Installation Instructions

Symbio[™] Options Modules

Model Number: Used With:

MOD03102

Symbio™ Options Module (Fresh air options module and indoor options module service part)

A SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the eauipment.

September 2024

PART-SVN267A-EN @2024 Trane

JAVAL

Warnings, Cautions, and Notices

Read this manual thoroughly before operating or servicing this unit. Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:



Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone laver are refrigerants that contain Chlorine. Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

Proper Field Wiring and Grounding Required!

Failure to follow code could result in death or serious injury. All field wiring MUST be performed by gualified personnel. Improperly installed and grou field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state/national electrical codes.

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury. Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, MUST follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below

- Before installing/servicing this unit, technicians MUST put on all PPE required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). ALWAYS refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, ALWAYS refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labeling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.
- If there is a risk of energized electrical contact, arc, or flash, technicians MUST put on all PPE in accordance with OSHA, NFPA 70E, or other country specific requirements for arc flash protection, PRIOR to servicing the unit NEVER PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.

Overview

Symbio[™] Options Module board is the service part for both the fresh air options module and the indoor options module. Options modules are differentiated by their address when connected to a Symbio 700 Controller. Refer to the specific section that applies to your replacement scenario.

Replacing a Fresh Air Options Module

Follow the instructions below when replacing a failed fresh air options module. If replacing an indoor options module, see "Replacing an Indoor Options Module"

Removing Failed Options Module

- 1. Turn off and lockout power to the unit and the controller.
- 2. Open return section to access return enclosure. See Figure 1, Figure 2, and Figure 3.
- 3. Locate fresh air options module inside return enclosure. See Figure 4.
- 4. Note the point of connection for each terminal connection.
- 5. Disconnect all factory Molex-style connectors and remove failed fresh air options module





Figure 2. Fresh air options module location - Voyager 3



Figure 3. Fresh air options module location - Foundation (15 to 25 ton)







Install the New Options Module

- 1. With the unit still powered down, install the new fresh air options module.
- 2. Reconnect the factory Molex-style connectors. Factory connectors are keyed and color coded. Verify color match between wire harness and board connectors.
- 3. Set fresh air options module rotary switches to address 76. See Figure 5.

Follow EHS Policies!

Failure to follow instructions below could result in death or serious injury.

- All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.
- Non-Trane personnel should always follow local regulations.

Copyright

This document and the information in it are the property of Trane, and may not be used or reproduced in whole or in part without written permission. Trane reserves the right to revise this publication at any time, and to make changes to its content without obligation to notify any person of such revision or change.

Trademarks

All trademarks referenced in this document are the trademarks of their respective owners.

7

Figure 5. Fresh air options module addressing



Replacing an Indoor Options Module

Follow the instructions below when replacing a failed Indoor Options Module. If replacing an fresh Air Options module, see "Replacing a Fresh Air Options Module"

Removing the Original Controller

- 1. Turn off and lockout power to the unit and the controller.
- 2. Open the control box section to access indoor options module. See Figure 6 Figure 7, and Figure 8.
- 3. Note the point of connection for each terminal connection.
- 4. Disconnect all factory Molex-style connectors and removed failed indoor options module.



Update Controller Firmware

Important: After replacing the options module, update the Symbio[™] 700 controller firmware. This process will also update all Symbio modules.

Download Firmware

1. Visit trane.com and download the latest Symbio 700 firmware. Scan the QR code below for quick access to the download page.

Figure 13. QR code - firmware download page



Note: The Symbio[™] Service and Installation app is the preferred method to upgrade firmware, restore controller backup, and configure the Symbio 700 controller. The Tracer® TU tool can also be used. This document provides instructions for Symbio 700 replacement using the Symbio Service and Installation App.

Figure 8. Indoor options location - Odyssey (indoor unit)



Figure 9. Indoor options location - Foundation (15 to 25 ton)

Indoor options module location

13

2. Copy the firmware to the USB storage device. Confirm the firmware is located in the root folder of the USB drive and not in a subfolder.

Important: Verify the USB storage device is formatted as FAT or FAT32. Other formats are not compatible with the Symbio 700 Controller.

Install Firmware

 With the unit and the controller powered, insert the USB storage device with the firmware (downloaded in previous section) into Symbio[™] 700 USB port J2. See Figure 14.

Figure 14. USB port J2 location

USB Port locatio



- 2. Using the Symbio Service and Installation App, connect to the new controller.
- Navigate to Tools -> Update Firmware and perform a update on the new controller. See Figure 15.

Note: The firmware update process may take up to 5 minutes. During this time, the Bluetooth connection will be unavailable. Follow the update on the Symbio 700 onboard user interface.

Install the New Options Module

10

- 1. With the unit still powered down, install the new indoor options module.
- Reconnect the factory Molex-style connectors. Factory connectors are keyed and color coded. Verify color match between wire harness and board connectors.
- 3. Set indoor options module rotary switches to address **75**. See Figure 10.
- Figure 10. Indoor options module addressing



Confirm Option Module Replacement

Using Symbio[™] Service and Installation App

- 1. Using the Symbio Service and Installation App, connect to the new controller.
- 2. Navigate to **Tools > Service**. Within the service menu, scroll down until you see a section called Options Modules.
- 3. Confirm that replaced module, communication status is Communicating as shown in Figure 11.



| ► Tools | ← Service C |
|-------------------------|--|
| Unit Auto/Stop Auto | OPTIONS MODILIES |
| Service Test Mode | Customer Options Module Communication |
| | Status Communicating |
| View Data Logs | Fresh Air Options Module Communication |
| Export Data Logs | Status Communicating |
| Service | Fresh Air Options Module Firmware Major |
| Protocol Configuration | Version 1.00 |
| i onTalk™ | Fresh Air Options Module Firmware Minor |
| | 99.00 |
| IP Configuration | Indoor Options Module Communication Statu |
| Regional Specifications | Communicating |
| Intelligent Services | On-Board I/O Communication Status Communicating |
| Cell Modem | On-Board I/O Firmware Major Version |
| | |

Using Symbio[™] service and installation app

- Using the on-board display navigate to Service > Options Modules, and click enter (☑).
- Use the down arrow (☉) to scroll to the module that was replaced (Fresh Air Options Module or Indoor Options Module).
- 3. Confirm that communication status indicates Communicating.

Trane - by Trane Technologies (NYSE: TT), a global climate innovator - creates comfortable, energy efficient indoor environments for commercial and residential applications. For more information, please visit trane.com or tranetechnologies.com.

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.