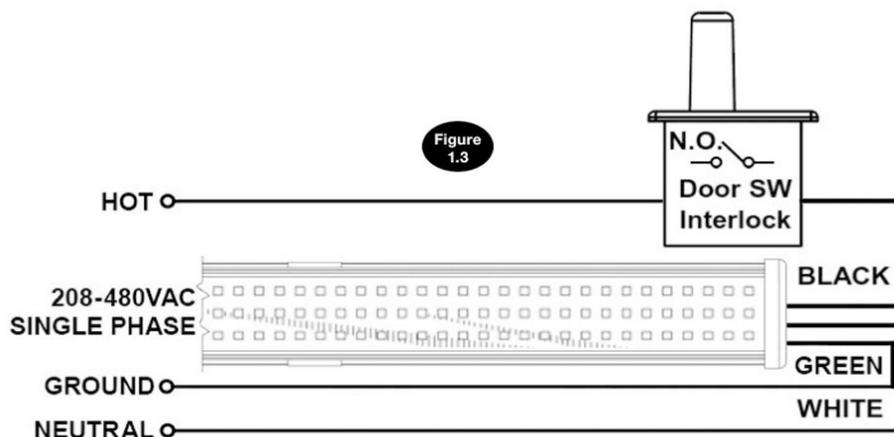
将提供的警告/安装日期贴纸贴在设备外部。

### ☆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。



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No. 80, Fengshu Street, Liufan Village, Liufan Township, Taihu County, Anqing City, Anhui Province

邮编 Postal code: 246474

网站 Web: www.ahuvic.cn

电子邮件 E-mail: uvclcd@qq.com

电话 TEL: 400-8601710

## 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-50W-265NM-96P.

### 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-50W-265NM-96P – 10,000 Hour Run Timer

The ROOTIN HK-50W-265NM-96P needs to be replaced after 10,000 hours of run time. The HK-50W-265NM-96P is equipped with a run timer and LED that will notify you when it needs to be replaced. When the HK-50W-265NM-96P 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-50W-265NM-96P 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-50W-265NM-96P 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-50W-265NM-96P – 1 万小时运行计时器

ROOTIN HK-50W-265NM-96P 在运行 10,000 小时后需要更换。HK-50W-265NM-96P 配备了运行计时器和 LED，会在需要更换时提醒您。当 HK-50W-265NM-96P 运行达到 1 万小时，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-50W-265NM-96P 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。