



Toshiba Carrier MCY-MAP0367HS-UL Startup Manual

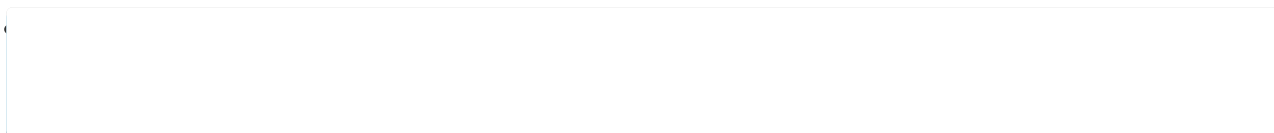
1ph heat pump

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Related Manuals for Toshiba Carrier MCY-MAP0367HS-UL

[Air Conditioner Toshiba MCY-MAP0367HS-UL Owner's Manual](#)

(56 pages)

[Heat Pump Toshiba Carrier MCY-MAP0367HS-UL Installation Manual](#)

Outdoor unit (30 pages)

[Heat Pump Toshiba MMY-MAP0501HT8-E Service Manual](#)

(45 pages)

[Heat Pump Toshiba RAV-360UH Service Data](#)

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[Heat Pump Toshiba HWS-802XWHM3-E Engineering Data](#)

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Hydro unit air to water heat pump (58 pages)

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Air to water heat pump (300 pages)

[Heat Pump Toshiba HWS-803XWHM3-E Installation Manual](#)

Air to water heat pump (186 pages)

[Heat Pump Toshiba HWS-P805XWHM3-E Service Manual](#)

(184 pages)

[Heat Pump Toshiba MMY-SAP0806HT8P-E Service Manual](#)

Air-conditioner multi type, super modular multi system - e, stand alone type, outdoor unit (231 pages)

[Heat Pump Toshiba HWT-601F21SM3W-E Installation Manual](#)

Air to water heat pump hydro unit -all in one type- (39 pages)

[Heat Pump Toshiba HWT-601XWHM3W-ETR Service Manual](#)

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[Heat Pump Toshiba HWS-803XWHM3-E Owner's Manual](#)

Hydro unit air to water heat pump (58 pages)

[Heat Pump Toshiba HWT-601XWHM3W-E Installation Manual](#)

Air to water heat pump, hydro unit wall mounted type (40 pages)

[Heat Pump Toshiba ESTIA RUA-CP1701H Service Manual](#)

Air to water heat pump (164 pages)

Summary of Contents for Toshiba Carrier MCY-MAP0367HS-UL

[Page 1](#) Carrier Enterprise Toshiba Carrier 1PH Heat Pump VRF Start Up Guide Ver. 3.0...

[Page 2](#) Your Resources for Information and Support Carrier Enterprise Northeast (CENE) Technical Service's Website www.cenetechsupport.com • Go here for all CENE Tech Training • Go here for Troubleshooting help • Set up videos • Troubleshooting Forms • Links to submit case for Tech support • ...

[Page 3](#) Your Resources for Information and Support • Why Guess?? Information is too easy to get. • Carrier Enterprise Website - www.carrierenterprise.com 1. From landing page, 1 click and enter beginning of model to search. 2. Example: Type in 38MAR and select family shown. Install, Product Data and Service Manuals as well as 9 other documents related to same product family.

[Page 4](#) Your Resources for Information and Support • Carrier Enterprise App – • Download & Play • 6 actions to start reading Click Click Click Enter model Select type Enjoy! Choices populate...

[Page 5](#) Your Resources for Information and Support Other sources for Carrier information • Carrier Website – www.carrier.com • From landing page: “Owner Resources” drop down, click “Find Documents”. 3 Actions and enter model to search. • Carrier “Service Tech” App • 6 actions to start reading Click Click Enter model...

[Page 6](#) Table of Contents Page Section 1 – Preplan for Start Up Section 2 – Toshiba Carrier VRF Section 3 – Toshiba Carrier VRF Controls Section 4 – Toshiba Carrier VRF Central Controls Section 5 – Appendix...

[Page 7](#) Section – 1 Preplan for Start Up...

[Page 8](#) Preplan for Start Up How to Plan for Start Up Day • Plan to book your Start Up date with CE Tech Support 2 weeks from planned Start Up date. We cannot always accommodate next day requests. Save time and plan ahead! •...

[Page 9](#) Preplan for Start Up Required!!! Logon How to Plan for Start Up Day Ready for Startup? Go here to start the process. • [https:// cenetechsupport.com/](https://cenetechsupport.com/) • This process is for Carrier Enterprise Northeast, your region of CE may be different, check with your local CE tech support.

[Page 10](#) How to Plan for Start Up Day • This guide lays out a concise step by step process for Start Up of a properly installed Toshiba carrier 1PH VRF Heat Pump system. It is intended to use in conjunction with the Installation/Operation Manuals that are shipped with the equipment.

[Page 11](#) Preplan for Start Up How to Plan for Start Up Day • If you are not installing a Central Touchscreen, BACnet or other centralized control you can go to to the next page and skip this step. • If you are installing a Touchscreen, BACnet or other knowing the IDU’s address is required. •...

[Page 12](#) Section – 2 Toshiba Carrier VRF Models covered in Section 2 of this guide: Heat Pump – 1PH MCY-MAP0367HS-UL MCY-MAP0487HS-UL MCY-MAP0607HS-UL...

[Page 13](#) Toshiba Carrier Dyna-Doctor Windows based PC only Toshiba Carrier MCY/MMY VRF Dyna-Doctor Diagnostic Software & Communication Adapter Dyna-Doctor diagnostic software can provide a user a view across the VRF entire system. The technician will be able to see EEV positions, refrigerant pressures, thermistor readings, compressor speeds, operational modes and much more.

[Page 14](#) Getting Started Toshiba Carrier (TC) 1PH VRF Start Up Guide 1. TC VRF install is 100% complete. Additional charge added, stop valves opened. All wiring complete. Outdoor units, Indoor Units and Remote Controls are all installed and ready to operate.

[Page 15](#) Getting Started TC VRF Start Up Guide (cont.) 5. Power OFF all outdoor units, flow selector boxes and indoor units. Open all Header outdoor unit control box's. 6. Set Refrigerant Line Address in each Header outdoor unit – Single or Stand alone or systems without a centralized controller can skip this step.

[Page 16](#) Setting Up Outdoor Units TC VRF Start Up Guide (cont.) 7. Outdoor units are set from the factory for Heating Priority. If one of the other three Priority settings shown below are preferred, set as indicated. SW11 Operation SW11-1 SW11-2 Priority heating (factory default) Priority cooling Priority operation based on No.

[Page 17](#) Setting Indoor Unit Address TC VRF Start Up Guide (cont.) Indoor Unit Addressing Explained • Each Indoor unit must have an unique address for it to be recognized and controlled within the VRF system. The indoor unit address can be between 1 & 64. •...

[Page 18](#) Setting Indoor Unit Address TC VRF Start Up Guide (cont.) 8. If available, connect Dyna-Doctor to Header outdoor unit and prepare software on computer for system verification and data recording. Only one system can be viewed/recorded at a time. 9. Confirm Rotary

switches SW01,02,03 are all set to [1][1][1] Main PCB on header ODU SW04 SW05 SW15 10.

[Page 19](#) Setting Indoor Unit Address How to enter "Field setting menu" TC VRF Start Up Guide (cont.) 12. Manual addressing instructions. If Automatic addressing was used, go to step 13. Enter "Field settings menu" using steps below. 1. Press the Down arrow to highlight #7 "DN settings". 2.

[Page 20](#) Setting Indoor Unit Address TC VRF Start Up Guide (cont.) 12.1 Manual indoor unit address instructions Set Line Address: Go to DN code 12 - Line Address Utilize the "F1" & "F2" to move the cursor left or right. The "UP" & "DOWN" arrows will check the valve. Once you have the desired Line Address shown on the right side, press the "MENU"...

[Page 21](#) Setting Indoor Unit Address TC VRF Start Up Guide (cont.) 12.2 Manual indoor unit address instructions (end) Set Group Address: 1. Go to DN code 14 - Group Address 2. Utilize the "F1" & "F2" to move the cursor left or right. 3.

[Page 22](#) If no 24V Interfaces were installed go to step 14. If Auto Addressing was used, the 24V interface will be assigned an address. Toshiba Carrier 24V Interface TCB-IFTH1GUL If Manual Address is used or a Control Address is required, a Remote Controller will be needed.

[Page 23](#) 24V Interface Set Up Attention: TC VRF Start Up Guide Do not use Heat Pump (cont.) thermostats 13.1 IDU's using 24V Interface Accessory TCB-IFTH1GUL If no 24V Interfaces were installed go to step 14. Wiring options: • Two-stage Cooling and Heating Two-Stage Cooling and Heating •...

[Page 24](#) 24V Interface Set Up TC VRF Start Up Guide (cont.) 13.2 IDU's using 24V Interface Accessory TCB-IFTH1GUL If no 24V Interfaces were installed go to step 14. DIP Switch Settings, recycle power after any changes made. DIP Switches...

[Page 25](#) 24V Interface Set Up TC VRF Start Up Guide (cont.) 13.3 IDU's using 24V Interface Accessory TCB-IFTH1GUL (end) If no 24V Interfaces were installed go to step 14. DIP Switch Settings, recycle power after any changes made. LED's - D501 D502 D503 D504 D505 D506 D507 D508...

[Page 26](#) 40QQ Electric Heat Control Set Up TC VRF Start Up Guide (cont.) 14. 40QQ Rooftop Electric Heater Set Up If no 40QQ are installed with electric heat, go to step 15 • Step 1 - If Electric Heater is installed, set DIP switches as show below and recycle power to unit. 40QQ Control box view SW501 Default...

[Page 27](#) 40QQ Electric Heat Control Set Up TC VRF Start Up Guide (cont.) 14.1 40QQ Rooftop Electric Heater Set Up If no 40QQ are installed with electric heat, go to step 15 • Step 2 - Set DN code DC - Select a value for Heater Control. Set Data 0000 0001...

[Page 28](#) 40QQ Electric Heat Control Set Up TC VRF Start Up Guide (cont.) 14.2 40QQ Rooftop Electric Heater Set Up If no 40QQ are installed with electric heat, go to step 15 • Step 3 - Set DN code "DB" - Optional Advance setting for electric heater control Factory Setting •...

[Page 29](#) 40QQ Electric Heat Control Set Up TC VRF Start Up Guide (cont.) 14.3 40QQ Rooftop Electric Heater Set Up If no 40QQ are installed with electric heat, go to step 15 • Step 4 - Secondary Heat Disable DN Code Legend Set Data Value...

[Page 30](#) 40QQ EconoMi\$er Control Set Up TC VRF Start Up Guide (cont.) 15. 40QQ Rooftop EconoMi\$er Control If no 40QQ are installed with EconoMi\$er, go to step 16 • Step 1 - If EconoMi\$er Control is installed, set DIP switches as show below and recycle power to unit. DN code setting (required to activate the EconoMi\$er) •...

[Page 31](#) External Condensate Safety Connection Set Up TC VRF 1PH HP Start Up Guide (cont.) 16. Optional Kit - TCB-KBCN61HAE If no TCB-KBCN61HAE are being used, go to step 17 • Plug the TCB-KBCN61HAE wire harness into CN61 on the indoor unit's main PCB. Connect the external pump switch to the Blue &...

[Page 32](#) Power Recycle & Start Up TC 1PH VRF Start Up Guide (end) 17. Power OFF all outdoor units, flow boxes and indoor units. Wait 5 minutes and power ON indoor units, flow boxes next and then outdoor units. 18. If there are any errors present after initialization, you

will need to find the cause and correct before continuing.

[Page 33](#) Section - 3 Toshiba Carrier VRF Controls Models covered in Section 3 of this guide: Wireless Controller TCB-AX32-UL - Stand Alone Receiver RBC-AMS54E-UL - Remote Controller RCB-AX33C-UL - Integral Receiver Underceiling RCB-AX32U(W)-UL - Integral Receiver 4-Way Cassette...

[Page 34](#) Remote Controller Set Up RBC-AMS54E-UL - Buttons & Basic Operation 1 - MONITOR: Displays the monitoring screen. 2 - MENU: Displays the menu screen. 3 - CANCEL: Functions as indicated on the display, such as returning to the previous menu screen. 4 -...

[Page 35](#) Remote Controller Set Up RBC-AMS54E-UL - Display Modes Display Modes: To switch between displays: Push and hold the [CANCEL] button and the [Monitor] button at the same time for more than 4 seconds. 1. Normal Display (factory default) Detailed Display...

[Page 36](#) Remote Controller Set Up RBC-AMS54E-UL - Icon List Shows a timer function is activated. Shows the Louver lock is activated. Shows the Energy saving operation is activated. Shows the setting of the louver. Shows the remote control sensor is activated. Shows the filter needs to be cleaned.

[Page 37](#) Remote Controller Set Up RBC-AMS54E-UL - Initial Settings Initial Settings: 1. Press the [MENU] button. Once the Menu is displayed press the UP/DOWN buttons to highlight Initial Setting and then press [F2] button to select. Initial Settings Menu:...

[Page 38](#) Remote Controller Set Up RBC-AMS54E-UL - Auto Mode & Dual Set Points Auto Mode & Dual Set Points: In dual set point setting, the temperature set point of individual cooling and heating can be set to adjust the indoor temperature. 1.

[Page 39](#) Remote Controller Set Up RBC-AMS54E-UL - Field Settings Field Settings: 1. Press the [MENU] button to display the menu screen. 2. Push and hold the [MENU] button and the [DOWN] button at the same time to display the "Field setting menu". Push and hold the buttons for more than 4 seconds.

[Page 40](#) Remote Controller Set Up RBC-AMS54E-UL - DN Codes DN Codes: Commonly Set DN Codes: 03 - Central Control Address • 19 - Louver Type • 2E - HA Terminals (CN61) • 77 - Dual Set Point • 5d - High Ceiling (Cassettes)

[Page 42](#) Touchscreen Start Up BMS-CT1280UL (cont.) Touch Screen 7. Do not connect LAN at this BMS-CT1280UL Bottom of Touchscreen time. There is a second LAN connection under this "unused" label, This connection is not used. USB Connection for outputting data.

[Page 43](#) Touchscreen Start Up BMS-CT1280UL (cont.) 8. If you have any of the following indoor units and they have no local controller, follow this step. If all units have local controllers go to next step. Touch Screen BMS-CT1280UL • Med Static Ducted - MMD-AP---6BHPUL •...

[Page 44](#) Touchscreen Start Up BMS-CT1280UL (end) 11. Plug your computer into the LAN connection. Bottom of Touchscreen 12. Using the File Creation Software, upload the file to the device. 13. Once file is uploaded, recycle power to touchscreen and disconnect laptop. 14.

[Page 45](#) Touchscreen & TCS-net Relay Start Up BMS-CT5120UL & BMS-IFLSV4UL Before the Touchscreen controller can be used, a setting file must be created and uploaded to the Touchscreen first. Without this file the system can only be controlled by the local remote controllers attached to the fan coils directly.

[Page 46](#) Touchscreen & TCS-net Relay Start Up BMS-CT5120UL & BMS-IFLSV4UL (cont.) The BMS-CT5120UL TCS-net Relay is only needed if a BMS-CT5120UL Touchscreen is being installed. The Touchscreen will not connect to the VRF system without this relay. For ease of installation, it recommended that they be mounted close to each other, within 3'...

[Page 47](#) Touchscreen & TCS-net Relay Start Up BMS-CT5120UL & BMS-IFLSV4UL (cont.) 4. Verify 120VAC power is connected to TCS-net Relay L,N & Ground. Do not turn power ON yet. 5. Connect outdoor unit daisy chain to U1 & U2. TCS-NET Relay Interface BMS-IFLSV4UL ODU Daisy Chain U1, U2 Power Connection...

[Page 48](#) Touchscreen & TCS-net Relay Start Up BMS-CT5120UL & BMS-IFLSV4UL (cont.) 6. Connect the supplied RS-485 cable from A, B to serial port on Touchscreen Control. Connect: Black to B & White to A If Ground is present connect to FG Touchscreen -...

[Page 49](#) Touchscreen & TCS-net Relay Start Up BMS-CT5120UL & BMS-IFLSV4UL (cont.) 7. In TCS-net Relay set Rotary switch SW1 to 1 If more then one TCS-net Relay are used set to 2 ~ 8. Do not use any other setting or duplicate. 8.

[Page 50](#) Touchscreen & TCS-net Relay Start Up BMS-CT5120UL & BMS-IFLSV4UL (cont.) 9. Do not connect LAN cable at this time. 10. Connect supplied power cord to Touchscreen. The other end has 120 Volt 3-prong plug for a wall outlet. 11. Power up TCS-net Relay, Touchscreen and then outdoor units. Bottom of Not necessary to power cycle Touchscreen...

[Page 51](#) Touchscreen & TCS-net Relay Start Up BMS-CT5120UL & BMS-IFLSV4UL (end) Bottom of 13. Plug your computer into the LAN connection. Touchscreen 14. Using the File Creation Software, upload the file to the device. 15. Once file is uploaded, recycle power to touchscreen and disconnect laptop. 16.

[Page 52](#) The micro BACnet comes with a default I.P. address of 192.168.1.100, if the network Admin has not designated a different I.P. address this is want will be used. In order to change the I.P. address, Toshiba's File Creation software must be used. See appendix of this guide for more information.

[Page 53](#) BACnet Start Up BMS-IFBN640TLUL (cont.) 1. Once the VRF systems has been fully started and tested by local BMS-IFBN640TLUL control or by Dyna-Doctor, power down all outdoor units. 2. If not already done during equipment Start Up, set Refrigerant Line Address on each Header outdoor units, 1-28 can be used, 1 is default, do not duplicate.

[Page 54](#) BACnet Start Up BMS-IFBN640TLUL (cont.) 5. Plug in the supplied power adapter in to BMS-IFBN640TLUL a 120 VAC power source and in to the 5V DC connection. The power adapter has a 6' power cord. 6. Do not plug anything into the LAN connection yet. 7.

[Page 55](#) BACnet Start Up BMS-IFBN640TLUL (cont.) 8. If you have any of the following indoor units and they have no local controller BMS-IFBN640TLUL follow this step. If all units have local controllers go to next step. • Med Static Ducted - MMD-AP---6BHPUL •...

[Page 56](#) BACnet Start Up BMS-IFBN640TLUL (end) 10. Plug your computer into the LAN connection. BMS-IFBN640TLUL 11. Use the File Creation Software to set desired I.P address. 12. Once I.P. is uploaded, recycle power to device and disconnect laptop. 13. Once Red & Green lights are blinking back and forth press the Shutdown button until Green light is ON solid, then release.

[Page 57](#) LonWorks Start Up TCB-IFLN642TLUL 1. Once the VRF systems has been fully started and tested by local control or by Dyna-Doctor. Power down all outdoor units. TCB-IFLN642TLUL 2. If not already done during equipment Start Up, set Refrigerant Line Address on each Header outdoor units, 1-28 can be used, 1 is default, do not duplicate.

[Page 58](#) LonWorks Start Up TCB-IFLN642TLUL (cont.) 7. Set SW1 & SW2 based on the TCB-IFLN642TLUL amount on indoor units connected. 8. If you have any of the following indoor units and they have no local controller follow this step. If all units have local controllers go to next step. •...

[Page 59](#) LonWorks Start Up TCB-IFLN642TLUL (end) 9. Power up LonWorks. Power up all outdoor units. TCB-IFLN642TLUL Not necessary to power cycle indoor units or flow selector boxes. 10. Go to each local remote controller and set Central Control Address DN Code 03. Also check Line Address DN Code 12, this will need to match the SW13 &...

[Page 60](#) Section - 5 Appendix Items covered in Section 5 of this guide: 192 .168 . 1 . 7 255 . 255 . 255 . 0 About Dyna-Doctor Software Activation Connecting Dyna-Doctor Software Navigation File Creation Software Page 79 Page 129 How to change your IP Address on your computer Page 149...

[Page 61](#) Toshiba Carrier Dyna-Doctor Windows based PC only Toshiba Carrier MCY/MMY VRF Dyna-Doctor Diagnostic Software & Communication Adapter Dyna-Doctor diagnostic software

can provide a user a view across the VRF entire system. The technician will be able to see valve positions, refrigerant pressures, thermistor readings, compressor speeds, operational modes and much more.

[Page 62](#) Toshiba Carrier Dyna-Doctor Toshiba Carrier MCY/MMY VRF Dyna-Doctor Diagnostic Software & Communication Adapter NOTE: The following Dyna-Doctor Guide will help you Connect, Activate and Record using Dyna-Doctor. Not all features of the Software will be shown.

- Dyna-Doctor allows the technician to see a large amount of data all in one place. No need to put gauges on the outdoor unit or take a temperature at the coil inlet/outlet and much more.

[Page 63](#) Toshiba Carrier Dyna-Doctor Toshiba Carrier MCY/MMY VRF Dyna-Doctor Diagnostic Software & Communication Adapter What's in the Box USB Cable Three connector cables Dyna-Doctor Communication Adapter Serial cable, not used at this time Software CD Three User Manuals (20+ languages)

[Page 64](#) Toshiba Carrier Dyna-Doctor Windows based PC only Toshiba Carrier MCY/MMY VRF Dyna-Doctor Diagnostic Software • Load Dyna-Doctor software on Windows computer/laptop to be used. • Use the included CD or contact CE Tech Support for the latest version of software.

[Page 65](#) Toshiba Carrier Dyna-Doctor Activation Activating Dyna-Doctor Software 1. Start "Dyna-Doctor" and click on the message which says "The expiration date for use remains XX days. Please execute license authentication" to display the license authentication screen.

[Page 66](#) Toshiba Carrier Dyna-Doctor Activation Activating Dyna-Doctor Software (cont.) 2. Select "Creation of License Information" and click the "Next" button. 3. If you agree to processing of your personal data by Toshiba Carrier Corporation in accordance with the Privacy Notice, click the "YES" button.

[Page 67](#) Toshiba Carrier Dyna-Doctor Activation Activating Dyna-Doctor Software (cont.) 4. Fill in the necessary sections (*) and click the "Next" button. 5. To save the created license information, enter a file name and click the "Save" button. File location defaulted to save in Document folder or select another location/folder instead.

[Page 68](#) 6. Attach the saved license information file to a new email and send. When the license is authenticated, an authentication email with an attached authenticated license information file will be sent from Tcc-dynadoctor@ml.toshiba.co.jp Use the following format for the request email: To: Tcc-dynadoctor@ml.toshiba.co.jp...

[Page 69](#) Toshiba Carrier Dyna-Doctor Activation Activating Dyna-Doctor Software (cont.) 7. When email response is received. Copy the new license file to Documents of other location. Make sure you make note of where it is copied. cne.techservice@carrierenterprise.com...

[Page 70](#) Toshiba Carrier Dyna-Doctor Activation Activating Dyna-Doctor Software (cont.) 8. Start "Dyna-Doctor" and click on the message which says "The expiration date for use remains XX days. Please execute license authentication" to display the license authentication screen. 9. Select "Registration of License Information" and click the "Next" button.

[Page 71](#) Toshiba Carrier Dyna-Doctor Activation Activating Dyna-Doctor Software (end) 10. Select the authenticated license information file and click the "Regist" button. If the license authentication is successful, the following message is displayed. The software is now activated.

[Page 72](#) Toshiba Carrier Dyna-Doctor Connecting Toshiba Carrier MCY/MMY VRF Dyna-Doctor Communication Adapter Connecting Adapter/Cables: • Select cable "B" for all 1PH Heat Pumps • Select cable "C" for 3PH Heat Pumps & all Heat Recovery Systems • A small flat screwdriver is required to open the communication adapter • ...

[Page 73](#) Toshiba Carrier Dyna-Doctor Connecting Toshiba Carrier MCY/MMY VRF Dyna-Doctor Communication Adapter Connecting Adapter/Cables (cont.): • Leave all DIP switches in the OFF position • Close cover CN101 Connect Cable "B or C" here CN1 (underneath) connection not used CN102 connection not used...

[Page 74](#) Toshiba Carrier Dyna-Doctor Connecting Toshiba Carrier MCY/MMY VRF Dyna-Doctor Communication Adapter Connecting Adapter/Cables (cont.): • Plug Mini-USB end into Communication Adapter • Plug USB end into computer • Turn VRF system OFF at outdoor unit's

disconnect • Plug Cable “B or C” (depending on ODU type) into CN800 on Main Interface PCB
•...

[Page 75](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software • Start Dyna-Doctor software • Select the Outdoor Unit connected 1PH Heat Pumps Older Model – 3PH Heat Pumps Older Model – 1PH & 3PH Heat Recovery Current Model – 3PH Heat Pump Current Model –...

[Page 76](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software • Start Dyna-Doctor software • Select the Outdoor Unit connected 1PH Heat Pumps Older Model – 3PH Heat Pumps Older Model – 1PH & 3PH Heat Recovery Current Model – 3PH Heat Pump Current Model –...

[Page 77](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) • After selecting the type of system, click “OK” • Next Click on “COM Setting”...

[Page 78](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) • After “COM Setting”, click the drop down for Port Setting and select the port Dyna-Doctor is connected to (USB Port). • If you do not know the Port# (COM#), you can try each one until communication is established or see next page.

[Page 79](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) How to find COM Port ID # • Right click your mouse on the Windows Button • Select “Device Manager” • Scroll if needed and expand “Ports (COM & LPT)” • In this case Dyna-Doctor is using COM4 Tech1 •...

[Page 80](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Select the COM Port that was identified and click “Set”, after 15 to 30 seconds a message will appear and next a new “System Configuration Diagram” window will automatically open. Length of time depends on...

[Page 81](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Once this window opens you have successfully connected to the system. Immediately you will see the status of each fan coil as well as some outdoor unit information. Unit Address IDU Type...

[Page 82](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) On the first time you open Dyna-Doctor we recommend you select the desired units of measurements. They do not come defaulted to the common units used in the United States and Canada.

[Page 83](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Before you start reviewing data and system operation we recommend you start recording the data file. This way you can use it in the future for a comparison. 1. Click “File” then “Save”...

[Page 84](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) 3. Select the file sampling rate, typical 4. Finally click “Set” settings are 30 sec to 5 min. In the bottom left corner you should see “Saving”...

[Page 85](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) The Record No. (number) is how many data sets (sampling times) have been saved. You can use the scroll buttons to look back while the data is being saved. The total time record is shown as well as date/time each data set was taken.

[Page 86](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) System Configuration Diagram window The “System Configuration Diagram (Communication)” can be used to check the indoor/outdoor unit connection or operation status. The “System Configuration Diagram (Refrigeration Cycle)” tab in the system configuration diagram Select “Refrigerant Cycle Diagram (System Data)”...

[Page 87](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) System Configuration Diagram (Refrigeration Cycle) window • The “Switch” button will toggle between the component’s value and it’s name. • Use the scroll arrows (located bottom

right) to cycle through the indoor units.

[Page 88](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) System Configuration Diagram (Refrigeration Cycle) window • When the system is operating, the diagram will tell you status, temperatures and pressure values. • The indoor unit values: PMV, fan, mode, temperature values (coil split) can be seen.

[Page 89](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) System Configuration Diagram (System Data) window • The view is defaulted to “Auto” mode the indoor unit values change once a second. • If “Fixed” is selected mode the unit being...

[Page 90](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) List of System (Error) Codes • Go to “Menu”, then click “List System Codes” • Check Codes are broken down by Operating Element, Determining Method and what to Check.

[Page 91](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Initiating Test Operation • Select “Action” then “ON/OFF control”...

[Page 92](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Initiating Test Operation • If recording has not been started, we recommend starting it before the test. • Click “Test operation”. Within 5 to 20 seconds the IDU’s status will change and the test will start.

[Page 93](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) “Cooling”, “Heating” and “Fan” mode can also be selected from this window. “Mode store” & “Mode re-store” can be used to first clicking “Mode store” prior to you making any changes to the operation using Dyna-Doctor.

[Page 94](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) List Data - System Data (2 views) View 1 - Outdoor Units Outdoor data is on the left, Indoor data is in the middle and System data is on the right.

[Page 95](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) List Data - System Data (2 views) View 1 - Check (Error) Code If Check Code is displayed, click on the code to bring up more detailed information on error. E-03...

[Page 96](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) List Data - System Data (2 views) View 2 - Indoor Units Detailed operational data can be seen for each indoor unit. Scroll to the right for more.

[Page 97](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) List Data - System Data (2 views) P-10 View 2 - Check (Error) Code If Check Code is displayed, click on the code to bring up more detailed information on error.

[Page 98](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) List Data - System Data (2 views) View 2 - Flow Selector Box Values If Heat Recovery system, operational data can be seen for the Flow Selector Units. Scroll window to the right for this...

[Page 99](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) List Data - System Data (2 views) View 2 - Flow Selector Box Values Use the diagram and table from the Factory Service Manual to help trace and understand refrigerant flow.

[Page 100](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Graphing Data Using a graph to see the data trends can be very useful to spot irregularities in the equipment operation. • Select “Graph” then “Outdoor Unit - System data”...

[Page 101](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Graphing Data • Now select the data points you wish to see. Data points can be selected for each outdoor unit in the system up to a four- module system.

[Page 102](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software

(cont.) Graphing Data • When viewing a system live, the data points update based on what you selected. • When viewing a recording of a system, data only updates when manually scrolling...

[Page 103](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Graphing Data The same can be done for the Indoor Units. • Select “Graph” then “Indoor Unit”...

[Page 104](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Graphing Data • Now select the Indoor Unit and the data points you wish to see. • Not all Graph Contents can be seen at one time. • Cycle Data and Control Data...

[Page 105](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Indoor Unit - Cycle Data and Control Data...

[Page 106](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Indoor Unit Comparison Data 1 PMV Opening Status • If you want to compare two or more Indoor Unit’s PMVs, select the ones you want to compare and then select “Indoor Comparison Data 1”.

[Page 107](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Indoor Unit Comparison Data 1 PMV Opening Status...

[Page 108](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (cont.) Indoor Unit Comparison Data 2 Suction Temp, Relative Ability • If you want to compare two or more Indoor Unit’s Suction Temp, Relative Ability (capacity), select the ones you want to compare and then select “Indoor Comparison...”

[Page 109](#) Toshiba Carrier Dyna-Doctor Software Navigation Navigating Dyna-Doctor Software (end) Indoor Unit Comparison Data 2 Suction Temp, Relative Ability...

[Page 110](#) Toshiba Carrier Dyna-Doctor Toshiba Carrier MCY/MMY VRF Dyna-Doctor Diagnostic Software & Communication Adapter Important items to remember about Dyna-Doctor • Dyna-Doctor will not diagnose the system for you. The Technician needs to review the data and make determinations based on findings.

[Page 111](#) File Creation Software Toshiba Carrier’s Touchscreen and BACnet devices can only used after a file is created and uploaded using the “Setting File Creation Software”. To obtain a copy of the software please contact your Sales Representative or CE Tech Support.

[Page 112](#) File Creation Software 1. Install the software on the laptop and confirm the below screen appears when the program is started. 2. Once open, select “New” We recommend saving your file as you work on it. The final will need to be saved prior to uploading to the device.

[Page 113](#) File Creation Software 2. A second window opens and lists the default value Touchscreen is normally shown. If what is listed is not correct, click the down drop and select the correct device.

[Page 114](#) File Creation Software 3. Once selected, click “OK”. There will be a slight pause and a new window will open. Select One Touch Screen Controller BMS-CT5120UL USA/Can Touchscreen Touch Screen Controller (CT128series) NOT Used NOT Used Smart BMS Manager BMS-SM1280HTLUL USA/Can Smart Manager BACnet BMS-IFBN640TLUL...

[Page 115](#) File Creation Software 4. Depending on the control selected, one of the following two screen will appear. Both have System and Server / Interface tabs. The other non-common tabs are control specific. Model shown at bottom of screen...

[Page 116](#) File Creation Software 5. Details of each tab will vary by controller as well. Fill in or change fields related to your system/application. 6. Continue to Server / Interface tab. Not all items can be shown, scroll down for more...

[Page 117](#) File Creation Software 7. The Server tab is where the Static IP address and other

network values are entered. Enter the IP, Subnet Mask & Default Gateway (if provided)

[Page 118](#) File Creation Software 8. BACnet is done. The third tab is not used. For BACnet installations go to step 18, for Touchscreen continue to Outdoor tab.

[Page 119](#) File Creation Software 9. First you will add the Outdoor unit(s), Select "Operation" then "Outdoor Unit" then "New"...

[Page 120](#) File Creation Software 10. Double click in the Outdoor Unit box, a second window will appear, select the outdoor unit.

[Page 121](#) File Creation Software 11. If system has multiple modules, the software will self populate the required models.

[Page 122](#) File Creation Software 12. Add all systems, be sure to set Line address for each number 1 unit.

[Page 123](#) File Creation Software 13. When all ODU's are entered go to the Zone tab. This optional setting will divide up the IDU's on the Touchscreen's display. Names such as Area or Floor 1, Floor 2 and so on, or pick another. Click "Operation"...

[Page 124](#) File Creation Software 14. Enter the Indoor units: "Operation" then "Indoor Unit" then "New"...

[Page 125](#) File Creation Software 15. Enter the Indoor units: "Operation" then "Indoor Unit" then "New" Double click in the model box and a second window appears, select the correct indoor unit.

[Page 126](#) File Creation Software 16. Make sure to enter all other applicable information: Line Address, Indoor Unit Address and any of the drop downs for the Zones that might have been set up.

[Page 127](#) File Creation Software 17. Once complete, name and save the file. 18. Next change the IP of your computer to connect to the Touchscreen or BACnet so file can be uploaded. Change laptop IP to: Touchscreen - 192.168.2.70 BACnet - 192.168.1.90 This will allow the laptop to connect to the device.

[Page 128](#) File Creation Software 19. To Upload file, click "File" then "Upload"...

[Page 129](#) File Creation Software 20. Select file 21. Change the IP and add Default Gateway if available. 22. After above are selected and the laptop is connected to the powered up device this button will be active. Once it is click to upload software file.

[Page 130](#) File Creation Software 23. A Progress bar will appear and help complete the upload. Progress bar Do not disconnect power to the device during upload. 24. When complete, exit out and disconnect laptop. Recycle power to the device. Devices should be connected to BMS via the LAN port on each.

[Page 131](#) How to change your IP Address 1. How to change laptop's network adapter's IP address • Not all computers are the same, yours may differ slightly from the below instructions. Open the Network Connections window. 3. Right click on adapter for Local Connection. Click on Properties.

[Page 132](#) How to change your IP Address 4. Double click on TCP/IPv4...

[Page 133](#) How to change your IP Address (end) 5. Select "Use the following IP address" • Enter the IP needed, then click within the Subnet Mask fields, these fields should auto populate with 255.255.255.0 if not enter manually. • Click "OK" and "OK" again to apply changes and exit. 192 .168 .1.

[Page 134](#) This guide was made by Carrier Northeast Technical Services Department.

Information within is subject to change...

This manual is also suitable for:

[Carrier mcy-map0487hs-ulCarrier mcy-map0607hs-ul](#)