YKphone 485
Version 1.0

Ref: N-27686 0108

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YORK BY JOHNSON CONTROLS

Johnson Controls

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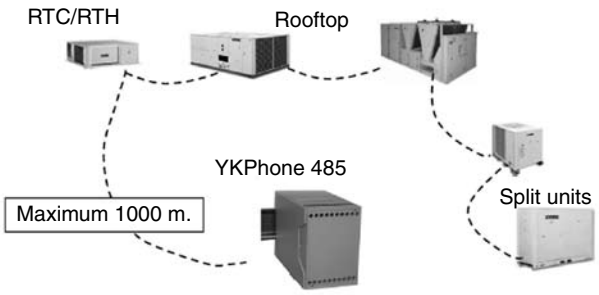
Introduction

YKPhone 485 is a device designed for the remote supervision, monitoring and diagnosing of installations with air conditioning equipment (supermarkets, factories, cinemas, etc.). It is equipped with a RS485 controller for communication with a YKlon (version 3.0) board, and another RS232 controller for communication with the PC.

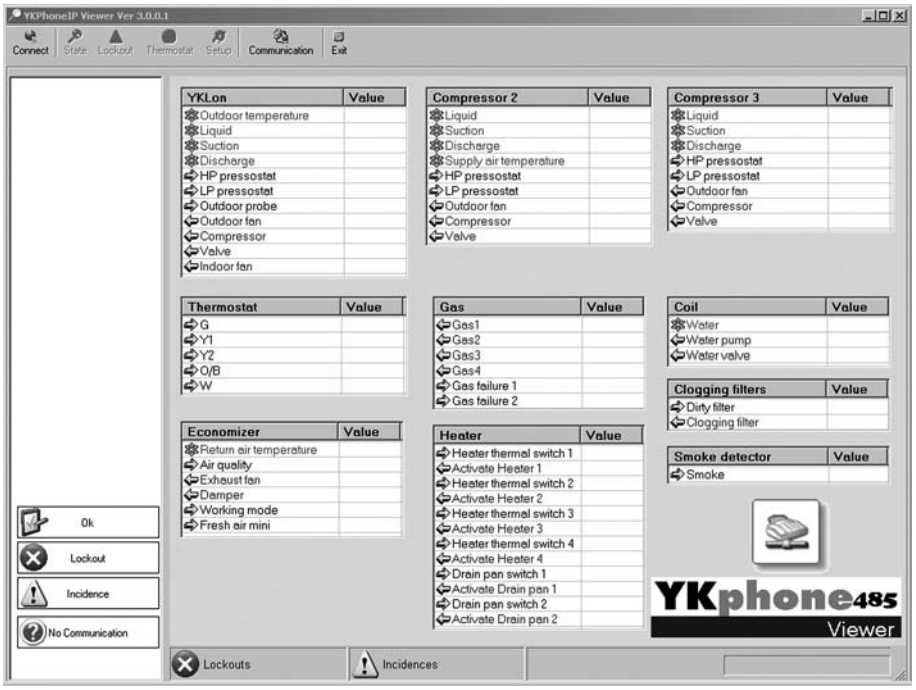
It allows connecting a maximum of 16 units with a YKlon plate. It is necessary to use the RS485 board accessory, code 006791239, with each unit, and to configure the SW1 microswitch in accordance with the network address.

To communicate the installation with the PC, it is necessary to install the YKViewerIP software.

Maximum 16 units



- - - BELDEN or equivalent cable



Technical Specifications

The accessory includes the following components:
- YKphone 485 device.
- Communication hose, 4 x 0.5 mm² + mesh (black, grey, brown), with 9-way connector for connection RS232 to the PC (approximate lenght 2000 mm).
- AC/DC feeder with connection cable to 230 VAC and regulator to a 12 VDC.
- Two 150-ohm 1/4 W resistances.

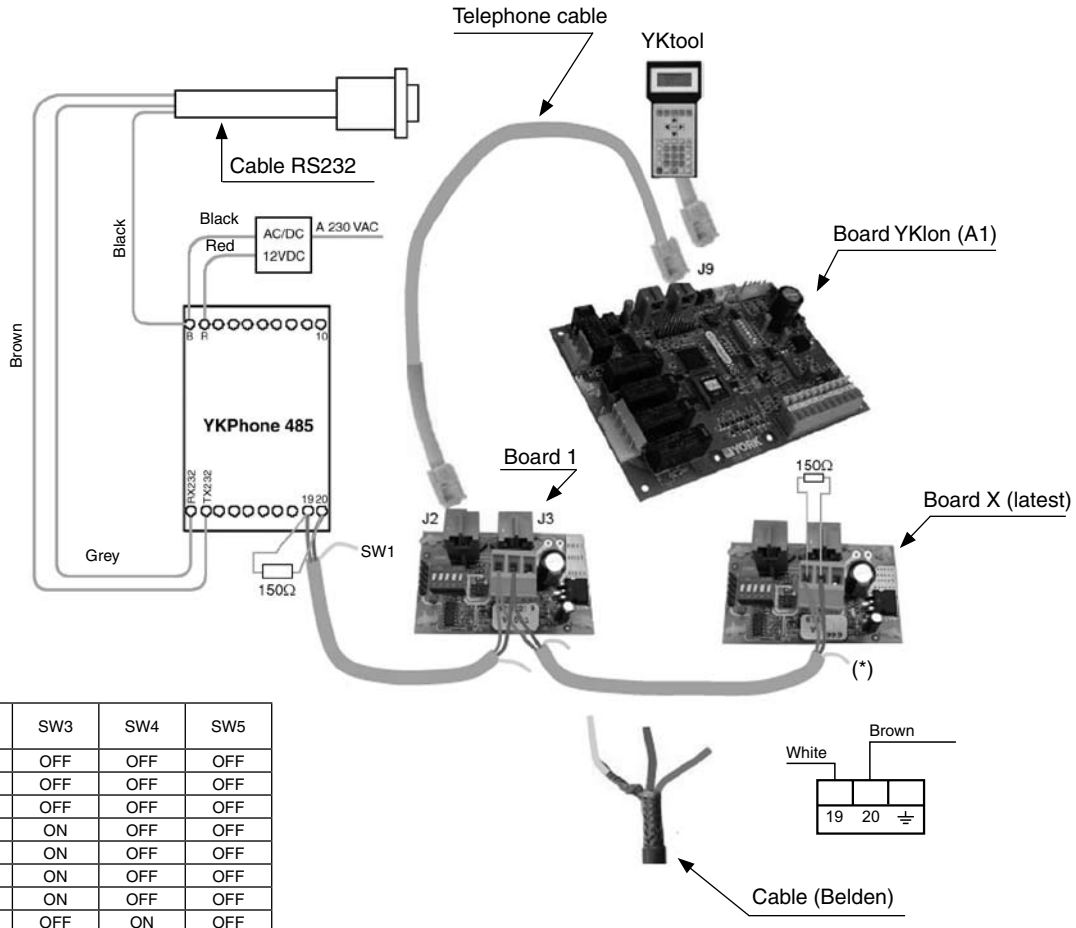
Network installation

Install the accessory as follows:

1. Pass the shielded 2 x 0.55 mm² cable (Belden 9272 type or equivalent) from the YKphone 485 to the first machine and successively until the last machine on the bus (maximum length 1000m). Connect a 150-ohm resistance to terminals 19 and 20 of Ykphone 485.
2. On each unit, install the RS485 board, connect the telephone cable to connector J9 of board A1 (YKlon) and connect the RS485 communication cable to the orange coloured 3-way connector (19-white, 20-brown). On the last RS485 board, connect a 150-ohm resistance to terminals 19 and 20. The YKtool can be connected to connector J9 (A1) only.
3. Configure microswitch SW1 in accordance with the address hexadecimal network. Identify each machine with an outer label indicating name and network address.
4. Install the YKphone 485 device as close as possible to the PC. Connect the 12 VDC power supply (B-black, R-red) and hose RS232 supplied (RX232-grey, TX232-brown, B-black).

Warning

Loose cables can cause overheating of the terminals or incorrect operation of the unit. A fire hazard may also exist. Therefore, make sure all cables are connected tightly.
Pass the RS485 communication cable at a minimum of 30 cms. from the power supply cables (400VAC, 230VAC or I>30 A). Do not splice cables between two units and do not lay out near transformers or equipment that generates high frequencies.



MACHINE DIRECTION TABLE

DIRECTION	SW1	SW2	SW3	SW4	SW5
1	ON	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF
5	ON	OFF	ON	OFF	OFF
6	OFF	ON	ON	OFF	OFF
7	ON	ON	ON	OFF	OFF
8	OFF	OFF	OFF	ON	OFF
9	ON	OFF	OFF	ON	OFF
10	OFF	ON	OFF	ON	OFF
11	ON	ON	OFF	ON	OFF
12	OFF	OFF	ON	ON	OFF
13	ON	OFF	ON	ON	OFF
14	OFF	ON	ON	ON	OFF
15	ON	ON	ON	ON	OFF
16	OFF	OFF	OFF	OFF	ON

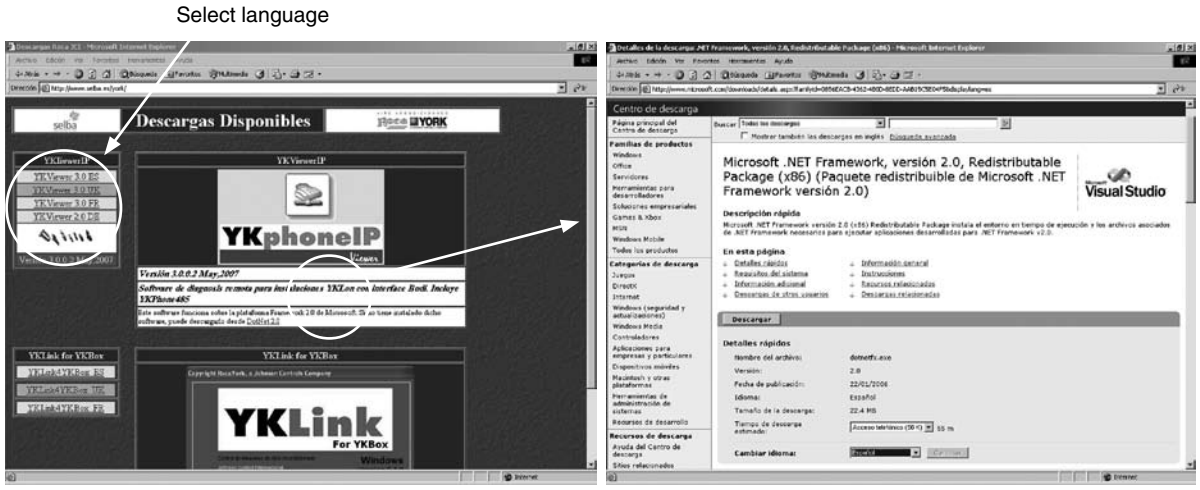
Alter configuring, power off and then power on again

(*) In the case of communication errors, connect the mesh to one of the ende of the cable only

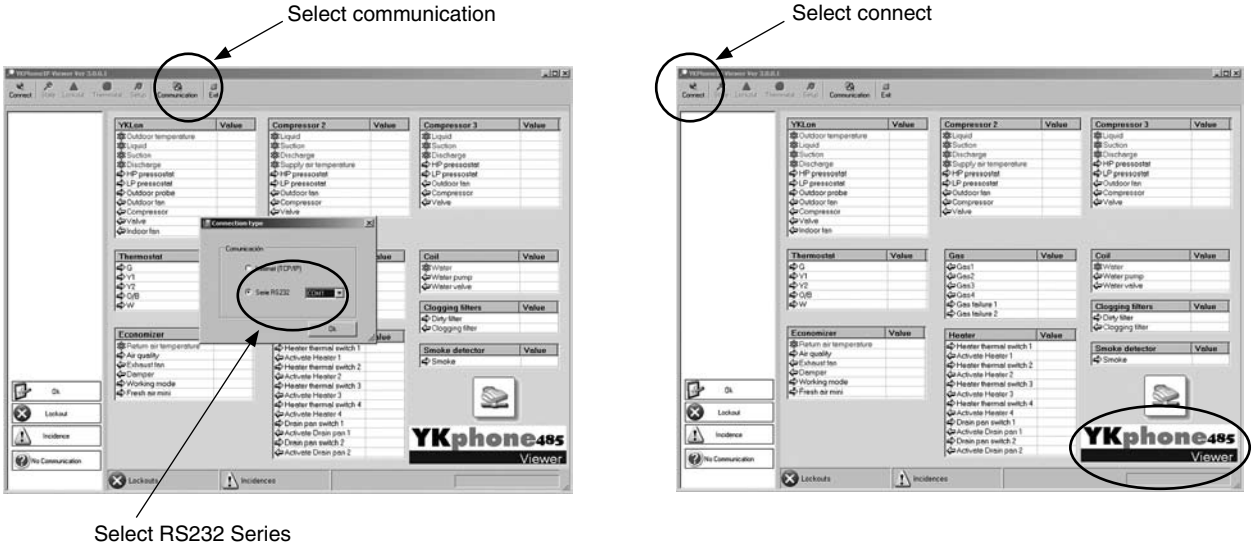
Installation YKViewerIP Software

Install this program as follows:

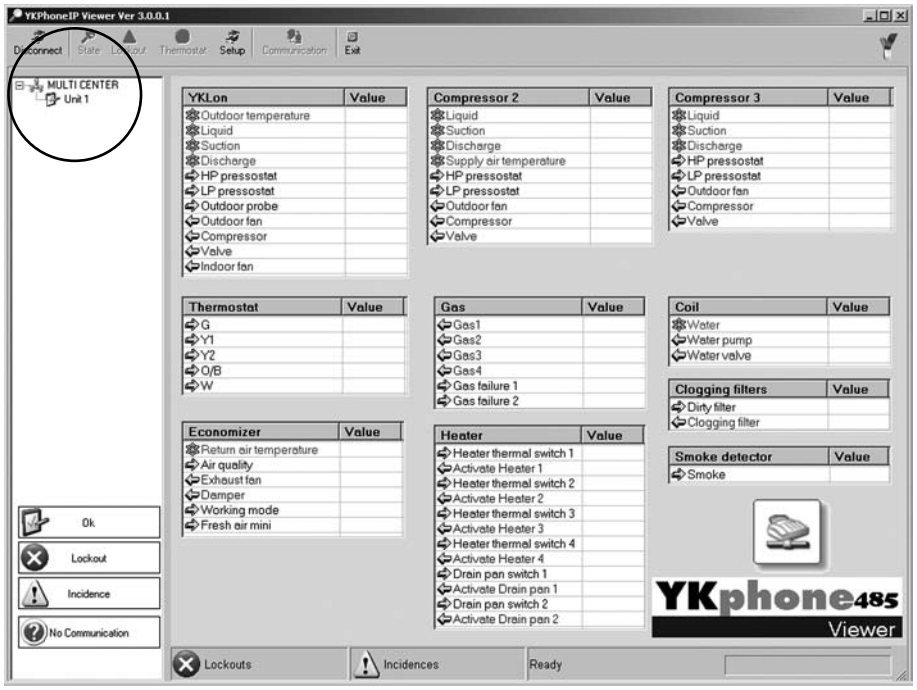
1. Download this software for Internet: http://www.selba.es/york/.
2. This software works on the Microsoft Framework 2.0 platform. If not installed in your PC, you can download it from DotNet 2.0.



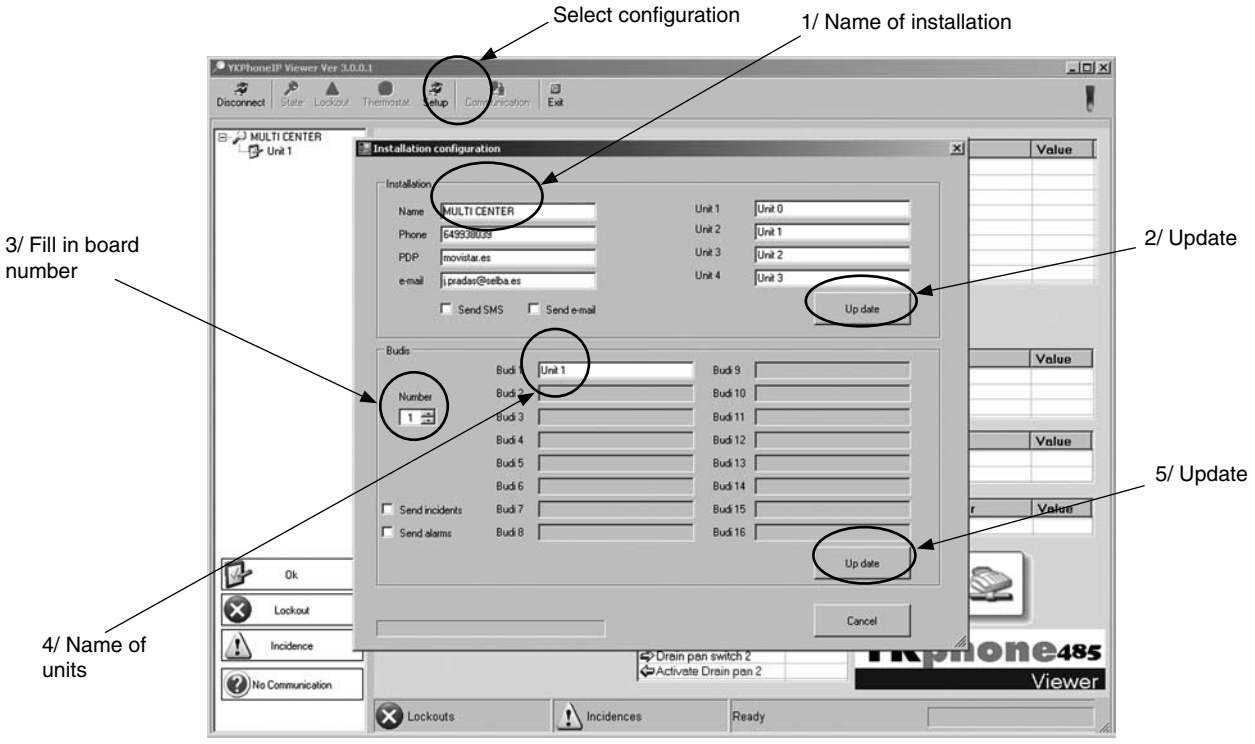
3. Select the YKViewerIP version in accordance with the language.
4. Store the zip file on hard disc C of the PV and close Internet.
5. Open the zip file and save the files.
6. Execute the BudiLink.exe file. On the main YKphoneIP Viewer screen, select ***Communication*** on the top left side.
7. Select the ***RS232 Series*** (COM1 or COM2) and accept. YKphone485 Viewer will appear in the bottom right area.



8. Select ***Connect*** at the top left. The program searches out the units connected. These appear at the left of the screen.

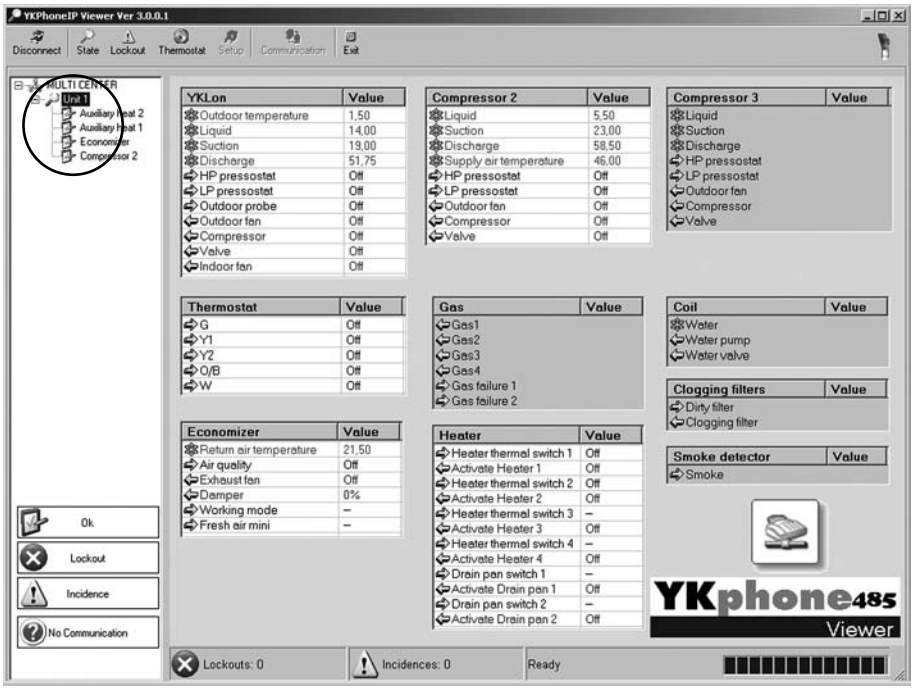


9. Select ***Configure***. Enter the ***Configuration of the Installation***, fill in the name of the installation and accept. In the Budies section, fill in the number of RS485 boards and the name of the units and accept (do not select send SMS, e-mail, incidents or alarms).

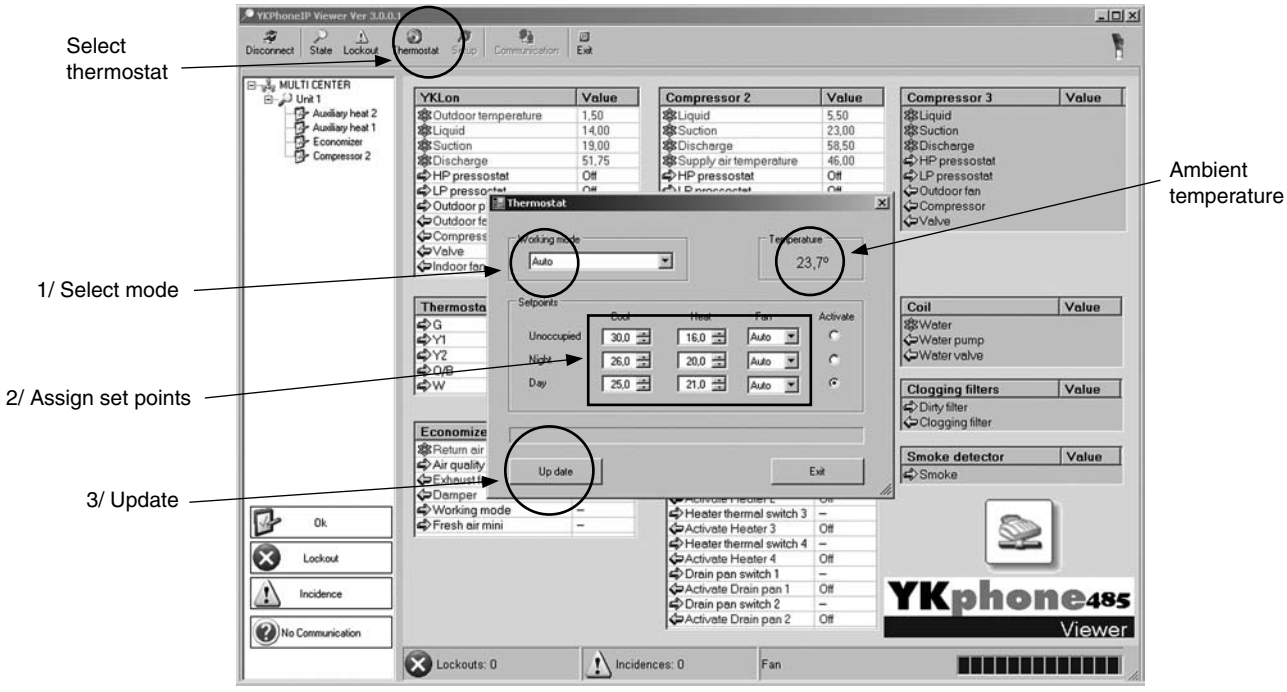


Operation

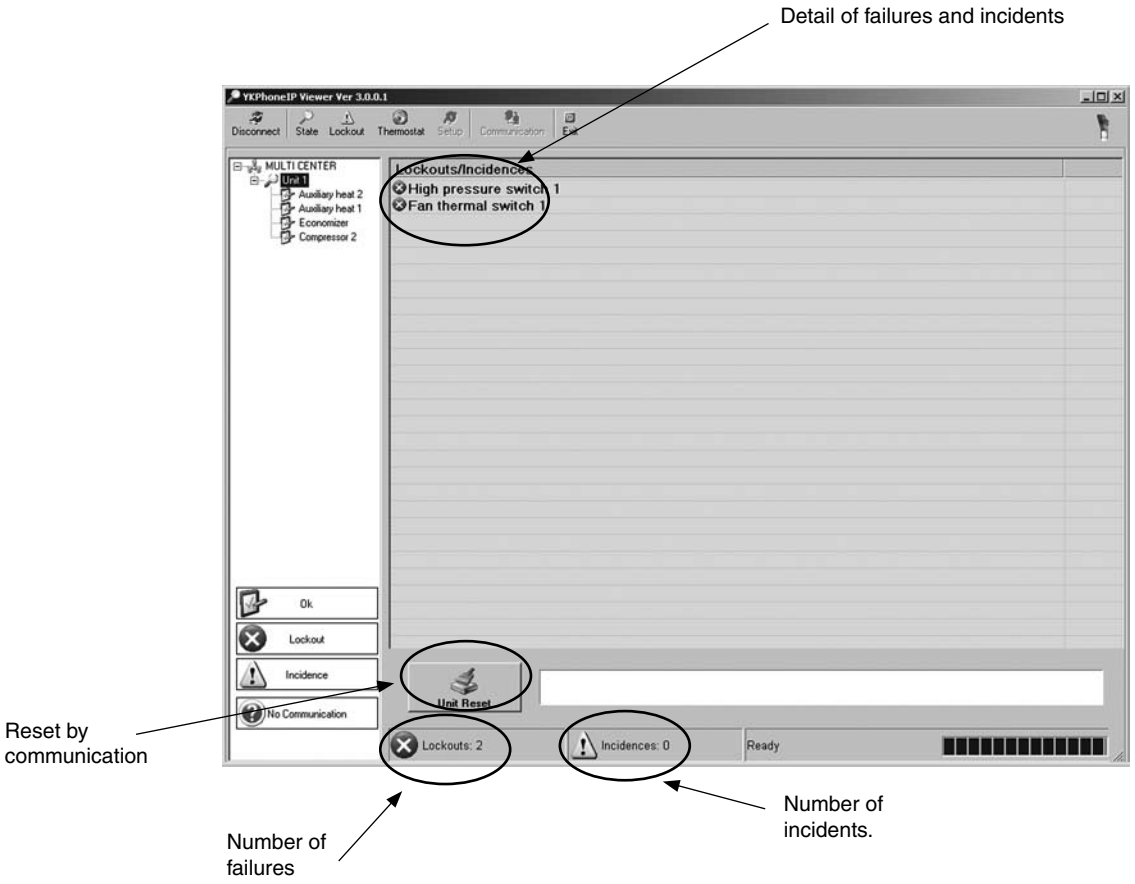
On the left column of the main screen, select the machine. The program requests information on the machine and, after a few seconds, the screen displays information on the different status of intakes and outputs, the accessories installed and the probe temperatures.



Selecting ***Thermostat*** you can consult the room temperature, as well as consult and modify the different temperature set points, operating mode, fan status (auto/on) and thermostat status (day/night/unoccupied).



Whenever there is a failure or an incident, the bottom bar of the screen indicates this with a number. ***Failure*** is displayed on the screen with a list of all failures or incidents present at that moment. By pressing ***Machine Reset***, a reset communication signal is sent to the monitored machine, and it becomes operative once again if the digital or analogical input related to the failure or incident has disappeared.



Record of Program Versions

Version 1.0: Launch version

www.johnsoncontrols.com