MITSUBISHI ELECTRIC

INTERFACE

AIR-HANDLING UNIT (AHU) SD TOOL MANUAL

October 2015

Related document:
Refer to the following manual
・PAC-IF013B-E/ PAC-SIF013B-E INSTALLATION MANUAL

[Model Name]

PAC-IF013B-E
PAC-SIF013B-E

This manual describes the SD tool only. For other information, make sure to read installation manual of PAC-IF013B-E/ PAC-SIF013B-E.

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1. System (usage environment) requirement

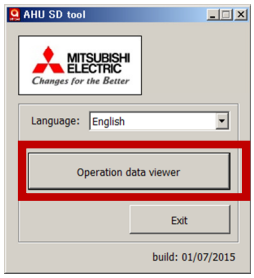
(1) Recommended OS: Windows 7 or 8
(2) Installation of Microsoft .NET Framework 3.5SP1 or later version on your PC is necessary.

2. AHU SD tool (operation data viewer)

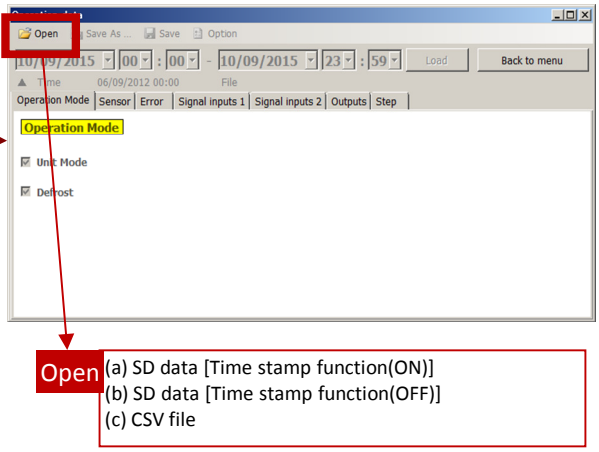
2.1 Opening operation data

(1) Run the "AHU.exe" file. (Fig. 2-1)
(2) Select "Operation data viewer". (Fig. 2-2)
(3) Open the data file. (Fig. 2-3) (Before opening the file, see (4) below.)

<Fig. 2-1>



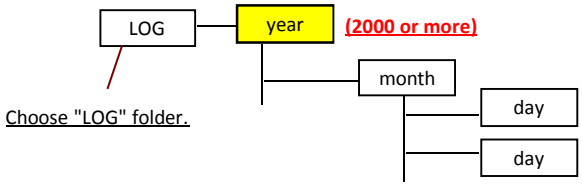
<Fig. 2-2>



<Fig. 2-3>

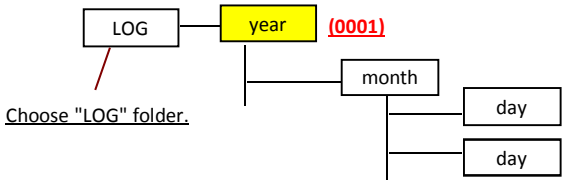
(4) Select the following (a), (b), or (c) based on the file type.

(a) SD data [Time stamp function (ON)]
If year folder in "LOG" folder is 2000 or more, choose this.
Year folder becomes the year when you operate, if time stamp function of interface unit is ON.
Choose the "LOG" folder to open the data file. (See Fig. 2-4.)



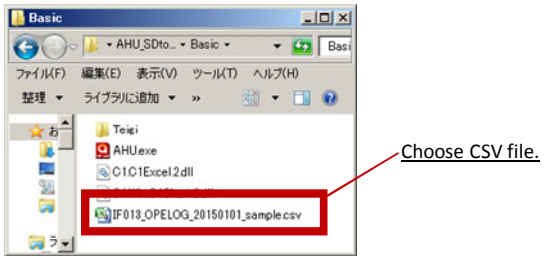
<Fig. 2-4>

(b) SD data [Time stamp function (OFF)]
If year folder in "LOG" folder starts from 0001, choose this.
Date of log data starts from from 1st January, 0001, if time stamp function of interface unit is OFF.
Choose the "LOG" folder to open the data file. (See Fig. 2-5.)



<Fig. 2-5>

(c) CSV file
Choose the "CSV file", if you open log data saved as a CSV file.
(See Fig. 2-6.)

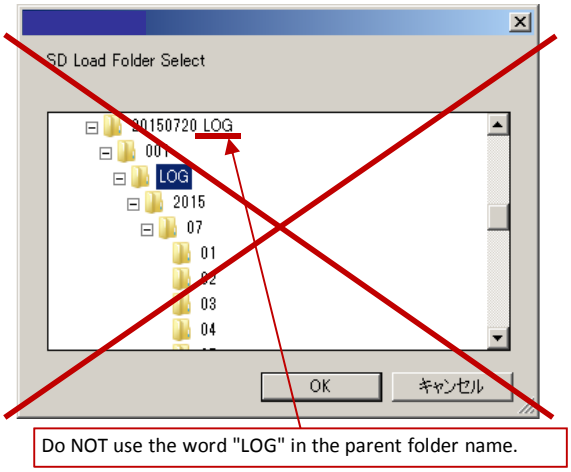


<Fig. 2-6>

Note 1:
AHU SD tool reads operation data according to the folder structure shown above.
Make sure to keep this folder structure whenever you save log data received by e-mails, memory device, etc.

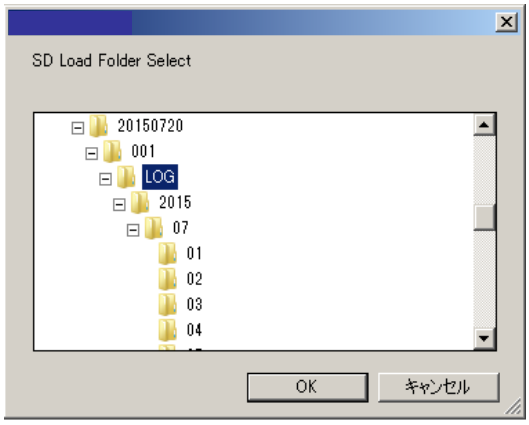
2. AHU SD tool (operation data viewer)

Note 2:
Regarding LOG folder structure, do NOT use the word "LOG" in the parent folder name when you save log data on your PC.
(See Fig. 2-7.)



Do NOT use the word "LOG" in the parent folder name.

NOT OK



OK

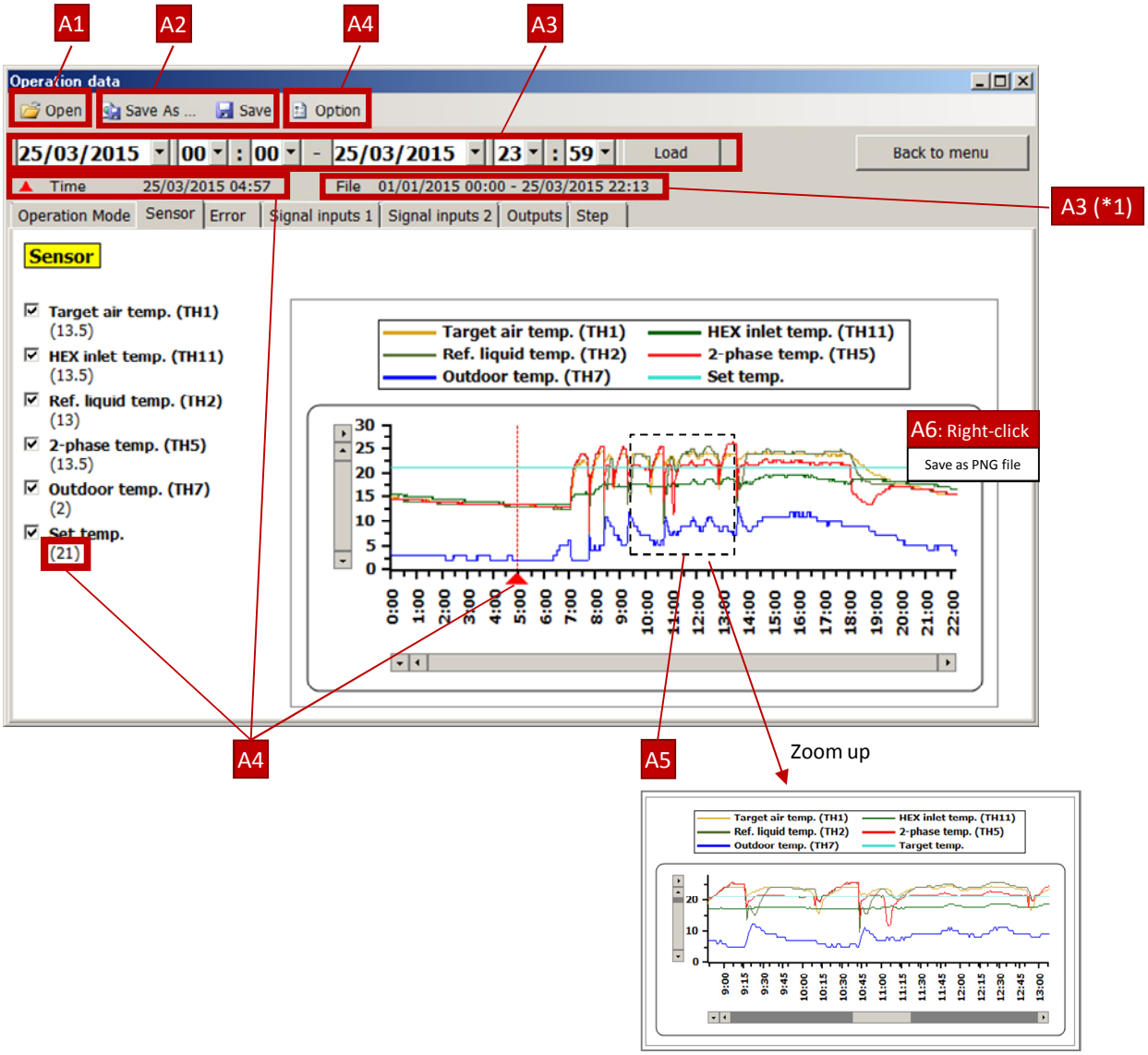
<Fig. 2-7>

2. AHU SD tool (operation data viewer)

2.2 Operation data viewer

2.2.1 When the data is (a) or (c) below.

(a) SD data [Time stamp function (ON)]
(c) CSV file



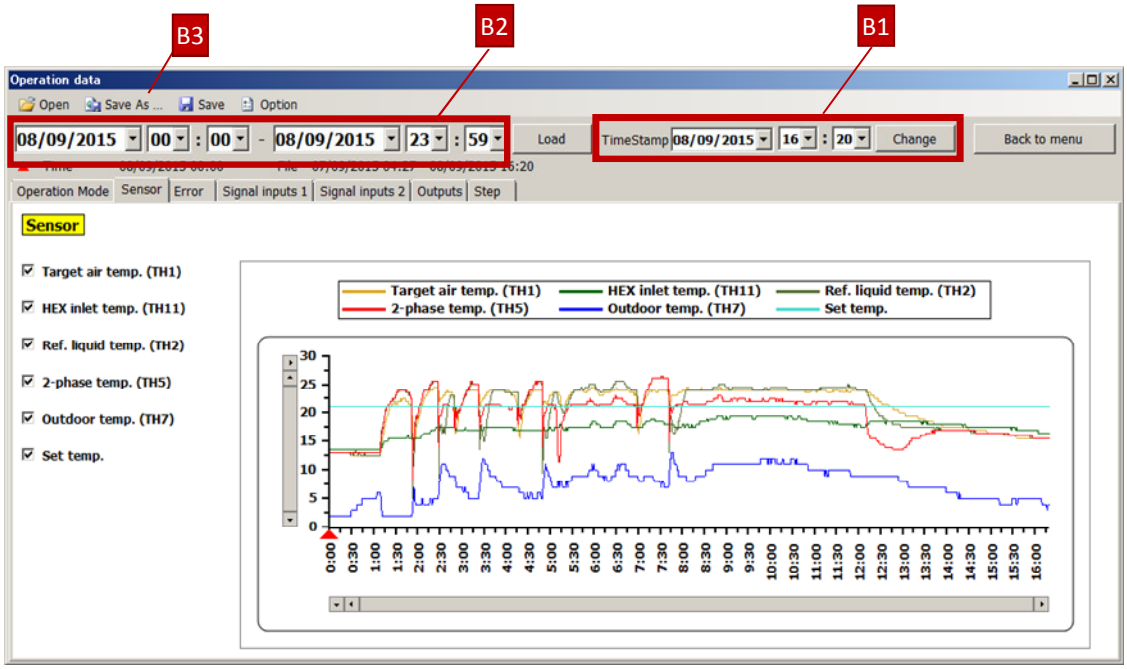
No.	Item		Description
A1	Open	SD data	SD tool reads operation (logged) data stored on SD card.
		CSV file	SD tool reads operation (logged) data in CSV format stored on a PC or on memory device.
A2	Save/Save As		SD tool saves operation data (of the period shown in graph) on a PC or on a memory device in CSV format.
A3	Specified period		You can select specified data period (from when to when) to be shown in graph. (*1)
A4	▲ Graph marker		You can choose to display or hide "Graph Marker" by top right menu "Option". You can choose the specified data point by moving ▲ with PC mouse. This function shows date and time of the specified data point on left above of the graph. It also shows actual values at the selected point for your easier reading.
A5	Zoom		Zooming up the graph is available by selecting range with PC mouse. It will return to the original period by a double-click.
A6	Screen capture		Screen-capturing of the graph is available by right click of PC mouse.

(*1) Total operation data period can be shown below the specified data period selection window:
e.g.) File 01/01/2015 00:00 - 25/03/2015 22:13
Up to 30 day's length data can be displayed at once.

2. AHU SD tool (operation data viewer)

2.2.2 When the data is (b) below.

(b) SD data [Time stamp function (OFF)]



< Setting rough time stamp by SD tool>

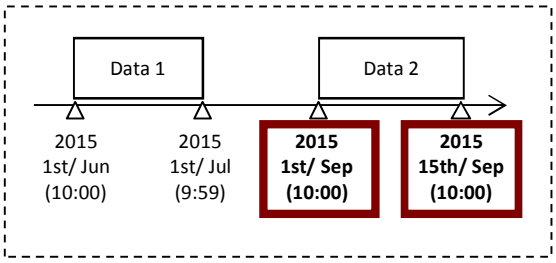
- Setting rough time stamp by SD tool is available even if you don't set time stamp function of interface unit.
- Rough time stamp will go back from the set time when the last operation end to the beginning of the data. (See the example below.)

Note 1: This time stamp is not accurate because accuracy of this rough time stamp is approximately ± 7 minutes per day. It's recommended to set time stamp function of interface unit.

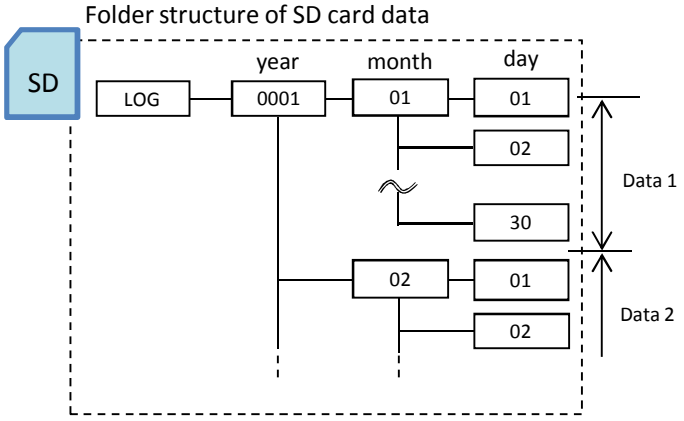
Note 2: SD tool cannot recognize time gap between the data if NO operating period exists (when SD card is not inserted or power is not supplied), therefore rough time stamp for data 1 of below example is not correct. (See the following example.)

[Example of referential time stamp]

Actual date and time



Folder structure of SD card data



Original SD card data				Actual date and time				Time stamp by SD tool			
Year	Month	Day	Time	Year	Month	Day	Time	Year	Month	Day	Time
0001	01	01	00:00	2015	6	1	10:00	2015	8	2	10:00
			00:01				10:01				10:01
			⋮				⋮				⋮
0001	01	30	23:59	2015	7	1	9:59	2015	9	1	9:59
0001	02	01	00:00	2015	9	1	10:00	2015	9	1	10:00
			01:01				10:01				10:01
			⋮				⋮				⋮
0001	02	15	00:00	2015	9	15	10:00	2015	9	15	10:00

Rough time stamp of data 1 is NOT correct.

← Setting rough time stamp

2. AHU SD tool (operation data viewer)

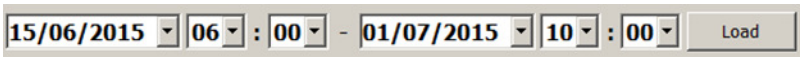
< How to set referential time stamp by SD tool>

B1 Time stamp

Set the date and time when the last operation end.

B2 Specified period

You can select specified data period (from when to when) to be shown in graph. (Same function as A3 in section 2.2.1)



B3 Save as..

Save 'Operation data (of the period shown in graph)' on computer or on a memory device in CSV format.

< Other functions>

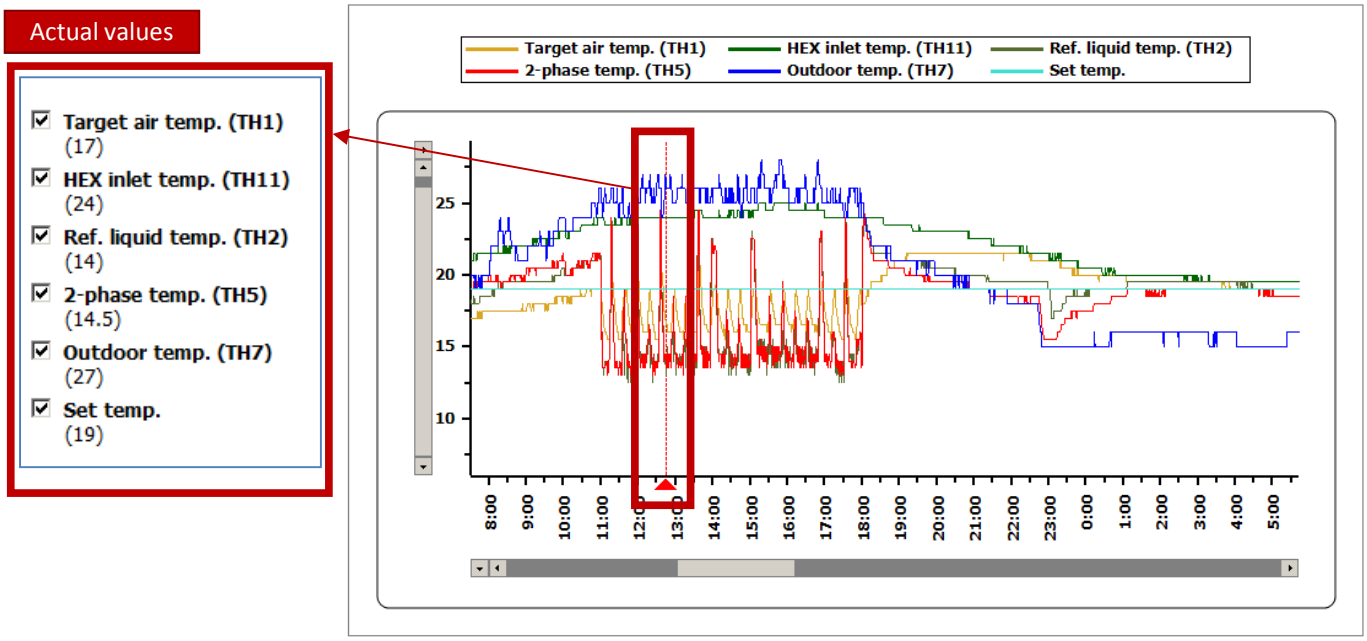
Other functions are same as section 2.2.1.

3. Graph (image)

3.1 Sensor

You can see sensor information. (Fig. 3-1)

Actual values at the selected point are shown if you use "Graph Marker". (See No. A4 in section 2.2.1.)



<Fig. 3-1>

3.2 Error

Error history and date in the selected period, is displayed. (Fig. 3-2)

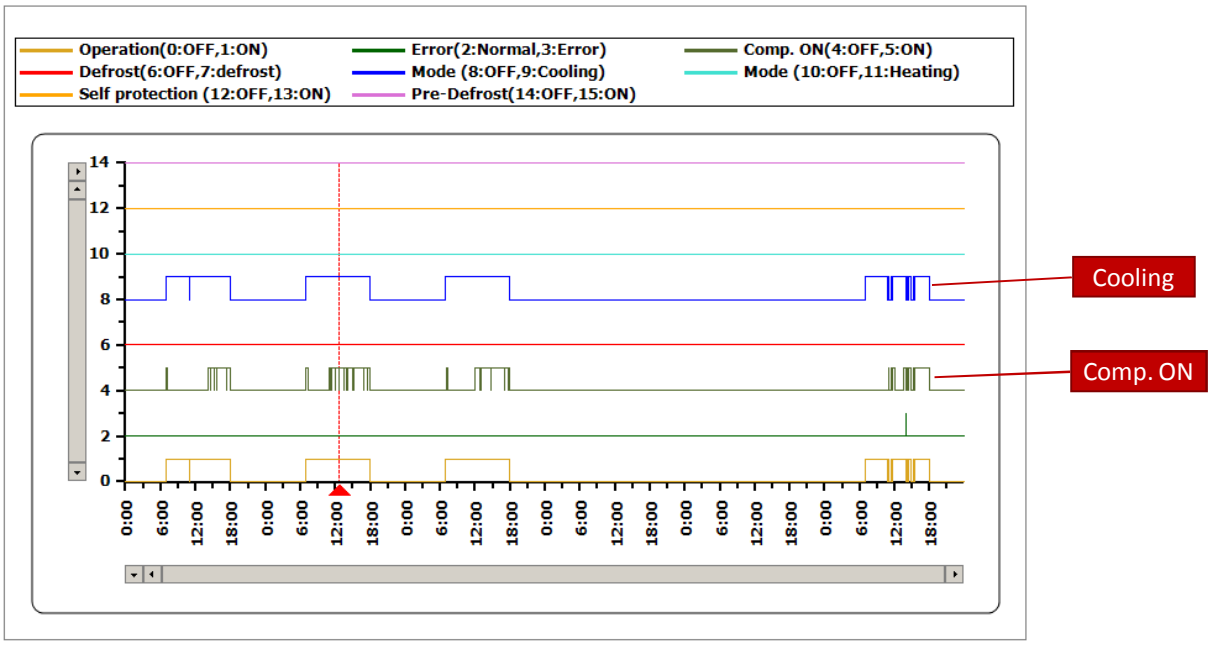
Error	Date
U3	24/06/2017 16:41
U3	24/06/2017 16:42
U3	24/06/2017 16:43
U3	24/06/2017 16:44
U3	24/06/2017 16:45
U3	24/06/2017 16:46
U3	24/06/2017 16:47
U3	24/06/2017 16:48
U3	24/06/2017 16:49

<Fig. 3-2>

3. Graph (image)

3.3 Outputs

You can see the external output signal from OUT 1 to OUT 8. (Fig. 3-3)



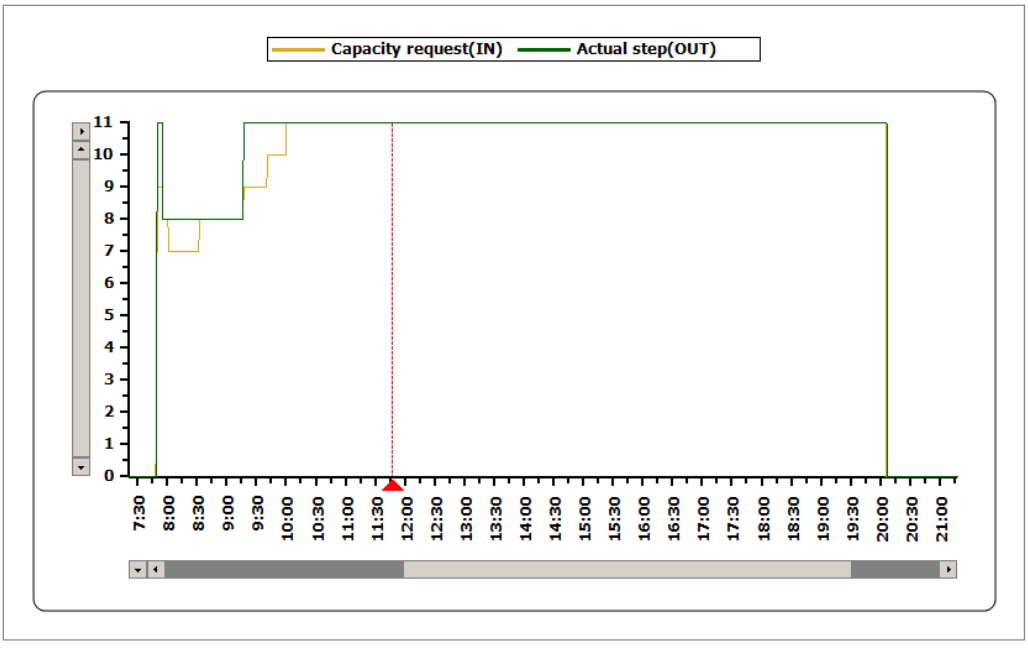
<Fig. 3-3>

3.4 Step

You can see the capacity request (step) and actual step in the manual step mode. (Fig. 3-4)

Notice:

- Step 12 means Auto step mode.
- When the intelligent multiple outdoor unit controll is selected, actual step (OUT) means the devided step for each outdoor unit.
- When the intelligent multiple outdoor unit controll is selected, capacity request (IN) becomes 12 (meaningless) because capacity request is only for main interface unit.



<Fig. 3-4>