Intelligent Equipment® for Air-Cooled and Centrifugal Chillers, and Packaged Rooftops: Magnitude®, Pathfinder®, Trailblazer®, Maverick® II, Rebel®, Rebel Applied™, RoofPak®

Models: AGZ-D, AGZ-E, AMZ, AWS, AWV, DPS, DPSA, MPS, RAH, RDS, RDT, RFS, RPR, RPS, WSC, WDC, WCC, and WMC
# Table of Contents

- **Introduction** .................................................. 3
- **Revision History** ............................................. 3
- **Reference Documents** ........................................ 3
- **Limited Warranty** ............................................. 3
- **Product Description** ......................................... 3
- **Hazard Identification Messages** ............................ 3
- **Recognize Safety Symbols, Words and Labels** ........... 3

## Set Up

- **Initial Login** .................................................. 4
- **User Profile Menu** ............................................ 6
- **Profile** ......................................................... 6
- **Settings** ....................................................... 6
- **Help Menu** .................................................... 7
- **Log Out** ......................................................... 7
- **System Messages** .............................................. 8
- **Administration Menu** ......................................... 9
- **Attributes Display Settings** .................................. 9
- **Access Management** .......................................... 10

## Reports Menu

- **Overview Screen** ............................................. 12
- **Map View** ..................................................... 12
- **List View** ..................................................... 15
- **Buildings List** ................................................. 17

## Chillers

- **Unit Dashboard – Chillers** .................................. 19
- **Change Time Zone (A)** ....................................... 19
- **Refresh (B)** ..................................................... 19
- **Subscription Status (D)** ..................................... 20

## Overview Screen

- **Upcoming and Past Due Maintenance** ................. 21
- **Overview Info** ................................................ 22
- **IE Documents** ................................................ 22
- **Equipment Documents** ....................................... 22
- **Upload Documents** .......................................... 22
- **Unit Overview** ............................................... 22
- **About Chiller** ................................................. 22
- **Power Usage** .................................................. 22

## Circuit Screen (Screw & Scroll Chillers)

- **Status** ......................................................... 23
- **Compressors** .................................................. 23
- **Compressor Health** ......................................... 23
- **Condenser (AWV only)** ...................................... 23
- **Pressures** ..................................................... 23
- **Evaporator Screen (Screw & Scroll Chillers)** ....... 24
- **Evaporator Screen (Centrifugal Chillers)** .......... 25
- **Compressors Screen (Centrifugal Chillers)** ....... 26
- **Condenser Screen (Centrifugal Chillers)** .......... 27
- **Expansion Screen (Centrifugal Chillers)** .......... 28
- **Tower Screen (Centrifugal Chillers)** ................. 29
- **Maintenance Screen** ........................................ 30
- **Maintenance Info** ........................................... 31
- **Log Maintenance** ............................................. 33
- **Commission/Recommission** ................................ 34
- **Controls Screen** ............................................. 36
- **Network Screen** .............................................. 36
- **Reports Screen** ................................................ 37
- **Trends** ........................................................ 37
- **Export Data** ................................................... 38
- **Maintenance Report** ......................................... 40
- **300 Point Inspection** ....................................... 40
- **Service Logs** ................................................ 41

## Rooftop Systems

- **Unit Dashboard – Rooftops** ............................... 42
- **Current Schedule (A)** ....................................... 42
- **Change Schedule (B)** ....................................... 42
- **Alarm Log (D)** ................................................ 42

## Subscription Status (E)

- **Change Time Zone (F)** ..................................... 42

## Overview Screen

- **Upcoming Maintenance** ...................................... 45
- **Overview Info** ................................................ 45
- **IE Documents** ................................................ 45
- **Equipment Documents** ....................................... 45
- **Upload Documents** .......................................... 45
- **Unit Overview** ............................................... 45
- **Economizer** .................................................... 45
- **Heating** ........................................................ 45
- **Power Usage** .................................................. 45

## Air Screen

- **Fan** ............................................................ 48
- **100% Econ.** .................................................... 48
- **Unit Overview** ............................................... 48
- **Sensor Setpoints** ............................................ 48
- **Measured Calculated** ....................................... 48
- **Operating Hours** ............................................. 48
- **Refrigeration or Cooling Screen** ....................... 49
- **Unit Overview** ............................................... 49
- **Sensors Setpoints** .......................................... 49
- **Operating Hours** ............................................. 49

## Supplemental Heat Screen

- **Unit Overview** ............................................... 50
- **Operating Hours** ............................................. 50
- **Maintenance Screen** ......................................... 51
- **Maintenance Info** ........................................... 51
- **Log Maintenance** ............................................. 53
- **Commission/Recommission** ............................... 54
- **Auto Commissioning Tests** ............................... 55

## Controls Screen

- **Setpoints Override** ......................................... 56
- **Setpoints Screen** ............................................ 56
- **Operations Screen** ........................................... 56
- **Capacity** ....................................................... 56
- **Unit Overview** ............................................... 56
- **Sensor Setpoints** ............................................ 56

## Reports Screen

- **Trends** ........................................................ 59
- **Export Data** ................................................... 59
- **Maintenance Report** ......................................... 62
- **Service Logs** ................................................ 63

## Building

- **Building Dashboards** ....................................... 64
- **Building Status** .............................................. 65
- **Setup Meters** ................................................ 66
- **Run Time** ....................................................... 69
- **Energy Usage** ................................................ 69
- **Building Info** ................................................ 70
- **Weather** ....................................................... 70
- **Sustainability Index** ....................................... 71
- **ENERGY STAR®** ............................................. 71
- **Resources** ..................................................... 72
- **Energy Cost** ................................................... 72
- **Maintenance** .................................................. 73
- **Alarm Status** .................................................. 74
- **Comfort Index** .............................................. 75
- **Equipment Metrics** ......................................... 76
- **Financial Summary** ......................................... 76
- **Performance Index** ......................................... 77
- **Thermostat** .................................................... 77
Introduction

Revision History

<table>
<thead>
<tr>
<th>Literature Number</th>
<th>Revision Number</th>
<th>Release Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>OM 1241-3</td>
<td></td>
<td>March 2020</td>
<td>General updates, addition of Applied Rebel and Centrifugal chiller models</td>
</tr>
<tr>
<td>OM 1241-2</td>
<td></td>
<td>November 2017</td>
<td>Combines OM 1218 (archived) and OM 1241 content</td>
</tr>
<tr>
<td>OM 1241-1</td>
<td></td>
<td>January 2017</td>
<td>Addition of AWV Pathfinder chiller, addition of UI enhancements/modifications</td>
</tr>
<tr>
<td>OM 1241</td>
<td></td>
<td>June 2015</td>
<td>Initial release</td>
</tr>
</tbody>
</table>

Reference Documents

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Company</th>
<th>Title</th>
<th>Source</th>
</tr>
</thead>
</table>

Limited Warranty

Consult your local Daikin Representative for warranty details. To find your local Daikin Representative, go to www.DaikinApplied.com.

Product Description

The Intelligent Equipment® solution by Daikin provides facility and equipment management, monitoring, control, analysis, and decision-making via a secure, cloud-communicating machine-to-machine gateway that captures, analyzes and delivers building and equipment information, and third party content (i.e., weather, utility, and CRM data), to a user device (smart phone, tablet, etc.) via wireless (cellular, Wi-Fi) or local area network (LAN) connection.

The Intelligent Equipment solution consists of two elements: the hardware components on each unit necessary to deliver power and other data to the cloud, and the Software as a Service (SaaS) subscription necessary for retrieving that information from the cloud. Intelligent Equipment provides real-time power monitoring of individual equipment.

The user can view unit statuses, modes, temperatures, pressures and setpoints, and make adjustments to modes, operation and temperature setpoints. Messages and alarms can be viewed, acknowledged and cleared. User accounts are role-based, and user interaction, including setpoint changes and clearing of alarms, is logged for later reporting. System updates can be delivered automatically from the cloud. Built-in trending tools provide easy access to unit performance history.

Hardware components consist of: one Machine to Machine (M2M) Gateway, one Energy Management Module (EMM), one or two Antenna, and three Current Transformers (CT’s).

Hazard Identification Messages

Recognize Safety Symbols, Words and Labels

The following symbols and labels are used throughout this manual to indicate immediate or potential hazards. It is the owner and installer’s responsibility to read and comply with all safety information and instructions accompanying these symbols. Failure to heed safety information increases the risk of property damage and/or product damage, serious personal injury or death. Improper installation, operation and maintenance can void the warranty.

**CAUTION**

Cautions indicate potentially hazardous situations, which can result in personal injury or equipment damage if not avoided.

Static sensitive components. Can cause equipment damage.

Discharge any static electrical charge by touching the bare metal inside the control panel before performing any service work. Never unplug cables, circuit board terminal blocks, or power plugs while power is applied to the panel.

**WARNING**

Warnings indicate potentially hazardous situations, which can result in property damage, severe personal injury, or death if not avoided.

**DANGER**

Dangers indicate a hazardous situation which will result in death or serious injury if not avoided.

Electric shock hazard. Can cause personal injury or equipment damage.

This equipment must be properly grounded. Connections and service to the MicroTech III Chiller or Rooftop Unit Controller must be performed only by personnel knowledgeable in the operation of the equipment being controlled.

**NOTICE**

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense. Daikin disclaims any liability resulting from any interference or for the correction thereof.
Initial Login

Users are granted access to units in Intelligent Equipment by Administrators. Administrators are generally assigned at the time of the Intelligent Equipment order but can be added at any time by an existing Administrator. Upon initially being given access to one or more Daikin Applied units, the user will receive an e-mail directing him or her to login to the system for the first time (Figure 1). Clicking the link in the e-mail notification brings the user to the user license agreement (Figure 2). The license agreement acceptance check-box can only be checked once the entire acceptance agreement has been viewed by scrolling to the bottom of the pop-up message. After doing this, clicking the 'Accept' button prompts the user to create a password (Figure 3). The password should be entered, then confirmed. Clicking the 'Save' button sets the new password.

NOTE: If using Internet Explorer and it appears as though the Log In button does not work:
- Go to the Tools > Compatibility View settings menu and make sure the Compatibility View is not selected
- If this does not resolve the issue, try another web browser like Chrome

Figure 1: E-Mail Invitation

Dear User,

Welcome to the Daikin Intelligent Equipment® website.

You have been given Standard access to IE System with the following Daikin Equipment available:

1. Address: 13600 INDUSTRIAL PARK, PLYMOUTH, MN, 55441, United States
   Unit Tag: D0S 002
   Serial Number: FB0U1120068

Click this link to access the Daikin Intelligent Equipment® website: http://ie.daikinapplied.com/Account/Initiation/6149356d-e573-4676-8cd7-f4e6cb1166c

Note: The link will expire within 60 days.

For additional information, please, contact our Daikin Intelligent Equipment® Customer Support team at 866-462-7629

Thank you,
Daikin Intelligent Equipment Team
Daikin Applied
866-462-7629
www.DaikinApplied.com

This is a system generated message, we kindly ask you not to reply to this e-mail.

Figure 2: License Agreement

Welcome to Daikin Intelligent Equipment.

You must read and accept the Daikin Intelligent Equipment License Agreement (Agreement) below to use the application.

This is a legal contract between Daikin Applied Americas Inc. d/b/a Daikin Applied ("Daikin Applied") and you ("You" or "User"). Daikin Applied is willing to license User the Daikin Intelligent Equipment Content, which includes, but is not limited to all data, software and information, text, scripts, video, sound, music, graphics and images that are gathered, created, uploaded, transferred or in any manner derived from an "Intel IOT Gateway" (i.e. a node that serves as an entrance to another network containing an Intel processor), a power measurement hardware, or from the services offered by Daikin Applied or its affiliates (hereinafter "Content"). The Content may be provided to User via the "Cloud", "Internet", "LAN", or "Wi-Fi", as part of the Gateway device only upon the condition that you accept all of the terms and conditions contained in this Agreement. By clicking on the "Accept" button, or otherwise accessing or using the Content, User accepts all of the terms and conditions of this Agreement and agrees to be bound by its terms. If User does not accept the terms of this Agreement, User is not permitted to use the Content, and must click the " Cancel" button and is prohibited from using the application.

Gary, I have read and accept the agreement

Accept Cancel

Figure 3: Setting a Password at Initial Login
On only the first login to the Intelligent Equipment user interface, the user is asked to confirm their Account Information (Figure 4). All information should be verified, and modified as necessary. Some fields, noted by a red asterisk, are required, and must have data entered before proceeding. Clicking, 'Confirm', takes the user to the Overview screen (Figure 5).

On subsequent logins, the user should type https://ie.daikinapplied.com into a web browser and press the enter key. After entering login information the user will be taken directly to the Overview screen.

Figure 4: Confirm Account Information

![Account Information Form]

Figure 5: Overview Screen
User Profile Menu
Within the Intelligent Equipment user interface, the User Profile menu will always appear in the upper-right corner of the Intelligent Equipment user interface. Several items appear in this menu (Figure 6), allowing the user to perform specific tasks. Each of these tasks are described in the subsequent section.

Figure 6: Profile Menu

Profile
Selecting ‘Profile’, under the User Profile button, displays Account Information (Figure 7) and allows for changing personal information, address information, organizational information, and passwords. All required parameters are noted with a red asterisk. After making the desired changes, the ‘Save’ button must be clicked before they take effect. A confirmation message appears at the top of the screen to confirm the saved changes. Clicking the ‘Overview’ icon or the ‘Daikin’ logo returns the user to the Overview screen.

Figure 7: Account Information

Settings
Selecting ‘Settings’, under the User Profile menu, allows the user to choose units of measure for the display, create and modify alarm schedules, and create and modify maintenance schedules.

On the ‘Measurement Units’ tab (Figure 8), choose English or Metric units of measure for display within the user interface. Changes do not take effect until the “Save’ button is clicked.

Figure 8: Measurement Units Tab

Selecting the ‘Alarm Schedules’ tab allows the user to set schedules for alarm notification from units. The user can select the default alarm notification settings or create a new schedule. Once the ‘Create New Schedule’ button is clicked, the user chooses a name for the schedule, when each category of alarms will be sent, when unacknowledged active alarms will be escalated to all users, and which units will use the new alarm schedule (Figure 9). After entering the desired information, click ‘Create’.

NOTE: Notification frequency and escalation settings apply to all units using the alarm schedule and to all users with access to the units using the alarm schedule. If a user wishes to not receive alarm notification e-mails for a specific alarm category within an alarm schedule, selecting the ‘Unsubscribe Me’ checkbox will disable notifications for that category. Other users will continue to receive notifications for units using the alarm schedule.

Figure 9: Create New Schedule
Selecting the ‘Maintenance Schedules’ tab allows the user to select the maintenance notification schedule to apply to their units (Figure 10). Maintenance notifications are reminders sent to the user’s email. The user can choose to apply the same schedule to all units or apply different schedules. Once the desired settings are made, clicking the ‘Save’ button applies the changes to the units.

**NOTE:** Unlike alarm notification settings, maintenance notification settings are distinct for each user.

**Help Menu**

Selecting ‘Help Menu’, under the User Profile menu, provides the user access to several IE instructional documents, videos and release notes (Figure 11). These same materials can also be accessed by clicking the Help icon (Figure 12) in the upper-right corner of the Intelligent Equipment user interface.

**Figure 10: Maintenance Schedules**

![Image of Maintenance Schedules]

**Figure 11: IE Help Tabs**

<table>
<thead>
<tr>
<th>IE Help Documents</th>
<th>IE Help Videos</th>
<th>IE Release Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligent Equipment® Included Data Points - RTU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pub Date: 6/6/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chart of RTU Included Data Points in Intelligent Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent Equipment® Included Data Points - AGZ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pub Date: 6/6/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chart of AG2 Included Data Points in Intelligent Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daikin Intelligent Equipment® License Agreement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pub Date: 6/6/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Must read and approve license agreement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to Add Users and Grant Access to Intelligent Equipment®</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pub Date: 6/6/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation on adding and removing users to Intelligent Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to Commission or Recommission Equipment with Intelligent Equipment®</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pub Date: 6/6/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructions for Commissioning or Recommissioning Equipment after Intelligent Equipment is installed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to Update Maintenance Notification Settings with Intelligent Equipment®</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pub Date: 6/6/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to Update Your Maintenance Notification Settings with Intelligent Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to Update Alarm Notification Settings with Intelligent Equipment®</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pub Date: 6/6/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How to Update Your Alarm Notification Settings with Intelligent Equipment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 12: Help Icon**

![Image of Help Icon]

**Log Out**

Selecting ‘Log Out’, under the User Profile menu, logs the user out of the current session and returns to the Intelligent Equipment login page.
System Messages

Clicking the ‘Messages’ button lists the most recent messages and alarms for all units to which the user is assigned (Figure 13). The button itself indicates the number of unread user messages. The user is provided the option to click a link to view the target unit. Additionally, clicking the ‘My Messages’ link at the top of the message list opens the Messages screen, which displays a comprehensive list of all user messages (Figure 14). By default, the list is sorted in time order, with the most recent message at the top of the list. Clicking the category header will resort the list based on that category. Clicking the message ‘Type’ field opens the message in a separate pop-up window (Figure 15). Closing the pop-up message automatically marks the message as read within the message list. Clicking the ‘Overview’ icon or the ‘Daikin’ logo returns the user to the Overview screen.

![Figure 13: Messages](image1)

![Figure 14: Message List](image2)
Administration Menu

The ‘Administration’ menu (Figure 16), which appears to the right of the Overview icon, allows the user to customize the display for a unit and to provide other users with access to units. There are two types of user roles defined within Intelligent Equipment:

- **Standard** – allows access to equipment and buildings without the ability to invite new users, manage other users’ access to equipment, or view building reports.
- **Administrator (Admin)** – allows has Standard level access plus the ability to create new users, assign users to equipment, and view building and operational settings change reports.

Attributes Display Settings

Selecting the ‘Attributes Display Settings’ menu item from the ‘Administration’ menu allows the user to hide specific data points from the user interface and to change the label name for data points that are displayed. The user first selects which unit to edit (Figure 17), then selects the data points to edit. Clicking the ‘Hide’ checkbox hides the item from the user interface but does NOT delete it from the IE database. Entering a value in the ‘Change To’ field (Figure 18) allows the user to change the label as it displays in the user interface. This change does not change the data point in the underlying IE database, only how it is displayed in the user interface. Once all changes are made, clicking the ‘Save’ button applies the changes to the unit. A confirmation message appears at the top of the screen to indicate a successful save operation. To change the label back to the system default, click the ‘X’ to the right of the ‘Change To’ field, then click the ‘Save’ button.

**IMPORTANT NOTE**: Changes to the attribute display settings for a unit apply to all users with access to the unit.
Access Management

Selecting the ‘Access Management’ menu item from the ‘Administration’ menu allows the user to provide other users with access to units. Only users with Admin access have the ‘Access Management’ menu available. Clicking the ‘Access Management’ menu opens the Access Management screen, which lists all units to which the current user has access (Figure 19). To provide a user access to a specific unit from this list, click the ‘Invite User’ button. This displays the ‘Invite User’ screen, which prompts the administrator to enter an e-mail address for the new user (Figure 20). After entering the e-mail address, clicking the search button to the right of the field begins a search for the user within the database. If the user does not exist in the database, a prompt appears asking to add the new user and decide the user’s access level within Intelligent Equipment (Figure 21), Standard or Admin.

On the Assign user screen (Figure 22), the selected user is shown, along with the user’s level of access. For Standard users, the user’s access to writable points must first be chosen. Access to writable points is defined as follows:

- Setpoint – User will be able to edit only Setpoint Attributes
- Configuration – User can edit only Configuration Attributes
- Both – User can edit both Configuration and Setpoint Attributes
- None – User has only read access to Configuration and Setpoint Attributes

For reference, a typical example of a Setpoint Attribute is Leaving Evaporator Water Setpoint on a chiller and a typical example of a Configuration Attribute is the Low OAT Lockout parameter on a chiller.

Next, the desired units must be chosen by clicking the check box to the left of the unit tag. Temporary unit access can be provided by clicking the ‘Temporary’ checkbox for the unit, then entering start and end dates. The user’s unit access will expire automatically following the end date.

Once all units have been selected, clicking the ‘Submit’ button finalizes the process. A confirmation message appears at the top of the screen and the user will receive an email notification of the newly granted access.

![Figure 19: Access Management Menu](image1)

<table>
<thead>
<tr>
<th>Unit Tag</th>
<th>Serial Number</th>
<th>Building Name</th>
<th>Building Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center East, M17</td>
<td>FBOU60000823</td>
<td>Fbo Addition Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
<tr>
<td>DH005</td>
<td>FBOU710591237</td>
<td>Fbo Addition Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
<tr>
<td>DH007</td>
<td>FBOU510591242</td>
<td>Fbo Addition Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
<tr>
<td>North East, M19</td>
<td>FBOU66000833</td>
<td>Fbo Addition Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
<tr>
<td>West, M18</td>
<td>FBOU76000802</td>
<td>Fbo Addition Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
</tbody>
</table>

![Figure 20: New User Email](image2)

![Figure 21: User Access Level](image3)
**Figure 22: Assign User Screen**

User: J - Daikin Applied  
john.doe@daikinapplied.com

Access to Writable Points: Setpoint

Access to Units

<table>
<thead>
<tr>
<th>User Assigned</th>
<th>Temporary</th>
<th>Start Date</th>
<th>End Date</th>
<th>Unit Tag</th>
<th>Serial Number</th>
<th>Building Name</th>
<th>Building Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Center East, M17</td>
<td>FBOU860600823</td>
<td>Fbo Addiction Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DH005</td>
<td>FBOU710501237</td>
<td>Fbo Addiction Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DH007</td>
<td>FBOU510501242</td>
<td>Fbo Addiction Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>North East, M19</td>
<td>FBOU860600883</td>
<td>Fbo Addition Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>West, M19</td>
<td>FBOU760600802</td>
<td>Fbo Addition Rebel</td>
<td>300 24TH ST NW, FARIBAULT, MN, 55021, United States</td>
</tr>
</tbody>
</table>
Reports Menu

Selecting ‘Operational Activity and Settings Change’ from the ‘Reports’ menu opens the Operational Activity and Settings Change Report screen (Figure 23). From this screen, the user can filter the display by user name, unit, action (such as login, setpoint changes, etc.), and site. The user can also filter by a specific date range, using the ‘Time Period’ configuration box. Once all filters are applied, clicking the ‘Export’ button generates the report in Comma-Separated Values (.csv) format.

Figure 23: Operational Activity and Settings Change Report Screen

Overview Screen

Map View

After logging into the Intelligent Equipment website, the user interface will initially display the Overview screen (Figure 24 on page 13), which is a listing of all buildings having units associated with the user. By default, a Map View is displayed, showing the physical location of all user-associated buildings (Figure 25 on page 13). Each dot indicates a building and the status of the equipment in the building. If the user has access to more than one building within a general area, the dot may contain a number representing the total of user-assigned buildings for that area (Figure 26 on page 14). A key of the statuses is displayed at the bottom of the map (Figure 27 on page 14). A green dot indicates no units in the building(s) have alarms. A yellow dot indicates that one or more units in the in the building(s) have warning alarms. An orange dot indicates that one or more units in the in the building(s) have problem alarms. A red dot indicates that one or more units in the in the building(s) have fault alarms. A gray dot indicates that one or more units in the in the building(s) has an inactive subscription (for example, due to an expiration).

Placing the cursor over an individual dot on the map will display a pop-up with information for the building and status for the units associated to the building (Figure 28 on page 14).

NOTE: The informational pop-up will only display if the zoom is set at a level capable of distinguishing between multiple user-associated buildings. Clicking a unit’s tag name in this pop-up will open the ‘Unit Dashboard’ for the unit, while clicking the building name will open the ‘Building Dashboard’. Both dashboards are described in subsequent sections of this document. From any screen within the Intelligent Equipment user interface, clicking the ‘Overview’ icon or the ‘Daikin’ logo returns the user to the Overview screen.
By default, the map is scaled to display the dots for all user-associated buildings. Thus, the initial map scaling will vary between users depending on the number and location of their respective buildings. To navigate to a specific location on the map using a pc, click and hold on the map and drag it to the desired location. To zoom into a specific location on the map using a pc, double-click the desired location until the zoom reaches the desired scaling. To reset the zoom to full size, click the ‘Overview’ button or Daikin logo in the upper-left corner of the browser window (Figure 29 on page 14). Alternatively, the scroll-wheel of the pc’s mouse, if available, can also be used to zoom in and out within the map. To navigate to a specific location on a mobile device or touchscreen, place two fingers on the screen and drag them to the desired location (Figure 30 on page 14). To zoom to a specific location on a mobile device or touchscreen, place two fingers on the screen near the desired location and spread the fingers apart to zoom in on the map or pull them together to zoom out on the map.

Figure 24: Overview Screen

Figure 25: User-Associated Buildings
Figure 26: User-Assigned Building in an Area

Figure 27: Key Status Data

Figure 28: Unit Status for Assigned Building

Figure 29: Overview Icon

Figure 30: Touch Screen Navigation
List View

By clicking the ‘List’ button in the upper-right corner of the map (Figure 31), the Overview screen can also be displayed in List View (Figure 32), which shows all user-assigned units in a list format. In this view, units are grouped by type and identified by unit tag and building. In addition, several key operational indicators are displayed for each unit. Placing the cursor over the alarm icon to the left of the unit tag will display a message regarding any current alarms (Figure 33 on page 16). Clicking a unit’s tag name will open the Unit Dashboard for the unit, while clicking the building name will open the Building Dashboard. Both dashboards are described in subsequent sections of this document. Any units with expired subscriptions are displayed in red with a message indicating the subscription is inactive (Figure 34 on page 16). No operational data is displayed for units with expired subscriptions. The user can return to Map View by clicking the ‘Map’ button.

If any units associated with the user have expired subscriptions, a message appears above the equipment list (Figure 35 on page 16). Clicking the ‘X’ within the message closes the message until the next time the user logs into the user interface. Clicking the ‘Show Details’ link within the message expands the message to show a list of all units with an impending subscription expiration, along with a contact phone number for technical support. Clicking the ‘Renewal Request’ link opens the ‘Request Subscription Renewal’ message window (Figure 36 on page 16). The user selects the units to renew, enters a contact email, contact phone, and any desired comments. Clicking the ‘Send’ button within the message window directs a message to the Intelligent Equipment support team. The user will subsequently be contacted with instructions for subscription renewal. Clicking the ‘Cancel’ button closes the message window without sending a renewal request.

If any units associated with the user have impending subscription expirations (within 90 days), a message appears above the equipment list (Figure 37 on page 16). Clicking the ‘X’ within the message closes the message until the next time the user logs into the user interface. Clicking the ‘Show Details’ link within the message expands the message to show a list of all units with an impending subscription expiration, along with a contact phone number for technical support. Clicking the ‘Renewal Request’ link opens the ‘Request Subscription Renewal’ message window (Figure 38 on page 16). The user selects the units to renew, enters a contact email, contact phone, and any desired comments. Clicking the ‘Send’ button within the message window directs a message to the Intelligent Equipment support team. The user will subsequently be contacted with instructions for subscription renewal. Clicking the ‘Cancel’ button closes the message window without sending a renewal request.

Figure 31: List View Button

Figure 32: List View
Figure 33: Current Alarms

Figure 34: Subscription Status

Figure 35: Subscription Expired Prompt

Figure 36: Renewal Request

Figure 37: Subscription Near Expiration Warning

Figure 38: Request Subscription Renewal
Buildings List

By default, the user interface displays a ‘Buildings List’ to the left side of the Overview screen (Figure 39). This is a listing of all buildings having units associated with the user. Unlike the List View, the Buildings List has all available units grouped by building name. Clicking the arrow to the right of the building name expands the list to display all units (Figure 40), while clicking it a second time collapses the list (Figure 41). Specific buildings and units can be quickly located in the Building List using the search icon in the list header (Figure 42). Clicking the search icon opens a search field. Typing keyword text in the search field limits the list to buildings and units meeting the search parameters (Figure 43). This is especially helpful if the user has access to many buildings and units. Clicking the ‘X’ to the left of the search field closes the search function. Clicking a unit’s tag name in the Buildings List will open the Unit Dashboard for the unit, while clicking the building name will open the Building Dashboard. Both dashboards are described in subsequent sections of this document. From any screen within the Intelligent Equipment user interface, clicking the ‘Overview’ icon or the ‘Daikin’ logo returns the user to the Overview screen.

If desired, clicking the Buildings List button (Figure 44 on page 18) in the upper-left corner of the user interface hides the Buildings List (Figure 45 on page 18). Clicking the button a second time displays the Buildings List.

Figure 39: Overview Screen

Figure 40: Building Name

Figure 41: Collapsed Menu

Figure 42: Search Icon

Figure 43: Search Parameters
**Figure 44: Building List Button**

![Building List Button](image1)

**Figure 45: Building List Hidden**

![Building List Hidden](image2)
Unit Dashboard – Chillers

The ‘Unit Dashboard’ (Figure 46) allows the user to view current unit status, review the unit alarm log, modify unit setpoints and control, and monitor unit live data. The Unit Dashboard is accessed by clicking the unit tag in the Map View, List View or Buildings List. Screen content is driven by button selections on the left of the User Interface (UI). The initial screen provides a comprehensive unit overview, with other buttons allowing the user to choose information specific to the condenser circuits, evaporator, maintenance recommendations, and unit controls. Not all button categories apply to all units.

Figure 46: Unit Dashboard

Change Time Zone (A)

Clicking the ‘Change Time Zone’ button allows the user to select the appropriate Time Zone for the unit, and whether to have the time automatically adjust for Daylight Savings (Figure 47).

Refresh (B)

Clicking the ‘Refresh’ button reloads the current display with updated data.

Figure 47: Change Time Zone
Alarm Log (C)

The 'Alarm Log' header (Figure 46 on page 19) lists the highest priority active alarm within each category, Warnings, Problems, and Faults. Warning alarms are displayed with a yellow icon, problem alarms are displayed with an orange icon and faults are displayed with a red icon. If there are no active alarms, the icon will be green. Clicking the ‘Alarm Log’ button allows the user to review a list of active and recent highest priority unit alarms (Figure 48). Each alarm provides a Date, User Name (if it was acknowledged or cleared), Alarm Type, and Alarm Status. If an alarm is no longer active and has been acknowledged, its status will show as, “Clear”. If an alarm is still active, but has been acknowledged, its status should read, “Acknowledged”. Clicking the ‘Unit Details’ link returns the user to the Unit Dashboard.

Clicking the ‘Acknowledge’ button acknowledges whichever alarm is currently selected in the alarm list. Clicking the ‘Send Message’ button allows the user to send an e-mail notification to one or more e-mail addresses (Figure 49). In addition, clicking the ‘Change’ button for Alarm Escalation Rules allows the user to select a set of rules described in the “User Profile” section of this document.

Subscription Status (D)

This section indicates the current subscription status for the unit (Figure 46 on page 19).
Overview Screen

With the ‘Overview’ button selected, a unit graphic is displayed (Figure 50). The user can monitor live unit status, temperatures, capacities, power, and maintenance.

NOTE: The unit graphics are specific to the unit being viewed, so may differ from the images shown in this manual.

Figure 50: Overview Screen
Upcoming and Past Due Maintenance
A description of ‘Upcoming and Past Due Maintenance’ is displayed beneath the unit graphic.

Overview Info
The ‘Overview Info’ button is selected by default and displays the unit graphic.

IE Documents
Clicking the ‘IE Documents’ button provides a list of manuals for the IE hardware and software, along with hyperlinks to access these documents in the cloud.

Equipment Documents
Clicking the ‘Equipment Documents’ button provides a list of manuals specific to the unit model, along with hyperlinks to access those documents in the cloud (Figure 51).

Upload Documents
Clicking the ‘Upload Documents’ button allows the user to upload documents, such as image and text files, and save them to the cloud.

Unit Overview
Clicking the ‘Unit Overview’ header expands a list of current unit parameters, including Chiller Status, Chiller Capacity, Setpoints, and Evaporator Temperatures. Clicking the header a second time will collapse the list.

About Chiller
Clicking the ‘About Chiller’ header provides the Unit GO (General Order) Number and Serial Number. Clicking the header a second time will collapse the list.

Power Usage
Clicking the ‘Power Usage’ header expands a list of current power-related operating parameters, including Meter Power, and Hourly, Daily and Weekly Power usage. Clicking the header a second time will collapse the list.

Figure 51: Document List
Circuit Screen (Screw & Scroll Chillers)

With a 'Circuit' button selected (Figure 52), a unit graphic is displayed. The user can monitor live circuit and compressor status, temperatures, and pressures.

Figure 52: Circuit 1 Screen

---

**Status**

Clicking the ‘Status’ header expands a list of several current circuit operating parameters, including Circuit Mode, Circuit Status, Fan Stage, VFD output, and Circuit Capacity. Clicking the header a second time will collapse the list.

**Compressors**

Clicking the ‘Compressors’ header expands a list of several current compressor operating parameters, including Status, Run Hours, Starts, Cycle Time, Last Start and Last Stop for all compressors on the circuit. Clicking the header a second time will collapse the list.

**Compressor Health**

Clicking the ‘Compressor Health’ header displays the ratio of hours to start for all compressors on the circuit. These ratios are displayed for weekly, monthly, yearly and lifetime increments. Clicking the header a second time will collapse the list.

**Condenser (AWV only)**

Clicking the ‘Condenser’ header displays key indicators related to the condenser fan control on an AWV chiller. Clicking the header a second time will collapse the list.

**Temperatures**

Clicking the ‘Temperatures’ header expands a list of current temperatures for the circuit, including Suction Temperature, Approach Temperature, Saturated Refrigerant Temperature, and Superheat Temperature. Clicking the header a second time will collapse the list.

**Pressures**

Clicking the ‘Pressures’ header displays the current Evaporator and Condenser refrigerant pressures for Circuit 1. Clicking the header a second time will collapse the list.
Evaporator Screen (Screw & Scroll Chillers)

With the ‘Evaporator’ button selected, a unit graphic is displayed (Figure 53), and the user can monitor evaporator pump status and run hours.

Pumps

Clicking the ‘Pumps’ header displays the status and run hours for Evaporator Pumps 1 and 2, along with the current setting of the evaporator recirculation timer.

Figure 53: Evaporator Screen
Evaporator Screen (Centrifugal Chillers)

With the ‘Evaporator’ button selected, a unit graphic is displayed (Figure 54), and the user can monitor evaporator, liquid line, suction, and economizer temperatures and pressures.

Unit Overview

Clicking the ‘Unit Overview’ header expands a list of current unit parameters, including Chiller Status, Evaporator and Condenser Temperatures, and Compressor Temperatures and Pressures. Clicking the header a second time will collapse the list.

Water

Clicking the ‘Water’ header expands a list of current evaporator parameters, including Entering and Leaving Water Temperatures, and Evaporator Status. Clicking the header a second time will collapse the list.

Refrigerant

Clicking the ‘Refrigerant’ header expands a list of current refrigerant parameters, including Liquid Line Temperatures, Subcooling, and Compressor Suction Temperatures and Pressures. Clicking the header a second time will collapse the list.

Economizer

Clicking the ‘Economizer’ header expands a list of current economizer parameters, including Economizer Temperatures and Pressures, Economizer Valve Position, and Inlet Guide Vane Position. Clicking the header a second time will collapse the list.

Figure 54: Evaporator Screen (Centrifugal Chillers)
Compressors Screen (Centrifugal Chillers)

With the ‘Compressor’ button selected, a unit graphic is displayed (Figure 55), and the user can monitor compressor starts, run hours, power information, temperatures and pressures.

Unit Overview

Clicking the ‘Unit Overview’ header expands a list of current unit parameters, including Chiller Status, Evaporator and Condenser Temperatures, and Compressor Temperatures and Pressures. Clicking the header a second time will collapse the list.

Analog

Clicking the ‘Analog’ header expands a list of current analog compressor parameters, including Compressor Temperatures and Pressures, Compressor Starts, Run Hours and RPMs, and Valve Positions. Clicking the header a second time will collapse the list.

Power

Clicking the ‘Power’ header expands a list of current compressor power parameters, including Voltage, Current, Power and Kilowatt Hours. Clicking the header a second time will collapse the list.

Economizer

Clicking the ‘Economizer’ header expands a list of current economizer parameters, including Economizer Temperatures and Pressures, Economizer Valve Position, and Inlet Guide Vane Position. Clicking the header a second time will collapse the list.

Figure 55: Compressor Screen (Centrifugal Chillers)
Condenser Screen (Centrifugal Chillers)

With the ‘Evaporator’ button selected, a unit graphic is displayed (Figure 56), and the user can monitor evaporator, liquid line, suction, and economizer temperatures and pressures.

**Unit Overview**

Clicking the ‘Unit Overview’ header expands a list of current unit parameters, including Chiller Status, Evaporator and Condenser Temperatures, and Compressor Temperatures and Pressures. Clicking the header a second time will collapse the list.

**Water**

Clicking the ‘Water’ header expands a list of current evaporator parameters, including Entering and Leaving Water Temperatures, Heat Recovery Temperatures (if applicable), and Condenser Status. Clicking the header a second time will collapse the list.

**Refrigerant**

Clicking the ‘Refrigerant’ header expands a list of current refrigerant parameters, including Liquid Line Temperatures, Subcooling, and Compressor Discharge Temperatures and Pressures. Clicking the header a second time will collapse the list.

*Figure 56: Condenser Screen (Centrifugal Chillers)*
Expansion Screen (Centrifugal Chillers)

With the ‘Expansion’ button selected, a unit graphic is displayed (Figure 57), and the user can monitor expansion valve position, liquid line temperatures, and compressor lift temperatures and pressures.

Unit Overview

Clicking the ‘Unit Overview’ header expands a list of current unit parameters, including Chiller Status, Evaporator and Condenser Temperatures, and Compressor Temperatures and Pressures. Clicking the header a second time will collapse the list.

Analog

Clicking the ‘Analog’ header expands a list of current expansion valve-related parameters, including Expansion Valve Position, Liquid Line Refrigerant Temperatures, and Compressor Lift Temperatures and Pressures. Clicking the header a second time will collapse the list.

Figure 57: Expansion Screen (Centrifugal Chillers)
Tower Screen (Centrifugal Chillers)

With the ‘Tower’ button selected, a unit graphic is displayed (Figure 58), and the user can monitor condenser temperatures, tower bypass valve position and fan status.

Unit Overview

Clicking the ‘Unit Overview’ header expands a list of current unit parameters, including Chiller Status, Evaporator and Condenser Temperatures, and Compressor Temperatures and Pressures. Clicking the header a second time will collapse the list.

Water

Clicking the ‘Water’ header expands a list of current condenser parameters, including Condenser Entering and Leaving Water Temperatures. Clicking the header a second time will collapse the list.

Fan Status

Clicking the ‘Fan Status’ header expands a list of current tower fan and bypass valve parameters, including Fan 1 - 4 Status, and Tower Bypass Valve Position. Clicking the header a second time will collapse the list.

Figure 58: Tower Screen (Centrifugal Chillers)
Maintenance Screen

With the 'Maintenance' button selected, the user can view past due and upcoming maintenance, log maintenance activity, and commission/recommission the unit (Figure 59).

**Figure 59: Maintenance Screen**
**Maintenance Info**

Clicking the ‘Maintenance Info’ button displays a list of upcoming maintenance and a list of recommended maintenance intervals.

At the bottom of the ‘Maintenance Info’ screen, there are buttons to ‘Update Periods’ and ‘Apply to Other Units’. By default, IE uses the default maintenance recommendations for the particular unit type. If the user wishes to do maintenance on a different schedule, the maintenance periods can be modified by clicking the ‘Update Periods’ button. Once clicked, the user is able to select which maintenance period to edit, then choose a new maintenance period for each item in that list (Figure 60). Once changes are made, clicking the ‘Submit Changes’ button will save and apply them to the unit. The user can also choose to add custom items to the list, or copy an existing period from another unit (Figure 61 on page 32).

*Figure 60: Edit Maintenance Period*
Figure 61: Copy Existing Maintenance Period
Log Maintenance

Clicking the ‘Log Maintenance‘ button displays a maintenance log entry form (Figure 62) and a history of logged maintenance. First, the user must choose what type of maintenance to log, Weekly, Monthly, or Annual, then select the services that were performed. Additional fields to complete include, Service Date, Contact Number, Comments, and an indication of further service being required. An image file, such as a copy of a service order, can also be attached to the log entry. In addition, a notification e-mail message can be sent using the “Send Message” button. The entry is not recorded until the user clicks the ‘Submit’ button. The current user logged into the system is automatically tagged as having entered the maintenance issue. The history of logged maintenance appears at the bottom of the “Log Maintenance” screen (Figure 63). By default, a snapshot of current device values is saved with the entry. The user can choose not to have this done by clearing the checkbox prior to submitting the log entry.
Commission/Recommission

Clicking the ‘Commission/Recommission’ button (Figure 64) allows the user to complete a commissioning process for the equipment. The first time the process is completed, the ‘Commissioning Procedure’ button will be used to access the procedure. This will typically be done at unit start-up, but may be done later. The ‘Recommission’ button becomes active only after the commissioning procedure has been initially completed and submitted. Both processes are essentially identical, and follow the commissioning procedure provided in the IOM document for the chiller. By clicking either button, the user is presented with a number of screens containing an electronic commissioning form (Figure 65 on page 35).

The user should complete the required information on each screen, then click the ‘Next’ button to switch to the subsequent page of the form. At any point, the user can click the ‘Save Progress’ button to save and remain in the application, or the ‘Save and Close’ button to save and return to the unit screen. At the bottom of the last screen of the commissioning form, the user must enter contact information, then click the ‘Submit’ button to complete the commissioning/recommissioning procedure (Figure 66). The data is then stored in the cloud, and the commissioning report can be viewed or downloaded on the Reports/Service Logs screen.
**Commissioning Procedures for ACCH-1**

**Figure 65: Electronic Commissioning Form**

*Commission has been performed outside IE Application*

Commission Date

**II. Pre Start-Up Checklist**

Pre Start-Up Checklist. All NO checks require an explanation under "Description". Please check yes or no.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Is the unit free of visible shipping damage, corrosion or paint problems?</td>
<td></td>
</tr>
<tr>
<td>B. Is unit installed level?</td>
<td></td>
</tr>
<tr>
<td>C. Does the unit meet all location, installation and service clearances per IM Bulletin?</td>
<td></td>
</tr>
<tr>
<td>D. Has thermostat bulb been properly installed in the well?</td>
<td></td>
</tr>
<tr>
<td>E. Are all set screws on all pulleys, bearings, and fans tight?</td>
<td></td>
</tr>
<tr>
<td>F. Does electrical service correspond to unit nameplate?</td>
<td></td>
</tr>
<tr>
<td>G. Has electrical service been checked for proper phasing at each circuit power terminal block?</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 66: Commissioning Form Submission**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A. Are all control lines secure to prevent excess vibration and wear?

B. Are all gauges shut off, valve caps, and packings tight after startup?

**Figure 66: Commissioning Form Submission**

Perform By: 

Company Name: 

Address Line 1: Address Line 2: 

Address Line 3: Address Line 4: 

Country: 

State: City: 

Zip Code: Telephone: 

Modern Number: 

Signature: Date: 

Contractor's Signature:
Controls Screen
With the ‘Controls’ button selected, the user can modify a number of temperature, mode, and capacity setpoints, and monitor live unit status, temperatures, and capacities.

Setpoints Screen
Clicking the ‘Setpoints’ button allows the user to modify Evaporator Leaving Water Temperature setpoints, the Control Source, and Unit Enable. (Figure 67). Prior to making any setting changes, the user should be familiar with the operation manual for the particular unit. The changes do not take effect until the Save Changes button is clicked. Clicking ‘Reset’ reverts the settings to their previous values. If desired, clicking the Send Message button allows the user to send an e-mail informing others of any changes.

Figure 67: Setpoints Screen

Setup Screen
Clicking the ‘Setup’ button (Figure 68) allows the user to modify Unit Setup, such as available modes, maximum pulldown, and unit timers, Design Conditions, such as approach temperatures, evaporator temperatures, and evaporator flow, Power Conservation settings, Date and Time settings, and Alarm Limits, such as flow proof, lockout and freeze protection temperatures, hold, unload, and stop pressures. Prior to making any Setup changes, the user should be familiar with the operation manual for the particular unit. Please consult the appropriate operation manual for the unit.

Within the ‘Setup’ screen, highlighting a question mark icon will provide context specific help. Changes do not take effect until the Save Changes button is clicked. Clicking ‘Reset’ reverts the setpoints to their previous values. If desired, clicking the Send Message button allows the user to send an e-mail informing others of any changes.

Figure 68: Setup Screen

Network Screen
Clicking the ‘Network’ button allows the user to observe the current values of the network setpoints (Figure 69). These read-only variables would normally be written via a third-party Building Automation System (BAS) using BACnet, LON, or Modbus.

Figure 69: Network Screen
Reports Screen

With the ‘Reports’ button selected, the user can view trended data for the current hour, day, month or year and can export this data for further analysis. In addition, they can view Maintenance and Remote Inspection Reports, along with Service Logs for the unit.

Trends

The ‘Trends’ button is selected by default and displays the trended data for the current day (Figure 70). Data can be viewed for the current hour, days, month or year by clicking the appropriate button. Clicking the ‘Customize’ button enables the Start and End fields, allowing the user to enter a trend for a specific range (Figure 71). The default trend displays Evaporator Leaving Water Temperature, Evaporator Entering Water Temperature and Actual Capacity but more data points can be added to the graph by clicking the ‘Setup Trend’ button then selecting the desired additional points (Figure 72). Selecting the ‘Graphs’ button also allows the user to select predefined set of graphed points. Clicking the ‘Add Charts’ button allows the user to display additional graphs. This is helpful, as only two types of data, such as pressures and temperatures, can be displayed on a single graph.
Export Data

Clicking the ‘Export Data’ button (Figure 73) allows the user to export selected data points for a specific date range. The data is exported to a CSV file which can be saved to a local computer, tablet or smart-phone. Files in CSV format can typically be opened by commercial spreadsheet software.

By default, the ‘Data Unit Log File’ report type is selected. This report type allows the user to export all values for one or more data points during a selected time-frame. The data is reported sequentially within the log report, meaning it is a single stream of data point changes in the order in which they occurred. The user selects the time period in the ‘From’ and ‘To’ fields. Clicking in either field displays a calendar to use for selecting the date. Clicking the clock icon at the bottom of this calendar allows the user to select a specific time on that date (Figure 74 on page 39). The user can select specific data points from the table. Clicking the ‘Include All’ box allows the user to quickly check or clear all data points within the table. When checked, the ‘Show Selected’ box filters the larger table to just those data points that are currently checked. Navigation arrows at the bottom of the data point table allow for movement between several pages within the table. The report is created by clicking the ‘Download Data’ button.

The ‘Fixed Time Trend Report’ allows the user to export data for one or more data points for a specific date/time range, and at specific intervals. Selecting the ‘Fixed Time Trend Report’ presents a drop-down menu for selecting the time interval (Figure 75). The report is created by clicking the ‘Download Data’ button. The user selects the time period in the ‘From’ and ‘To’ fields. Clicking in either field displays a calendar to use for selecting the date. Clicking the clock icon at the bottom of this calendar allows the user to select a specific time on that date. The user can select specific data points from the table. Clicking the ‘Include All’ box allows the user to quickly check or clear all data points within the table. When checked, the ‘Show Selected’ box filters the larger table to just those data points that are currently checked. Navigation arrows at the bottom of the data point table allow for movement between several pages within the table. The report is created by clicking the ‘Download Data’ button.

The ‘Change of Value Trend Report’ allows the user to export all changes of value for one or more data points for a specific date/time range. The user selects the time period in the ‘From’ and ‘To’ fields. Clicking in either field displays a calendar to use for selecting the date. Clicking the clock icon at the bottom of this calendar allows the user to select a specific time on that date. The user can select specific data points from the table. Clicking the ‘Include All’ box allows the user to quickly check or clear all data points within the table. When checked, the ‘Show Selected’ box filters the larger table to just those data points that are currently checked. Navigation arrows at the bottom of the data point table allow for movement between several pages within the table. The report is created by clicking the ‘Download Data’ button.

Figure 73: Export Data
Figure 74: Date and Time Range Selection

Export Trend Data
Select the start and end dates of the data you would like to export. All trended data for the current unit will be exported to a .csv file that you can save to your computer or smart device.

From: 01/01/2015 12:00 AM
To: 06/30/2015 11:59 PM

Incl. Attributes
Please be aware that the report can navigate through the site.

Show Selected

Figure 75: Fixed Time Trend Report

Export Trend Data
Select the start and end dates of the data you would like to export. All trended data for the current unit will be exported to a .csv file that you can save to your computer or smart device.

From: 01/01/2015 12:00 AM
To: 06/30/2015 11:59 PM

Incl. Attributes
Please be aware that the report will be linked in a new tab. This may take several minutes. Meanwhile, you can navigate through the site in a local browser.

Show Selected

Figure 76: Change of Value Trend Report

<table>
<thead>
<tr>
<th>Time Stamp</th>
<th>Evap Ent Water Temp (°F)</th>
<th>Time Stamp</th>
<th>Evap Lvg Water Temp (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/1/2015 0:00</td>
<td>53.489354</td>
<td>4/1/2015 0:00</td>
<td>53.1709</td>
</tr>
<tr>
<td>4/1/2015 1:05</td>
<td>53.631362</td>
<td>4/1/2015 0:30</td>
<td>53.612124</td>
</tr>
<tr>
<td>4/1/2015 3:48</td>
<td>53.339828</td>
<td>4/1/2015 1:05</td>
<td>53.754476</td>
</tr>
<tr>
<td>4/1/2015 4:30</td>
<td>53.19707</td>
<td>4/1/2015 1:32</td>
<td>53.902472</td>
</tr>
<tr>
<td>4/1/2015 5:17</td>
<td>52.960272</td>
<td>4/1/2015 5:02</td>
<td>53.754476</td>
</tr>
<tr>
<td>4/1/2015 6:10</td>
<td>52.468934</td>
<td>4/1/2015 5:20</td>
<td>53.466584</td>
</tr>
<tr>
<td>4/1/2015 6:42</td>
<td>52.179026</td>
<td>4/1/2015 5:28</td>
<td>53.1709</td>
</tr>
<tr>
<td>4/1/2015 7:15</td>
<td>51.888218</td>
<td>4/1/2015 5:36</td>
<td>52.88612</td>
</tr>
<tr>
<td>4/1/2015 7:49</td>
<td>51.59993</td>
<td>4/1/2015 5:44</td>
<td>52.591994</td>
</tr>
<tr>
<td>4/1/2015 8:23</td>
<td>51.310382</td>
<td>4/1/2015 5:51</td>
<td>52.30838</td>
</tr>
<tr>
<td>4/1/2015 8:57</td>
<td>51.019412</td>
<td>4/1/2015 6:00</td>
<td>52.010504</td>
</tr>
<tr>
<td>4/1/2015 10:47</td>
<td>50.00252</td>
<td>4/1/2015 6:50</td>
<td>51.344992</td>
</tr>
<tr>
<td>4/1/2015 11:21</td>
<td>49.7156126</td>
<td>4/1/2015 7:02</td>
<td>50.857772</td>
</tr>
<tr>
<td>4/1/2015 12:23</td>
<td>49.2790154</td>
<td>4/1/2015 7:14</td>
<td>50.569646</td>
</tr>
<tr>
<td>4/1/2015 13:00</td>
<td>51.310382</td>
<td>4/1/2015 7:39</td>
<td>50.278568</td>
</tr>
<tr>
<td>4/1/2015 13:10</td>
<td>51.115616</td>
<td>4/1/2015 7:57</td>
<td>49.988147</td>
</tr>
<tr>
<td>4/1/2015 13:11</td>
<td>50.703908</td>
<td>4/1/2015 8:16</td>
<td>49.707218</td>
</tr>
<tr>
<td>4/1/2015 13:12</td>
<td>49.364922</td>
<td>4/1/2015 8:43</td>
<td>49.413766</td>
</tr>
<tr>
<td>4/1/2015 13:15</td>
<td>42.7631342</td>
<td>4/1/2015 12:46</td>
<td>47.6816216</td>
</tr>
</tbody>
</table>
Maintenance Report

Clicking the ‘Maintenance Report’ button allows the user to run a report of maintenance completed for a particular date range. The user selects the time period in the ‘From’ and ‘To’ fields. Clicking in either field displays a calendar to use for selecting the date. By default, the report is automatically sent to the user requesting it, but it can be sent to other users by clicking in the ‘Send To’ field and entering an e-mail address. Clicking the ‘Request’ button triggers the software to generate the report. All current and previous maintenance reports are listed in the ‘Unit Maintenance Report History’ table. While the system is compiling the report, its status will display as “requested” in the table (Figure 77). Once the report is complete, the status will display as “available” and it can be downloaded by clicking on the link. The report is in Microsoft Word format.

300 Point Inspection

Clicking the ‘300 Point Inspection’ button provides the user to create and view electronic inspection reports for the chiller (Figure 78). Clicking the ‘Start Inspection’ button opens the report wizard, which consists of unit set-up information, diagnostic information, and operational data. The user completes the fields on each successive screen, using the next and previous buttons to navigate between pages. The diagnostic screen contains pre-defined service items for different chiller components (Figure 79). When completed with the report, clicking the ‘Submit’ button on the operational data page saves the report to the cloud. All previous chiller inspection reports can be viewed and downloaded from the ‘Chiller Inspection Report Log’ table at the bottom of the page. Clicking the ‘View Details’ link for a report will take the user to a download screen. The report is saved in Microsoft Word format.

Figure 77: Unit Maintenance Report Requested

Figure 78: 300 Point Inspection

Figure 79: 300 Point Inspection Diagnostic Screen
Service Logs

Clicking the 'Service Logs' button allows the user to view a list of all service logs and commissioning procedures that have been performed using the Maintenance feature of IE (Figure 80). For each item in the table, clicking the 'View Details' link opens a pop-up window with a list of all services performed, and allowing the user to download a snapshot of the unit values when the service item was entered (Figure 81).

Figure 80: Service Logs

![Service Logs](image)

Figure 81: Service Log Details

![Service Log Details](image)
Unit Dashboard – Rooftops

The 'Unit Dashboard' (Figure 82) allows the user to view current unit status, manage unit schedule, review the unit alarm log, modify unit setpoints and control, and monitor unit live data. Screen content is driven by button selections on the left of the User Interface (UI). The initial screen provides a comprehensive unit overview, with other buttons allowing the user to choose information specific to the fan, cooling section, heating section, maintenance recommendations, and unit controls. Not all button categories apply to all units.

Current Schedule (A)
This section indicates the current active schedule for the unit.

Change Schedule (B)
Clicking the 'Change Schedule' button allows the user to select from a list of standard schedules, or create a custom schedule. If “Custom Schedule” is chosen, a new dialog box will open, allowing the user to choose the days and start/end times for the schedule, and to give it a name (Figure 83 on page 43). Clicking ‘Apply Schedule’ will save and apply the new schedule.

Refresh (C)
Clicking the ‘Refresh’ button reloads the current display with updated data.

Alarm Log (D)
The ‘Alarm Log’ header lists the highest priority active alarm within each category, Warnings, Problems, and Faults. Warning alarms are displayed with a yellow icon, problem alarms are displayed with an orange icon and faults are displayed with a red icon. If there are no active alarms, the icon will be green. Clicking the ‘Alarm Log’ button allows the user to review a list of active and recent highest priority unit alarms (Figure 84 on page 43). Each alarm provides a Date, User Name (if it was acknowledged or cleared), Alarm Type, and Alarm Status. If an alarm is no longer active and has been acknowledged, its status will show as, “Clear”. If an alarm is still active, but has been acknowledged, its status should read, “Acknowledged”. Clicking the ‘Unit Details’ link returns the user to the Unit Dashboard.

Clicking the ‘Acknowledge’ button acknowledges whichever alarm is currently selected in the alarm list. Clicking the ‘Send Message’ button allows the user to send an e-mail notification to one or more e-mail addresses. In addition, clicking the ‘Change’ button for Alarm Escalation Rules allows the user to select a set of rules described in the ‘User Profile’ section of this document.

Subscription Status (E)
This section indicates the current subscription status for the unit.

Change Time Zone (F)
Clicking the ‘Change Time Zone’ button allows the user to select the appropriate Time Zone for the unit, and whether to have the time automatically adjust for Daylight Savings (Figure 85 on page 44).
Figure 83: Creating a Custom Schedule

Figure 84: Alarm Log
Figure 85: Change Time Zone

![Change Time Zone](image_url)
Overview Screen
With the “Overview” button selected, a labeled unit graphic is displayed (Figure 86). The user can monitor live unit status, temperatures, capacities, power, and upcoming maintenance.

NOTE: The unit graphics are specific to the unit being viewed, so may differ from the images shown in this manual.

Upcoming Maintenance
A description of upcoming maintenance, along with a date of last maintenance, is displayed beneath the unit graphic.

Overview Info
The “Overview Info” button is selected by default and displays the unit graphic.

IE Documents
Clicking the ‘IE Documents’ button provides a list of manuals for the IE hardware and software, along with hyperlinks to access these documents in the cloud.

Equipment Documents
Clicking the ‘Equipment Documents’ button provides a list of manuals specific to the unit model, along with hyperlinks to access those documents in the cloud (Figure 87).

Upload Documents
Clicking the ‘Upload Documents’ button (Figure 88 on page 47) allows the user to upload documents, such as image and text files, and save them to the cloud.

Unit Overview
Clicking the ‘Unit Overview’ header expands a list of current unit parameters, including Occupancy Mode, Occupancy Status, Discharge Air Temperature, and Return Air Temperature. Clicking the header a second time will collapse the list.

Economizer
Clicking the ‘Economizer’ header expands a list of current economizer operating parameters, including Economizer Status and Outside Air Temperature. Clicking the header a second time will collapse the list.

Cooling
Clicking the ‘Cooling’ header expands a list of current cooling operating parameters, including the Occupied and Unoccupied Cooling Setpoints. Clicking the header a second time will collapse the list.

Heating
Clicking the ‘Heating’ header expands a list of current heating operating parameters, including Occupied and Unoccupied Heating Setpoints. Clicking the header a second time will collapse the list.

Power Usage
Clicking the ‘Power’ header expands a list of current power-related operating parameters, including Hourly and Daily Power usage. Clicking the header a second time will collapse the list.
Figure 86: Overview Screen

Figure 87: Equipment Documents List
Figure 88: Upload Documents

Upload Documents

Building Address: 11769 Justin Circle, Unit D, Maple Grove, MN, 55369, United States

Select Document

- AH4000.jpg
- card in controllers.jpg
- nema-enclosure-types.pdf

Add Comment

You can add document comment here...

Add More Documents

Update Documents

Overview Live Data

Unit Overview

- Discharge Air Temperature: 73.4°F
- Occupy Mode: Auto
- Occupancy Status: Off
- Return Air Temperature: 72.7°F

- Heating
- Economizer
- Cooling
- Power Usage

Apply To Units

By clicking Apply To Units button the documents will be automatically associated to all units with the same address. Please, uncheck appropriate item below if documents should not be associated to any of units with the same address. 

# RTU-3 MPL Grove Rebel 10 Ton - F8OU10J008007
Air Screen

With the ‘Air’ button selected (Figure 89), a labeled fan graphic is displayed, and the user can monitor unit temperatures, statuses, setpoints, and run hours.

Fan

The ‘Fan’ button is selected by default and displays the fan section.

100% Econ

Clicking the ‘100% Econ’ button displays a graphic of the airflow through the unit (Figure 90).

Unit Overview

Clicking the ‘Unit Overview’ header expands a list of several current unit operating parameters, including Economizer percentage, Economizer Status, Unit State, and Unit Status. Clicking the header a second time will collapse the list.

Sensor Setpoints

Clicking the ‘Sensor Setpoints’ header expands a list of current temperatures, temperature setpoints, pressures, pressure setpoints, fan capacities, fan speeds, economizer capacities, and economizer setpoints. Clicking the header a second time will collapse the list.

Measured Calculated

Clicking the ‘Measured Calculated’ header expands a list of several current unit operating parameters, including Duct High Limit switch status, Entering Fan/Leaving Coil Temperature, Fan Speed and VAV Box Output status. Clicking the header a second time will collapse the list.

Operating Hours

Clicking the ‘Operating Hours’ header expands a list of current operating hours for the Economizer and Supply Fan. Clicking the header a second time will collapse the list.

Figure 89: Air Screen

Figure 90: Airflow Through Unit
Refrigeration or Cooling Screen
With the ‘Refrigeration’ or ‘Cooling’ button selected, a labeled refrigerant system graphic is displayed (Figure 91), and the user can monitor unit temperatures, statuses, setpoints, and run hours. Depending on unit model, a second close-up view of the compressor section may be available.

Unit Overview
Clicking the ‘Unit Overview’ header expands a list of several current unit operating parameters, including Unit State and Unit Status. Clicking the header a second time will collapse the list.

Sensors Setpoints
Clicking the ‘Sensors Setpoints’ header expands a list of current temperatures, temperature setpoints, and refrigerant pressures. Clicking the header a second time will collapse the list.

Measured Calculated
Clicking the ‘Measured Calculated’ header expands a list of several current unit operating parameters, including Cooling Capacity, Cooling Status, Outdoor Air Temperature, and several refrigerant temperatures. Clicking the header a second time will collapse the list.

Operating Hours
Clicking the ‘Operating Hours’ header expands a list of current operating hours for compressor(s). Clicking the header a second time will collapse the list.

Figure 91: Refrigeration Screen
Supplemental Heat Screen
With the ‘Supplemental Heat’ button selected, a labeled supplemental heating system graphic is displayed (Figure 92), and the user can monitor unit temperatures, statuses, setpoints, and capacities.

Unit Overview
Clicking the ‘Unit Overview’ header expands a list of several current unit operating parameters, including Unit State, Unit Status, Heating State, and Heating Capacity. Clicking the header a second time will collapse the list.

Sensors Setpoints
Clicking the ‘Sensor Setpoints’ values header expands a list of current temperatures and temperature setpoints. Clicking the header a second time will collapse the list.

Operating Hours
Clicking the ‘Operating Hours’ (Figure 93) header expands a list of current operating hours for Reheat. Clicking the header a second time will collapse the list.
Maintenance Screen

With the ‘Maintenance’ button selected, the user can view past due and upcoming maintenance, log maintenance activity, commission/recommission the unit, and perform auto-commissioning tests. (Figure 94).

Maintenance Info

Clicking the ‘Maintenance Info’ button displays a list of upcoming maintenance and a list of recommended maintenance intervals.

At the bottom of the ‘Maintenance Info’ screen, there are buttons to ‘Update Periods’ and ‘Apply to Other Units’. By default, IE uses the default maintenance recommendations for the particular unit type. If the user wishes to do maintenance on a different schedule, the maintenance periods can be modified by clicking the Update Periods’ button. Once clicked, the user is able to select which maintenance period to edit, then choose a new maintenance period for each item in that list (Figure 95 on page 52). Once changes are made, clicking the ‘Submit Changes’ button will save and apply them to the unit. The user can also choose to add custom items to the list, and copy an existing period from another unit (Figure 96 on page 52).
Figure 95: Edit Maintenance Period

Figure 96: Copy Existing Maintenance Period
Log Maintenance

Clicking the ‘Log Maintenance’ button displays a maintenance log entry form (Figure 97) and a history of logged maintenance. First, the user must choose what type of maintenance to log, Weekly, Monthly, Yearly, or Customer Call, then select the services that were performed. Additional fields to complete include, Service Date, Contact Number, Comments, and an indication of further service being required. An image file, such as a copy of a service order, can also be attached to the log entry. In addition, a notification e-mail message can be sent using the “Send Message” button. The entry is not recorded until the user clicks the ‘Submit’ button. The current user logged into the system is automatically tagged as having entered the maintenance issue. The history of logged maintenance appears at the bottom of the “Log Maintenance” screen (Figure 98). By default, a snapshot of current device values is saved with then entry. The user can choose not to have this done by clearing the checkbox prior to submitting the log entry.

Figure 97: Log Maintenance

![Log Maintenance Form](image)

Figure 98: Maintenance Log History

<table>
<thead>
<tr>
<th>Date</th>
<th>Employee Name</th>
<th>Employee Contact Number</th>
<th>Additional Service Required?</th>
<th>Report Type</th>
<th>View Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/03/2016</td>
<td>Hubbard, J</td>
<td>Not Available</td>
<td>No</td>
<td>Maintenance</td>
<td>View Details</td>
</tr>
<tr>
<td>05/13/2015</td>
<td>Hubbard, J</td>
<td>Not Available</td>
<td>No</td>
<td>Maintenance</td>
<td>View Details</td>
</tr>
</tbody>
</table>

**Figure 98: Maintenance Log History**

The table above shows a history of logged maintenance with dates, employee names, contact numbers, whether additional service was required, the report type, and whether the entry is viewable.
Commission/Recommission

Clicking the 'Commission/Recommission' button allows the user to complete a commissioning process for the equipment. The first time the process is completed, the 'Commissioning Procedure' button will be used to access the procedure. This will typically be done at unit start-up, but may be done later. The 'Recommission' button becomes active only after the commissioning procedure has been initially completed and submitted. Both processes are essentially identical, and follow the commissioning procedure provided in the IOM document for the chiller. By clicking either button, the user is presented with a number of screens containing an electronic commissioning form (Figure 99).

Figure 99: Commission/Recommission
Recommissioning Procedures for RTU-08:Auditorium No.8

NOTE:
1. Unit does not require high pressure switch testing
2. Refrigerant pressures can be checked from the MT III controller. Refrigerant gages are not needed.
3. Ensure proper unit phasing.
4. Compressor J might not operate during startup due to ambient conditions and compressor operating envelope.
Select Yes or No. If not applicable to the type of unit, select N/A.

I. INITIAL CHECK

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Is any shipping damage visible?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Has the discharge static pressure reference been properly located in the building?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Do fans turn freely?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Electrical service corresponds to unit nameplate?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volts: 460  Hertz 60  Phase 3

E. Unit phased correctly? |   |

F. Is the main disconnect adequately fused and are fuses installed? |   |

G. Are crankcase heaters operating, and have they been operating 24 hours prior to start-up? |   |

H. Are all electrical power connections tight? |   |

The user should complete the required information on each screen, then click the 'Next' button to switch to the subsequent page of the form. At any point, the user can click the 'Save Progress' button to save and remain in the application, or the 'Save and Close' button to save and return to the unit screen. At the bottom of the last screen of the commissioning form, the user must enter contact information, then click the 'Submit' button to complete the commissioning/recommissioning procedure. The data is then stored in the cloud, and the commissioning report can be viewed or downloaded on the Reports/Service Logs screen.
Auto Commissioning Tests

Clicking the 'Auto Commissioning Tests' button displays automated tests for the RTU (Figure 100). The Automated Economizer Test is performed in units with a modulating economizer to confirm that the dampers are modulating as expected. The Automated Refrigerant Test is performed in units with DX Cooling to confirm the Refrigerant charge is working as expected.

Figure 100: Auto Commissioning Tests
Controls Screen
With the ‘Controls’ button selected, the user can monitor and change a number of temperature, pressure, occupancy, mode, and capacity setpoints, and monitor live unit status, temperatures, and capacities.

Setpoints Override
Clicking the ‘Setpoints Override’ button (Figure 101) allows the user to override the schedule for temporary periods of time – increasing flexibility for comfort adjustments and to save energy by defaulting back to the schedule when the event expires. Time Duration can be specified for a 1, 2, 4, 8, 12, or 24 hour override duration. This functionality applies only to zone-controlled rooftop units.

Setpoints Screen
Clicking the ‘Setpoints’ button allows the user to modify the Discharge Air setpoints, Heating and Cooling Changeover setpoints, Humidity Setpoints, Duct Pressure setpoints, and Building Pressure setpoints (Figure 102 on page 57). Prior to making any setpoint changes, the user should be familiar with the operation manual for the particular unit.
Within the ‘Setpoints’ screen, highlighting a question mark icon will provide context specific help. Changes do not take effect until the ‘Save Changes’ button is clicked. Clicking ‘Reset’ reverts the setpoints to their previous values. If desired, clicking the ‘Send Message’ button allows the user to send an e-mail informing others of any changes.

Operations Screen
Clicking the ‘Operation’ button allows the user to change various occupancy and operation parameters (Figure 103 on page 57). Prior to making any setting changes, the user should be familiar with the operation manual for the particular unit.
Within the ‘Operations’ screen, highlighting a question mark icon will provide context specific help. Changes do not take effect until the ‘Save Changes’ button is clicked. Clicking ‘Reset’ reverts the settings to their previous values. If desired, clicking the ‘Send Message’ button allows the user to send an e-mail informing others of any changes.

Capacity
Clicking the ‘Capacity’ button allows the user to raise and lower the Supply and Return Fan Capacities, Cooling Capacity, Heating Capacity, and Economizer Capacity (Figure 104 on page 58). Prior to making any setting changes, the user should be familiar with the operation manual for the particular unit.
Within the ‘Capacity’ screen, highlighting a question mark icon will provide context specific help. Changes do not take effect until the ‘Save Changes’ button is clicked. Clicking ‘Reset’ reverts the settings to their previous values. If desired, clicking the ‘Send Message’ button allows the user to send an e-mail informing others of any changes.

Unit Overview
Clicking the ‘Unit Overview’ header expands a list of current unit operating parameters. Clicking the header a second time will collapse the list.

Sensor Setpoints
Clicking the ‘Sensor Setpoints’ header expands a list of current unit capacities, temperatures and setpoints. Clicking the header a second time will collapse the list.

Figure 101: Setpoints Override
**Figure 102: Setpoints Screen**

```
Setpoints

Discharge Air Temperature
- Cooling Reset: None
- DAT Cooling Setpoint (°F): 57.1
- DAT Heating Setpoint (°F): 85.0
- Heating Reset: None
- Maximum Cooling Setpoint (°F): 65.0
- Maximum Cooling Setpoint @: 100
- Max Heating Setpoint (°F): 128.0
- Max Heating Setpoint @: 100
```

**Figure 103: Operations Screen**

```
Operations

- Occupancy: Occ
- Occupancy Mode: OccMode
- Occupancy Source: None
- Occupancy Status: Occ
- Application Mode: Zone
- Control Type: CoolOnly
- Control Mode: Off
- Cooling Status: Off
- Humidity:
  - Dewpoint: 26.2°F
  - Dewpoint Setpoint (°F): 50.0
  - RH Setpoint (%): 45
- Relative humidity: 24%
```

Controls Live Data

- Unit Overview: 
- Air Flow Status: NoFlow
- Occupy Mode: Auto
- Occupancy Source: None
- Occupancy Status: Unocc
- Unit State: Off
- Unit Status: Enable

Sensors Setpoints
Figure 104: Capacity Screen
Reports Screen

With the ‘Reports’ button selected, the user can generate, view and send maintenance reports, generate and view data trends, and export selected data to a CSV file.

Trends

Clicking the ‘Trend’ button (Figure 105) allows the user to view trend data for the current hour, day, month, or year by clicking the appropriate button. Clicking the ‘Customize’ button enables the Start and End Date fields, allowing the user to enter a trend for a specific date range. The default trend displays Discharge Air Temperature, Outside Air Temperature, and Return Air Temperature, but more data points can be added to the graph by clicking the ‘Setup Trend’ button, then selecting the desired additional points. Selecting the ‘Graphs’ button also allows the user to select from a predefined set of graphed points. Clicking the ‘Add Charts’ button allows the user to display additional graphs. This is helpful, as only two types of data, such as pressures and temperatures, can be displayed on a single graph.

Export Data

Clicking the ‘Export Data’ button (Figure 106 on page 60) allows the user to export selected data points for a specific date range. The data is exported to a CSV file which can be saved to a local computer, tablet or smart-phone. Files in CSV format can typically be opened by commercial spreadsheet software.

By default, the ‘Data Unit Log File’ report type is selected. This report type allows the user to export all values for one or more data points during a selected time-frame. The data is reported sequentially within the log report, meaning it is a single stream of data point changes in the order in which they occurred. The user selects the time period in the ‘From’ and ‘To’ fields. Clicking in either field displays a calendar to use for selecting the date. Clicking the clock icon at the bottom of this calendar allows the user to select a specific time on that date (Figure 107 on page 61). The user can select specific data points from the table. Clicking the ‘Include All’ box allows the user to quickly check or clear all data points within the table. When checked, the ‘Show Selected’ box filters the larger table to just those data points that are currently checked. Navigation arrows at the bottom of the data point table allow for movement between several pages within the table. The report is created by clicking the ‘Request Data’ button.

Figure 105: Trend Data
The ‘Fixed Time Trend Report’ allows the user to export data for one or more data points for a specific date/time range, and at specific intervals. Selecting the ‘Fixed Time Trend Report’ presents a drop-down menu for selecting the time interval (Figure 108 on page 61). The report is created by clicking the ‘Request Data’ button. The user selects the time period in the ‘From’ and ‘To’ fields. Clicking in either field displays a calendar to use for selecting the date. Clicking the clock icon at the bottom of this calendar allows the user to select a specific time on that date. When checked, the ‘Show Selected’ box filters the larger table to just those data points that are currently checked. Navigation arrows at the bottom of the data point table allow for movement between several pages within the table. The report is created by clicking the ‘Request Data’ button.

The ‘Change of Value Trend Report’ allows the user to export all changes of value for one or more data points for a specific date/time range. The user selects the time period in the ‘From’ and ‘To’ fields. Clicking in either field displays a calendar to use for selecting the date. Clicking the clock icon at the bottom of this calendar allows the user to select a specific time on that date. The user can select specific data points from the table. Clicking the ‘Include All’ box allows the user to quickly check or clear all data points within the table. When checked, the ‘Show Selected’ box filters the larger table to just those data points that are currently checked. Navigation arrows at the bottom of the data point table allow for movement between several pages within the table. The report is created by clicking the ‘Request Data’ button. Each data point receives its own column within the report (Figure 109 on page 61), making the data set easy to graph using commercial spreadsheet software.

Figure 106: Export Specific Date Range Example
Figure 107: Date and Time Range Selection

Export Trend Data
Select the start and end dates of the data you would like to export. All trended data for the current unit will be exported to a .csv file that you can save to your computer or smart device.

Time Period:
From 10/30/2017 12:00 AM
To 10/30/2017 11:59 PM
Export Report Type:
Fixed Time Trend Report
Include Attributes:
Please be aware that the report can navigate through the site several minutes. Meanwhile, you can navigate through the site in a cool manner.

Figure 108: Fixed Time Trend Report

Export Trend Data
Select the start and end dates of the data you would like to export. All trended data for the current unit will be exported to a .csv file that you can save to your computer or smart device.

Time Period:
From 11/15/2017 12:00 AM
To 11/15/2017 11:59 PM
Export Report Type:
Fixed Time Trend Report
Time Interval:
60 min
Include Attributes:
Please be aware that the report will be loaded in a new tab. This may take several minutes. Meanwhile, you can navigate through the site in a cool manner.

Figure 109: Change of Value Trend Report

<table>
<thead>
<tr>
<th>Time Stamp</th>
<th>DAT (°F)</th>
<th>Time Stamp</th>
<th>Space Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/30/2017 0:00</td>
<td>71.8197818</td>
<td>10/30/2017 0:00</td>
<td>71.198006</td>
</tr>
<tr>
<td>10/30/2017 0:24</td>
<td>70.8596798</td>
<td>10/30/2017 0:23</td>
<td>72.26828</td>
</tr>
<tr>
<td>10/30/2017 0:31</td>
<td>69.899922</td>
<td>10/30/2017 2:58</td>
<td>71.356766</td>
</tr>
<tr>
<td>10/30/2017 0:38</td>
<td>68.951902</td>
<td>10/30/2017 4:23</td>
<td>70.293128</td>
</tr>
<tr>
<td>10/30/2017 0:52</td>
<td>68.00495</td>
<td>10/30/2017 5:42</td>
<td>69.275678</td>
</tr>
<tr>
<td>10/30/2017 1:07</td>
<td>67.67258</td>
<td>10/30/2017 7:08</td>
<td>68.28752</td>
</tr>
<tr>
<td>10/30/2017 1:21</td>
<td>66.1328762</td>
<td>10/30/2017 7:46</td>
<td>67.2778202</td>
</tr>
<tr>
<td>10/30/2017 1:32</td>
<td>65.30217</td>
<td>10/30/2017 8:09</td>
<td>68.25911</td>
</tr>
<tr>
<td>10/30/2017 1:48</td>
<td>64.58129</td>
<td>10/30/2017 8:55</td>
<td>69.2617838</td>
</tr>
<tr>
<td>10/30/2017 2:09</td>
<td>63.36185</td>
<td>10/30/2017 9:36</td>
<td>70.279556</td>
</tr>
</tbody>
</table>
Maintenance Report

Clicking the ‘Maintenance Report’ button allows the user to generate a unit maintenance and inspection report for a specified time period (Figure 110). First, the user selects the desired beginning and end dates for the report, then chooses any e-mail addresses to receive the report. Clicking the ‘Request’ button begins the process of generating the report.

To view the status of the requested report, or to view any previously generated reports, the user should access the report history table at the bottom of the screen. The ‘Original Report’ column of the table indicates when the requested report becomes available.

Figure 110: Maintenance Report
Service Logs

Clicking the ‘Service Logs' button allows the user to view a list of all service logs and commissioning procedures that have been performed using the Maintenance feature of IE (Figure 111). For each item in the table, clicking the 'View Details' link opens a pop-up window with a list of all services performed, and allowing the user to download a snapshot of the unit values when the service item was entered (Figure 112).

Figure 112: Service Log Details
Building Dashboards

The 'Building Dashboard' (Figure 113) displays the building critical information, including building status information, run-time analytics for individual units, maintenance items, weather forecast, and sustainability metrics. In addition the user can choose to view unit-specific data, and add/remove widgets to the building dashboard. Widgets are added and removed by clicking the 'Show/Hide Widgets' icon in the upper-right corner of the dashboard, then clicking the checkbox next to the desired widgets (Figure 114). Not all widgets apply to individual equipment types; a message appears when the user places the cursor over a widget that is not applicable for the equipment. Once a widget is displayed, clicking and dragging its header allows the user to reorganize the building dashboard display.
Building Status

The ‘Building Status’ portion of the Building Dashboard displays basic utility usage information as well as overall building ENERGY STAR Score. The information in this portion of the dashboard can only be generated by clicking the ‘Subscribe To ENERGY STAR’ button, and entering general building and utility information (Figure 115). Once all information is entered on all three tabs, clicking the ‘Save’ button returns the user to the Building Dashboard. Clicking the ‘Cancel’ button cancels any changes.

Figure 115: Subscribe to Energy Star

When a building is created in Intelligent Equipment, and ENERGY STAR data entered, a corresponding building is automatically created in ENERGY STAR Portfolio Manager. For questions on accessing Portfolio Manager, please contact Daikin Applied Controls Technical Support.

Once the building is subscribed to ENERGY STAR’s Portfolio Manager, ‘View Details’ and ‘Setup Meters’, appear in the Building Status section (Figure 116). Clicking ‘View Details’ directs the user the ‘ENERGY STAR Information’ screen, which allows the user to update property information, add meters, and set energy targets. Clicking the ‘Setup Meters’ button takes the user directly to the ‘Meters & Consumption’ tab of the ‘ENERGY STAR Information’ screen. Until usage data is uploaded, the corresponding fields will read, “Not Available”.

Figure 116: Building Status Following Addition of Building Details
Setup Meters

The 'Meters & Consumption' tab of the 'ENERGY STAR Information' screen (Figure 117) allows the user to add their utility meter information. The user must first add the desired meter by clicking the corresponding 'Add' button, then give the meter a name (Figure 118). Once all desired meters are added and given names, clicking the 'Submit' button provides each of the meters with an 'Upload Data' button (Figure 119). All data must be uploaded using the template provided by clicking the 'Download Template' button (Figure 120). The template is in Comma-Separated Values (.csv) format, and can be edited using a number of readily available spreadsheet software programs.

Once all data is entered into the template, the file should be saved. Following this, clicking the 'Upload Data' opens a dialog box, allowing the user to navigate to and select the desired file. Once the file is selected, the upload begins immediately, and a confirmation message appears when complete (Figure 121 on page 67).

After all desired meter data is uploaded, clicking the 'Building' link near the top of the screen returns the user to the 'Building Dashboard'. An ENERGY STAR score should now be calculated, and all meters with uploaded data should display usage comparison to the previous month or year (Figure 122 on page 67). If enough data is available, the comparison will be year-over-year.

Figure 117: Meters and Consumption Tab

Figure 118: Adding a Meter

Figure 119: Upload Data Button

Figure 120: Download Template button
Figure 121: Consumption Data Upload Successful

Figure 122: Usage Comparison Following Data Upload
The user can also choose to display a 'Target ENERGY STAR' score by choosing this option on the 'Targets' tab of the 'ENERGY STAR Information' screen. Click the 'View Details' button, then select the 'Targets' tab. The user then clicks the 'Edit' button, which makes the 'Target Metric' field editable. The user can choose from three different reports; Target ENERGY STAR Score, Target Percentage better than Baseline, and Target Percentage better than Median (Figure 123). The Target Percentage better than Baseline option makes a comparison between current and baseline performance. The Target Percentage better than Median option makes a comparison between the current building's performance and that of similar size and usage characteristics.

Once the 'Target Metric' is decided, the user must then enter a 'Target Value' for the metric. Clicking the 'Save' button sets the target. After this, clicking the 'Building' link near the top of the screen returns the user to the 'Building Dashboard', where the 'Target Score' should now be visible (Figure 124).

NOTE: If the user wishes to preview the dashboard with sample values, rather than uploading meter data, set the 'Sample Property' field on the 'Meters & Consumption' tab to 'Yes' and click 'Submit'. The dashboard will now display data from a sample building (Figure 125).
Run Time

The ‘Run Time’ section of the Building Dashboard (Figure 126) displays a current state of a chosen chiller for one of three attributes: Chiller Status, Unit Mode, or Unit Status. The default attribute is Chiller Status. For Rooftop Units, the available parameters are Unit State and Unit Status. The default attribute is Unit State. Selecting a different parameter from the ‘Attribute’ menu will update the graph to display that attribute. The current state of the selected attribute is displayed under the graph. By default, the graph is displayed for the current week, but the Time Period can be changed by selecting a new Start and End Date. If the building has more than one unit, the user must select the desired unit from the ‘Unit’ list in the upper-left corner of the building dashboard (Figure 127).

Figures 126: Run Time Widget

Energy Usage

The ‘Energy Usage’ section of the Building Dashboard (Figure 128) displays a graph of the current energy usage for the chosen chiller or rooftop unit. By clicking the appropriate button, the user can choose to display the energy usage trend for the current day, week, month, or year. By default, the current week button is selected. Clicking the ‘Show Previous’ box will display an additional graph for the previous day, week, month, or year, depending on the button selected. Clicking the ‘View Details’ button at the bottom of the graph opens a pop-up with additional energy usage data, including average power, metered power, and current and previous week’s energy (Figure 129).

Figures 128: Energy Usage Widget

Figures 129: Energy Details
Building Info

The ‘Building Info’ header of the Building Dashboard displays the Building name, Building address, and all units currently displayed for the site (Figure 130). Clicking the edit icon allows the user to change the building name or remove individual units from the Building. Clicking the header once expands the data for display, while clicking it a second time collapses it.

![Figure 130: Building Info](image)

Weather

The ‘Weather’ header of the Building Dashboard displays current weather conditions as well as a weather forecast (Figure 131). A link is also provided to check the weather online. Clicking the header once expands the data for display, while clicking it a second time collapses it.

![Figure 131: Weather](image)
### Sustainability Index

The ‘Sustainability Index’ header of the Building Dashboard displays current CO₂ Emissions for the building, and a comparison to the previous month or year (Figure 132). The data will automatically display year-over-year comparison once enough meter data has been entered for the building. Clicking the ‘Sustainability Index’ header once expands the data for display, while clicking it a second time collapses it.

**Figure 132: Sustainability Index**

<table>
<thead>
<tr>
<th>CO₂ Equivalents of Total building</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>280.9 Metric Tons This year</strong></td>
</tr>
<tr>
<td><strong>4.62% Same period previous year</strong></td>
</tr>
</tbody>
</table>

This equals to...

- **Homes’ energy use for one year:** 25.6
- **Miles/year driven by an average passenger vehicle:** 668809.5
- **Incandescent lamps switched to CFLs:** 7353.4
- **Tree seedlings grown for 10 years:** 7202.6

### ENERGY STAR®

The ‘ENERGY STAR’ header of the Building Dashboard displays the current calculated ENERGY STAR score for the building, and a comparison to a typical building. This section also provides Performance and Financial data (Figure 133). It is important to remember that no calculations can be made without the user entering meter data. Clicking the ‘ENERGY STAR’ header once expands the data for display, while clicking it a second time collapses it.

**Figure 133: ENERGY STAR Performance and Financial Data**

- **ENERGY STAR Score:** 99
- **Target Score:** 75
- **Typical Building Rating:** 50
- **Energy Cost Per SF ($/sq. feet):**
  - **Previously:** 0.01
  - **Currently:** 0.01
Resources

The ‘Resources’ header of the Building Dashboard displays a list of links to resources on Green Buildings. This section also provides Performance and Financial data (Figure 134). Clicking the ‘Resources’ header once expands the data for display, while clicking it a second time collapses it.

Figure 134: Resources on Green Buildings

- U.S. Green Building Council (USGBC)
- Leadership in Energy & Environmental Design (LEED)
- Green Building Initiative (GBI)
- International Green Construction Code (IGCC)
- Zero Energy Commercial Buildings Consortium (CBC)

Energy Cost

The ‘Energy Cost’ header of the Building Dashboard displays a calculated energy cost for the unit selected from the ‘Unit’ list in the upper-left corner of the building dashboard. The data is displayed in the form of a bar chart. The cost is determined by the actual unit energy usage measured by the unit’s energy management module, and the ‘Energy Rate’, measured in dollars per kilowatt hour (4/kWh), entered by the user (Figure 135). By clicking the appropriate button, the user can choose to display the energy usage trend for the current day, week, month, or year. By default, the current week button is selected. Clicking the ‘Show Previous’ box will display an additional chart for the previous day, week, month, or year, depending on the button selected.

Figure 135: User Energy Rate
Maintenance

The ‘Maintenance’ section of the Building Dashboard (Figure 136) displays a notification of any upcoming or past due maintenance items. By clicking the ‘View Details’ link under the ‘Maintenance’ item, the user can access the Maintenance Details for the building (Figure 138). Any recommended maintenance is listed for each unit, and a history of maintenance logs for the building is presented. To search for logs during a specific time frame, the user only needs to enter a start and end date, after which, the UI will automatically refresh to display only log items occurring between those dates. By clicking the ‘Add Servicing Entity’ button, the user can add reference information for the building service provider (Figure 137). This service entity can be used when the user clicks the ‘Schedule Maintenance’ button within the maintenance screen.

**Figure 136: Maintenance Notification**

**Figure 138: Maintenance Details**

Lab Chiller

<table>
<thead>
<tr>
<th>Unit Tag</th>
<th>Date</th>
<th>Employee Name</th>
<th>Employee Contact Number</th>
<th>Additional Service Required?</th>
<th>Report Type</th>
<th>View Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Chiller</td>
<td>05/28/2015</td>
<td>User, J</td>
<td>7615553330</td>
<td>No</td>
<td>Maintenance</td>
<td>View Details</td>
</tr>
<tr>
<td>Lab Chiller</td>
<td>06/02/2015</td>
<td>User, J</td>
<td>7615553330</td>
<td>No</td>
<td>Commissioning</td>
<td>View Details</td>
</tr>
</tbody>
</table>

**Figure 137: Add Servicing Entity**

Add New Servicing Entity

- **Organization Information**
  - Name *
  - Country *
  - Select Country
  - Street Address Line 1 *
  - Street Address Line 2
  - Street Address Line 3
  - Street Address Line 4
  - City *
  - State/Province *
    - Select State/Province
  - Zip/Postal Code *
  - Website

- **Personal Information**
  - First Name *
  - Middle Name
  - Last Name *
  - Email Address *
  - Contact Phone *

[Save] [Cancel]
Alarm Status

The 'Alarm Status' section of the Building Dashboard (Figure 139) displays a list of any active alarms. By clicking the 'View Details' link under the Alarms section, the user is directed to more detailed unit information, including the alarm state for all units, general unit operation information for all units, and subscription status for all units (Figure 140).

Figure 139: Alarm Status

![Alarm Status]

Figure 140: Unit Status Details

Unit Status

<table>
<thead>
<tr>
<th>Unit Tag</th>
<th>Short Description</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexington - AGZ-1</td>
<td>START INHIBITED - Ambient Temperature Low</td>
<td>11/23/2016 6:00 PM</td>
</tr>
<tr>
<td>Lexington - AGZ-2</td>
<td>START INHIBITED - Ambient Temperature Low</td>
<td>11/17/2016 6:23 PM</td>
</tr>
</tbody>
</table>

General Information

Chiller AGZ-MTTII

<table>
<thead>
<tr>
<th>Unit Tag</th>
<th>Alarm Status</th>
<th>Active Setpoint</th>
<th>Evap LG Water Temp</th>
<th>Chiller Status</th>
<th>OA Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexington - AGZ-1</td>
<td></td>
<td>43 °F</td>
<td>77.8 °F</td>
<td>Off</td>
<td>3.1 °F</td>
</tr>
<tr>
<td>Lexington - AGZ-2</td>
<td></td>
<td>45 °F</td>
<td>78.1 °F</td>
<td>Off</td>
<td>3.4 °F</td>
</tr>
</tbody>
</table>

Subscription Status

<table>
<thead>
<tr>
<th>Unit Tag</th>
<th>Subscription Type</th>
<th>Status</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexington - AGZ-1</td>
<td>Customer Road</td>
<td>Active</td>
<td>6/7/2017</td>
</tr>
<tr>
<td>Lexington - AGZ-2</td>
<td>Customer Road</td>
<td>Active</td>
<td>6/7/2017</td>
</tr>
</tbody>
</table>
Comfort Index

The ‘Comfort Index’ header of the Building Dashboard displays a graphical representation of occupant comfort, in alignment with ASHRAE Standard 55-2010. The user must first select a specific unit from within the list in the ‘Comfort Index’ section, which causes ‘Comfort Index’ data to display for the specific unit (Figure 142).

The ‘Comfort Index’ is calculated using fixed values, such as Mean Radiant Temperature, Air Speed, Clothing Level, and Metabolic Rate, and adjustable values, Air Temperature and Humidity. The current ‘Comfort Index’ is indicated by a red target placed within the ‘Comfort Index’ graph. Three graph profiles are provided, an Economy Winter graph, a Fixed Comfort graph, and an Economy Summer graph. Selecting a different graph adjusts the depiction of the occupant comfort range. A message is displayed above the graph indicating whether the current ‘Comfort Index’ is in conformance to ASHRAE Standard 55-2010. To adjust the current ‘Comfort Index’, the user must set the parameter to be adjusted from ‘Auto’ to ‘Manual’ (Figure 141). The adjustment arrows then become active. Setting the parameter back to ‘Auto’ reverts the parameters to their default values.

Context specific help, including a detailed description of ‘Comfort Index’, is provided by highlighting or clicking the information icon near each element. Clicking the ‘Comfort Index’ header once expands the data for display, while clicking it a second time collapses it.

Figure 141: Adjusting Comfort Index Parameters

Figure 142: Comfort Index
Equipment Metrics

The ‘Equipment Metrics’ header of the Building Dashboard (Figure 143) displays a number of values concerning energy use and performance. These include CO₂ emissions associated with the building, financial performance indicators, such as Energy Cost Intensity, and equipment performance indicators, such as Energy Use Intensity. Each category of ‘Equipment Metrics’ can be filtered to a specific unit (the default is All Units).

Figure 143: Equipment Metrics

- **Energy Use**:
  - Total: 17,683 kWh
  - Unit Operating Area: 6,500 sq. ft.

- **Energy Cost Per KWh**:
  - 0.1065 $

- **CO₂ Equivalents**:
  - Total: 12.2 Metric Tons
  - 11.23% Last full month compared with previous one

  This Equals to...
  - Homes’ energy use for one year: 1.1
  - Miles/year driven by an average passenger vehicle: 290,313
  - Incandescent lamps switched to CFLs: 319.2
  - Tree seedlings grown for 10 years: 312.6

- **$ Financials**
  - Energy Cost: $1,000.51
  - National Energy Cost avg: $0.1060
  - Energy Cost Intensity: 0.30 $/sq. feet

Financial Summary

The ‘Financial Summary’ header of the Building Dashboard (Figure 144) displays a payback calculation, which compares high-efficiency rooftop air conditioners to standard equipment in terms of life cycle cost. The ‘Financial Summary’ provides an ongoing roll-up of the estimated saving due to the acquisition of a highly efficient Daikin RTU compared to a standard efficiency RTU. By default, calculations are performed for All Units, but a single unit can be selected using the drop-list selector. This metric does not apply to chillers.

Figure 144: Financial Summary

- **Payback Amount**: $7,000.00
**Performance Index**

The ‘Performance Index’ header of the Building Dashboard (Figure 145) displays a graph representing the expected monthly energy usage based on unit operation captured during the baseline period. The bar above or below the dot represents the actual energy consumed for the month. A red bar above the dot indicates more energy consumption than expected. A green bar below the dot indicates less energy consumption than expected. The bars will be larger or smaller depending on how far the actual energy consumption was from expected. The period of data shown can be adjusted by clicking the forward and back arrows. The name of the current baseline is indicated at the bottom of the graph. The date that a new baseline was implemented will be indicated by a vertical bar on the graph. Following recommended maintenance will help ensure that units operate at peak efficiency. Month-to-month changes in performance may be the result of isolated operating condition changes and not equipment performance degradation. An ongoing trend of degrading performance may indicate that special service is required.

**Figure 145: Performance Index**

![Performance Index Graph](Image)

**Thermostat**

The ‘Thermostat’ widget of the Building Dashboard (Figure 146) provides a graphical representation of the local thermostat control on a single-zone Daikin Applied rooftop unit. The widget provides information about unit mode, fan status, occupancy status, space temperature, and space temperature setpoint. If the unit is in unoccupied mode, the unit can be overridden to an occupied state by clicking the ‘Occupancy Override’ button. The space temperature setpoint can be adjusted by clicking the up or down arrows to raise or lower the setpoint value. The setpoint is constrained by high and low limits set at the local rooftop unit controller. All other parameters displayed in the ‘Thermostat’ widget are not adjustable. The ‘Thermostat’ widget is only used for Daikin Applied rooftop units that are single zone and controlled by a thermostat.

**Figure 146: Thermostat™ widget**

![Thermostat Widget](Image)
Daikin Applied Training and Development

Now that you have made an investment in modern, efficient Daikin equipment, its care should be a high priority. For training information on all Daikin HVAC products, please visit us at www.DaikinApplied.com and click on Training, or call 540-248-9646 and ask for the Training Department.

Warranty

All Daikin equipment is sold pursuant to its standard terms and conditions of sale, including Limited Product Warranty. Consult your local Daikin Applied representative for warranty details. To find your local Daikin Applied representative, go to www.DaikinApplied.com.

Aftermarket Services

To find your local parts office, visit www.DaikinApplied.com or call 800-37PARTS (800-377-2787). To find your local service office, visit www.DaikinApplied.com or call 800-432-1342.

This document contains the most current product information as of this printing. For the most up-to-date product information, please go to www.DaikinApplied.com.

Products manufactured in an ISO Certified Facility.