

Air Conditioning Control System Centralized Controller EB-50GU-A/EB-50GU-J



Instruction Book –Web Browser for System Maintenance Engineer–

Contents

1. Introduction.....	2
1-1. Terms Used in This Manual	2
1-2. PC Requirements.....	2
2. Setting the Operating Environment	3
2-1. Setting the IP Address of the PC	3
2-2. Setting the Web Browser	5
3. Logging in to the Web Browser for System Maintenance Engineer	8
4. Monitor/Operation.....	11
4-1. Condition List	11
4-2. Measurement List	19
4-3. Malfunction List.....	20
4-4. Filter Sign List	22
4-5. AHC List.....	23
5. Energy Management	25
5-1. Energy Use Status	25
5-2. Ranking.....	31
5-3. Target Value Setting.....	34
5-4. Peakcut Control Status	36
6. Schedule Settings.....	38
6-1. Weekly Schedule	40
6-2. Annual Schedule.....	45
6-3. Today's Schedule.....	48
7. Malfunction Log	50
7-1. Unit Error/Communication Error.....	50
8. System Settings.....	51
8-1. Date/Time Settings	51
8-2. User Registration	52
9. Maintenance	53
9-1. Send Mail Log	53
9-2. Gas Amount Check	54
9-3. Outdoor unit status.....	55
9-4. Free Contact List.....	56
9-5. CSV output.....	57
10. License registration for optional functions	68

1. Introduction

Mitsubishi Electric Corporation's Centralized Controller EB-50GU-A/EB-50GU-J features functions to allow users to monitor and operate the air conditioning units from a PC over the LAN.

This Instruction Book explains how to monitor and operate the units connected to the EB-50GU-A/EB-50GU-J using a Web browser.

For initial settings and function settings, refer to the Instruction Book (Web Browser for Initial Settings).

1-1. Terms Used in This Manual

- "Centralized Controller EB-50GU-A/EB-50GU-J" is referred to as "EB-50."
- "Booster unit" and "Water HEX unit" are referred to as "Air To Water (PWFY) unit."
- "Advanced HVAC CONTROLLER" is referred to as "AHC."
- Screen images used in this manual are from Windows 7® and Internet Explorer 9.0.

Note: Windows is a registered trademark or trademark of Microsoft Corporation in the United States and other countries.

1-2. PC Requirements

Table1-1 PC Requirements

Item	Requirement
CPU	1 GHz or faster
Memory	512 MB or more
Screen resolution	1024 x 768 or higher recommended
Browser	Microsoft® Internet Explorer 8.0 Microsoft® Internet Explorer 9.0 * Java execution environment is required. (Oracle® Java Plug-in Ver. 1.7.0_11) * Install Oracle® Java Plug-in that is appropriate for your operating system. When using a 64-bit Internet Explorer, install a 64-bit Java Plug-in. * The version of the Oracle® Java Plug-in can be verified by clicking [Java] in the Control Panel.
On-board LAN port or LAN card	100 BASE-TX
Pointing device	e.g., mouse

Note: Microsoft is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
Oracle and Java are trademarks or registered trademarks of Oracle Inc. in the United States and/or other countries.

2. Setting the Operating Environment

This chapter explains how to make PC settings and Web browser settings to monitor and operate the air conditioning units.

2-1. Setting the IP Address of the PC

Follow the instructions below to set the PC's IP address for the Web browser to recognize the EB-50 unit.

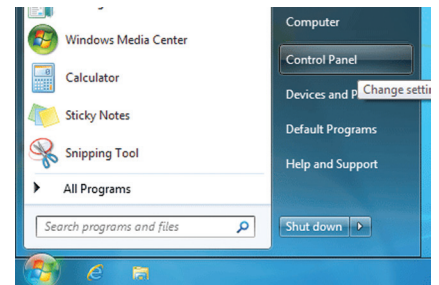
The PC's IP address must have the same network address as the EB-50's IP address.

(i.e., EB-50's IP address: [192.168.1.1], PC's IP address: [192.168.1.101])

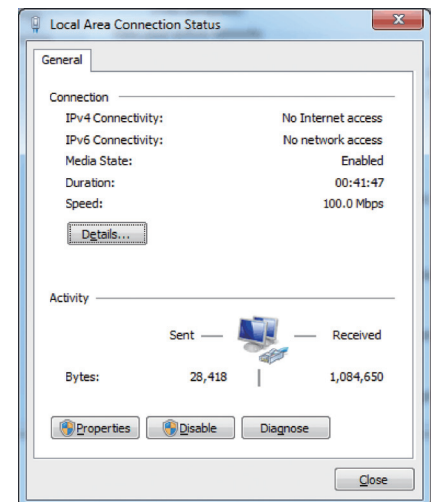
When connecting an EB-50 to an existing LAN, consult the system administrator to decide the IP address of the PC.

Note: When using an EB-50-dedicated LAN, it is recommended that the main EB-50 unit be assigned an IP address between the range [192.168.1.1] and [192.168.1.40] and that the PC connected to the EB-50 be assigned an IP address between the range [192.168.1.101] and [192.168.1.150].

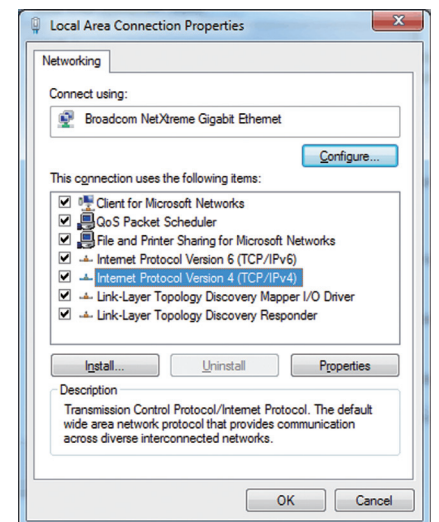
(1) Click [Control Panel] in the Start menu.



(2) Click [Network and Sharing Center]>[Local Area Setting].
In the [Local Area Connection Status] window, click [Properties].



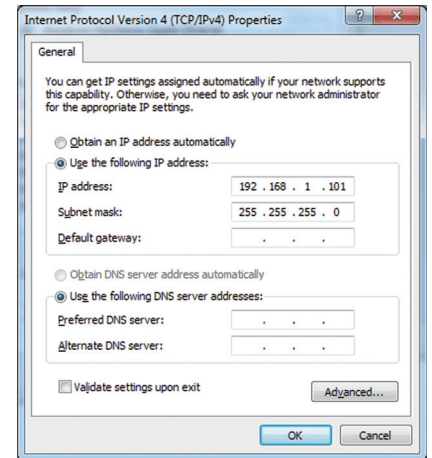
(3) Click [Internet Protocol Version 4 (TCP/IPv4)] to select it, and click [Properties].



- (4) In the [Internet Protocol Version 4 (TCP/IPv4) Properties] window, check the radio button next to [Use the following IP address]. Enter the PC's IP address (e.g., [192.168.1.101]) in the [IP address] field, and enter the subnet mask [255.255.255.0] (unless otherwise specified) in the [Subnet mask] field. In the [Default gateway] field, enter the gateway address as necessary.

Note: Consult the system administrator to decide the IP, subnet mask, and gateway addresses.

- (5) Keep clicking [OK] or [Close] to close all windows.



2-2. Setting the Web Browser

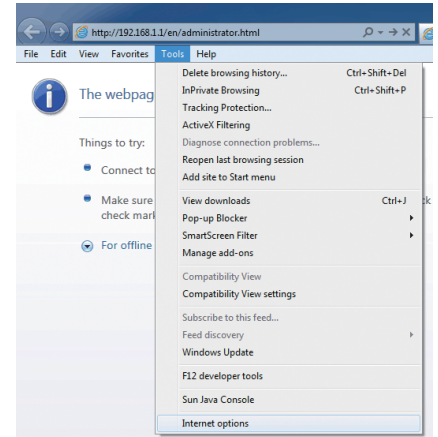
Web browser setting varies with the Internet connection type. See the sections below for how to make Web browser settings for different types of Internet connection.

To prevent unauthorized access, always use a security device such as a VPN router when connecting the EB-50 to the Internet.

2-2-1. No Internet connection

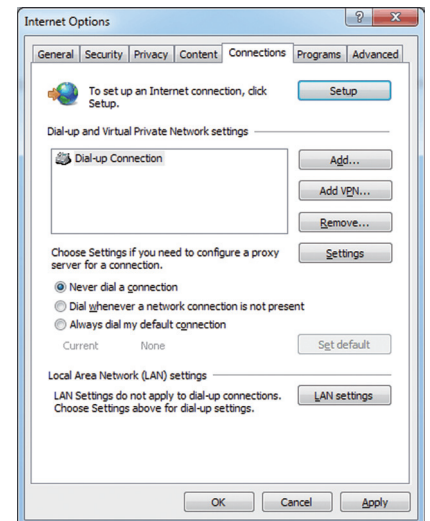
To monitor and operate the air conditioning units from a PC with no Internet connection, follow the instructions below to set the environment for the Web browser.

- (1) Click [Tools] in the menu bar, then click [Internet options].



- (2) In the [Internet Options] window, click the [Connections] tab.

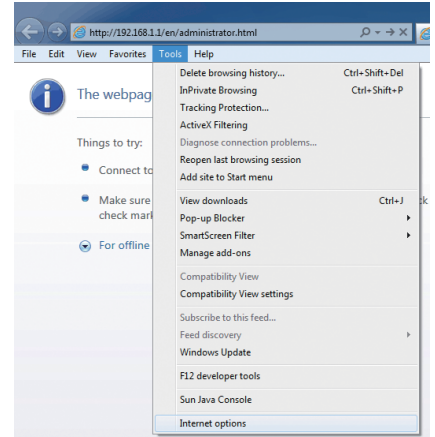
- (3) Check the radio button next to [Never dial a connection] in the middle of the window, and click [OK] to close the window.



2-2-2. Dial-up Internet connection

To monitor and operate the air conditioning units from a PC that connects to the Internet through a dial-up connection, follow the instructions below to set the environment for the Web browser.

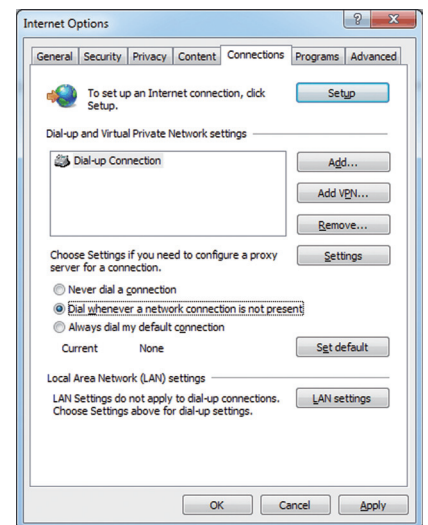
- (1) Click [Tools] in the menu bar, then click [Internet options].



- (2) In the [Internet Options] window, click the [Connections] tab.

- (3) Check the radio button next to [Dial whenever a network connection is not present] in the middle of the window, and click [OK] to close the window.

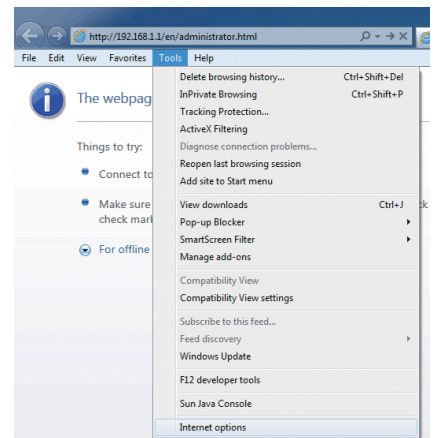
By making these settings, a message will appear asking whether or not to use a dial-up connection when an Internet connection is necessary. Follow the message to connect to the Internet.



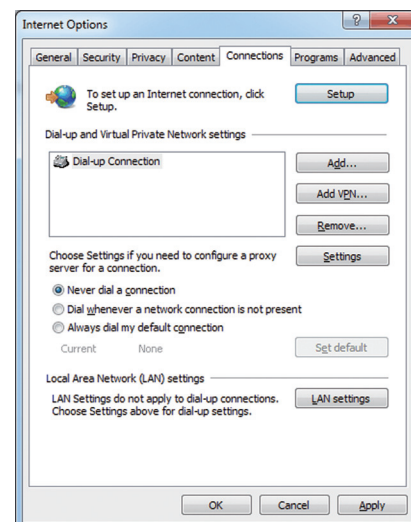
2-2-3. Connecting to the Internet via proxy server using an existing LAN

To monitor and operate the air conditioning units from a PC that connects to the Internet through a proxy server by connecting to an existing LAN, such as a LAN within your company, follow the instructions below to set the environment for the Web browser.

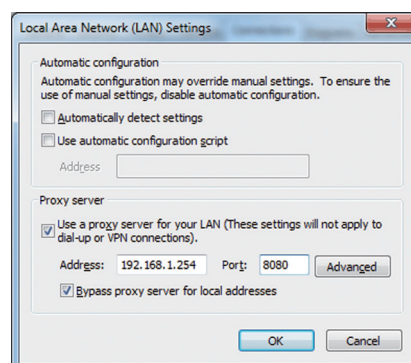
- (1) Click [Tools] in the menu bar, then click [Internet options].



- (2) In the [Internet Options] window, click the [Connections] tab.
- (3) Check the radio button next to [Never dial a connection] in the middle of the window.
- (4) Click [LAN settings] under [Local Area Network (LAN) settings].

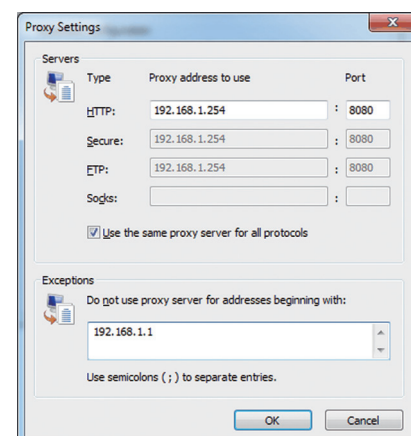


- (5) In the [Local Area Network (LAN) Settings] window, check [Bypass proxy server for local addresses], and click [Advanced].



- (6) In the [Proxy Settings] window, enter the EB-50's IP address (e.g., 192.168.1.1) in the [Exceptions] field. Then, keep clicking [OK] or [Close] to close all windows.

If connecting multiple EB-50 units, enter the addresses of all EB-50 units (e.g., [192.168.1.1; 192.168.1.2]). It is also possible to use an asterisk as a wildcard (e.g., [192.168.1.*]).



3. Logging in to the Web Browser for System Maintenance Engineer

- (1) Enter the web page address in the address field of the Web browser as follows:

http://[IP address of the EB-50]/administrator.html

Press the [Enter] key. A login screen will appear.

Note: If the IP address of the EB-50 is [192.168.1.1], the web page address is [http://192.168.1.1/administrator.html].

Note: Default IP address of EB-50 is [192.168.1.1].

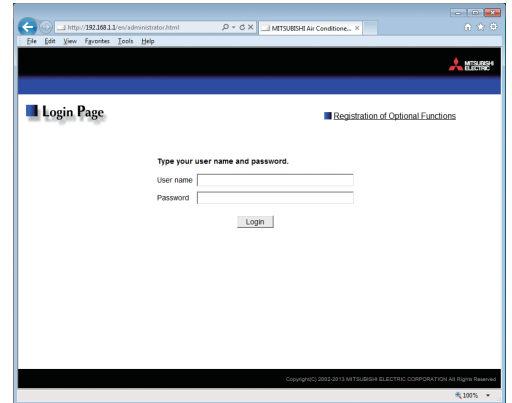
Note: If the login screen does not appear then take the steps below to delete the temporary files.

<Internet Explorer>

1. Click [Tools] in the menu bar, then click [Internet options].
2. On the [General] tab, click [Delete] in the middle of the window.
3. In the [Delete Browsing History] window, click [Delete].

<Java>

1. Click [Control Panel] from the Start menu.
2. Click the [Java] icon to launch the Java Control Panel.
3. On the [General] tab, click [Settings] in the [Temporary Internet Files] section.
4. Click [Delete Files].
5. In the [Delete Files and Applications] window, click [OK].



Note: The web page will be displayed in the same language as the operating system on the PC.

The web page can be displayed in other languages by entering the web page address as follows:

Chinese	http://[IP address of the EB-50]/zh/administrator.html
English	http://[IP address of the EB-50]/en/administrator.html
French	http://[IP address of the EB-50]/fr/administrator.html
German	http://[IP address of the EB-50]/de/administrator.html
Italian	http://[IP address of the EB-50]/it/administrator.html
Japanese	http://[IP address of the EB-50]/ja/administrator.html
Portuguese	http://[IP address of the EB-50]/pt/administrator.html
Russian	http://[IP address of the EB-50]/ru/administrator.html
Spanish	http://[IP address of the EB-50]/es/administrator.html

Note: You can add the web page address to your Favorites for easy access in the future.

- (2) Enter the user name and the password in the login screen, and click [Login]. A screen for monitoring the operation conditions will appear.
- The table below shows the web page addresses for building managers and general users, their respective default user names and passwords, and their accessible functions.

User	Web page address	Default user name	Default password	Available functions	
Building manager	http://[IP address of the EB-50]/administrator.html	administrator	admin	Monitor/Operation	Condition List Measurement List Malfunction List Filter Sign List AHC List
				Energy Management	Energy Use Status Ranking Target Value Setting Peakcut Control Status
				Schedule Settings	Today's Schedule Weekly Schedule 1 Weekly Schedule 2 Weekly Schedule 3 Weekly Schedule 4 Weekly Schedule 5 Annual Schedule
				Malfunction Log	Unit Error Communication Error
				System Settings	Date/Time Settings User Registration
				Maintenance	Send Mail Log Gas Amount Check Outdoor unit status Free Contact List CSV output
General user	http://[IP address of the EB-50]/index.html	guest	guest	Monitor/Operation	Condition List

Note: The license "Personal Web" is required to register up to 50 general users and to specify the accessible unit groups for each general user. Refer to section 8-2 "User Registration" for details.

Note: It is recommended to change the default user name and password so that the users other than the building managers and general users will not be able to change the settings.

Encrypting the communication data and logging in to the Web browser (HTTPS connection)

EB-50 can encrypt communication data using HTTPS (SSL).

When connecting the EB-50 to the LAN that is accessible to the general public, it is recommended that the following settings be made so that the units are monitored and controlled on the encrypted web page.

Note: Depending on the operating system or the Java version, HTTPS encrypted communication may not be enabled properly. If this happens, use an HTTP connection as explained in the previous page.

- (1) Prefix the web address with [https], enter the rest of the address, and press the [Enter] key.

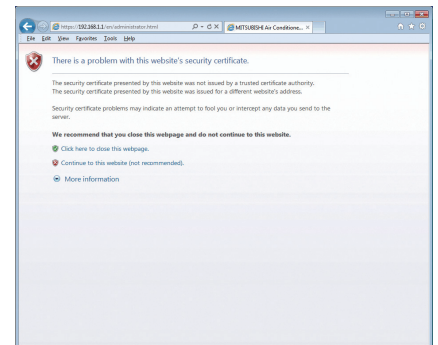
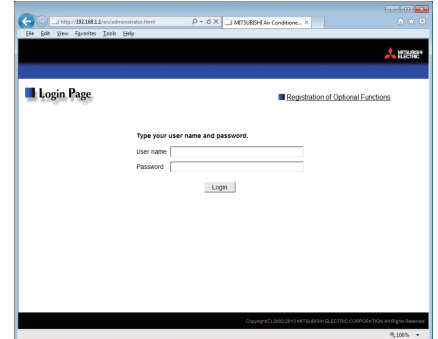
https://[IP Address of the EB-50]/administrator.html

Note: If the IP address of the EB-50 is [192.168.1.1], the web page address is [https://192.168.1.1/administrator.html].

The encrypted data communication will begin, and the Login screen will appear.

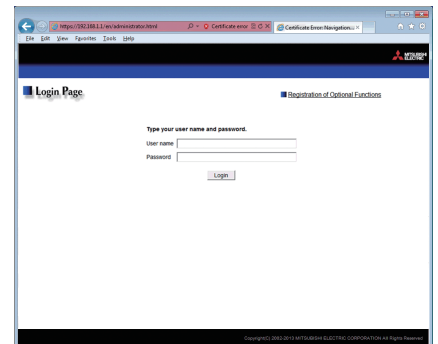
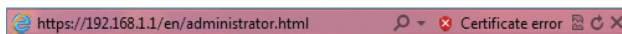
If a security certificate error page appears instead of the Login screen, go to step (2) below.

- (2) If the security certificate is invalid, a security certificate error page (as shown at right) will appear.
Click [Continue to this website (not recommended)].



- (3) If the connection is successfully made, the Login screen will appear.

Note: Although the address bar will turn red and a message "Certificate error" will appear, you can still access the Web browser.



4. Monitor/Operation

This chapter explains how to monitor and operate the connected unit groups and to check the measurement data, malfunctioning units, units whose filter sign is triggered, and AHC status.

4-1. Condition List

This section explains how to monitor the operation conditions of all groups collectively (see section 4-1-1) or groups per block (see section 4-1-2) and also explains how to operate each group (see section 4-1-3), groups per block (see section 4-1-4), or all groups collectively (see section 4-1-5).

After login, the Overview display of the Condition List screen will appear, which shows the operation conditions of all air conditioning unit groups, LOSSNAY unit (ventilator) groups, general equipment groups, and Air To Water (PWFY) unit groups.

To access the Condition List screen from the other screen, click [Monitor/Operation] in the menu bar, and then click [Condition List].

4-1-1. Checking the operation conditions of all groups

On the Overview display of the Condition List screen, the operation conditions of all groups can be monitored. The operator can also check the unit malfunctions on this screen and prevent the units from being left on unintentionally.







































































The screenshot shows the 'Condition List' screen in a web browser. The interface includes a menu bar at the top with options like 'Monitor/Operation', 'Energy Management', 'Schedule Settings', 'Malfunction Log', 'System Settings', and 'Maintenance'. Below the menu, there are tabs for 'Condition List', 'Measurement List', 'Malfunction List', 'Filter Sign List', and 'AHC List'. The main area displays a grid of unit icons with various status indicators. Annotations point to specific features:

- Update**: Click to show the most recent operation conditions. (Points to the 'Update' button)
- Batch Operations**: Click to operate the units in all groups at once. (Points to the 'Batch Operations' button)
- Number of units whose filter sign is turned on**: (Points to the 'Filter Sign List' tab)
- Number of units in error**: (Points to the 'Malfunction List' tab)
- Block/Overview**: (Points to the 'Block' and 'Overview' buttons)
- Weekly schedule number**: Indicates the weekly schedule that is currently effective. (Points to the 'Weekly1 in period' text)
- Group icons**: The icons indicate the operation conditions of groups. Click the icon to switch to the operation screen. (Points to a unit icon)

Item	Description
Block/Overview	Click [Block] to display the operation conditions of groups per block, and click [Overview] to display the operation conditions of all groups.
Update	Click to show the most recent operation conditions. When [Auto] is selected, the operation conditions are updated automatically every minute.
Batch Operations	Click to operate the units in all groups at once. (See section 4-1-5.)
Number of units whose filter sign is turned on *1	The number of units under the control of EB-50 whose filter sign is currently turned on will appear. Clicking "■" will bring up the Filter Sign List screen. (See section 4-4.) Note: This item will not appear if the [Filter Sign Display] is set to [OFF] on the Basic System settings screen, accessible via the Web Browser for Initial Settings.
Number of units in error *1	The number of units under the control of EB-50 that are currently in error will appear. Clicking "▲" will bring up the Malfunction List screen. (See section 4-3.)

*1 The item will not appear if the number of units is "0."

Item	Description																										
Group icons	<p>Each group icon indicates the operation condition of the group. Move the cursor to the icon to display its group name. Clicking the icon will bring up the operation screen. The icons to indicate the operation conditions are shown below.</p> <p>(1) Air conditioning unit group</p> <table><tr><td>ON</td><td>OFF</td><td>Error</td><td>Filter sign ON *1</td></tr><tr><td></td><td></td><td></td><td></td></tr></table> <table><tr><td>Interlocked LOSSNAY ON *2 *8</td><td>Interlocked LOSSNAY OFF *3 *8</td><td>Schedule set *4</td><td>HOLD ON</td></tr><tr><td></td><td></td><td></td><td></td></tr></table> <table><tr><td>Energy-saving ON *5</td><td>Setback ON *11</td><td>Starting up</td><td>Occupied/Vacant *6*7*8</td></tr><tr><td></td><td></td><td></td><td></td></tr></table> <table><tr><td>Bright/Dark *9*10*11</td></tr><tr><td></td></tr></table> <p>Note: Besides the 4-way airflow unit icons, 2-way airflow or ceiling-suspended unit icons are also available. Icons can be selected on the group settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*1 Whether or not to display the filter sign can be set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*2 If the LOSSNAY unit is interlocked with the operation of Mr. Slim units, "Interlocked LOSSNAY ON" icon will appear, even when the LOSSNAY unit is operated individually. (Applicable M-NET adapter model: PAC-SF48/50/60/70/80/81MA-E)</p> <p>*3 If a LOSSNAY unit is interlocked with the operation of indoor units in multiple groups, the LOSSNAY unit may be in operation, even when the "Interlocked LOSSNAY OFF" icon is displayed.</p> <p>*4 If any schedule setting is applied to a DIDO controller whose prohibition setting is enabled ([Allow operations] is set to [No operations] on the group settings screen, accessible via the Web Browser for Initial Settings), the "Schedule set" icon will appear, but the scheduled operations will not be performed.</p> <p>*5 The "Energy-saving ON" icon will appear while the Peak Cut control is performed on the group or on the outdoor unit that is connected to the group.</p> <p>*6 The Occupancy/Vacancy status icon will appear only when [Show occupancy icon], [Show vacancy icon], or [Show both icons] is selected in the [Occupancy sensor display] section under the [Display Format] section of the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*7 The Occupancy/Vacancy status icon will not appear if the remote controller in the group does not have an occupancy sensor.</p> <p>*8 The Occupancy/Vacancy status icon takes priority over the "Interlocked LOSSNAY ON" or "Interlocked LOSSNAY OFF" icon.</p> <p>*9 The Brightness/Darkness status icon will appear only when [Show bright symbol], [Show dark symbol], or [Show both symbols] is selected in the [Brightness sensor display] section under the [Display Format] section of the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*10 The Brightness/Darkness status icon will not appear if the remote controller in the group does not have a brightness sensor.</p> <p>*11 The "Setback ON" icon takes priority over the Brightness/Darkness status icon.</p>	ON	OFF	Error	Filter sign ON *1					Interlocked LOSSNAY ON *2 *8	Interlocked LOSSNAY OFF *3 *8	Schedule set *4	HOLD ON					Energy-saving ON *5	Setback ON *11	Starting up	Occupied/Vacant *6*7*8					Bright/Dark *9*10*11	
	ON	OFF	Error	Filter sign ON *1																							
	Interlocked LOSSNAY ON *2 *8	Interlocked LOSSNAY OFF *3 *8	Schedule set *4	HOLD ON																							
	Energy-saving ON *5	Setback ON *11	Starting up	Occupied/Vacant *6*7*8																							
	Bright/Dark *9*10*11																										

Item	Description																																				
Group icons	<div>(2) LOSSNAY unit (ventilator) group</div> <table><tr><td>ON</td><td>OFF</td><td>Error</td><td>Filter sign ON *1</td></tr><tr><td></td><td></td><td></td><td></td></tr></table> <table><tr><td>Schedule set</td><td>HOLD ON</td><td>Energy-saving ON *2</td></tr><tr><td></td><td></td><td></td></tr></table> <div><div>*1 Whether or not to display the filter sign can be set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</div><div>*2 The "Energy-saving ON" icon will appear while the Peak Cut control is performed on the LOSSNAY unit group.</div></div> <div>(3) Air To Water (PWFY) unit group</div> <table><tr><td>ON</td><td>OFF</td><td>Error</td><td>Schedule set</td></tr><tr><td></td><td></td><td></td><td></td></tr></table> <table><tr><td>HOLD ON</td><td>Energy-saving ON *1</td></tr><tr><td></td><td></td></tr></table> <div>*1 The "Energy-saving ON" icon will appear while the Peak Cut control is performed on the Air To Water (PWFY) unit group.</div> <div>(4) General equipment group</div> <table><tr><td>ON</td><td>OFF</td><td>Error</td><td>Schedule set</td></tr><tr><td></td><td></td><td></td><td></td></tr></table> <table><tr><td>HOLD ON</td></tr><tr><td></td></tr></table> <div>Note: Besides the lighting icons, pump or card key icons are also available. The icon can be selected on the group settings screen, accessible via the Web Browser for Initial Settings.</div>	ON	OFF	Error	Filter sign ON *1					Schedule set	HOLD ON	Energy-saving ON *2				ON	OFF	Error	Schedule set					HOLD ON	Energy-saving ON *1			ON	OFF	Error	Schedule set					HOLD ON	
	ON	OFF	Error	Filter sign ON *1																																	
																																					
	Schedule set	HOLD ON	Energy-saving ON *2																																		
																																					
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	HOLD ON	Energy-saving ON *1																																			
																																					
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HOLD ON																																					
																																					
Group name	<div>Only the first 8 characters will be visible under the icons. To display all characters, move the cursor to the icon.</div> <div>Note: Whether or not to display the group names can be set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</div> <div><div><div>Condition List</div><div><div>● Update</div><div>[<input type="checkbox"/> Auto <input checked="" type="checkbox"/> Manual]</div><div>● Batch Operation</div></div><div><div></div><div></div><div></div><div></div></div><div><div>Elevator hall (1F)</div><div></div><div></div><div></div><div></div></div><div>ElevatorLightingLightingLighting</div></div></div> <div><div>Condition List</div><div><div>● Update</div><div>[<input type="checkbox"/> Auto <input checked="" type="checkbox"/> Manual]</div><div>● Batch Operation</div></div><div><div></div><div></div><div></div><div></div></div><div><div>Elevator hall (1F)</div><div></div><div></div><div></div><div></div></div><div></div></div>																																				

4-1-2. Checking the operation conditions of the groups in a given block

In the Block display of the Condition List screen, select a block to display the operation conditions (such as operation mode, set temperature, and room temperature) of the air conditioning unit groups, LOSSNAY unit (ventilator) groups, Air To Water (PWFY) unit groups, and general equipment groups in the block.

The screenshot shows the 'Condition List' screen in a web browser. The interface includes a top navigation bar with tabs like 'Monitor/Operation', 'Energy Management', 'Schedule Settings', 'Malfunction Log', 'System Settings', and 'Maintenance'. Below this is a sub-navigation bar with 'Condition List', 'Measurement List', 'Malfunction List', 'Filter Sign List', and 'AHC List'. The main area displays a grid of room information, including 'Entrance', 'Lobby(South)', 'Lobby(East)', 'Lobby(West)', 'Conference Room A', 'Conference Room B', 'Conference Room C', and 'Conference Room D'. Each room entry shows an icon, a name, an operation mode (e.g., Heat, Auto, Fan), a set temperature, a room temperature, and a room humidity. Annotations with arrows point to various elements: 'Update' points to the 'Update' button; 'Block selection' points to the 'All Blocks' dropdown; 'Group name' points to the room names; 'Group icons' points to the room icons; 'Set temperature' points to the temperature values; 'Batch Operations' points to the 'Batch Operations' button; 'Block/Overview' points to the 'Block' and 'Overview' tabs; 'Number of units in error' points to a yellow warning icon; 'Number of units whose filter sign is turned on' points to a blue icon; 'Room humidity' points to the humidity percentage; 'Room temperature' points to the room temperature value; and 'Operation mode' points to the operation mode text.

Update
Click to show the most recent operation conditions.

Block selection
Click the icon to switch to the operation screen.

Group name
The icons indicate the operation conditions of groups.

Group icons
Click the icon to switch to the operation screen.

Set temperature

Batch Operations
Click to operate the units in all groups in a given block at once.

Block/Overview

Number of units in error



Number of units whose filter sign is turned on

Room humidity

Room temperature

Operation mode

Item	Description
Block/Overview	Click [Block] to display the operation conditions of groups per block, and click [Overview] to display the operation conditions of all groups.
Update	Click to show the most recent operation conditions. When [Auto] is selected, the operation conditions are updated automatically every minute.
Batch Operations	Click to operate the units in all groups in a given block at once. (See section 4-1-4.)
Block selection	Select a block you want to monitor.
Group icons	Each group icon indicates the operation condition of the group. Clicking the icon will bring up the operation screen.
Group name	The name of the group will appear.
Operation mode	The operation mode of the group will appear.
Set temperature	The set temperature of the group will appear. Note: For Air To Water (PWFY) unit groups, the set water temperature will appear. Note: The temperature unit (°C or °F) can be selected on the Basic System settings screen, accessible via the Web Browser for Initial Settings.
Room temperature	Indoor unit return air temperature will appear. Note: The temperature shown may be different from the actual room temperature. Note: Whether to show or hide the room temperature can be set on the Basic System settings screen, accessible via the Web Browser for Initial Settings. Note: For Air To Water (PWFY) unit groups, the current water temperature will appear. Note: The temperature unit (°C or °F) can be selected on the Basic System settings screen, accessible via the Web Browser for Initial Settings.
Room humidity	The reading of the indoor unit return air humidity or the humidity sensor on the ME remote controller (Smart ME controller) will appear. Note: The value will not appear if the indoor unit does not have a humidity measurement function. Note: If a ME remote controller (Smart ME controller) is connected to the group and the built-in humidity sensor is enabled, the reading of the sensor will appear. Note: The indoor unit return air humidity has priority to be displayed over the reading of the humidity sensor on the ME remote controller (Smart ME controller).

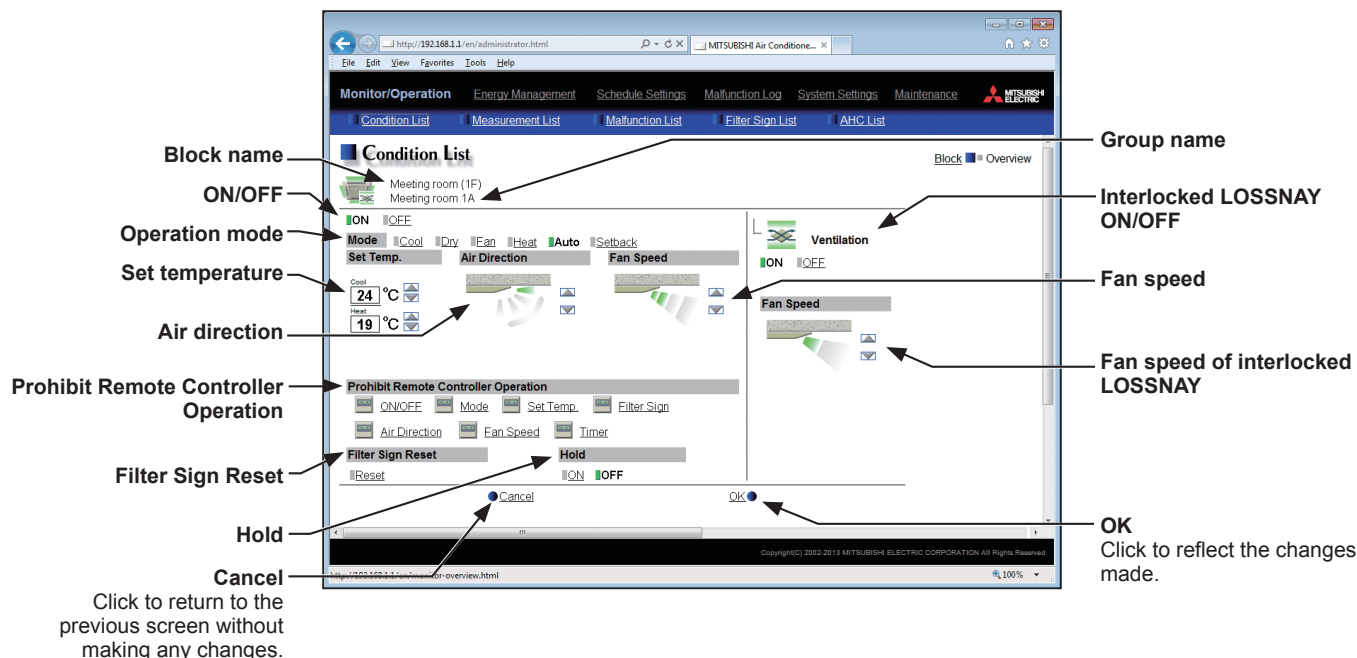
Item	Description
Number of units whose filter sign is turned on *1	The number of units under the control of EB-50 whose filter sign is currently turned on will appear. Clicking "  will bring up the Filter Sign List screen. (See section 4-4.) Note: This item will not appear if the [Filter Sign Display] is set to [OFF] on the Basic System settings screen, accessible via the Web Browser for Initial Settings.
Number of units in error *1	The number of units under the control of EB-50 that are currently in error will appear. Clicking "  will bring up the Malfunction List screen. (See section 4-3.)

*1 The item will not appear if the number of units is "0."



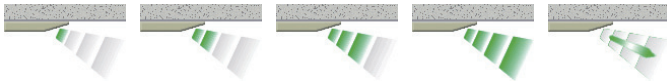





4-1-3. Operating the units in a given group

In the Overview display of the Condition List screen, click one of the group icons to display its operation settings screen, which shows the current operation conditions. Change the desired settings and click [OK] to reflect the changes. Click [Cancel] to return to the previous screen without making any changes.

Note: Only the ON/OFF operation is possible for general equipment groups. The general equipment whose prohibition setting is enabled ([Allow operations] is set to [No operations] on the group settings screen, accessible via the Web Browser for Initial Settings) cannot be operated.



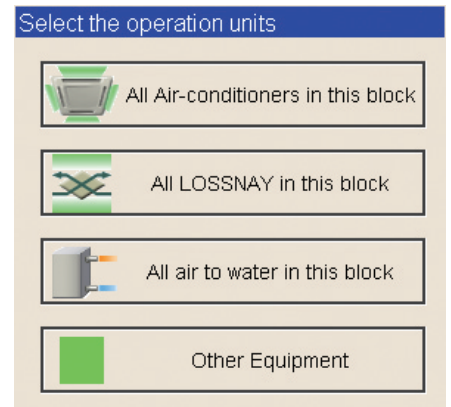
Item	Description
ON/OFF	Click [ON] or [OFF] to turn on or off the units in a given group. Note: Switching this switch will turn on or off the LOSSNAY unit as well that is interlocked with the operation of indoor units in the group. To turn on or off the LOSSNAY unit only, use the "Interlocked LOSSNAY ON/OFF" switch.
Operation mode *1	Click the desired operation mode. Air conditioning unit: Cool, Dry, Fan, Heat, Auto, Setback LOSSNAY unit: Heat Recovery, Bypass, Auto Air To Water (PWFY) unit: Heating, Heating ECO, Hot Water, Anti-freeze, Cooling Note: Only the operation modes available for the unit model will appear. Note: The Setback mode can be selected on the EB-50GU-A, but not on the EB-50GU-J.
Set temperature *1	Click or to adjust the set temperature of the air conditioning unit or the Air To Water (PWFY) unit. Note: The settable temperature ranges depend on the unit model. Note: If the indoor unit supports the dual set point function in the AUTO mode and when the operation mode above is set to Auto or Setback, two set temperatures for Cool mode and Heat mode can be set. Note: The temperature unit (°C or °F) can be selected on the Basic System settings screen, accessible via the Web Browser for Initial Settings.
Air Direction *1	Click or to adjust the air direction. (Mid 3) (Mid 2) (Mid 1) (Mid 0) (Horizontal) (Swing) (Auto) Note: Available air directions depend on the unit model.

Item	Description
Fan Speed *1	<p>Click  or  to adjust the fan speed.</p> <p>(Low) (Mid 2) (Mid 1) (High) (Auto)</p>  <p>Note: Available fan speeds depend on the unit model.</p>
Prohibit Remote Controller Operation	<p>The following operations or setting change from the local remote controllers and the Web Browser for User can be prohibited: ON/OFF, Operation mode, Set temperature, and Filter sign reset.</p> <p>Click the operation item [ON/OFF], [Mode], [Set Temp.], [Filter Sign], [Air Direction], [Fan Speed], or [Timer] to switch the setting between  (Prohibit) or  (Permit).</p> <p>Note: For LOSSNAY unit (ventilator) groups, the item [Mode] or [Set Temp.] will not appear.</p> <p>Note: [Air Direction], [Fan Speed], and [Timer] may not be displayed, depending on the unit model.</p> <p>Note: When the [ON/OFF] operation is prohibited and the "Automatic recovery after power failure" switch on the indoor unit is set to "Turn off the power, or restore operation regardless of the operation status immediately before power failure," the operation of the indoor unit will not be restored, even when turned on after power restoration.</p> <p>When the switch is set to "Turn off the power, or restore operation if the unit was in operation immediately before power failure," the operation of the indoor unit will be restored regardless of whether the [ON/OFF] operation is prohibited or not.</p> <p>Refer to the indoor unit Installation Manual for details about switch settings.</p>
Filter Sign Reset	<p>Click [Reset] to switch between resetting and not resetting the filter sign. The rectangular icon next to Reset will appear in yellow-green when it is set to Reset ().</p> <p>Note: If a filter sign in the group has not been triggered, then the item [Filter Sign Reset] will not appear.</p> <p>Note: Filter sign of LOSSNAY units will not be reset.</p>
Hold	<p>Click [ON] or [OFF] to enable/disable the Hold function. When the Hold function is enabled, the scheduled operations are disabled.</p> <p>Note: The operations that have been scheduled from the remote controller will also be disabled.</p> <p>Note: [Hold type] can be specified on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>Note: The Hold function cannot be enabled on general equipments.</p> <p>Note: The Hold function can be used on the EB-50GU-A, but not on the EB-50GU-J.</p>
Interlocked LOSSNAY ON/OFF	<p>Click [ON] or [OFF] to turn on or off the interlocked LOSSNAY unit.</p> <p>Note: For a group that is not connected to an interlocked LOSSNAY unit (ventilator), the item [Interlocked ventilator ON/OFF] will not appear.</p>
Fan speed of interlocked LOSSNAY	<p>Click  or  to adjust the fan speed of the interlocked LOSSNAY unit (ventilator).</p> <p>Note: For a group that is not connected to an interlocked LOSSNAY unit, the item [Fan speed of interlocked LOSSNAY] will not appear.</p>

*1 The item may not be displayed, depending on the unit model.

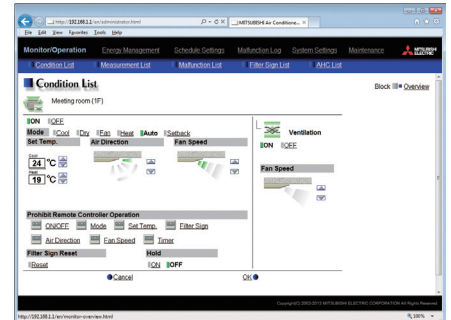
4-1-4. Operating the units in a given block

- (1) In the Block display of the Condition List screen, select a block to operate, and click [Batch Operations].
If air conditioner group, LOSSNAY unit (ventilator) group, Air To Water (PWFY) unit group, and general equipment group exist together in the same block, a screen to select a group type will appear.
Click one of the group types to change its settings.



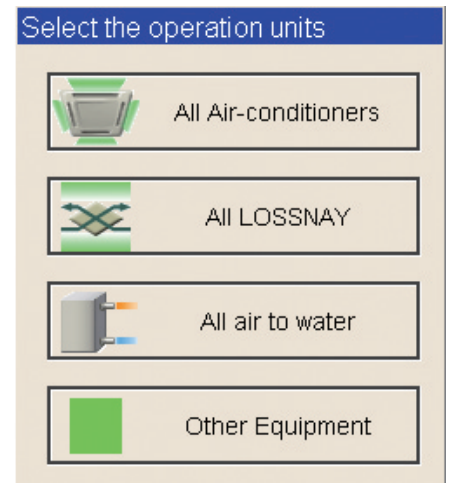
- (2) On the operation settings screen, change the desired settings and click [OK] to reflect the changes.
Click [Cancel] to return to the previous screen without making any changes.

Note: When the filter sign is reset on this screen, the cumulative operation time of all units will be reset, irrespective of whether or not the filter sign was triggered. Reset the filter sign on this screen when the filters of all units were cleaned at once.



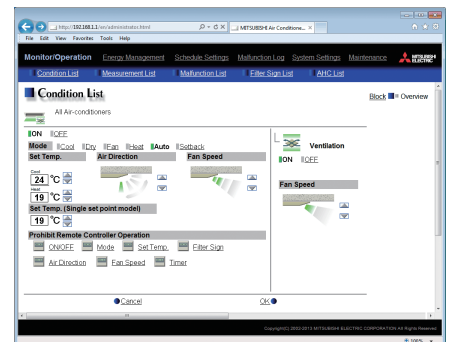
4-1-5. Operating the units in all groups

- (1) In the Overview display of the Condition List screen, click [Batch Operations]. If air conditioner group, LOSSNAY unit (ventilator) group, Air To Water (PWFY) unit group, and general equipment group exist together in the same system, a screen to select a group type will appear.
Click one of the group types to change its settings.



- (2) On the operation settings screen, change the desired settings and click [OK] to reflect the changes.
Click [Cancel] to return to the previous screen without making any changes.

Note: When the filter sign is reset on this screen, the cumulative operation time of all units will be reset, irrespective of whether or not the filter sign was triggered. Reset the filter sign on this screen when the filters of all units were cleaned at once.



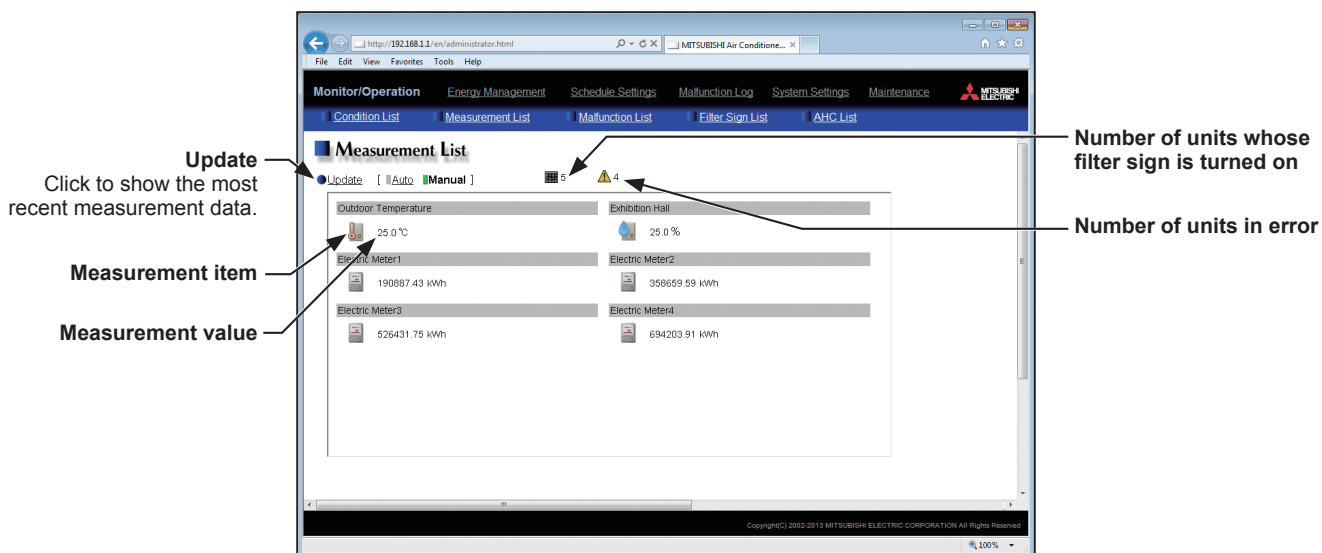
4-2. Measurement List








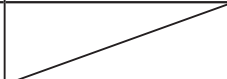








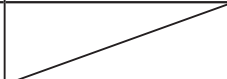








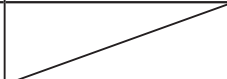

This section explains how to check the measurement data of the temperature sensors, humidity sensors, and metering devices.

Click [Monitor/Operation] in the menu bar, and then click [Measurement List] to access the Measurement List screen.

Note: An AI controller (PAC-YG63MCA), a commercially available temperature sensor, and a humidity sensor are required to measure the temperature and humidity.

Note: A PI controller (PAC-YG60MCA) and a commercially available metering devices are required to measure the electric, water, heat, and gas consumptions.

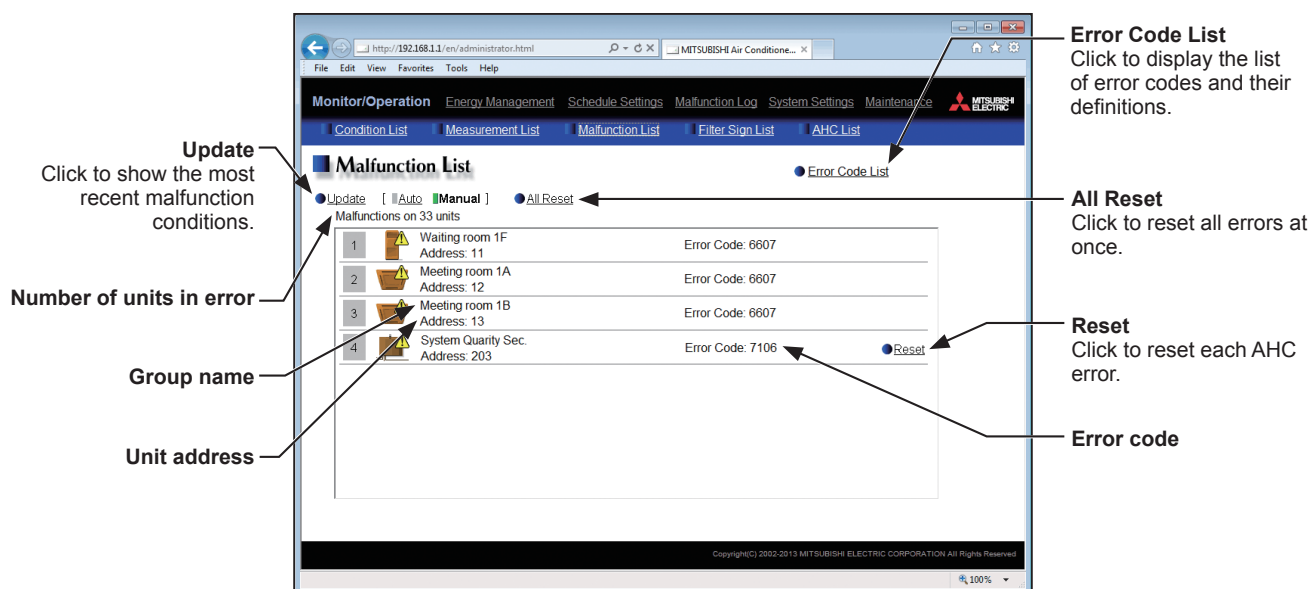


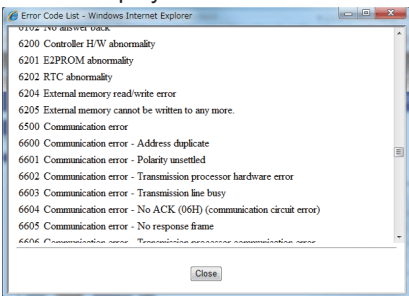
Item	Description																
Update	Click to show the most recent measurement data. When [Auto] is selected, the measurement data is updated automatically every minute.																
Measurement value	<p>The current measurement values will appear.</p> <p>Note: The following icons are used to indicate the measuring devices. Icons will appear in orange when the measurement value reaches the upper or lower alarm threshold value that has been set on the Measurement screen, accessible via the Web Browser for Initial Settings.</p> <table><tr><td></td><td>Normal</td><td>Upper/lower alarm threshold value is reached.</td><td>Communication error</td></tr><tr><td>Temperature sensor</td><td></td><td></td><td> *1</td></tr><tr><td>Humidity sensor</td><td></td><td></td><td> *1</td></tr><tr><td>Metering device</td><td></td><td></td><td> *2</td></tr></table> <p>*1 When there is a communication error, the measurement value of the temperature or humidity sensor will be "--."</p> <p>*2 When there is a communication error, the measurement value of the metering device will be the measured value immediately before the error detection.</p>		Normal	Upper/lower alarm threshold value is reached.	Communication error	Temperature sensor			 *1	Humidity sensor			 *1	Metering device			 *2
	Normal	Upper/lower alarm threshold value is reached.	Communication error														
Temperature sensor			 *1														
Humidity sensor			 *1														
Metering device			 *2														
Number of units whose filter sign is turned on *1	<p>The number of units under the control of EB-50 whose filter sign is currently turned on will appear. Clicking "■" will bring up the Filter Sign List screen. (See section 4-4.)</p> <p>Note: This item will not appear if the [Filter Sign Display] is set to [OFF] on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p>																
Number of units in error *1	<p>The number of units under the control of EB-50 that are currently in error will appear. Clicking "⚠" will bring up the Malfunction List screen. (See section 4-3.)</p>																

*1 The item will not appear if the number of units is "0."

4-3. Malfunction List

Click [Monitor/Operation] in the menu bar, and then click [Malfunction List] to access the Malfunction List screen. A list of units that are currently malfunctioning will appear.



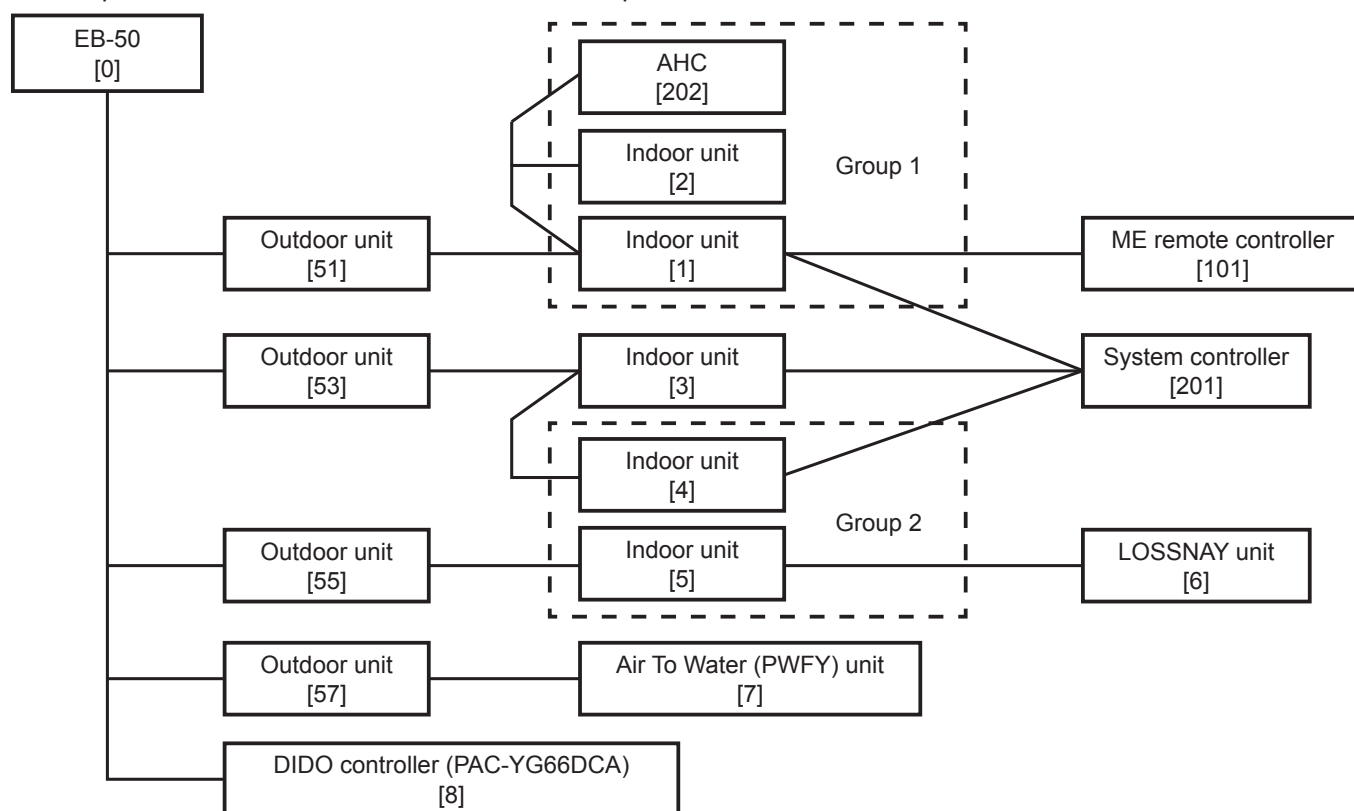
Item	Description
Update	Click to show the most recent malfunction conditions. When [Auto] is selected, the malfunction conditions are updated automatically every minute.
All Reset	Click to reset all errors at once.
Error Code List	Click to display the list of error codes and their definitions. 
Number of units in error	The number of malfunctioning units will appear.
Group name	The name of the group that the unit in error belongs to will appear. Note: The group name will be blank if the unit in error is a unit that does not belong to any group, such as an outdoor unit or a system controller.
Unit address	The address of the unit in error will appear.
Error code	The error code that corresponds to the error will appear.
Reset	Click to reset each AHC error.

Types of units in error and the units that will stop when errors are reset

Types of units in error and the units that will stop

Units in error	Units that will stop
EB-50	None
Outdoor unit	All indoor units that are connected to the outdoor unit in error
Indoor unit	Indoor unit in error and all other indoor units in the same group
ME (MA) remote controller	All indoor units that are connected to the remote controller in error
System controller	All indoor units that are connected to the system controller in error
Advanced HVAC CONTROLLER	None
Interlocked LOSSNAY unit	Indoor units with which the LOSSNAY unit in error is interlocked
Air To Water (PWFY) unit	Air To Water (PWFY) unit in error and all other Air To Water (PWFY) units in the same group
DIDO controller (PAC-YG66DCA)	None

Example of units in error and the units that will stop

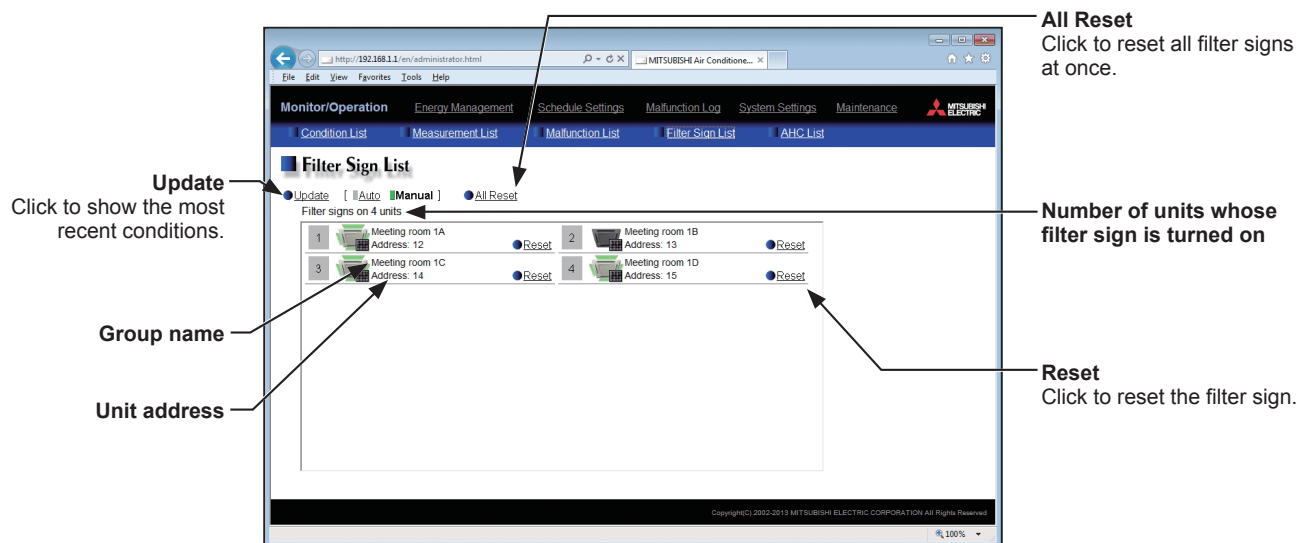


Units in error	Units that will stop
EB-50 [0]	None
Outdoor unit [51]	Indoor unit [1], Indoor unit [2]
Outdoor unit [53]	Indoor unit [3], Indoor unit [4], Indoor unit [5]
Outdoor unit [57]	Air To Water (PWFY) unit [7]
Indoor unit [1]	Indoor unit [1], Indoor unit [2]
Indoor unit [3]	Indoor unit [3]
Indoor unit [5]	Indoor unit [4], Indoor unit [5]
LOSSNAY unit [6]	Indoor unit [5]
Air To Water (PWFY) unit [7]	Air To Water (PWFY) unit [7]
ME remote controller [101]	Indoor unit [1]
System controller [201]	Indoor unit [1], Indoor unit [3], Indoor unit [4]
Advanced HVAC CONTROLLER [202]	None
DIDO controller (PAC-YG66DCA) [8]	None

4-4. Filter Sign List

A list of units whose filter sign is turned on can be displayed.

Click [Monitor/Operation] in the menu bar, and then click [Filter Sign List] to access the Filter Sign List screen.



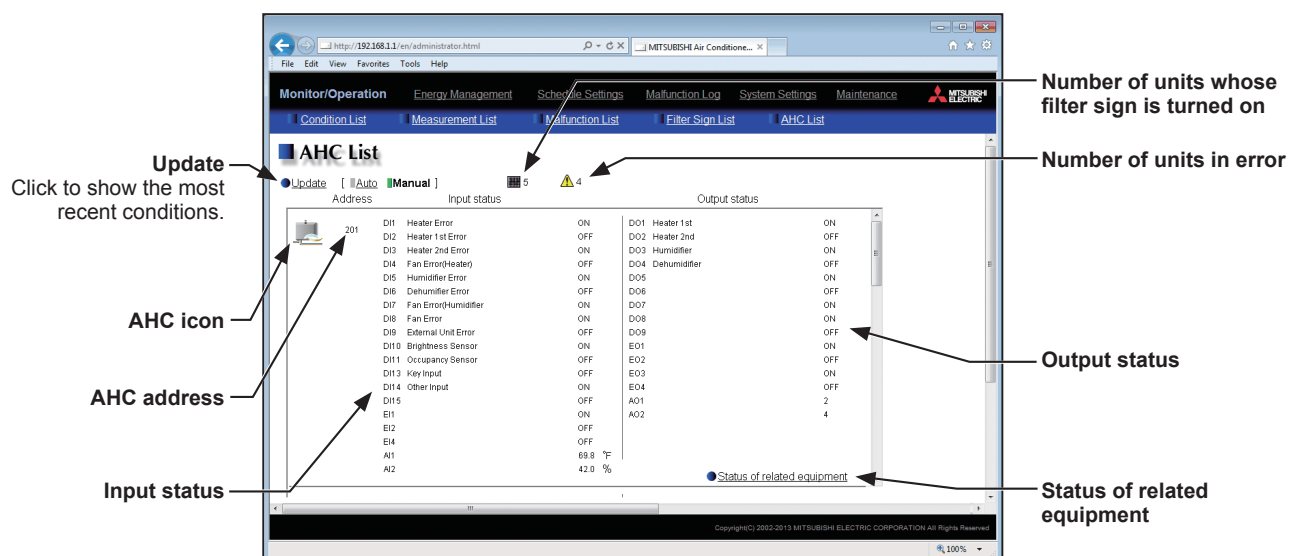
Item	Description
Update	Click to show the most recent conditions. When [Auto] is selected, the conditions are updated automatically every minute.
All Reset	Click to reset all filter signs at once.
Number of units whose filter sign is turned on	The number of units whose filter sign is currently turned on will appear.
Group name	The name of the group that the unit belongs to will appear.
Unit address	The address of the unit whose filter sign is turned on will appear.
Reset	Click to reset each filter sign.



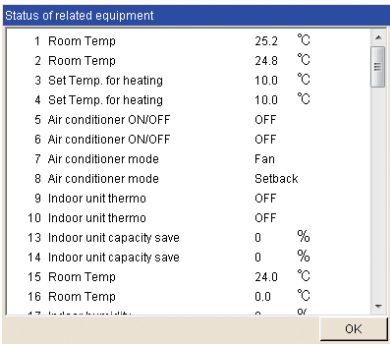
4-5. AHC List



On the AHC List screen, the status of input and output ports of each Advanced HVAC CONTROLLER (AHC) can be monitored.

Click [Monitor/Operation] in the menu bar, and then click [AHC List] to access the AHC List screen.

The port names and their status of each AHC will appear.



Item	Description
Update	Click to show the most recent conditions. When [Auto] is selected, the conditions are updated automatically every minute.
AHC icon	The following icons indicate the AHC status.  : Normal  : A communication error is occurring or an error signal has been input to the AHC.
AHC address	The address of the connected AHC will appear.
Input status	[Input port code * + Input port name + Input status] will appear. * DI1–DI15 (Digital input), EI1–EI4 (Extended digital input), AI1–AI8 (Analog input) Note: The status of the unused ports will not appear. Note: If a communication error occurs with AHC, no port information will appear.
Output status	[Output port code * + Output port name + Output status] will appear. * DO1–DO9 (Digital output), EO1–EO4 (Extended digital output), AO1–AO2 (Analog output) Note: The status of the unused ports will not appear. Note: If a communication error occurs with AHC, no port information will appear.
Status of related equipment	Click to display the status of the equipment that are used to control the equipments that are connected to the AHC. 

Item	Description
Number of units whose filter sign is turned on *1	The number of units under the control of EB-50 whose filter sign is currently turned on will appear. Clicking "  will bring up the Filter Sign List screen. (See section 4-4.) Note: This item will not appear if the [Filter Sign Display] is set to [OFF] on the Basic System settings screen, accessible via the Web Browser for Initial Settings.
Number of units in error *1	The number of units under the control of EB-50 that are currently in error will appear. Clicking "  will bring up the Malfunction List screen. (See section 4-3.)

*1 The item will not appear if the number of units is "0."

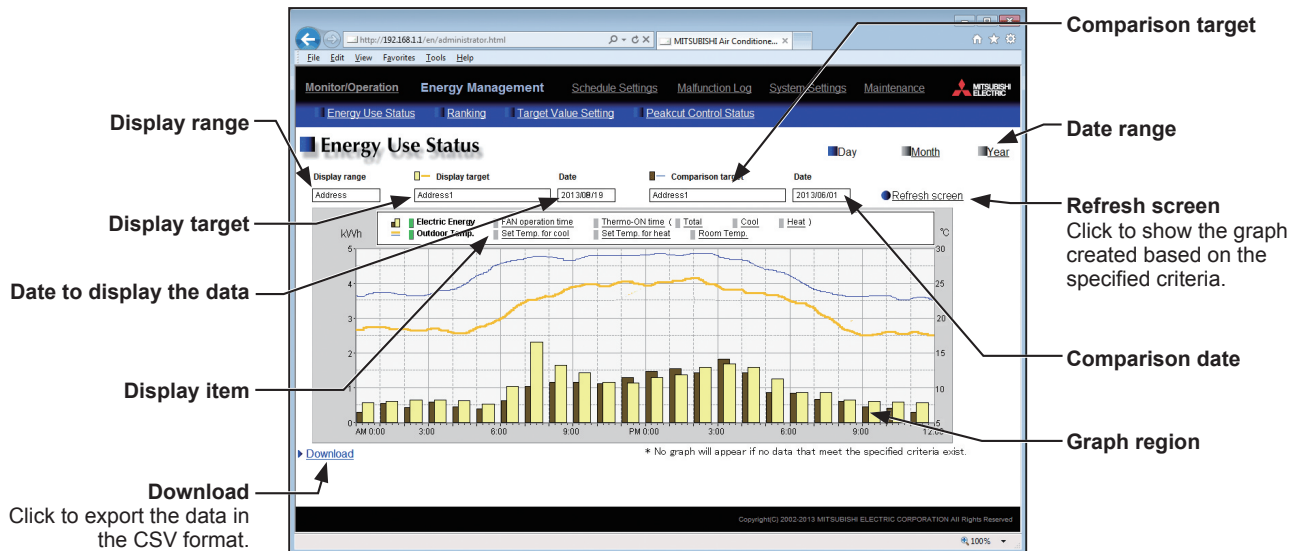
5. Energy Management

5-1. Energy Use Status

On the Energy Use Status screen, the energy-control-related status, such as electric energy consumption, operation time, and outdoor temperature, can be displayed in a graph. Operators can check the detailed status of given indoor units by specifying the date to display the data per group, block, or unit address. Also, the status of other indoor units can be displayed at the same time for comparison.

Click [Energy Management] in the menu bar, and then click [Energy Use Status] to access the Energy Use Status screen.

Note: A separate license is required, depending on the selected date range, display range, and display item.



Item	Description
Date range	<p>Select [Day], [Month], or [Year].</p> <p>Note: When [Day] is selected, the data for each hour between 0:00 and 24:00 of the specified date will appear in the graph.</p> <p>When [Month] is selected, the data for each day between the 1st and 31st of the specified month will appear in the graph.</p> <p>When [Year] is selected, the data for each month between January and December of the specified year will appear in the graph.</p> <p>Note: Only the data for the period during which the EB-50 was powered on will appear in the graph. The data for the period during which the EB-50 was powered off will not appear in the graph.</p>
Display range	Select [Block], [Group], or [Address] to display its data.
Display target	<p>Select a block name, group name, or address number to display its data.</p> <p>Note: The selectable items vary, depending on the item selected in the [Display range] field.</p>
Date to display the data	<p>Specify a date to display the data.</p> <p>Note: When [Day] is selected as a Date range, specify "yyyy/mm/dd" from the current month or the last 24 months.</p> <p>When [Month] is selected as a Date range, specify "yyyy/mm" from the current month or the last 24 months.</p> <p>When [Year] is selected as a Date range, specify "yyyy" from the current year or the last 4 years.</p> <p>Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p>
Comparison target	<p>Select a block name, group name, or address to display the comparison data.</p> <p>Note: The selectable items vary, depending on the item selected in the [Display range] field.</p>
Comparison date	<p>Specify a date to display the comparison data.</p> <p>Note: The same rule as for the "Date to display the data" apply.</p> <p>Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p>
Refresh screen	<p>Click to show the graph created based on the specified criteria.</p> <p>Note: No graph will appear if no data that meet the specified criteria exist.</p>

Item	Description																																														
Display item	Select an item in the top row to display its data in the bar graph, and select an item in the bottom row to display its data in the line graph. Note: The selectable items vary, depending on the items selected in the [Display range] and [Display target] fields.																																														
	<div><div><div></div><div></div></div><div>Display items for bar graph</div></div>																																														
	<table><tr><th rowspan="2">Display target</th><th rowspan="2">Display item</th><th colspan="3">Display range</th></tr><tr><th>Address</th><th>Group</th><th>Block</th></tr><tr><td rowspan="5">Indoor unit</td><td>Electric Energy *3</td><td>V *1</td><td>V *1</td><td>V *1</td></tr><tr><td>Fan operation time *4</td><td>V *1</td><td>V *1</td><td>-</td></tr><tr><td>Thermo-ON time (Total) *4</td><td>V *1</td><td>V *1</td><td>-</td></tr><tr><td>Thermo-ON time (Cool) *4</td><td>V *1</td><td>V *1</td><td>-</td></tr><tr><td>Thermo-ON time (Heat) *4</td><td>V *1</td><td>V *1</td><td>-</td></tr><tr><td rowspan="4">MCP (PI controller)</td><td>Name of the metering device 1</td><td>V *2</td><td>-</td><td>-</td></tr><tr><td>Name of the metering device 2</td><td>V *2</td><td>-</td><td>-</td></tr><tr><td>Name of the metering device 3</td><td>V *2</td><td>-</td><td>-</td></tr><tr><td>Name of the metering device 4</td><td>V *2</td><td>-</td><td>-</td></tr></table>	Display target	Display item	Display range			Address	Group	Block	Indoor unit	Electric Energy *3	V *1	V *1	V *1	Fan operation time *4	V *1	V *1	-	Thermo-ON time (Total) *4	V *1	V *1	-	Thermo-ON time (Cool) *4	V *1	V *1	-	Thermo-ON time (Heat) *4	V *1	V *1	-	MCP (PI controller)	Name of the metering device 1	V *2	-	-	Name of the metering device 2	V *2	-	-	Name of the metering device 3	V *2	-	-	Name of the metering device 4	V *2	-	-
	Display target			Display item	Display range																																										
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<div>*3 The electric energy consumed by indoor units will appear in the graph. The values are apportioned based on the setting for [Indoor unit operation apportioning mode] that has been made on the Energy Management Settings screen, accessible via the Web Browser for Initial Settings.</div>																																															
<div>*4 The indoor unit's cumulative operation time for the selected item will appear in the graph.</div>																																															
<div><div>• [FAN operation time] is the cumulative duration of time in which the indoor unit is powered on.</div><div>• [Thermo-ON time (Total/Cool/Heat)] is the cumulative duration of time in which the indoor unit and the compressor are powered on. (Cool: when the Cool mode is selected; Heat: when the Heat mode is selected; Total: when either mode is selected)</div></div>																																															

Item	Description																																																
Display item	<div><div><div></div></div><div>Display items for line graph</div></div> <table><tr><th rowspan="2">Display target</th><th rowspan="2">Display item</th><th colspan="3">Display range</th></tr><tr><th>Address</th><th>Group</th><th>Block</th></tr><tr><td>-</td><td>Outdoor Temp. *5</td><td>V *2</td><td>V *2</td><td>V *2</td></tr><tr><td rowspan="4">Indoor unit</td><td>Target value</td><td>-</td><td>-</td><td>V *1*3</td></tr><tr><td>Set Temp. for cool *5</td><td>V *3</td><td>V *3</td><td>-</td></tr><tr><td>Set Temp. for heat *5</td><td>V *3</td><td>V *3</td><td>-</td></tr><tr><td>Room Temp. *5</td><td>V *3</td><td>V *3</td><td>-</td></tr><tr><td rowspan="2">MCT (AI controller) *5</td><td>Name of the temperature sensor 1 or humidity sensor 1</td><td>V *4</td><td>-</td><td>-</td></tr><tr><td>Name of the temperature sensor 2 or humidity sensor 2</td><td>V *4</td><td>-</td><td>-</td></tr><tr><td rowspan="2">AHC *5</td><td>Name of the temperature sensor 1</td><td>V *3</td><td>-</td><td>-</td></tr><tr><td>Name of the temperature sensor 2</td><td>V *3</td><td>-</td><td>-</td></tr></table> <p>V: Item that can be displayed in the graph</p> <p>*1 The target values will appear in the graph when the target electric energy values are specified on the Target Value Setting screen and when the electricity meter is selected in the [Indoor unit electricity meter] section on the Energy Management Settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*2 Selectable only when the outdoor temperature sensor is selected in the [External Temperature Sensor] section on the Energy Management Settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*3 "Energy Management License Pack" is required.</p> <p>*4 If the "Energy Management License Pack" has not been registered, only [Day] is available for selection as a Date range. To select [Month] or [Year], "Energy Management License Pack" is required.</p> <p>*5 When [Day] is selected as a Date range, the temperature values obtained every hour will appear. When [Month] is selected, the average daily temperature values will appear. When [Year] is selected, the average monthly temperature values will appear.</p>	Display target	Display item	Display range			Address	Group	Block	-	Outdoor Temp. *5	V *2	V *2	V *2	Indoor unit	Target value	-	-	V *1*3	Set Temp. for cool *5	V *3	V *3	-	Set Temp. for heat *5	V *3	V *3	-	Room Temp. *5	V *3	V *3	-	MCT (AI controller) *5	Name of the temperature sensor 1 or humidity sensor 1	V *4	-	-	Name of the temperature sensor 2 or humidity sensor 2	V *4	-	-	AHC *5	Name of the temperature sensor 1	V *3	-	-	Name of the temperature sensor 2	V *3	-	-
Display target	Display item			Display range																																													
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AHC *5	Name of the temperature sensor 1	V *3	-	-																																													
	Name of the temperature sensor 2	V *3	-	-																																													
Graph region	<p>The display target's data and the comparison target's data will appear in a bar graph and a line graph.</p> <table><tr><th></th><th>Display target</th><th>Comparison target</th><th>Target value</th></tr><tr><td><div><div></div><div>Bar graph</div></div></td><td><div><div></div><div>(Brown)</div></div></td><td><div><div></div><div>(Yellow)</div></div></td><td><div><div></div></div></td></tr><tr><td><div><div></div><div>Line graph</div></div></td><td><div><div></div><div>(Orange)</div></div></td><td><div><div></div><div>(Blue)</div></div></td><td><div><div></div><div>(Red)</div></div></td></tr></table> <p>Note: If no item is selected in the [Comparison target] field, only the data of the item selected in the [Display target] field will appear in the graph.</p> <p>Note: The data for a certain period of time may not appear if it does not exist due to the changes of the daylight saving time setting or current time setting. If the data overlap for a certain period of time due to the time overlap that was occurred when daylight saving ended or the current time setting was changed, the newer data will appear in the graph.</p>		Display target	Comparison target	Target value	<div><div></div><div>Bar graph</div></div>	<div><div></div><div>(Brown)</div></div>	<div><div></div><div>(Yellow)</div></div>	<div><div></div></div>	<div><div></div><div>Line graph</div></div>	<div><div></div><div>(Orange)</div></div>	<div><div></div><div>(Blue)</div></div>	<div><div></div><div>(Red)</div></div>																																				
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Item	Description																																																																			
Download	Click [Download] to export the displayed measurement data in the CSV format. The CSV file name and file format will vary as shown below, depending on the selected date range.																																																																			
	■ <u>File name</u>																																																																			
	<When any item in the [Comparison target] field is selected>																																																																			
	Date range: Day EM_DailyTrend_[yyyy]-[mm]-[dd]_[Display target]_[YYYY]-[MM]-[DD]_[Comparison target]_[Bar graph type]_[Line graph type].csv																																																																			
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<table><tr><th>File-name contents</th><th colspan="2">Format</th></tr><tr><td>[yyyy]</td><td colspan="2">The year specified in the [Date to display the data] field</td></tr><tr><td>[mm]</td><td colspan="2">The month specified in the [Date to display the data] field</td></tr><tr><td>[dd]</td><td colspan="2">The date specified in the [Date to display the data] field</td></tr><tr><td rowspan="3">[Display target]</td><td>Address</td><td>"A" + M-NET address (000–250) + "_" + Sensor No. (00–04)</td></tr><tr><td>Group</td><td>"G" + Group No. (001–050) + "_" + "00"</td></tr><tr><td>Block</td><td>"B" + Block No. (001–050, 999 *1) + "_" + "00"</td></tr><tr><td>[YYYY]</td><td colspan="2">The year specified in the [Comparison date] field</td></tr><tr><td>[MM]</td><td colspan="2">The month specified in the [Comparison date] field</td></tr><tr><td>[DD]</td><td colspan="2">The date specified in the [Comparison date] field</td></tr><tr><td rowspan="3">[Comparison target]</td><td>Address</td><td>"A" + M-NET address (000–250) + "_" + Sensor No. (00–04)</td></tr><tr><td>Group</td><td>"G" + Group No. (001–050) + "_" + "00"</td></tr><tr><td>Block</td><td>"B" + Block No. (001–050, 999 *1) + "_" + "00"</td></tr><tr><td rowspan="8">[Bar graph type]</td><td colspan="2">B01: Electric energy (Indoor unit)</td></tr><tr><td colspan="2">B02: Fan operation time</td></tr><tr><td colspan="2">B03: Thermo-ON time (Total)</td></tr><tr><td colspan="2">B04: Thermo-ON time (Cool)</td></tr><tr><td colspan="2">B05: Thermo-ON time (Heat)</td></tr><tr><td colspan="2">B06: MCP electric energy</td></tr><tr><td colspan="2">B08: MCP water quantity</td></tr><tr><td colspan="2">B09: MCP heat quantity</td></tr><tr><td rowspan="8">[Line graph type]</td><td colspan="2">L01: Set temperature (Cool)</td></tr><tr><td colspan="2">L02: Set temperature (Heat)</td></tr><tr><td colspan="2">L03: Room temperature</td></tr><tr><td colspan="2">L04: MCT temperature</td></tr><tr><td colspan="2">L05: AHC temperature</td></tr><tr><td colspan="2">L06: Outdoor temperature</td></tr><tr><td colspan="2">L08: MCT humidity</td></tr></table>		File-name contents	Format		[yyyy]	The year specified in the [Date to display the data] field		[mm]	The month specified in the [Date to display the data] field		[dd]	The date specified in the [Date to display the data] field		[Display target]	Address	"A" + M-NET address (000–250) + "_" + Sensor No. (00–04)	Group	"G" + Group No. (001–050) + "_" + "00"	Block	"B" + Block No. (001–050, 999 *1) + "_" + "00"	[YYYY]	The year specified in the [Comparison date] field		[MM]	The month specified in the [Comparison date] field		[DD]	The date specified in the [Comparison date] field		[Comparison target]	Address	"A" + M-NET address (000–250) + "_" + Sensor No. (00–04)	Group	"G" + Group No. (001–050) + "_" + "00"	Block	"B" + Block No. (001–050, 999 *1) + "_" + "00"	[Bar graph type]	B01: Electric energy (Indoor unit)		B02: Fan operation time		B03: Thermo-ON time (Total)		B04: Thermo-ON time (Cool)		B05: Thermo-ON time (Heat)		B06: MCP electric energy		B08: MCP water quantity		B09: MCP heat quantity		[Line graph type]	L01: Set temperature (Cool)		L02: Set temperature (Heat)		L03: Room temperature		L04: MCT temperature		L05: AHC temperature		L06: Outdoor temperature		L08: MCT humidity	
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	L08: MCT humidity																																																																			
	*1 "B999" = Total of all blocks																																																																			

Item	Description				
Download	■ File format				
	Row	Item	Date range	Format	
	1st	File Type	Day	401	
			Month	402	
			Year	403	
	2nd	Date	Day	dd/mm/yyyy:DD/MM/YYYY *1	
			Month	mm/yyyy:MM/YYYY *1	
			Year	yyyy:YYYY *1	
	3rd	Target		"Block" + Block number (Display target)/ "Block" + Block number (Comparison target)	
	4th	Measurement item	Day	"Time",	"Block" + Block number (Display target) (Bar) + "-" + Display item (Bar), "Block" + Block number (Comparison target) (Bar) + "-" + Display item (Bar), "Target electric energy(kWh)"*2*3, "Block" + Block number (Display target) (Line) + "-" + Display item (Line), "Block" + Block number (Comparison target) (Line) + "-" + Display item (Line)
			Month	"Day",	
			Year	"Month",	
	5th–*5	Data *4	Day	hh:mm,	Data value (Bar), Comparison data value (Bar), Target electric energy value*2*3, Data value (Line), Comparison data value (Line)
			Month	dd,	
			Year	mm,	
	*1 The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.				
	*2 "Target electric energy(kWh)" and the target electric energy value will appear only when the data is displayed in the graph.				
	*3 "Target electric energy(kWh)" and the target electric energy value will not appear if [Day] is selected as a Date range.				
	*4 The separator character and decimal point character selected on the Measurement screen (accessible via the Web Browser for Initial Settings) will be used to the data.				
	*5 The number of rows varies with the selected date range. (Day: 5th–28th; Month: 5th–35th; Year: 5th–16th)				

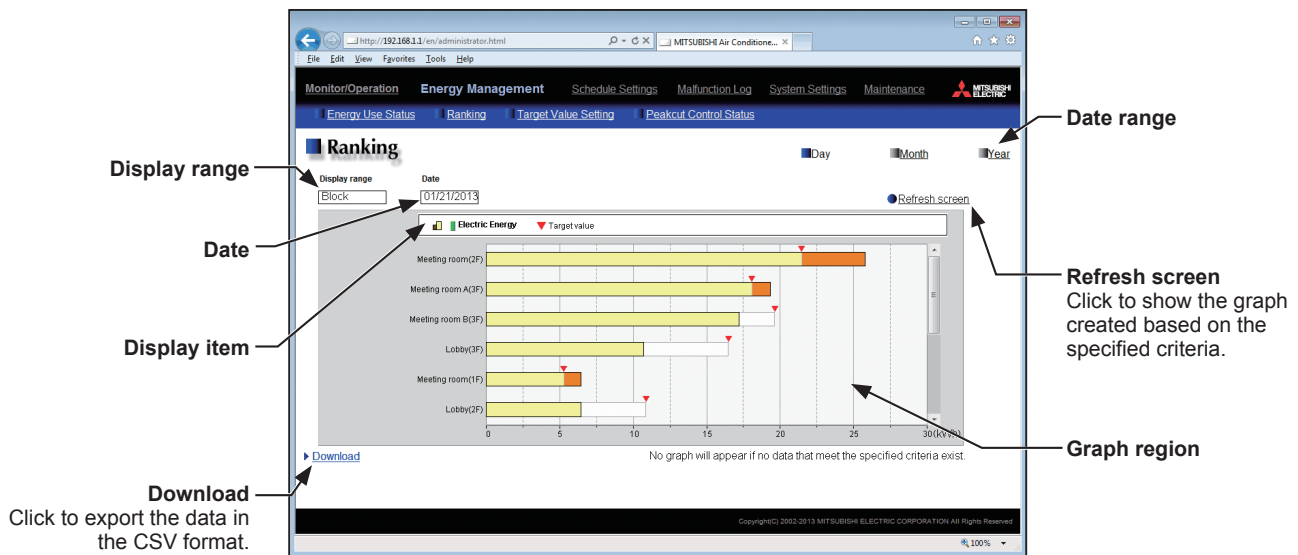
Item	Description
Download	<p>■ <u>File sample</u></p> <p>Date range: Day</p> <div> 401 2013/08/19:2012/06/01 Block1/Block5 Time,Block1 - Indoor Unit Electric Energy,Block5 - Indoor Unit Electric Energy,Block1 - Outdoor Temp.,Block5 - Outdoor Temp. 00:00,0.61,0.25,23.2,17.8 01:00,0.65,0.51,23.1,17.6 02:00,0.66,0.48,22.1,18.1 03:00,0.66,0.58,23.3,18.2 04:00,0.63,0.47,24.5,17.5 05:00,0.59,0.39,26.8,19.1 06:00,0.52,0.52,28.1,22.1 : 23:00,0.59,0.23,23.4,17.1 </div> <p>Date range: Month</p> <div> 402 2013/08:2012/06 Block1/Block5 Day,Block1 - Indoor Unit Electric Energy,Block5 - Indoor Unit Electric Energy,Target electric energy (kWh),Block1 - Outdoor Temp.,Block5 - Outdoor Temp. 01,24.69,8.74,22,26.2,17.9 02,25.31,8.22,22,27,17.4 03,12.36,22.33,10,25.2,16.6 04,10.37,21.36,10,25.1,19.3 05,27.02,17.55,22,27.7,20.5 06,24.55,16.58,22,26.3,19 07,24.69,17.96,22,24.9,18.9 : 31,13.2,20.22,10,27.3,20.2 </div> <p>Date range: Year</p> <div> 403 2013:2012 Block1/Block5 Month,Block1 - Indoor Unit Electric Energy,Block5 - Indoor Unit Electric Energy,Target electric energy (kWh),Block1 - Outdoor Temp.,Block5 - Outdoor Temp. 01,675.17,661.93,600,0.4,0.5 02,697.38,683.71,700,0.3,3.2 03,528.63,518.26,400,4.5,3.8 04,403.67,395.75,500,9.8,10 05,420.28,412.04,500,15.9,15.6 06,450.33,477.88,500,18.2,20.6 07,594.13,582.48,550,22.8,24.8 : 12,602.58,590.76,550,3.3,3.4 </div>

5-2. Ranking

On the Ranking screen, the rankings in electric energy consumption and the fan operation time of given indoor units can be displayed per block, group, and unit in descending order in the bar graph.

Click [Energy Management] in the menu bar, and then click [Ranking] to access the Ranking screen.

Note: "Energy Management License Pack" is required to access the Ranking screen.



Item	Description																															
Date range	Select [Day], [Month], or [Year].																															
Display range	Select [Block], [Group], or [Address] to display its data in the ranking graph.																															
Date	<p>Specify a date to display the data in the ranking graph.</p> <p>Note: When [Day] is selected as a Date range, specify "yyyy/mm/dd" from the current month or the last 24 months.</p> <p>When [Month] is selected as a Date range, specify "yyyy/mm" from the current month or the last 24 months.</p> <p>When [Year] is selected as a Date range, specify "yyyy" from the current year or the last 4 years.</p> <p>Note: Only the data for the period during which the EB-50 was powered on will appear in the graph. The data for the period during which the EB-50 was powered off will not appear in the graph.</p>																															
Display item	<p>Select an item to display its data in the ranking graph.</p> <p>Note: The selectable items vary, depending on the items selected in the [Display range] field.</p> <div><div><div>Display items</div><table><tr><th rowspan="2">Display item</th><th colspan="3">Display range</th></tr><tr><th>Address</th><th>Group</th><th>Block</th></tr><tr><td>Electric Energy (kWh)</td><td>V</td><td>V</td><td>V</td></tr><tr><td>Fan operation time (min)</td><td>V</td><td>V</td><td>-</td></tr><tr><td>Thermo-ON time (Total) (min)</td><td>V</td><td>V</td><td>-</td></tr><tr><td>Thermo-ON time (Cool) (min)</td><td>V</td><td>V</td><td>-</td></tr><tr><td>Thermo-ON time (Heat) (min)</td><td>V</td><td>V</td><td>-</td></tr><tr><td>Target value (kWh)</td><td>-</td><td>-</td><td>V *1</td></tr></table></div><div><p>V: Item that can be displayed in the graph</p><p>*1 The target values will appear in the graph when the target electric energy values are specified on the Target Value Setting screen and when the electricity meter is selected in the [Indoor unit electricity meter] section on the Energy Management Settings screen, accessible via the Web Browser for Initial Settings.</p></div></div>	Display item	Display range			Address	Group	Block	Electric Energy (kWh)	V	V	V	Fan operation time (min)	V	V	-	Thermo-ON time (Total) (min)	V	V	-	Thermo-ON time (Cool) (min)	V	V	-	Thermo-ON time (Heat) (min)	V	V	-	Target value (kWh)	-	-	V *1
Display item	Display range																															
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Electric Energy (kWh)	V	V	V																													
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Target value (kWh)	-	-	V *1																													
Refresh screen	<p>Click to show the graph created based on the specified criteria.</p> <p>Note: No graph will appear if no data that meet the specified criteria exist.</p>																															
Graph region	Ranking graph will appear in descending order of the value of the selected display item.																															

Download

Item	Description																																																																										
	<p>Click [Download] to export the displayed measurement data in the CSV format. The CSV file name and file format will vary as shown below, depending on the selected date range.</p> <p>■ <u>File name</u></p> <p>Date range: Day EM_DailyRanking_[yyyy]-[mm]-[dd]_[Display range]_[Ranking graph type].csv</p> <p>Date range: Month EM_MonthlyRanking_[yyyy]-[mm]_[Display range]_[Ranking graph type].csv</p> <p>Date range: Year EM_AnnualRanking_[yyyy]_[Display range]_[Ranking graph type].csv</p> <table><tr><th>File-name contents</th><th colspan="2">Format</th></tr><tr><td>[yyyy]</td><td colspan="2">The year specified in the [Date] field</td></tr><tr><td>[mm]</td><td colspan="2">The month specified in the [Date] field</td></tr><tr><td>[dd]</td><td colspan="2">The date specified in the [Date] field</td></tr><tr><td rowspan="3">[Display range]</td><td>Address</td><td>A999</td></tr><tr><td>Group</td><td>G999</td></tr><tr><td>Block</td><td>B999</td></tr><tr><td rowspan="5">[Ranking graph type]</td><td colspan="2">B01: Electric energy (Indoor unit)</td></tr><tr><td colspan="2">B02: Fan operation time</td></tr><tr><td colspan="2">B03: Thermo-ON time (Total)</td></tr><tr><td colspan="2">B04: Thermo-ON time (Cool)</td></tr><tr><td colspan="2">B05: Thermo-ON time (Heat)</td></tr></table> <p>■ <u>File format</u></p> <table><tr><th>Row</th><th>Item</th><th>Date range</th><th>Format</th></tr><tr><td rowspan="3">1st</td><td rowspan="3">File Type</td><td>Day</td><td>404</td></tr><tr><td>Month</td><td>405</td></tr><tr><td>Year</td><td>406</td></tr><tr><td rowspan="3">2nd</td><td rowspan="3">Date</td><td>Day</td><td>dd/mm/yyyy *1</td></tr><tr><td>Month</td><td>mm/yyyy *1</td></tr><tr><td>Year</td><td>yyyy *1</td></tr><tr><td rowspan="3">3rd</td><td rowspan="3">Display range</td><td>Address</td><td>"All addresses"</td></tr><tr><td>Group</td><td>"All groups"</td></tr><tr><td>Block</td><td>"All blocks"</td></tr><tr><td rowspan="3">4th</td><td rowspan="3">Measurement item</td><td>Address</td><td>"Address number", Display item</td></tr><tr><td>Group</td><td>"Group name", Display item</td></tr><tr><td>Block</td><td>"Block name", Display item, "Target electric energy(kWh)"*2</td></tr><tr><td rowspan="3">5th–28th</td><td rowspan="3">Data *3</td><td>Address</td><td>Address number, Data value</td></tr><tr><td>Group</td><td>"Group" + Group number, Data value</td></tr><tr><td>Block</td><td>"Block" + Block number, Data value, Target electric energy value*3</td></tr></table> <p>*1 The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*2 "Target electric energy(kWh)" and the target electric energy value will appear only when the data is displayed in the graph.</p> <p>*3 The separator character and decimal point character selected on the Measurement screen (accessible via the Web Browser for Initial Settings) will be used to the data.</p>	File-name contents	Format		[yyyy]	The year specified in the [Date] field		[mm]	The month specified in the [Date] field		[dd]	The date specified in the [Date] field		[Display range]	Address	A999	Group	G999	Block	B999	[Ranking graph type]	B01: Electric energy (Indoor unit)		B02: Fan operation time		B03: Thermo-ON time (Total)		B04: Thermo-ON time (Cool)		B05: Thermo-ON time (Heat)		Row	Item	Date range	Format	1st	File Type	Day	404	Month	405	Year	406	2nd	Date	Day	dd/mm/yyyy *1	Month	mm/yyyy *1	Year	yyyy *1	3rd	Display range	Address	"All addresses"	Group	"All groups"	Block	"All blocks"	4th	Measurement item	Address	"Address number", Display item	Group	"Group name", Display item	Block	"Block name", Display item, "Target electric energy(kWh)"*2	5th–28th	Data *3	Address	Address number, Data value	Group	"Group" + Group number, Data value	Block	"Block" + Block number, Data value, Target electric energy value*3
File-name contents	Format																																																																										
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		Group	"Group" + Group number, Data value																																																																								
		Block	"Block" + Block number, Data value, Target electric energy value*3																																																																								

Item	Description
Download	<p>■ File sample</p> <p>Date range: Day</p> <div> 404 01/23/2013 All blocks Block name,Indoor Unit Electric Energy,Target electric energy (kWh) Block1,25.19,21.2 Block5,19.58,18.13 Unregistered Blocks,17.01,19.73 Block3,11.2,16.9 Block6,6.19,5.24 Block2,5.98,10.96 </div> <p>Date range: Month</p> <div> 405 01/2013 All blocks Block name,Indoor Unit Electric Energy,Target electric energy (kWh) Block1,780.89,657.2 Block5,606.98,562.03 Unregistered Blocks,527.31,611.63 Block3,347.2,523.9 Block6,191.89,162.44 Block2,185.38,339.76 </div> <p>Date range: Year</p> <div> 406 2013 All blocks Block name,Indoor Unit Electric Energy,Target electric energy (kWh) Block1,9370.68,7886.4 Block5,7283.76,6744.36 Unregistered Blocks,6327.72,7339.56 Block3,4166.4,6286.8 Block6,2302.68,1949.28 Block2,2224.56,4077.12 </div>

5-3. Target Value Setting

This section explains how to set the target electric energy consumption values for the entire system for the current year, each month, each day of the week, and each block. The set values will be displayed in the graph on the Energy Use Status screen (see section 5-1) and the Ranking screen (see section 5-2).

Click [Energy Management] in the menu bar, and then click [Target Value Setting] to access the Target Value Setting screen.

Under the [Total target value] section, the items [Annual target], [Monthly target], and [Usage ratio for each day of the week] will appear. Set the annual target electric energy, usage ratio for each month, and usage ratio for each day of the week to automatically calculate the monthly target electric energy.

Under the [Target value for each block] section, set the usage ratio for each block to automatically calculate the annual target electric energy for each block.

Important: The target value settings must be made after all units have been started up.
The settings that have been saved while one or more units are starting up may be lost.

Annual target electric energy

Comparison with previous year

Monthly target electric energy

Usage ratio for each month

Usage ratio for each day of the week

Refresh
Click to import the settings from EB-50.

Block name

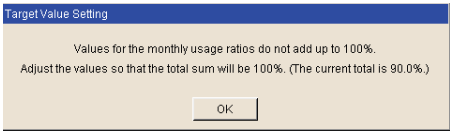
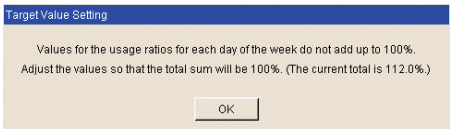
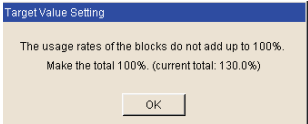
Annual target electric energy for each block

Auto calc.

Usage ratio for each block

Save Settings
Click to send the settings to EB-50.

Item	Description
Annual target electric energy	<p>Enter the annual target electric energy consumption value.</p> <p>Note: The value must be between 0 and 4294967 kWh.</p> <p>Note: If the ratio is entered in the [Comparison with previous year] field, the annual target electric energy will be calculated automatically, based on the electric energy consumption data of the previous year.</p>
Comparison with previous year	<p>Enter the ratio of the annual target electric energy of the current year to the electric energy consumed in the previous year.</p> <p>Note: The ratio must be between 0.0 and 999.9%.</p> <p>Note: If the value is entered in the [Annual target electric energy] field, the ratio will be calculated automatically based on the electric energy consumption data of the previous year.</p>
Monthly target electric energy	<p>The target electric energy value for each month will appear.</p> <p>Note: The values cannot be entered. The values will be calculated automatically, based on the ratios entered in the [Usage ratio for each month] field.</p>

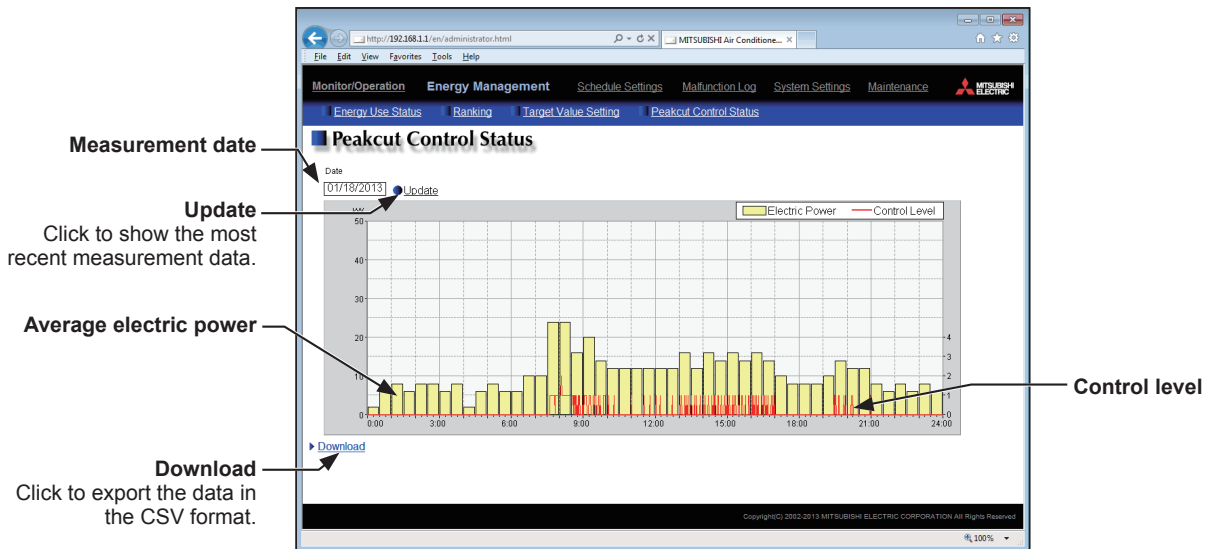
Item	Description
Usage ratio for each month	<p>Enter the target usage ratios of the annual electric energy for each month.</p> <p>Note: Each ratio must be between 0 and 100%.</p> <p>Note: The total of the ratios must be 100%. If the total is not 100%, a window that shows the current total value as shown below will appear and the setting will not be saved.</p>  <p>Note: When the ratios are entered, the values in the [Monthly target electric energy] field will be calculated automatically, based on the value in the [Annual target electric energy] field.</p>
Usage ratio for each day of the week	<p>Enter the target usage ratios of the electric energy for each day of the week.</p> <p>Note: The total of the ratios must be 100%. If the total is not 100%, a window that shows the current total value as shown below will appear and the setting will not be saved.</p>  <p>Note: When the ratios are entered, the values in the [Monthly target electric energy] field may change after being recalculated.</p>
Block name	<p>The names of all the registered blocks will appear.</p> <p>Note: If the block name has not been registered, ["Block" + block number] will appear.</p>
Usage ratio for each block	<p>Enter the target usage ratios of the electric energy for each block.</p> <p>Note: The ratios cannot be entered if the [Auto calc.] checkbox is checked. To enter the desired ratios, uncheck the checkbox.</p> <p>Note: The total of the ratios must be 100%. If the total is not 100%, a window that shows the current total value as shown below will appear and the setting will not be saved.</p> 
Auto calc.	<p>Check the checkbox to automatically calculate the usage ratio of the electric energy and the annual target electric energy for each block based on the indoor unit capacity.</p>
Annual target electric energy for each block	<p>The annual target electric energy for each block will appear after being calculated based on the ratios in the [Usage ratio for each block] field and the value entered in the [Annual target electric energy] field.</p>

5-4. Peakcut Control Status

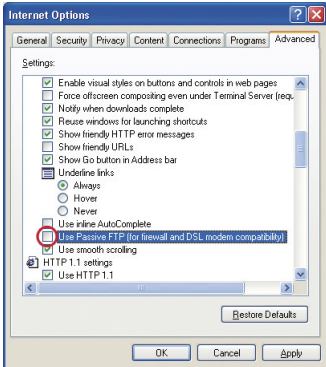
This section explains how to check the Peakcut control status.

Click [Energy Management] in the menu bar, and then click [Peakcut Control Status] to access the Peakcut Control Status screen.

The average electric power consumption (kW) and the control level will appear in the graph. The measurement data can be exported in a CSV format from the screen.

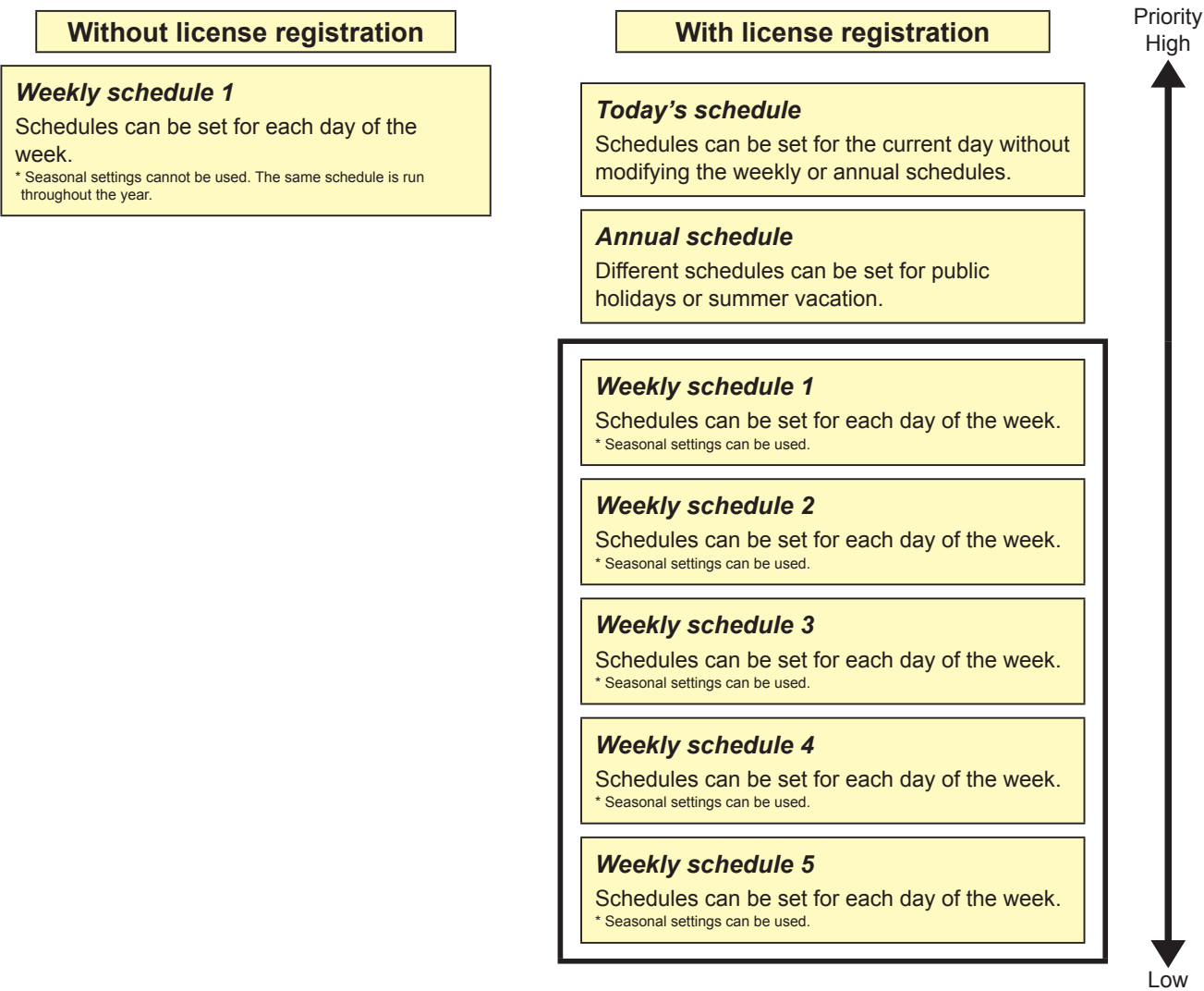


Item	Description								
Update	Click to show the most recent measurement data.								
Measurement date	Select the measurement date. Note: The data of the past three days including the current day can be displayed.								
Average electric power	Average electric power consumption (kW) will appear in 30-minute increments. Note: Average electric power consumption data are stored every hour and half hour. If a power failure occurs, up to 30-minute worth of data will be lost. Note: The graph can be displayed only when the Peak Cut method is set to [Electric Amount Count PLC] or [PI Controller] on the Peak Cut settings screen, accessible via the Web Browser for Initial Settings.								
Control level	Peak Cut control level will appear in 1-minute increments.								
Download	Click [Download] to export the measurement data in the CSV format as shown below. <div> <div>■ File name</div> <div>Peakcut_[yyyy]-[mm]-[dd].csv</div> <table> <tr> <th>File-name contents</th><th>Format</th></tr> <tr> <td>[yyyy]</td><td>The year specified in the [Measurement date] field</td></tr> <tr> <td>[mm]</td><td>The month specified in the [Measurement date] field</td></tr> <tr> <td>[dd]</td><td>The date specified in the [Measurement date] field</td></tr> </table> </div>	File-name contents	Format	[yyyy]	The year specified in the [Measurement date] field	[mm]	The month specified in the [Measurement date] field	[dd]	The date specified in the [Measurement date] field
File-name contents	Format								
[yyyy]	The year specified in the [Measurement date] field								
[mm]	The month specified in the [Measurement date] field								
[dd]	The date specified in the [Measurement date] field								

Item	Description																		
Download	<div>■ <u>File format</u></div> <table><tr><th>Row</th><th>Item</th><th>Format</th></tr><tr><td>1st</td><td>File Type</td><td>123</td></tr><tr><td>2nd</td><td>Date</td><td>yyyy/mm/dd *1</td></tr><tr><td>3rd</td><td>Target</td><td>"Peakcut energy"</td></tr><tr><td>4th</td><td>Measurement item</td><td>"Time,Power(kW),Control level"</td></tr><tr><td>5th–</td><td>Data</td><td>hh:mm (1-minute intervals), average electric power consumption, control level Note: The average electric power (kW) values remains unchanged for 30 minutes.</td></tr></table> <p>*1 The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <div>■ <u>File sample</u></div> <div><div>123 01/04/2007 Peakcut energy Time,Power(kW),Control level 00:00,8,1 00:01,8,0 00:02,8,0 : : 23:58,6,0 23:59,6,0</div></div> <p>Note: When the data cannot be exported properly, uncheck the "Use Passive FTP (for firewall and DSL modem compatibility)" checkbox.</p> <div></div>	Row	Item	Format	1st	File Type	123	2nd	Date	yyyy/mm/dd *1	3rd	Target	"Peakcut energy"	4th	Measurement item	"Time,Power(kW),Control level"	5th–	Data	hh:mm (1-minute intervals), average electric power consumption, control level Note: The average electric power (kW) values remains unchanged for 30 minutes.
	Row	Item	Format																
	1st	File Type	123																
	2nd	Date	yyyy/mm/dd *1																
	3rd	Target	"Peakcut energy"																
	4th	Measurement item	"Time,Power(kW),Control level"																
	5th–	Data	hh:mm (1-minute intervals), average electric power consumption, control level Note: The average electric power (kW) values remains unchanged for 30 minutes.																

6. Schedule Settings

Schedule functions [Weekly 1], [Weekly 2], [Weekly 3], [Weekly 4], [Weekly 5], [Annual], and [Today] are available for use if the "Annual Schedule, Weekly Schedule" license has been registered. Without the license registration, only [Weekly 1] (except the "Seasonal settings") is available for use.



6-1. Weekly Schedule

Click [Schedule Settings] in the menu bar, and then click [Weekly 1], [Weekly 2], [Weekly 3], [Weekly 4], or [Weekly 5] to access the Weekly Schedule settings screen.

On the Weekly Schedule settings screen, schedules can be set for each day of the week.

Note: The "Weekly 1" (except the "Seasonal settings") function is available, even if the "Annual schedule, Weekly schedule" license has not been registered.

Seasonal settings
Set the period in which the weekly schedule will be effective.

Setting Range
Select a target to which the weekly schedule will be applied.

Block Name
Lobby (1F)

Group Name
Waiting room 1F

Group Number
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

Copy (Group)/Paste
Click to copy or paste a schedule among groups.

Undo
Click to undo changes.

Day of the week selection
Sun Mon Tue Wed Thu Fri Sat

Copy (Day of the week)/Paste
Click to copy or paste a schedule among the days of the week.

Contents of Schedule
1 08:00 Cool 24 °C
2 12:00
3 13:00 Auto 26 °C 20 °C
4 17:00
5 17:15 Auto 26 °C 20 °C

Edit
Click to display a schedule settings screen.

Delete
Click to delete a schedule.

Save Settings
Click to save the settings.

(1) Selecting a target to which the schedule will be applied

(1-1) Selecting a group as a target

Select [Group] in the Setting Range section.

Select the name of the block that the group belongs to and either the group name or the group number, OR just select the group name or the group number.

The contents of the schedule for the group will appear in the Contents of Schedule section, if any.

Note: Only one group can be selected. To copy the existing schedule settings of a group to the settings for another group, select the number of the group whose schedule settings are to be copied, click [Copy (Group)], select the number of the group to which the copied schedule settings are to be pasted, and click [Paste].

Setting Range

☒ Group
 ☐ Block
 ☐ All Groups

Setting Object

☒ Block Name

 Lobby (1F)

☒ Group Name

 Lobby(South)

☒ Group Number

☐ Copy (Group)
 ☐ Paste

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

(1-2) Selecting a block as a target

Select [Block] in the Setting Range section.

Select a block name, or select one of the group numbers in the block to display the block name automatically. (If the selected group does not belong to a block, the block name will not be displayed automatically.)

Setting Range

☐ Group ☒ Block ☐ All Groups

Setting Object

☒ Block Name
Lobby (2F) ▼


☐ Group Name
▼


☒ Group Number


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40


If air conditioner group, LOSSNAY unit (ventilator) group, Air To Water (PWFY) unit group, and general equipment group exist together in the same block, a screen to select a group type will appear.
Click one of the group types to set the schedule.

Select the operation units

 All Air-conditioners in this block

 All LOSSNAY in this block

 All air to water in this block

 Other Equipment

A Schedule Settings screen will appear.

To create a schedule for the given block from scratch, click the radio button next to [New settings] and click [OK].

To create a schedule based on the existing setting of another group, click the radio button next to [Based on the following group settings], select the name of the group whose schedule is to be based on, and click [OK]. The contents of the schedule that have been set for the selected group will appear in the Contents of Schedule section.

Schedule Settings

☐ New settings

☒ Based on the following group settings

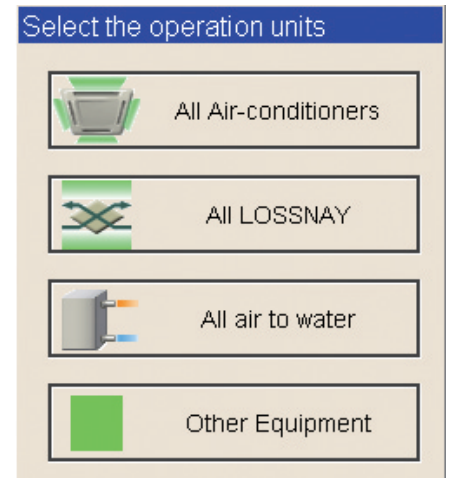
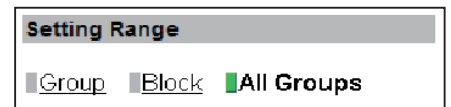
Tenant 1 ▼

Cancel OK

(1-3) Selecting all groups as a target

Select [All Groups] in the Setting Range section.

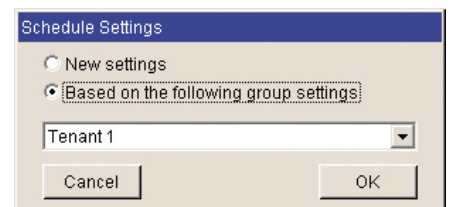
If air conditioner group, LOSSNAY unit (ventilator) group, Air To Water (PWFY) unit group, and general equipment group exist together in the same system, a screen to select a group type will appear. Click one of the group types to set the schedule.



A Schedule Settings screen will appear.

To create a schedule for the given groups from scratch, click the radio button next to [New settings] and click [OK].

To create a schedule based on the existing setting of another group, click the radio button next to [Based on the following group settings], select the name of the group whose schedule is to be based on, and click [OK]. The contents of the schedule that have been set for the selected group will appear in the Contents of Schedule section.



(2) Setting the date periods

Click [Edit] in the Seasonal settings section.

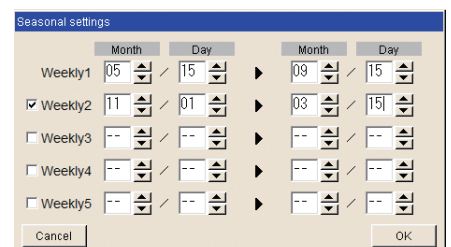
Enter the date periods in which each weekly schedule will be effective.

Check the checkboxes on the left side to enable each weekly schedule.

Note: If the [Schedule: Season setting] setting is set to [Not Available], the [Edit] button will not appear, and seasonal settings cannot be made. The [Schedule: Season setting] setting can be set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.

Note: If the "Annual schedule, Weekly schedule" license has not been registered, the Seasonal Settings section will not appear.

Note: When any of the Weekly Schedules 1, 2, 3, 4, and 5 overlap, the schedule with the lower number takes priority. For example, Weekly Schedule 1 takes precedence over Weekly Schedule 5.



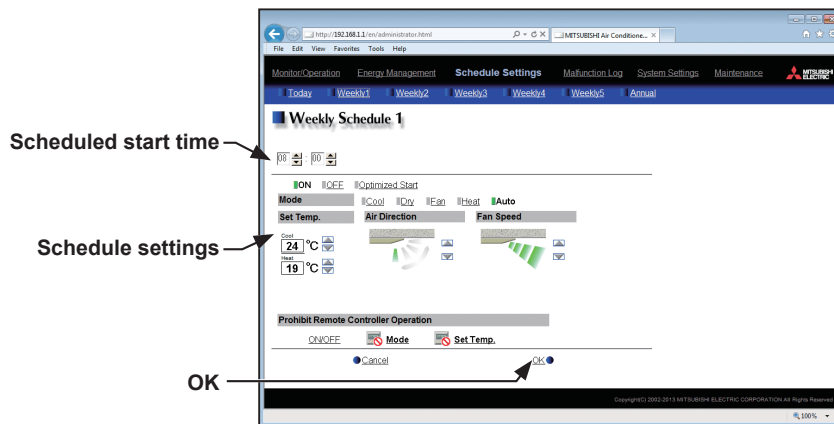
(3) Selecting a day of the week

In the Contents of Weekly Schedule section, select a day to set the schedule.



(4) Setting the contents of the schedule

Click [Edit] in the Contents of Schedule section to display the schedule settings screen.



Set the start time to apply to the schedule, set the operations to be scheduled, and then press [OK].

The operations that can be scheduled for air conditioning unit groups are as follows: ON/OFF/Optimized Start, Mode, Set Temp, Air Direction, Fan Speed, and Prohibit Remote Controller Operation.

Up to 24 events can be scheduled per day.

Note: The operation items that will appear on the screen vary, depending on the group type.

Note: [Optimized Start] can be selected only for the air conditioning unit groups.

Note: If [Optimized Start] is selected, the operation mode and the set temperature need to be set as well. The Optimized Start function will start the units 5 to 60 minutes prior to the scheduled start time to reach the set temperature at the scheduled start time, based on the operation data in the past. (When the units start the first time after a power reset, the units will start operation 30 minutes before the scheduled start time.)

If the room temperature is measured by the return air temperature sensor on the air conditioning unit, the measured value may not be an accurate representation of the temperature in the room, especially when the air conditioning unit is stopped and the room air is stagnant. When this is the case, use an external temperature sensor (PAC-SE40TSA) or remote controller sensor to measure the room temperature.

Note: If [Optimized Start] is selected and the [Prohibit Remote Controller Operation] setting is set to Prohibit or Permit at the same time, the operations from the remote controllers will be prohibited or permitted at the scheduled start time.

Note: When setting a schedule for a block or all groups, all operation modes are available for selection, but the available operation modes depend on the unit model. The units will not operate in the selected mode not supported by the units.

Note: For LOSSNAY unit groups, the item [Set Temp.] or [Air Direction] will not appear, and only ON/OFF setting under the Prohibit Remote Controller Operation can be made.

Note: For general equipment groups, only the operation ON/OFF settings can be made.

Note: The scheduled operations will continue to be in effect unless they are overwritten by the other schedule settings or the operation settings are changed on the Web browser. Be sure to set the contents of schedule in a way that will not impact on the next day's operation. For example, if Prohibit setting of remote controller operation is made for any time such as 17:00, Permit setting needs to be made for any time before the date changes such as 23:59.

(5) Copying a schedule

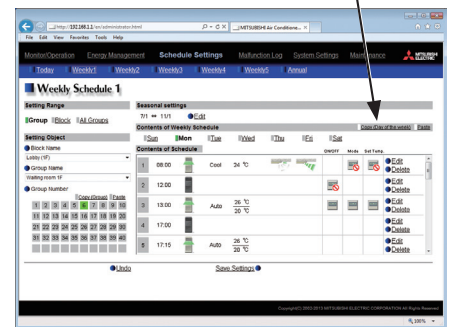
To copy the schedule settings of a day to the schedule settings for another day of the week, select the day whose schedule settings are to be copied, click [Copy (Day of the week)], select the day to which the copied schedule settings are to be pasted, and click [Paste]. The rectangular icon next to the selected button will appear in yellow-green.

Note: Schedules of a group cannot be copied to a different type of group.

For example, the schedules of an air conditioning unit group cannot be copied to the schedules for a LOSSNAY unit group.

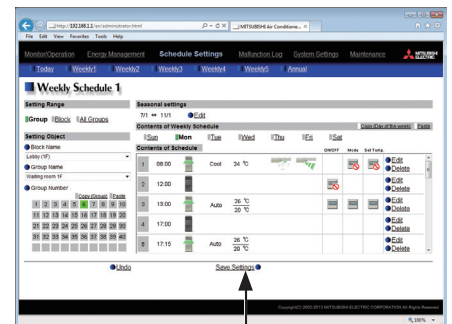
Note: The operation mode and set temperature may not be copied because the available operation modes or operable set temperature range differ among the units.

Copy (Day of the week)/Paste



(6) Saving the schedules

To undo the changes made, click [Undo] before saving the schedules. After completing the settings, click [Save Settings] to save the schedules.



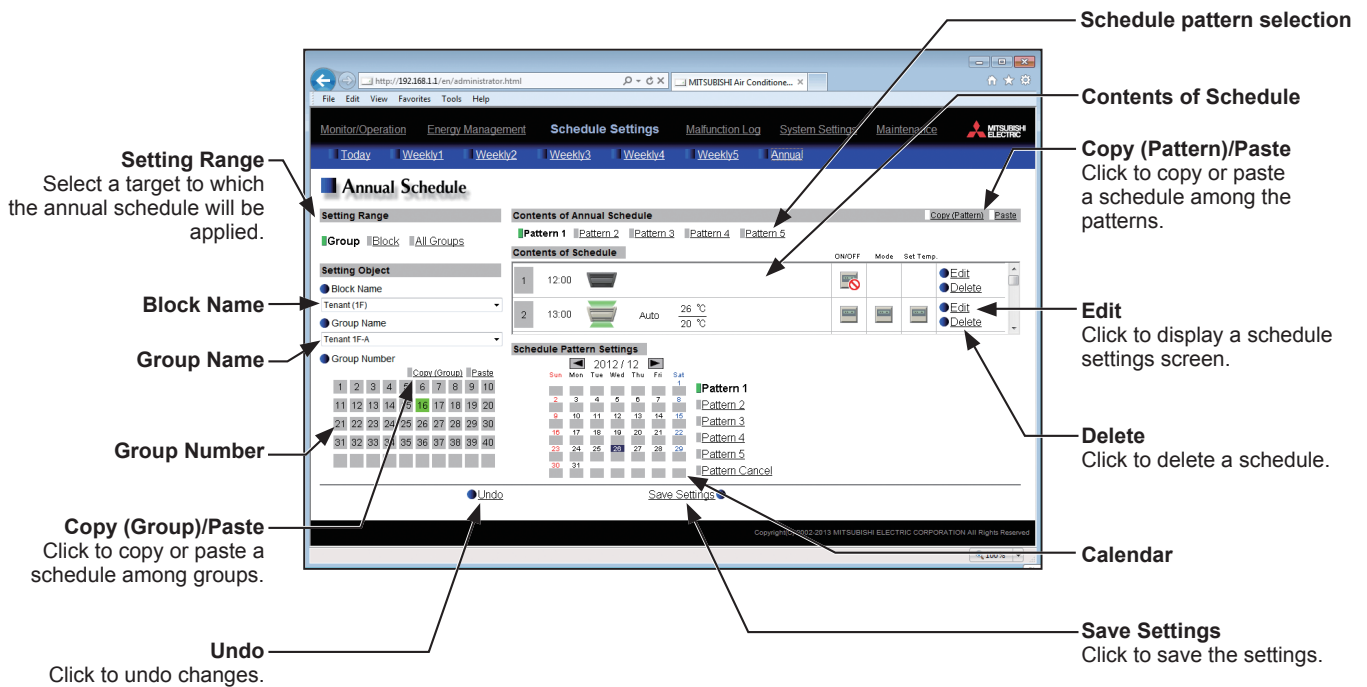
Save Settings

6-2. Annual Schedule

Click [Schedule Settings] in the menu bar, and then click [Annual Schedule] to access the Annual Schedule settings screen.

On the Annual Schedule settings screen, schedules can be set for public holidays or summer vacation.

Up to five operation patterns (Pattern 1 through 5) can be set for the 24 months including the current month, and total of 50 days can be allocated to the patterns.



(1) Selecting a target to which the schedule will be applied

In the Setting Range and Setting Object sections, select the target to which the schedule will be applied, referring to section 6-1.

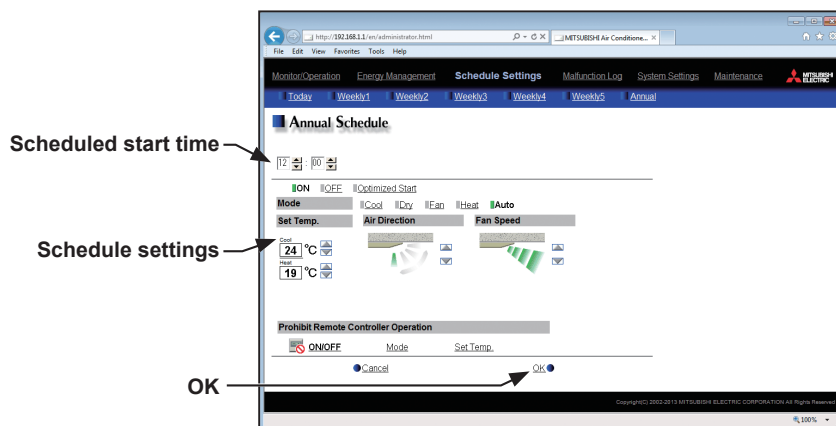
(2) Selecting a schedule pattern

In the Contents of Annual Schedule section, select a schedule pattern to set the schedule.



(3) Setting the contents of the schedule

Click [Edit] in the Contents of Schedule section to display the schedule settings screen.



Set the start time to apply to the schedule, set the operations to be scheduled, and then press [OK]. The operations that can be scheduled for air conditioning unit groups are as follows: ON/OFF/Optimized Start, Mode, Set Temp, Air Direction, Fan Speed, and Prohibit Remote Controller Operation.

Note: The operation items that will appear on the screen vary, depending on the group type.

Note: [Optimized Start] can be selected only for the air conditioning unit groups.

Note: If [Optimized Start] is selected, the operation mode and the set temperature need to be set as well. The Optimized Start function will start the units 5 to 60 minutes prior to the scheduled start time to reach the set temperature at the scheduled start time, based on the operation data in the past. (When the units start the first time after a power reset, the units will start operation 30 minutes before the scheduled start time.)

If the room temperature is measured by the return air temperature sensor on the air conditioning unit, the measured value may not be an accurate representation of the temperature in the room, especially when the air conditioning unit is stopped and the room air is stagnant. When this is the case, use an external temperature sensor (PAC-SE40TSA) or remote controller sensor to measure the room temperature.

Note: If [Optimized Start] is selected and the [Prohibit Remote Controller Operation] setting is set to Prohibit or Permit at the same time, the operations from the remote controllers will be prohibited or permitted at the scheduled start time.

Note: When setting a schedule for a block or all groups, all operation modes are available for selection, but the available operation modes depend on the unit model. The units will not operate in the selected mode not supported by the units.

Note: For LOSSNAY unit groups, the item [Set Temp.] or [Air Direction] will not appear, and only ON/OFF setting under the Prohibit Remote Controller Operation can be made.

Note: For general equipment groups, only the operation ON/OFF settings can be made.

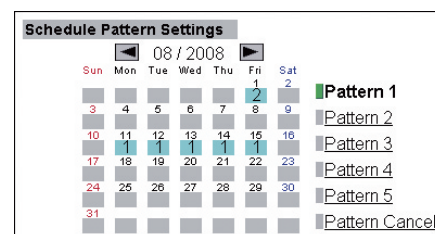
Note: The scheduled operations will continue to be in effect unless they are overwritten by the other schedule settings or the operation settings are changed on the Web browser. Be sure to set the contents of schedule in a way that will not impact on the next day's operation. For example, if Prohibit setting of remote controller operation is made for any time such as 17:00, Permit setting needs to be made for any time before the date changes such as 23:59.

(4) Assigning schedule patterns to special dates

Each schedule pattern can be assigned to the specified dates.

Click a pattern from Pattern 1 through 5, and then select the days in the calendar by clicking on the rectangles corresponding to the days. When selected, the rectangles will appear with the number of the pattern that has been assigned.

To cancel the pattern assignment, select [Pattern Cancel], and then click on the rectangle corresponding to the day.



(5) Copying a schedule

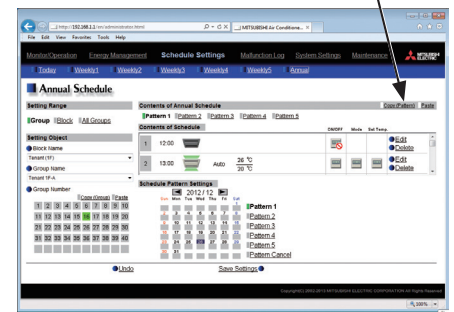
To copy the schedule settings of a pattern to the schedule settings for another pattern, select the pattern whose schedule settings are to be copied, click [Copy (Pattern)], select the pattern to which the copied schedule settings are to be pasted, and click [Paste]. The rectangular icon next to the selected button will appear in yellow-green.

Note: Schedules of a group cannot be copied to a different type of group.

For example, the schedules of an air conditioning unit group cannot be copied to the schedules for a LOSSNAY unit group.

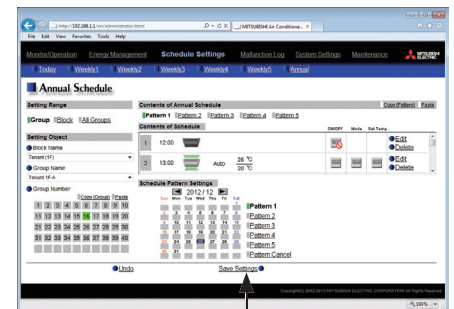
Note: The operation mode and set temperature may not be copied because the available operation modes or operable set temperature range differ among the units.

Copy (Pattern)/Paste



(6) Saving the schedules

To undo the changes made, click [Undo] before saving the schedules. After completing the settings, click [Save Settings] to save the schedules. The settings of the days that have passed will be deleted automatically.

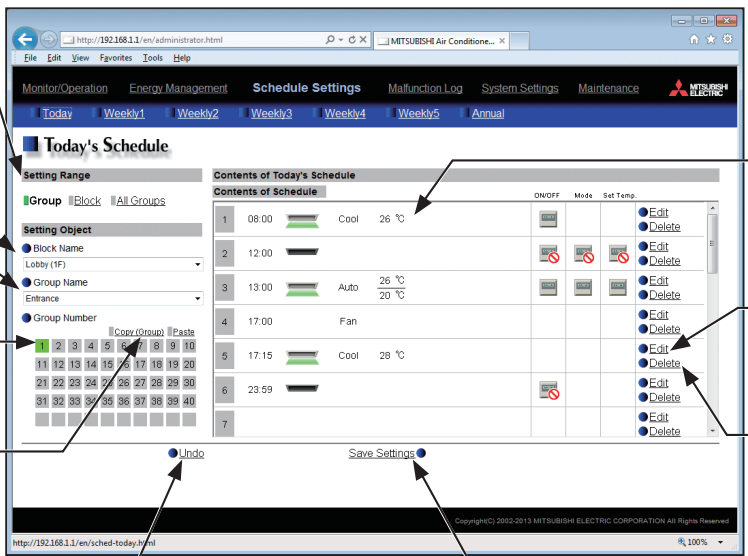


Save Settings

6-3. Today's Schedule

Click [Schedule Settings] in the menu bar, and then click [Today's Schedule] to access the Today's Schedule settings screen.

On the Today's Schedule settings screen, schedules can be set for the current day without modifying the weekly or annual schedules.



The screenshot shows the 'Today's Schedule' settings screen. The interface includes a menu bar at the top with options like Monitor/Operation, Energy Management, Schedule Settings, Malfunction Log, System Settings, and Maintenance. Below the menu bar, there are tabs for Today, Weekly1, Weekly2, Weekly3, Weekly4, Weekly5, and Annual. The main area is divided into two sections: 'Setting Range' and 'Contents of Today's Schedule'.

Setting Range: This section allows selecting a target for the schedule. It includes a 'Setting Object' dropdown menu with options like Block Name, Group Name, and Entrance. Below this is a 'Group Number' grid with numbers 1 through 40. Annotations point to the 'Setting Range' section, stating 'Select a target to which the today's schedule will be applied.' and 'Block Name', 'Group Name', and 'Group Number'.

Contents of Today's Schedule: This section displays a table of scheduled events. The table has columns for 'Contents of Schedule', 'ON/OFF', 'Mode', and 'Set Temp.'. The table lists 7 events with their start times, modes, and temperatures. Annotations point to this section, stating 'Contents of Schedule'.

Buttons: At the bottom of the screen, there are buttons for 'Undo', 'Save Settings', 'Edit', and 'Delete'. Annotations point to these buttons with the following descriptions: 'Undo: Click to undo changes.', 'Save Settings: Click to save the settings.', 'Edit: Click to display a schedule settings screen.', and 'Delete: Click to delete a schedule.'

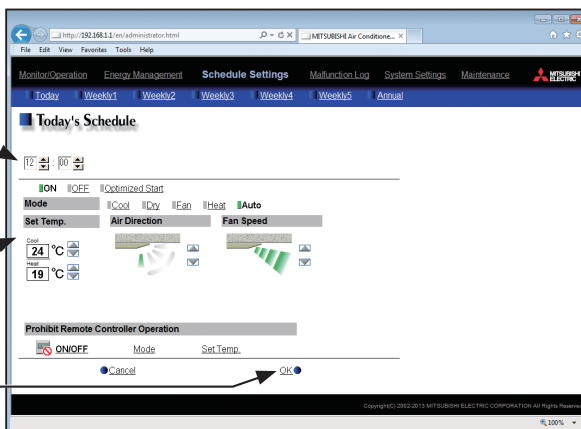
Copy (Group)/Paste: An annotation points to the 'Copy (Group)/Paste' button, stating 'Click to copy or paste a schedule among groups.'

(1) Selecting a target to which the schedule will be applied

In the Setting Range and Setting Object sections, select the target to which the schedule will be applied, referring to section 6-1.

(2) Setting the contents of the schedule

Click [Edit] in the Contents of Schedule section to display the schedule settings screen.



The screenshot shows the 'Schedule Settings' screen. The interface includes a menu bar at the top with options like Monitor/Operation, Energy Management, Schedule Settings, Malfunction Log, System Settings, and Maintenance. Below the menu bar, there are tabs for Today, Weekly1, Weekly2, Weekly3, Weekly4, Weekly5, and Annual. The main area is divided into two sections: 'Today's Schedule' and 'Schedule Settings'.

Today's Schedule: This section displays a table of scheduled events. The table has columns for 'Contents of Schedule', 'ON/OFF', 'Mode', and 'Set Temp.'. The table lists 7 events with their start times, modes, and temperatures. Annotations point to this section, stating 'Scheduled start time' and 'Schedule settings'.

Schedule Settings: This section allows setting the start time, mode, and temperature for the schedule. It includes a 'Scheduled start time' field with a time picker. Below this are sections for 'Mode' (ON, OFF, Optimized Start) and 'Set Temp.' (Air Temp., Fan Speed). There is also a 'Prohibit Remote Controller Operation' section. At the bottom, there are 'Cancel' and 'OK' buttons. An annotation points to the 'OK' button, stating 'OK'.

Set the start time to apply to the schedule, set the operations to be scheduled, and then press [OK]. The operations that can be scheduled for air conditioning unit groups are as follows: ON/OFF/Optimized Start, Mode, Set Temp, Air Direction, Fan Speed, and Prohibit Remote Controller Operation.

Up to 24 events can be scheduled per day.

Note: The operation items that will appear on the screen vary, depending on the group type.

Note: [Optimized Start] can be selected only for the air conditioning unit groups.

Note: If [Optimized Start] is selected, the operation mode and the set temperature need to be set as well. The Optimized Start function will start the units 5 to 60 minutes prior to the scheduled start time to reach the set temperature at the scheduled start time, based on the operation data in the past. (When the units start the first time after a power reset, the units will start operation 30 minutes before the scheduled start time.)

If the room temperature is measured by the return air temperature sensor on the air conditioning unit, the measured value may not be an accurate representation of the temperature in the room, especially when the air conditioning unit is stopped and the room air is stagnant. When this is the case, use an external temperature sensor (PAC-SE40TSA) or remote controller sensor to measure the room temperature.

Note: If [Optimized Start] is selected and the [Prohibit Remote Controller Operation] setting is set to Prohibit or Permit at the same time, the operations from the remote controllers will be prohibited or permitted at the scheduled start time.

Note: When setting a schedule for a block or all groups, all operation modes are available for selection, but the available operation modes depend on the unit model. The units will not operate in the selected mode not supported by the units.

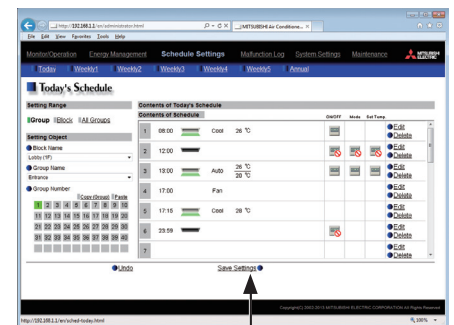
Note: For LOSSNAY unit groups, the item [Set Temp.] or [Air Direction] will not appear, and only ON/OFF setting under the Prohibit Remote Controller Operation can be made.

Note: For general equipment groups, only the operation ON/OFF settings can be made.

Note: The scheduled operations will continue to be in effect unless they are overwritten by the other schedule settings or the operation settings are changed on the Web browser. Be sure to set the contents of schedule in a way that will not impact on the next day's operation. For example, if Prohibit setting of remote controller operation is made for any time such as 17:00, Permit setting needs to be made for any time before the date changes such as 23:59.

(3) Saving the schedules

To undo the changes made, click [Undo] before saving the schedules.
After completing the settings, click [Save Settings] to save the schedules.



Save Settings

7. Malfunction Log

7-1. Unit Error/Communication Error

Click [Malfunction Log] in the menu bar, and then click [Unit Error] to display the last 64 unit errors, or click [Communication Error] to display the last 64 M-NET communication errors.

Unit Error
Click to display the unit error log.

Update
Click to show the most recent error log.

Error occurrence date and time

Error source unit address

Error detection unit address

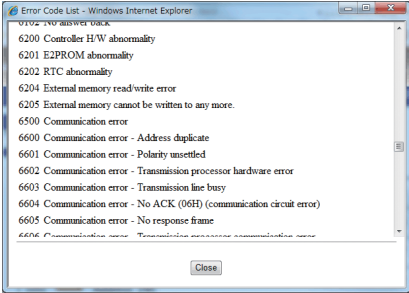
Communication Error
Click to display the M-NET communication error log.

Clear log
Click to clear the error log.

Error Code List
Click to display the list of error codes and their definitions.

Error code

Error recovery date and time

Item	Description
Unit Error	Click to display the unit error log.
Communication Error	Click to display the M-NET communication error log.
Update	Click to show the most recent error log. When [Auto] is selected, the error log is updated automatically every minute.
Clear Log	Click to clear the error log.
Error Code List	Click to display the list of error codes and their definitions. 
Error occurrence date and time	The date and time when the error occurred will appear.
Error source unit address	The address of the unit in error will appear.
Error detection unit address	The address of the unit that detected the error will appear.
Error code	The error code that corresponds to the error will appear.
Error recovery date and time	The date and time when the error was resolved will appear.

8. System Settings

8-1. Date/Time Settings

Click [System Settings] in the menu bar, and then click [Date/Time Settings] to access the date and time settings screen.

Set the current date and time, and then click [Save Settings] to send the settings to the EB-50.

Note: The date and time settings made on this screen will be reflected on all the units in the M-NET system and on the EB-50 units whose [Time Master] setting is set to [Sub].

Note: The date and time cannot be set on this screen if the [Time Master] setting is set to [Sub].

Daylight saving time setting
Click to enable the daylight saving time setting.

Current date and time
Enter the current date and time.

Refresh
Click to acquire the current date and time from the EB-50.

Save Settings
Click to save the changes made.

(1) Enter the current date and time.

(2) To adjust the daylight saving time automatically, check the [Automatically adjust clock for daylight saving changes] checkbox, and select the applicable country in the pulldown menu.

If the applicable country is not in the pulldown menu, select [Custom Settings] instead. A [Custom Settings] button will appear on the right of the pulldown menu.

Click the [Custom Settings] button to open the Custom Settings screen, and configure the daylight saving time setting.

Custom Settings

Day Month Time

01 / 04 02 : 00 ▶ 03 : 00

01 / 10 03 : 00 ▶ 02 : 00

Cancel OK

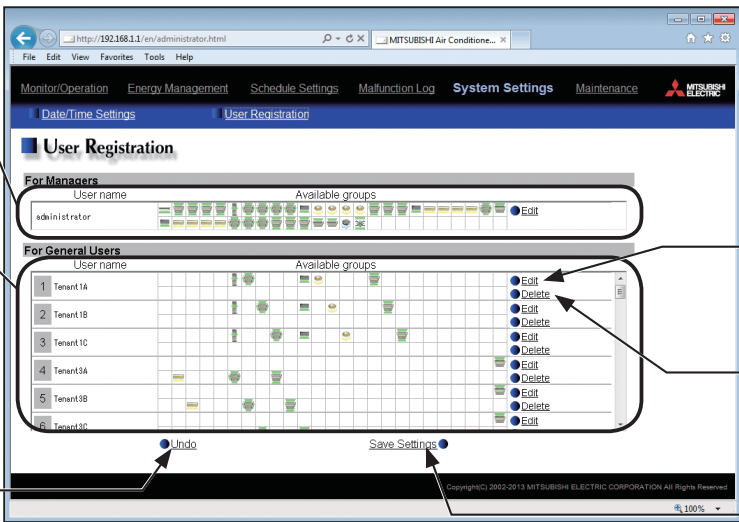
Custom Settings screen

8-2. User Registration

On the User Registration screen, the building manager's user name and password can be changed. If the "Personal Web" license is registered, up to 50 general users can be registered, and the groups that each general user is granted access to can be determined.

Click [System Settings] in the menu bar, and then click [User Registration] to access the User Registration screen.

Note: The building manager's user name and password for Web Browser for System Maintenance Engineer is the same as those for Web Browser for Initial Settings.



Building manager's user name and accessible unit group icons

General user name and accessible unit group icons

Edit
Click to edit the user information.

Delete
Click to delete the user information.

Undo
Click to undo changes.

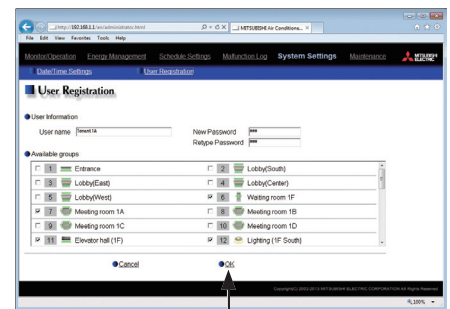
Save Settings
Click to save the settings.

* To show the group name, move the cursor to the group icon.

- (1) To edit the user settings, click the [Edit] button in the row of the user to be changed. To change the user name or password, type new information in the [User Name], [New Password], and [Retype Password] fields. Check the checkboxes next to the unit groups to be made accessible for each general user. Each general user will be able to monitor and operate the unit groups that are specified on this screen. Click [OK].

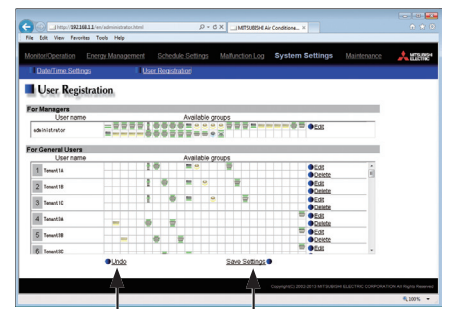
Note: User names and passwords are case-sensitive.

Note: The accessible unit groups for building managers cannot be specified because building managers can monitor and operate all unit groups.



OK

- (2) To undo changes made, click [Undo] before saving the settings. After completing the settings, click [Save Settings] to save the settings. Note that the changes will NOT be saved unless the [Save Settings] button is pressed.



Undo

Save Settings

9. Maintenance

9-1. Send Mail Log

Click [Maintenance] in the menu bar, and then click [Send Mail Log] to access the Send Mail Log screen. A list of error notification e-mail that have been sent will appear.

Error notification e-mail function is the function to send the error information to the specified e-mail addresses. To use this function, e-mail settings must be configured on the Web Browser for Initial Settings.

The screenshot shows the 'Send Mail Log' screen in a web browser. The browser address bar shows 'http://192.168.1.1/en/administrator.html'. The page has a menu bar with 'Monitor/Operation', 'Energy Management', 'Schedule Settings', 'Malfunction Log', 'System Settings', and 'Maintenance'. Below the menu bar, there are tabs: 'Send Mail Log', 'Gas Amount Check', 'Outdoor unit status', 'Free Contact List', and 'CSV output'. The 'Send Mail Log' tab is active. It contains a table with columns: 'Date/Time', 'Unit Address', 'Error Code', 'Error Status', and 'Sent Mail Status'. There are two buttons: 'Update' and 'Clear Log'. Annotations with arrows point to these buttons and various columns in the table.

Update
Click to show the most recent log.

Clear Log
Click to clear the e-mail log.

Error Code

Sent date and time

Error source unit address

Sent Mail Status

Error Status

	Date/Time	Unit Address	Error Code	Error Status	Sent Mail Status
1	01/23/2013 09:39:17	246	6607	Occurred	Failed
2	01/23/2013 09:39:17	245	6607	Occurred	Failed
3	01/23/2013 09:39:17	000	6600	Occurred	Failed
4	01/23/2013 09:39:17	000	6601	Occurred	Failed
5	01/23/2013 10:45:20	201	7201	Occurred	Sent
6	01/23/2013 10:45:26	201	7201	Resolved	Sent
7	01/23/2013 10:45:30	201	7201	Occurred	Sent
8	01/23/2013 10:45:37	201	7201	Resolved	Sent

Item	Description
Update	Click to show the most recent e-mail log. When [Auto] is selected, the e-mail log is updated automatically every minute.
Clear Log	Click to clear the e-mail log.
Sent date and time	The date and time when the e-mail was sent will appear.
Error source unit address	The address of the unit in error will appear. Note: When an error occurs on a general equipment connected to PLC Software for General Equipment, PLC number* (1 to 20) and connection number of the general equipment (1 to 32) will appear. (Example: PLC1-32) * PLC number indicates the row number on the [PLC Connection] screen, accessible from the [E-mail] screen on the Web Browser for Initial Settings. Note: When an error occurs on the general equipment connected via DIDO controller, M-NET address of the DIDO controller will appear. (The recipients will know that an error has occurred on one of the general equipment that is connected to the DIDO controller.)
Error Code	The error code that corresponds to the error will appear.
Error Status	Occurred: The e-mail was sent when an error occurred. Resolved: The e-mail was sent when the error was resolved.
Sent Mail Status	Sent: The e-mail was successfully sent. Failed: The e-mail failed to be sent.

9-2. Gas Amount Check

On the Gas Amount Check screen, operators can check the outdoor units for proper gas refrigerant charge. Click [Maintenance] in the menu bar, and then click [Gas Amount Check] to access the Gas Amount Check screen.

Note: Only the outdoor units that support the Gas Amount Check function will appear on the screen.

Note: During the Gas Amount Check, outdoor units will operate in a specific mode. The check will take between 30 minutes and 1 hour.

Check all outdoor units
Click to start checking the gas refrigerant charge on all outdoor units.

M-NET address of the outdoor unit

Check Result
Normal: Gas refrigerant charge is appropriate.
Lo: Gas refrigerant charge is low.

Check Start
Click to start checking the gas refrigerant charge for a given outdoor unit.

Log
Up to the last 10 check logs will appear. The date and time when each check ended and its check result will appear.

Address	Check Result	Log
51	Normal	2013/04/15 17:16 Normal
		2013/03/15 19:21 Normal
		2013/02/16 16:38 Normal
		2013/01/15 20:36 Normal
		2013/12/15 16:39 Normal
		2013/11/15 17:26 Normal
		2013/10/15 13:16 Normal
		2013/09/16 19:06 Normal
		2013/08/15 17:37 Normal
		2013/07/16 16:32 Normal
76	Lo	2013/04/15 17:16 Lo
		2013/03/15 19:22 Normal
		2013/02/16 16:38 Normal
		2013/01/15 20:36 Normal

- (1) To start a check for all outdoor units, click [Check all outdoor units].
To start a check for a given outdoor unit, click [Check Start] in the row of the outdoor unit to be checked. The [Check Start] button will change to [Check Cancel] button when clicked. To stop the check, click [Check Cancel].
- (2) The check will take between 30 minutes and 1 hour. Upon completion, check result "Normal" or "Lo" will appear. "Normal" indicates that the gas refrigerant charge is appropriate, and "Lo" indicates that the gas refrigerant charge is low.

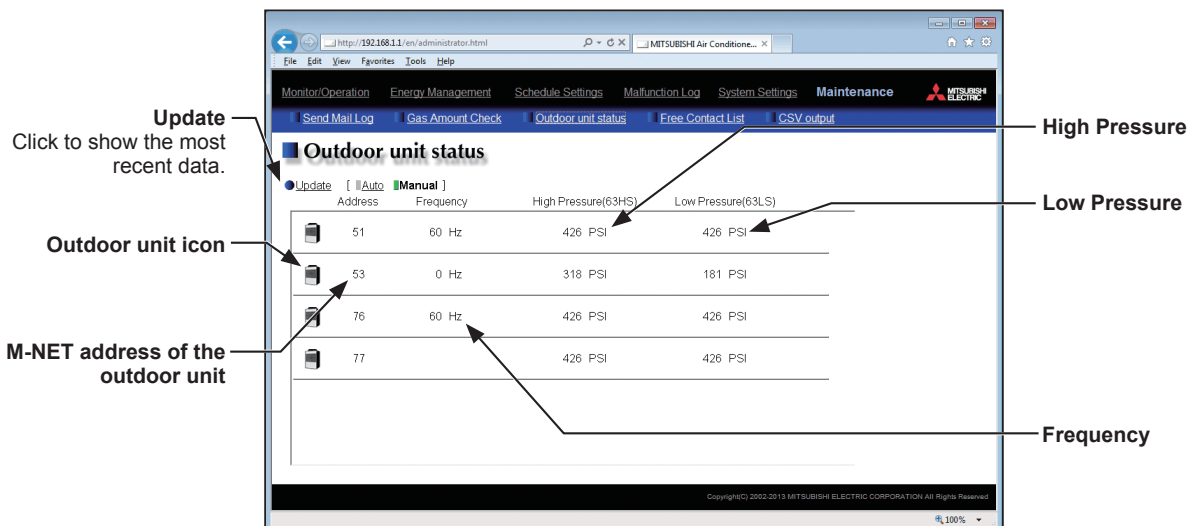
Note: The screen can be closed before a check is completed. The check results will be displayed next time this screen is opened.



9-3. Outdoor unit status

On the Outdoor Unit Status screen, operators can check the frequency, high pressure, and low pressure of each outdoor unit.

Click [Maintenance] in the menu bar, and then click [Outdoor unit status] to access the Outdoor Unit Status screen.

Note: The outdoor unit status may not appear if the EB-50 was started up while the outdoor unit was powered off. If this is the case, restart the EB-50.



Item	Description
Update	Click to show the most recent data. When [Auto] is selected, the data is updated automatically every minute.
Frequency	Operating frequency of the compressor on a given outdoor unit will appear. Note: The frequency of a sub outdoor unit will not appear.
High Pressure	Refrigerant discharge pressure of the compressor on a given outdoor unit will appear.
Low Pressure	Refrigerant suction pressure of the compressor on a given outdoor unit will appear.
Outdoor unit icon	 : Normal  : Communication error or unit error

* When a communication error occurs, "--" will appear in the Frequency, High Pressure, and Low Pressure value fields.

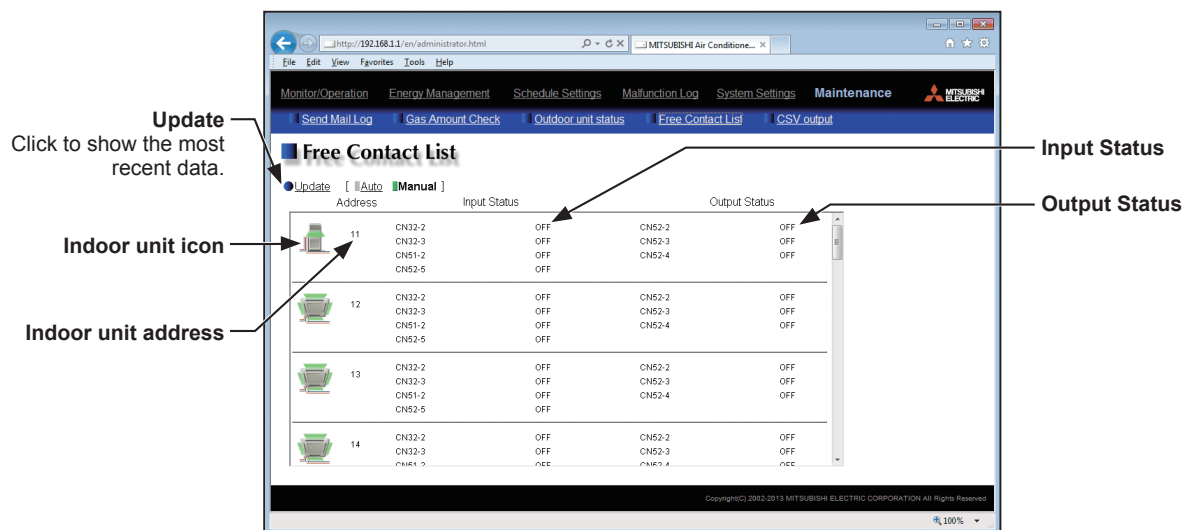
* If the outdoor unit is a PUMY model of City Multi S-series, "--" will appear in the Frequency, High Pressure, and Low Pressure value fields.



9-4. Free Contact List

This chapter explains how to check the input/output status of the free contacts on the indoor units.

Click [Maintenance] in the menu bar, and then click [Free Contact List] to access the Free Contact List screen.

Note: The free contact settings must be made on the indoor unit.



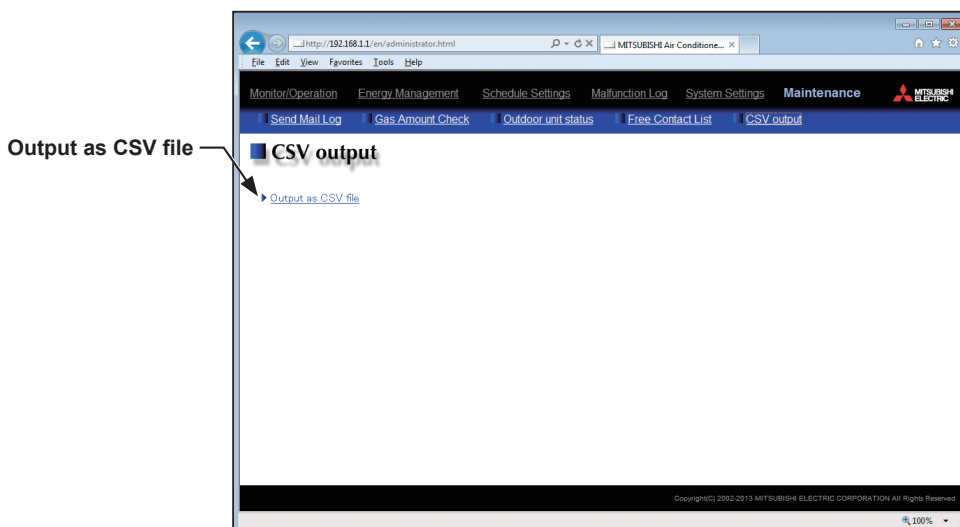
Item	Description
Update	Click to show the most recent data. When [Auto] is selected, the data is updated automatically every minute.
Input Status	The input status (ON or OFF) of the free contacts CN32-2, CN32-3, CN51-2, and CN52-5 on the indoor unit will appear.
Output Status	The output status (ON or OFF) of the free contacts CN52-2, CN52-3, and CN52-4 on the indoor unit will appear.
Indoor unit icon	 : Normal  : Communication error or unit error

9-5. CSV output

The operation data, such as apportioning parameters, power consumption, and energy management data, can be output in a CSV format from the CSV Output screen.

Click [Maintenance] in the menu bar, and then click [CSV output] to access the CSV Output screen.

Note: A separate license may be required to use the CSV output function. Only valid buttons can be selected on the CSV File Download Tool screen.



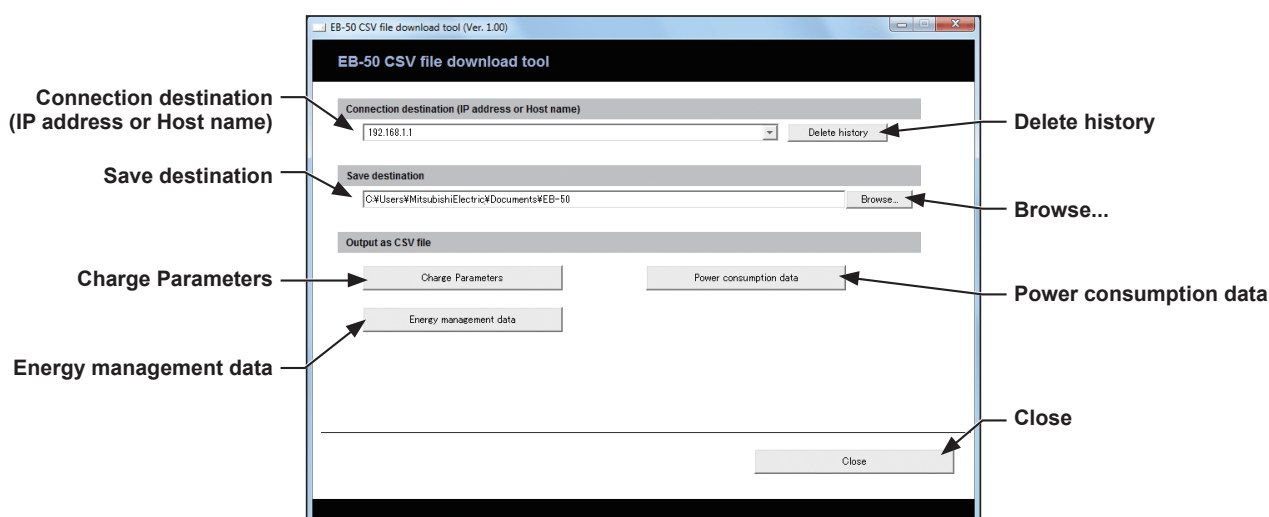
(1) Click [Output as CSV file] to display the Window's standard file download dialog.

(2) Click [Open] to start the CSV File Download Tool.

Note: If the "EB50csvdl.jar" file is associated with other applications, the CSV File Download Tool will not start up. Remove the association.

Note: If [Save] is clicked, the "EB50csvdl.jar" file will be saved in the specified folder. In this case, double clicking the file will also start the CSV File Download Tool.

CSV File Download Tool



- (3) Specify the connection destination and the save destination, and click [Charge Parameters], [Power consumption data], or [Energy management data], referring to the table below.
A login screen will appear. Enter the user name and the password, and click [Login].

Note: The building manager or maintenance user can login.

- (4) The selected data will be output in a CSV format to the specified save destination. Percentages of process completion will appear.

Note: Once you have successfully logged in, there is no need to login again every time you download data as long as the CSV File Download Tool remains open.

Note: It may take a few minutes to complete the download, depending on the data volume.

Item	Description
Connection destination	Enter the IP address or host name of the EB-50 as a destination. The last input value will appear every time the CSV File Download Tool is started up. The last 20 input values will appear in the pulldown menu. Note: If there is no history, "192.168.1.1" will appear.
Delete history	Deletes all history in the pulldown menu.
Save destination	Specify the destination to save the CSV file. Note: The default destination will be "My Documents" folder in the login user folder.
Browse...	Click to display a dialog to select a folder where the CSV file will be saved.

Item	Description																		
Charge Parameters	Click to download a CSV file of the charge parameters.																		
	■ <u>File name</u> ChargeParameter_[yyyy]-[mm]-[dd]A[Indoor unit address]-[Time period (1–5)].csv Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings. Note: Time periods 1 through 5 can only be set from TG-2000A. When shipped from the factory, only Time period 1 is settable.																		
	■ <u>File output destination</u> [Save destination]\[Serial No.]\OperationalData\ChargeParameters\[Date] Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.																		
	■ <u>File format</u>																		
	<table><tr><th>Row</th><th>Item</th><th>Format</th></tr><tr><td>1st</td><td>File Type</td><td>201</td></tr><tr><td>2nd</td><td>Data range *1</td><td>Start date + "-" + End date</td></tr><tr><td>3rd</td><td>Indoor unit address</td><td>"Address" + M-NET address</td></tr><tr><td>4th</td><td>Item</td><td>"Date,SaveValue,ThermoTime,FanTime,SubHeaterTime"</td></tr><tr><td>5th–404th</td><td>Data *2*3*4*5</td><td>Date *1, Capacity-save value (min), Thermo-ON time (min), Fan operation time (min), Sub-heater-ON time (min)</td></tr></table>	Row	Item	Format	1st	File Type	201	2nd	Data range *1	Start date + "-" + End date	3rd	Indoor unit address	"Address" + M-NET address	4th	Item	"Date,SaveValue,ThermoTime,FanTime,SubHeaterTime"	5th–404th	Data *2*3*4*5	Date *1, Capacity-save value (min), Thermo-ON time (min), Fan operation time (min), Sub-heater-ON time (min)
	Row	Item	Format																
	1st	File Type	201																
	2nd	Data range *1	Start date + "-" + End date																
	3rd	Indoor unit address	"Address" + M-NET address																
	4th	Item	"Date,SaveValue,ThermoTime,FanTime,SubHeaterTime"																
5th–404th	Data *2*3*4*5	Date *1, Capacity-save value (min), Thermo-ON time (min), Fan operation time (min), Sub-heater-ON time (min)																	
*1 The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.																			
*2 The separator character and decimal point character selected on the Measurement screen (accessible via the Web Browser for Initial Settings) will be used to the data.																			
*3 Each value is the cumulative value between the start date and the end date.																			
*4 The value will not appear if the data does not exist.																			
*5 Each file contains the data of up to 400 days.																			
■ <u>File sample</u>																			
<div><div>201 12/19/2011-1/10/2013 Address 31 Date,SaveValue,ThermoTime,FanTime,SubHeaterTime 12/19/2011,1258,0,465,0 12/20/2011,1260,0,468,0 12/21/2011,1262,0,472,0 12/22/2011,1264,0,477,0 12/23/2011,1266,0,490,0 : 01/10/2013,2058,0,1013,0</div></div>																			

Item	Description																		
Power consumption data	Click to download a CSV file of the power consumption data.																		
	■ <u>File name</u> ChargeParameter_[yyyy]-[mm]-[dd]MCPA[MCP address]-[Time period (1–5)].csv																		
	Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.																		
	Note: Time periods 1 through 5 can only be set from TG-2000A. When shipped from the factory, only Time period 1 is settable.																		
	■ <u>File output destination</u> [Save destination]\[Serial No.]\OperationalData\ChargeParameters\[Date]																		
	Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.																		
	■ <u>File format</u>																		
	<table><tr><th>Row</th><th>Item</th><th>Format</th></tr><tr><td>1st</td><td>File Type</td><td>202</td></tr><tr><td>2nd</td><td>Data range *1</td><td>Start date + "-" + End date</td></tr><tr><td>3rd</td><td>MCP (PI controller) address</td><td>"MCP" + M-NET address + "-" + Time period (1–5)</td></tr><tr><td>4th</td><td>Item</td><td>"No.,Date,Count value(Ch1),Count value(Ch2),Count value(Ch3),Count value(Ch4)"</td></tr><tr><td>5th–404th</td><td>Data *2*3*4*5*6</td><td>MCP address + Time period, Date *1, MCP 1, MCP 2, MCP 3, MCP 4</td></tr></table>	Row	Item	Format	1st	File Type	202	2nd	Data range *1	Start date + "-" + End date	3rd	MCP (PI controller) address	"MCP" + M-NET address + "-" + Time period (1–5)	4th	Item	"No.,Date,Count value(Ch1),Count value(Ch2),Count value(Ch3),Count value(Ch4)"	5th–404th	Data *2*3*4*5*6	MCP address + Time period, Date *1, MCP 1, MCP 2, MCP 3, MCP 4
	Row	Item	Format																
	1st	File Type	202																
2nd	Data range *1	Start date + "-" + End date																	
3rd	MCP (PI controller) address	"MCP" + M-NET address + "-" + Time period (1–5)																	
4th	Item	"No.,Date,Count value(Ch1),Count value(Ch2),Count value(Ch3),Count value(Ch4)"																	
5th–404th	Data *2*3*4*5*6	MCP address + Time period, Date *1, MCP 1, MCP 2, MCP 3, MCP 4																	
*1 The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.																			
*2 The separator character and decimal point character selected on the Measurement screen (accessible via the Web Browser for Initial Settings) will be used to the data.																			
*3 Each value is the cumulative value between the start date and the end date.																			
*4 Each value is between 0.00 and 999999.99. If the value exceeds the maximum value, it will wrap around to zero.																			
*5 The value will not appear if the data does not exist.																			
*6 Each file contains the data of up to 400 days.																			
■ <u>File sample</u>	<div><div>202 12/19/2011-1/10/2013 MCP 50-1 No.,Date,Count value(Ch1),Count value(Ch2),Count value(Ch3),Count value(Ch4) 501,12/19/2011,190887.43,872411.43,227424.88,55515.50 501,12/20/2011,190899.16,872420.12,227428.63,55526.70 501,12/21/2011,190905.22,872442.23,227435.74,55537.90 501,12/22/2011,190910.38,878449.77,227448.19,55549.84 : 501,01/10/2013,200014.38,87950.36,227925.19,60111.63</div></div>																		

Item	Description																				
Energy management data	<p>Click to download a CSV file of the energy management data. The "Select energy management data source" window will pop up. Select a data type and specify the data-acquisition period to acquire the data.</p> <p>Refer to section 9-5-1 "Energy Management Data List" for details about the data that can be output in a CSV format.</p> <div><div><div><div></div><div>Select energy management data source</div><div></div></div><div><div><div>Data type</div><div>5-minute intervals</div></div><div><div>Data-acquisition period</div><div><div>Year</div><div>Month</div><div>Day</div><div>2013</div><div>/</div><div>1</div><div>/</div><div>23</div><div>-</div><div>Year</div><div>Month</div><div>Day</div><div>2013</div><div>/</div><div>1</div><div>/</div><div>23</div></div></div><div><div>Acquire data.</div></div></div></div><div><div>Data type</div><div>Data-acquisition period</div><div>Acquire data</div></div></div> <table><tr><td>Data type</td><td>Select [5-minute intervals], [30-minute intervals], [1-month intervals], [1-day intervals], or [1-year intervals].</td></tr><tr><td>Data-acquisition period</td><td><p>Specify the date period to acquire the data.</p><p>Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p><p>Note: The date range that can be specified will vary, depending on the item selected in the [Data type] field.</p><p>Note: If [1-month intervals] or [1-year intervals] is selected in the [Data type] field, the data-acquisition period cannot be specified.</p><p>Note: Only the data for the period during which the EB-50 was powered on will be output. The data for the period during which the EB-50 was powered off will not be output.</p></td></tr><tr><td>Acquire data</td><td>Click to output the CSV file based on the selected criteria.</td></tr></table> <div><div>■ File name</div><div><div>Data type: 5-minute intervals</div><div>EnergyManagement_5MIN_[YYYY]-[MM]-[DD]_[yyyy]-[mm]-[dd].csv</div></div><div><div>Data type: 30-minute intervals</div><div>EnergyManagement_30MIN_[YYYY]-[MM]-[DD]_[yyyy]-[mm]-[dd].csv</div></div><div><div>Data type: 1-day intervals</div><div>EnergyManagement_1DAY_[YYYY]-[MM]-[DD]_[yyyy]-[mm]-[dd].csv</div></div><div><div>Data type: 1-month intervals</div><div>EnergyManagement_1MONTH_[YYYY]-[MM]_[yyyy]-[mm].csv</div></div><div><div>Data type: 1-year intervals</div><div>EnergyManagement_1YEAR_[YYYY]_[yyyy].csv</div></div><table><tr><td>File-name contents</td><td>Format</td></tr><tr><td>[YYYY]</td><td>Start year</td></tr><tr><td>[MM]</td><td>Start month</td></tr><tr><td>[DD]</td><td>Start date</td></tr><tr><td>[yyyy]</td><td>End year</td></tr><tr><td>[mm]</td><td>End month</td></tr><tr><td>[dd]</td><td>End date</td></tr></table><div><div>Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</div></div></div>	Data type	Select [5-minute intervals], [30-minute intervals], [1-month intervals], [1-day intervals], or [1-year intervals].	Data-acquisition period	<p>Specify the date period to acquire the data.</p> <p>Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>Note: The date range that can be specified will vary, depending on the item selected in the [Data type] field.</p> <p>Note: If [1-month intervals] or [1-year intervals] is selected in the [Data type] field, the data-acquisition period cannot be specified.</p> <p>Note: Only the data for the period during which the EB-50 was powered on will be output. The data for the period during which the EB-50 was powered off will not be output.</p>	Acquire data	Click to output the CSV file based on the selected criteria.	File-name contents	Format	[YYYY]	Start year	[MM]	Start month	[DD]	Start date	[yyyy]	End year	[mm]	End month	[dd]	End date
	Data type	Select [5-minute intervals], [30-minute intervals], [1-month intervals], [1-day intervals], or [1-year intervals].																			
	Data-acquisition period	<p>Specify the date period to acquire the data.</p> <p>Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>Note: The date range that can be specified will vary, depending on the item selected in the [Data type] field.</p> <p>Note: If [1-month intervals] or [1-year intervals] is selected in the [Data type] field, the data-acquisition period cannot be specified.</p> <p>Note: Only the data for the period during which the EB-50 was powered on will be output. The data for the period during which the EB-50 was powered off will not be output.</p>																			
	Acquire data	Click to output the CSV file based on the selected criteria.																			
	File-name contents	Format																			
	[YYYY]	Start year																			
	[MM]	Start month																			
	[DD]	Start date																			
	[yyyy]	End year																			
	[mm]	End month																			
[dd]	End date																				

Item	Description	
Energy management data	■ File output destination [Save destination]\[Serial No.]\OperationalData\EnergyManagementData\[Date] Note: The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.	
	■ File format [Data type: 5-minute intervals]	
	Row	Item
	1st	File Type
	2nd	Data range *1
	3rd	Item *5
	4th	Measurement unit *2*3*4*5
	5th—17860th	Data *5*6*7
*1 The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings. *2 The temperature unit °C or °F will appear, depending on the temperature unit that has been selected on the Basic System settings screen, accessible via the Web Browser for Initial Settings. *3 The measurement unit for MCP (PI controller) will be the measurement unit that has been set on the Measurement screen, accessible via the Web Browser for Initial Settings. *4 The measurement item for MCT (AI controller) will be temperature or humidity, which has been set on the Measurement screen, accessible via the Web Browser for Initial Settings. *5 The separator character and decimal point character selected on the Measurement screen (accessible via the Web Browser for Initial Settings) will be used to the data. *6 The value will not appear if the data does not exist. *7 Each file contains up to 17856 data (2-month worth of data).		

Item	Description																		
Energy management data	[Data type: 30-minute intervals]																		
	Row	Item	Format																
	1st	File Type	502																
	2nd	Data range *1	Start date + "-" + End date																
	3rd	Item *5	"DateTime,Data1(51),...Data1(100),Data2(51),...Data2(100),Data3(51),...Data3(100),OutdoorTemp(51),...OutdoorTemp(100),CoolSetTemp(1),...CoolSetTemp(50),HeatSetTemp(1),...HeatSetTemp(50),RoomTemp(1),...RoomTemp(50),FanTime(1),...FanTime(50),CoolTime(1),...CoolTime(50),HeatTime(1),...HeatTime(50),ThermoTime(1),...ThermoTime(50),CoolThermoTime(1),...CoolThermoTime(50),HeatThermoTime(1),...HeatThermoTime(50),ThermoCount(1),...ThermoCount(50),SaveValue(1),...SaveValue(50),CoolSaveValue(1),...CoolSaveValue(50),HeatSaveValue(1),...HeatSaveValue(50),ApporionedElectricEnergy(1),...ApporionedElectricEnergy(50),MCP1(1),...MCP1(50),MCP2(1),...MCP2(50),MCP3(1),...MCP3(50),MCP4(1),...MCP4(50),MCT1(1),...MCT1(50),MCT2(1),...MCT2(50),AHC1(201),...AHC1(250),AHC2(201),...AHC2(250)"																
	4th	Measurement unit *2*3*4*5	<table><tr><th>Item</th><th>Unit</th></tr><tr><td>ApportionedElectricEnergy</td><td>kWh</td></tr><tr><td>ThermoCount, Data1, Data2, Data3</td><td>-</td></tr><tr><td>OutdoorTemp, CoolSetTemp, HeatSetTemp, RoomTemp</td><td>°C, °F</td></tr><tr><td>FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue</td><td>Minute</td></tr><tr><td>MCP (PI controller)</td><td>kWh, m3, MJ</td></tr><tr><td>MCT (AI controller)</td><td>°C, °F, %</td></tr><tr><td>AHC (Advanced HVAC CONTROLLER)</td><td>°C, °F</td></tr></table>	Item	Unit	ApportionedElectricEnergy	kWh	ThermoCount, Data1, Data2, Data3	-	OutdoorTemp, CoolSetTemp, HeatSetTemp, RoomTemp	°C, °F	FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue	Minute	MCP (PI controller)	kWh, m3, MJ	MCT (AI controller)	°C, °F, %	AHC (Advanced HVAC CONTROLLER)	°C, °F
	Item	Unit																	
ApportionedElectricEnergy	kWh																		
ThermoCount, Data1, Data2, Data3	-																		
OutdoorTemp, CoolSetTemp, HeatSetTemp, RoomTemp	°C, °F																		
FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue	Minute																		
MCP (PI controller)	kWh, m3, MJ																		
MCT (AI controller)	°C, °F, %																		
AHC (Advanced HVAC CONTROLLER)	°C, °F																		
5th–37204th	Data *5*6*7*8*9	Date *1 and time, Data 1 (51), ... (100), Data 2 (51), ... (100), Data 3 (51), ... (100), Outdoor temperature (51), ... (100), Cooling set temperature (1), ... (50), Heating set temperature (1), ... (50), Room temperature (1), ... (50), Fan operation time (1), ... (50), Cooling operation time (1),... (50), Heating operation time (1), ... (50), Thermo-ON time (1), ... (50), Cooling Thermo-ON time (1), ... (50), Heating Thermo-ON time (1), ... (50), Number of Thermo-ON/OFF (1), ... (50), Capacity-save value (1), ... (50), Cooling capacity-save value (1), ... (50), Heating capacity-save value (1), ... (50), Apporioned electric energy (1), ... (50), MCP 1 (1), ... (50), MCP 2 (1), ... (50), MCP 3 (1), ... (50), MCP 4 (1), ... (50), MCT 1 (1), ... (50), MCT 2 (1), ... (50), AHC temperature 1 (201), ... (250), AHC temperature 2 (201), ... (250)																	
<p>*1 The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*2 The temperature unit °C or °F will appear, depending on the temperature unit that has been selected on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*3 The measurement unit for MCP (PI controller) will be the measurement unit that has been set on the Measurement screen, accessible via the Web Browser for Initial Settings.</p> <p>*4 The measurement item for MCT (AI controller) will be temperature or humidity, which has been set on the Measurement screen, accessible via the Web Browser for Initial Settings.</p> <p>*5 The separator character and decimal point character selected on the Measurement screen (accessible via the Web Browser for Initial Settings) will be used to the data.</p> <p>*6 "Outdoor temperature," "Cooling set temperature," "Heating set temperature," and "Room temperature" in the data are the temperature values obtained every hour and half hour.</p> <p>*7 "MCT 1" and "MCT 2" in the data are the temperature or humidity values obtained every hour and half hour.</p> <p>*8 The value will not appear if the data does not exist.</p> <p>*9 Each file contains up to 37200 data (25-month worth of data).</p>																			

Item	Description																		
Energy management data	[Data type: 1-day intervals]																		
	Row	Item	Format																
	1st	File Type	503																
	2nd	Data range *1	Start date + "-" + End date																
	3rd	Item *5	"DateTime,Data1(51),...Data1(100),Data3(51),...Data3(100), OutdoorTemp(51),...OutdoorTemp(100),CoolSetTemp(1),...CoolSetTemp(50), HeatSetTemp(1),...HeatSetTemp(50),RoomTemp(1),...RoomTemp(50), FanTime(1),...FanTime(50),CoolTime(1),...CoolTime(50), HeatTime(1),...HeatTime(50),ThermoTime(1),...ThermoTime(50), CoolThermoTime(1),...CoolThermoTime(50), HeatThermoTime(1),...HeatThermoTime(50), SaveValue(1),...SaveValue(50),CoolSaveValue(1),...CoolSaveValue(50), HeatSaveValue(1),...HeatSaveValue(50), ApporionedElectricEnergy(1),...ApporionedElectricEnergy(50), TargetElectricEnergy(1),...TargetElectricEnergy(50), MCP1(1),...MCP1(50),MCP2(1),...MCP2(50),MCP3(1),...MCP3(50), MCP4(1),...MCP4(50),MCT1(1),...MCT1(50),MCT2(1),...MCT2(50), AHC1(201),...AHC1(250),AHC2(201),...AHC2(250)"																
	4th	Measurement unit *2*3*4*5	<table><tr><th>Item</th><th>Unit</th></tr><tr><td>ApportionedElectricEnergy, TargetElectricEnergy</td><td>kWh</td></tr><tr><td>Data1, Data3</td><td>-</td></tr><tr><td>OutdoorTemp, CoolSetTemp, HeatSetTemp, RoomTemp</td><td>°C, °F</td></tr><tr><td>FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue</td><td>Minute</td></tr><tr><td>MCP (PI controller)</td><td>kWh, m3, MJ</td></tr><tr><td>MCT (AI controller)</td><td>°C, °F, %</td></tr><tr><td>AHC (Advanced HVAC CONTROLLER)</td><td>°C, °F</td></tr></table>	Item	Unit	ApportionedElectricEnergy, TargetElectricEnergy	kWh	Data1, Data3	-	OutdoorTemp, CoolSetTemp, HeatSetTemp, RoomTemp	°C, °F	FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue	Minute	MCP (PI controller)	kWh, m3, MJ	MCT (AI controller)	°C, °F, %	AHC (Advanced HVAC CONTROLLER)	°C, °F
	Item	Unit																	
ApportionedElectricEnergy, TargetElectricEnergy	kWh																		
Data1, Data3	-																		
OutdoorTemp, CoolSetTemp, HeatSetTemp, RoomTemp	°C, °F																		
FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue	Minute																		
MCP (PI controller)	kWh, m3, MJ																		
MCT (AI controller)	°C, °F, %																		
AHC (Advanced HVAC CONTROLLER)	°C, °F																		
5th–779th	Data *5*6*7*8*9	Date *1, Data 1 (51), ... (100), Data 3 (51), ... (100), Outdoor temperature (51), ... (100), Cooling set temperature (1), ... (50), Heating set temperature (1), ... (50), Room temperature (1), ... (50), Fan operation time (1), ... (50), Cooling operation time (1), ... (50), Heating operation time (1), ... (50), Thermo-ON time (1), ... (50), Cooling Thermo-ON time (1), ... (50), Heating Thermo-ON time (1), ... (50), Capacity-save value (1), ... (50), Cooling capacity-save value (1), ... (50), Heating capacity-save value (1), ... (50), Apportioned electric energy (1), ... (50), Target electric energy (1), ... (50), MCP 1 (1), ... (50), MCP 2 (1), ... (50), MCP 3 (1), ... (50), MCP 4 (1), ... (50), MCT 1 (1), ... (50), MCT 2 (1), ... (50), AHC temperature 1 (201), ... (250), AHC temperature 2 (201), ... (250)																	
<p>*1 The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*2 The temperature unit °C or °F will appear, depending on the temperature unit that has been selected on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*3 The measurement unit for MCP (PI controller) will be the measurement unit that has been set on the Measurement screen, accessible via the Web Browser for Initial Settings.</p> <p>*4 The measurement item for MCT (AI controller) will be temperature or humidity, which has been set on the Measurement screen, accessible via the Web Browser for Initial Settings.</p> <p>*5 The separator character and decimal point character selected on the Measurement screen (accessible via the Web Browser for Initial Settings) will be used to the data.</p> <p>*6 "Outdoor temperature," "Cooling set temperature," "Heating set temperature," and "Room temperature" in the data are the average daily values of the temperature values obtained every hour.</p> <p>*7 "MCT 1" and "MCT 2" in the data are the average daily temperature or humidity values obtained every hour.</p> <p>*8 The value will not appear if the data does not exist.</p> <p>*9 Each file contains up to 775 data (25-month worth of data).</p>																			

Item	Description																	
Energy management data	[Data type: 1-month intervals]																	
	Row	Item	Format															
	1st	File Type	504															
	2nd	Data range *1	Start year and month + "-" + End year and month															
	3rd	Item *5	"DateTime,Data1(51),...Data1(100),Data3(51),...Data3(100), OutdoorTemp(51),...OutdoorTemp(100),CoolSetTemp(1),...CoolSetTemp(50), HeatSetTemp(1),...HeatSetTemp(50),RoomTemp(1),...RoomTemp(50), FanTime(1),...FanTime(50),CoolTime(1),...CoolTime(50), HeatTime(1),...HeatTime(50),ThermoTime(1),...ThermoTime(50), CoolThermoTime(1),...CoolThermoTime(50), HeatThermoTime(1),...HeatThermoTime(50), SaveValue(1),...SaveValue(50),CoolSaveValue(1),...CoolSaveValue(50), HeatSaveValue(1),...HeatSaveValue(50), ApporionedElectricEnergy(1),...ApporionedElectricEnergy(50). TargetElectricEnergy(1),...TargetElectricEnergy(50), MCP1(1),...MCP1(50),MCP2(1),...MCP2(50),MCP3(1),...MCP3(50), MCP4(1),...MCP4(50),MCT1(1),...MCT1(50),MCT2(1),...MCT2(50), AHC1(201),...AHC1(250),AHC2(201),...AHC2(250)"															
	4th	Measurement unit *2*3*4*5	<table><tr><th>Item</th><th>Unit</th></tr><tr><td>ApportionedElectricEnergy, TargetElectricEnergy</td><td>kWh</td></tr><tr><td>Data1, Data3</td><td>-</td></tr><tr><td>OutdoorTemp, CoolSetTemp, HeatSetTemp, RoomTemp</td><td>°C, °F</td></tr><tr><td>FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue</td><td>Minute</td></tr><tr><td>MCP (PI controller)</td><td>kWh, m3, MJ</td></tr><tr><td>MCT (AI controller)</td><td>°C, °F, %</td></tr><tr><td>AHC (Advanced HVAC CONTROLLER)</td><td>°C, °F</td></tr></table>	Item	Unit	ApportionedElectricEnergy, TargetElectricEnergy	kWh	Data1, Data3	-	OutdoorTemp, CoolSetTemp, HeatSetTemp, RoomTemp	°C, °F	FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue	Minute	MCP (PI controller)	kWh, m3, MJ	MCT (AI controller)	°C, °F, %	AHC (Advanced HVAC CONTROLLER)
Item	Unit																	
ApportionedElectricEnergy, TargetElectricEnergy	kWh																	
Data1, Data3	-																	
OutdoorTemp, CoolSetTemp, HeatSetTemp, RoomTemp	°C, °F																	
FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue	Minute																	
MCP (PI controller)	kWh, m3, MJ																	
MCT (AI controller)	°C, °F, %																	
AHC (Advanced HVAC CONTROLLER)	°C, °F																	
5th–29th	Data *5*6*7*8*9	yyyy/mm *1, Data 1 (51), ... (100), Data 3 (51), ... (100), Outdoor temperature (51), ... (100), Cooling set temperature (1), ... (50), Heating set temperature (1), ... (50), Room temperature (1), ... (50), Fan operation time (1), ... (50), Cooling operation time (1), ... (50), Heating operation time (1), ... (50), Thermo-ON time (1), ... (50), Cooling Thermo-ON time (1), ... (50), Heating Thermo-ON time (1), ... (50), Capacity-save value (1), ... (50), Cooling capacity-save value (1), ... (50), Heating capacity-save value (1), ... (50), Apporioned electric energy (1), ... (50). Target electric energy (1), ... (50), MCP 1 (1), ... (50), MCP 2 (1), ... (50), MCP 3 (1), ... (50), MCP 4 (1), ... (50), MCT 1 (1), ... (50), MCT 2 (1), ... (50), AHC temperature 1 (201), ... (250), AHC temperature 2 (201), ... (250)																
<p>*1 The date will appear in the format that has been set on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*2 The temperature unit °C or °F will appear, depending on the temperature unit that has been selected on the Basic System settings screen, accessible via the Web Browser for Initial Settings.</p> <p>*3 The measurement unit for MCP (PI controller) will be the measurement unit that has been set on the Measurement screen, accessible via the Web Browser for Initial Settings.</p> <p>*4 The measurement item for MCT (AI controller) will be temperature or humidity, which has been set on the Measurement screen, accessible via the Web Browser for Initial Settings.</p> <p>*5 The separator character and decimal point character selected on the Measurement screen (accessible via the Web Browser for Initial Settings) will be used to the data.</p> <p>*6 "Outdoor temperature," "Cooling set temperature," "Heating set temperature," and "Room temperature" in the data are the average monthly values of the average temperature values obtained every day.</p> <p>*7 "MCT 1" and "MCT 2" in the data are the average monthly values of the average temperature or humidity values obtained every day.</p> <p>*8 The value will not appear if the data does not exist.</p> <p>*9 Each file contains up to 25 data (25-month worth of data).</p>																		

Item	Description												
Energy management data	[Data type: 1-year intervals]												
	Row	Item	Format										
	1st	File Type	505										
	2nd	Date range	Start year + "-" + End year										
	3rd	Item *2	"DateTime,Data1(51),...Data1(100),Data3(51),...Data3(100), FanTime(1),...FanTime(50),CoolTime(1),...CoolTime(50), HeatTime(1),...HeatTime(50),ThermoTime(1),...ThermoTime(50), CoolThermoTime(1),...CoolThermoTime(50), HeatThermoTime(1),...HeatThermoTime(50),SaveValue(1),...SaveValue(50), CoolSaveValue(1),...CoolSaveValue(50), HeatSaveValue(1),...HeatSaveValue(50), ApporionedElectricEnergy(1),...ApporionedElectricEnergy(50) TargetElectricEnergy(1),...TargetElectricEnergy(50), MCP1(1),...MCP1(50),MCP2(1),...MCP2(50),MCP3(1),...MCP3(50), MCP4(1),...MCP4(50)"										
	4th	Measurement unit *1*2	<table><tr><th>Item</th><th>Unit</th></tr><tr><td>ApporionedElectricEnergy, TargetElectricEnergy</td><td>kWh</td></tr><tr><td>Data1, Data3</td><td>-</td></tr><tr><td>FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue</td><td>Minute</td></tr><tr><td>MCP (PI controller)</td><td>kWh, m3, MJ</td></tr></table>	Item	Unit	ApporionedElectricEnergy, TargetElectricEnergy	kWh	Data1, Data3	-	FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue	Minute	MCP (PI controller)	kWh, m3, MJ
	Item	Unit											
	ApporionedElectricEnergy, TargetElectricEnergy	kWh											
Data1, Data3	-												
FanTime, CoolTime, HeatTime, ThermoTime, CoolThermoTime, HeatThermoTime, SaveValue, CoolSaveValue, HeatSaveValue	Minute												
MCP (PI controller)	kWh, m3, MJ												
5th–9th	Data *2*3*4	yyyy, Data 1 (51), ... (100), Data 3 (51), ... (100), Fan operation time (1), ... (50), Cooling operation time (1), ... (50), Heating operation time (1), ... (50), Thermo-ON time (1), ... (50), Cooling Thermo-ON time (1), ... (50), Heating Thermo-ON time (1), ... (50), Capacity-save value (1), ... (50), Cooling capacity-save value (1), ... (50), Heating capacity-save value (1), ... (50), Apporioned electric energy (1), ... (50) Target electric energy (1), ... (50), MCP 1 (1), ... (50), MCP 2 (1), ... (50), MCP 3 (1), ... (50), MCP 4 (1), ... (50)											
<p>*1 The measurement unit for MCP (PI controller) will be the measurement unit that has been set on the Measurement screen, accessible via the Web Browser for Initial Settings.</p> <p>*2 The separator character and decimal point character selected on the Measurement screen (accessible via the Web Browser for Initial Settings) will be used to the data.</p> <p>*3 The value will not appear if the data does not exist.</p> <p>*4 Each file contains up to 5 data (5-year worth of data).</p>													
Close	Click to close the CSV File Download Tool.												

9-5-1. Energy Management Data List

Table 9-1 below summarizes the energy-control-related items that can be output in a CSV format, their measurement units, and their data ranges for each data type.

Table 9-2 below summarizes how many months/years worth of data each CSV file can contain.

Table 9-1 Data items

Unit type	Item	Data type (intervals)					Measurement unit	Data range *12
		5-minute	30-minute	1-day *7	1-month *8	1-year *9		
Outdoor unit	Data 1 *1	V	V	V	V	V	—	0–999999.99
	Data 2 *1	V	V				—	0–9999.99
	Data 3 *1	V	V	V	V	V	—	0–99.99
	Outdoor temperature	V	V *2	V *3	V *4		°C, °F	-100.0–1000.0
Indoor unit	Cooling set temperature	V	V *2	V *3	V *4		°C, °F	-100.0–1000.0
	Heating set temperature	V	V *2	V *3	V *4		°C, °F	-100.0–1000.0
	Room temperature	V	V *2	V *3	V *4		°C, °F	-100.0–1000.0
	Fan operation time		V *10	V *11	V *11	V *11	Minute	0–2147483647
	Cooling operation time		V *10	V *11	V *11	V *11	Minute	0–2147483647
	Heating operation time		V *10	V *11	V *11	V *11	Minute	0–2147483647
	Thermo-ON time		V *10	V *11	V *11	V *11	Minute	0–2147483647
	Cooling Thermo-ON time		V *10	V *11	V *11	V *11	Minute	0–2147483647
	Heating Thermo-ON time		V *10	V *11	V *11	V *11	Minute	0–2147483647
	Number of Thermo-ON/OFF *6		V *10				—	0–2147483647
	Capacity-save value		V *10	V *11	V *11	V *11	Minute	0–21474836.47
	Cooling capacity-save value		V *10	V *11	V *11	V *11	Minute	0–21474836.47
	Heating capacity-save value		V *10	V *11	V *11	V *11	Minute	0–21474836.47
	Apportioned electric energy		V *10	V *11	V *11	V *11	kWh	0–999999.9999
	Target electric energy			V *11	V *11	V *11	kWh	0–214748.3647
MCP (PI controller)	MCP 1	V *10	V *10	V *11	V *11	V *11	kWh, m3, MJ	0–999999.99
	MCP 2	V *10	V *10	V *11	V *11	V *11	kWh, m3, MJ	0–999999.99
	MCP 3	V *10	V *10	V *11	V *11	V *11	kWh, m3, MJ	0–999999.99
	MCP 4	V *10	V *10	V *11	V *11	V *11	kWh, m3, MJ	0–999999.99
MCT (AI controller)	MCT 1	V	V *2	V *3	V *4		°C, °F, %	-100.0–1000.0
	MCT 2	V	V *2	V *3	V *4		°C, °F, %	-100.0–1000.0
AHC	AHC temperature 1	V	V *2	V *3	V *4		°C, °F	-100.0–1000.0
	AHC temperature 2	V	V *2	V *3	V *4		°C, °F	-100.0–1000.0

*1 The values are only for factory use. Do not use the values as reference.

*2 The values are the temperature or humidity values obtained every hour and half hour.

*3 The values are the average daily values of the temperature or humidity values obtained every hour.

*4 The values are the average monthly values of the average temperature or humidity values obtained every day *3.

*5 The values are the maximum values of the electric power consumption obtained in 1-minute increments during each period.

*6 "Number of Thermo-ON/OFF" is the number of times the unit has gone from Thermo-OFF to Thermo-ON.

*7 If the data contains the data for the current day, the data will be output that were collected up to the point of time when the CSV file was downloaded.

*8 The data for the current month will contain the data that were collected up to the point of time when the CSV file was downloaded.

*9 The data for the current year will contain the data that were collected up to the point of time when the CSV file was downloaded.

*10 Each value is a cumulative value after the start of operation. If the value exceeds the maximum value, it will wrap around to zero.

*11 Each value is a total value for each time period (1-day, 1-month, or 1-year).

*12 The number of digits that will be shown after the decimal point varies with the data item. For example, if the data range is "0–99.99," two digits after the decimal point will be shown.

Table 9-2 Data period

Data type (intervals)	Data period
5-minute	Last 2 months
30-minute	Last 25 months
1-day	Last 25 months
1-month	Last 25 months
1-year	Last 5 years

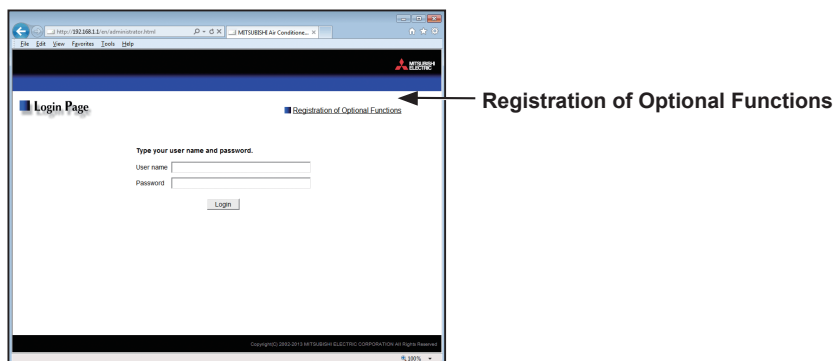
10. License registration for optional functions

This chapter explains how to register a license for optional functions.

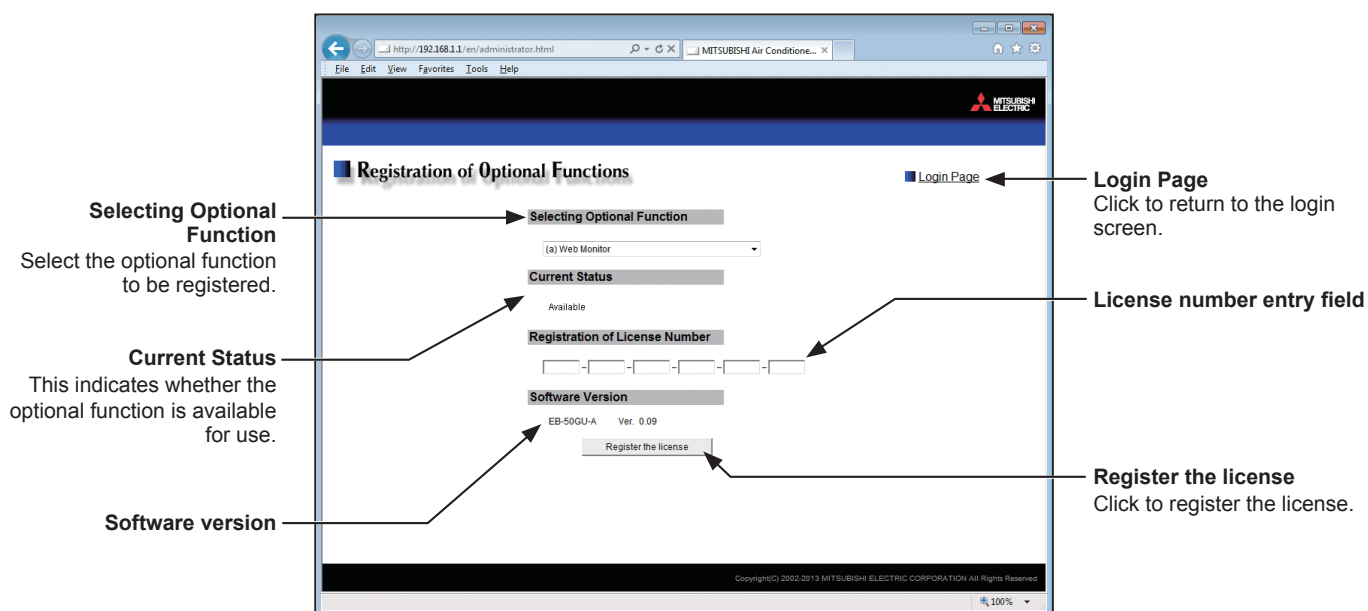
Please ask your dealer for more details on the optional functions and how to purchase a license number.

Note: The current date and time settings are required for license registration. Refer to section 8-1 for date and time settings.

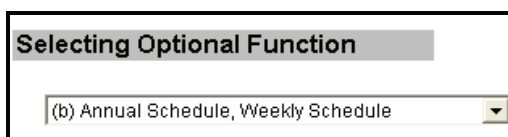
- (1) On the login screen, click [Registration of Optional Functions].



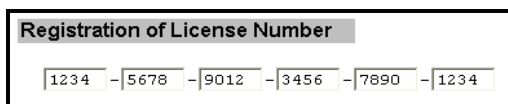
The [Registration of Optional Functions] screen will appear.



- (2) In the [Selecting Optional Function] section, select the optional function to be registered. The current availability will appear in the [Current Status] section.



- (3) In the [License number entry] field, enter the license number and click [Register the license]. In the [Current Status] section, a word "Available" will appear. If the registration is unsuccessful, verify that the selected optional function and the license number are correct.



Note: Alphabet "O" and "I" are not used for license number.

This product is designed and intended for use in the residential,
commercial and light-industrial environment.

The product at hand is based on the following EU regulations:

- Electromagnetic Compatibility Directive 2004/108/EC
- Restriction of Hazardous Substances 2011/65/EU

Please be sure to put the contact address/telephone number
on this manual before handing it to the customer.

mitsubishi **ELECTRIC CORPORATION**

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