



Maintenance Alarms

How To Guides



Maintenance Alarms



Figure 1. AHU fitted with typical 5-inch HMI display.

Video Duration: 4 minutes 22 seconds

Applies to: AHUs fitted with a 5-inch HMI display connected to the Trend control system

Document Status: Controlled technical instruction

1. Purpose

This booklet accompanies the video demonstrating how to locate, review, and reset maintenance alarms using the AHU HMI interface.

Maintenance alarms are generated automatically by the control system to notify operators when scheduled maintenance tasks are due, such as fan servicing or component inspections.

Maintenance alarms ensure that key components of the AHU are serviced at the correct intervals.



Figure 2. Typical HMI display fitted to ECE air handling units. Maintenance alarms are viewed and reset directly from this display.

2. Important AHU Information

- ECE AHUs are bespoke. Do not assume that information, access arrangements, terminal numbers, wiring colours, component selections or controls logic from another AHU applies to the AHU being reviewed or worked on.
- The certified drawing and current project-specific documentation are the primary sources for the AHU arrangement and component technical information.
- Where component technical information is checked, it must be checked against the certified drawing and related manufacturer data for the exact AHU.

IMPORTANT: Always use the project-specific asset information, certified drawing, relevant ECE product-range IOM, quotation scope and component information for the exact AHU being reviewed or worked on.

3. Safety and Competency Requirements

- Only competent and authorised personnel should carry out this procedure. The required competency depends on the task being undertaken.
- Before starting, confirm the correct AHU, asset tag, certified drawing, relevant ECE product-range IOM and any applicable wiring diagram, controls description, component technical information or manufacturer data sheet.
- Follow all site-specific RAMS, permits, PPE, isolation and access requirements.
- Where the task requires physical access to the AHU, do not open access doors, remove panels or work inside the AHU unless fans and relevant equipment are isolated, stationary and safe to access.
- Do not bypass safety devices, interlocks, alarms or controls.
- Stop and escalate if the AHU identity, current technical information, safe isolation, access condition or required competency cannot be confirmed.



Figure 3. Site personnel in PPE reviewing the certified drawing. Confirm the project-specific controls description and points list before resetting any alarm.

Task-specific requirements:

- Only competent and authorised personnel should operate, reset, test or adjust AHU controls.
- Do not reset alarms, faults or maintenance warnings until the underlying cause has been investigated and corrected.
- Do not use hand mode, manual overrides or resets to bypass safety controls, interlocks, airflow proving, fire/smoke inputs or protective functions.
- Confirm the correct AHU, controls description, wiring diagram and HMI/control panel before making changes or carrying out a test.
- Stop and escalate if the fault cause is unknown, the alarm returns after reset, the control strategy is unclear, or the system does not operate as described.

4. Before You Begin

- Access the AHU asset information via the ECE Client Portal using the asset tag or 18-digit reference number where available.
- Confirm the AHU reference, project name, location and latest document revision.
- Review the certified drawing, relevant ECE product-range IOM, quotation scope, component schedule and manufacturer data sheets where applicable.
- Review the wiring diagram, controls description and commissioning information where the task involves electrical, controls or BMS interfaces.
- Confirm the required personnel, tools, PPE, access equipment, permits and isolation method before starting work.



Figure 4. Asset Tag plate carrying the unique 18-digit reference number used to retrieve AHU technical information from the ECE Client Portal.

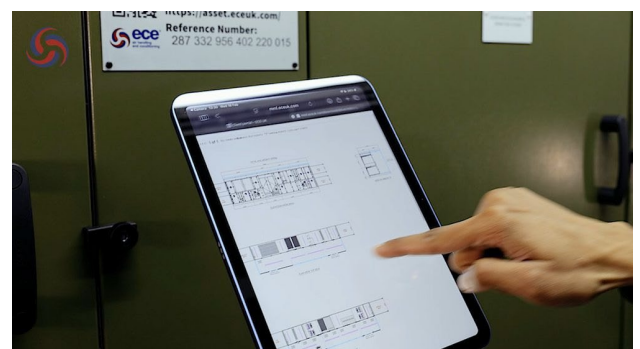


Figure 4b. AHU technical information opened on a device via the Asset Tag link, used to confirm AHU reference, drawing revision and fan information before starting work.

5. Required Tools, Equipment, PPE and Information

- Project-specific controls description
- Wiring diagram or interface drawing
- HMI/control panel access credentials where required
- Commissioning report or points list where available
- Fault/alarm log or maintenance record

6. Procedure

These alarms are typically based on:

- Equipment run hours
- Maintenance timers
- Operational conditions

Correct management of maintenance alarms helps ensure:

- Reliable system performance
- Reduced equipment wear
- Compliance with service schedules

6.1 Accessing the HMI Display

The AHU control system is accessed through the 5-inch HMI display located on the control panel.

The HMI allows operators to:

- View system status
- Monitor alarms
- Access maintenance information
- Reset maintenance timers

6.2 Navigating to the Alarms Browser

- From the main HMI home screen, locate the Alarms Browser.
- Select the Alarms Browser option on the display.
- The alarms page will open, showing all current alarms.

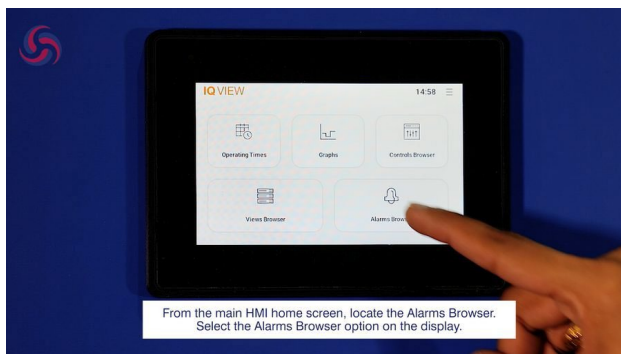


Figure 5. HMI home screen — locate and select the Alarms Browser.

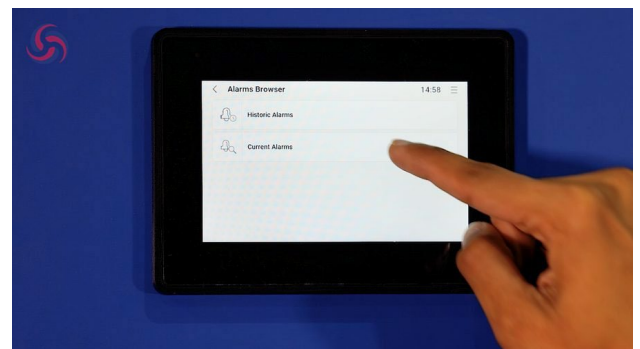


Figure 6. Alarms Browser menu — select Current Alarms to display any active alarms.

The alarm list may include:

- Active alarms
- Maintenance alarms
- Historical alarms

6.3 Viewing Maintenance Alarm Information

On the alarms screen:

- Identify the “Fan Maintenance” alarm.
- Select the alarm entry to view details.

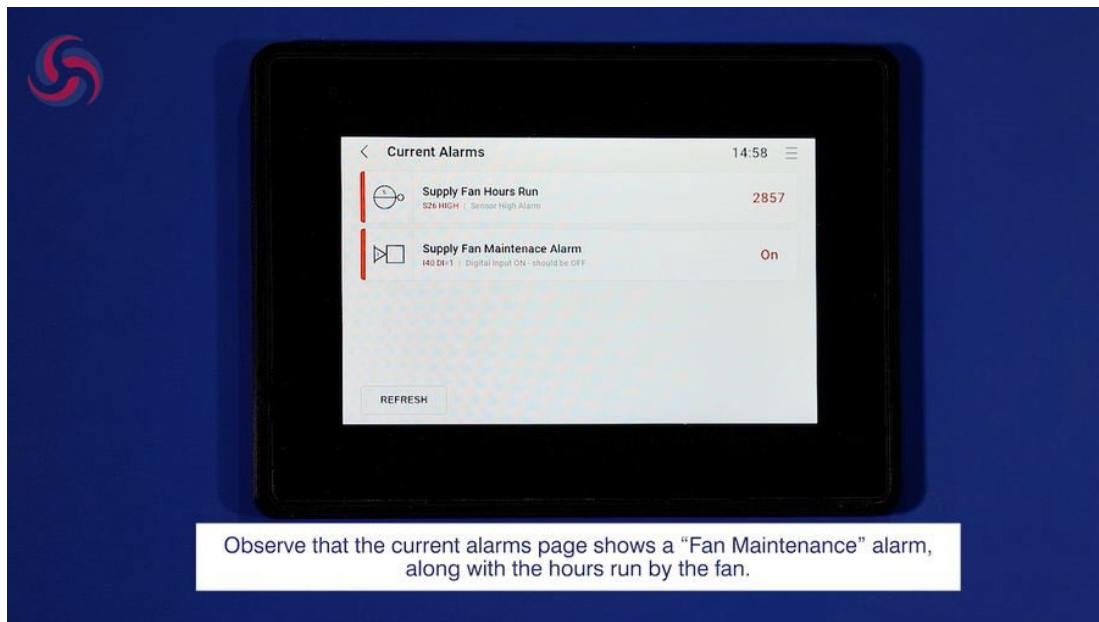


Figure 7. Current Alarms page showing a “Fan Maintenance” alarm along with the hours run by the fan.

The alarm information will typically display:

- Alarm description
- Component affected (e.g., supply fan or extract fan)
- Total run hours of the equipment

The run hours indicate when the maintenance interval has been reached.

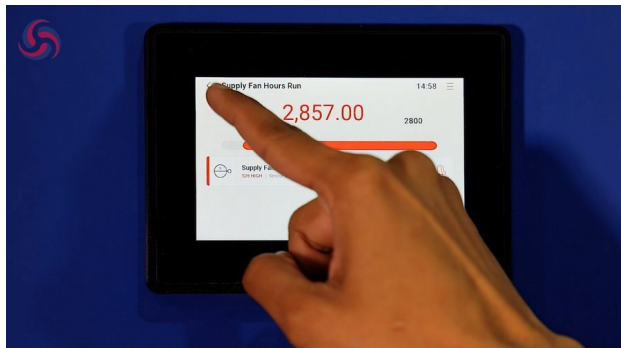


Figure 8. Supply Fan Hours Run detail showing the total accumulated run hours (e.g., 2,857.00).

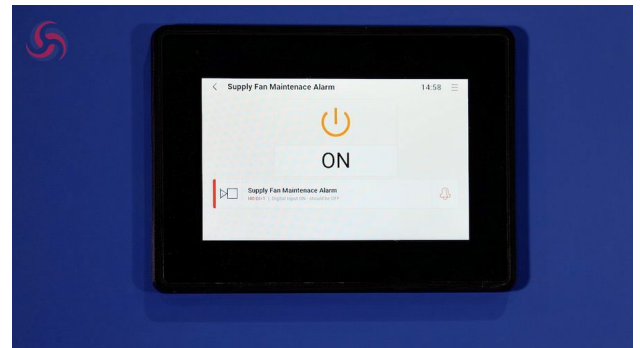


Figure 9. Supply Fan Maintenance Alarm shown active (ON).

6.4 Carrying Out Required Maintenance

Before resetting the alarm:

- Perform the necessary maintenance according to the manufacturer’s maintenance guide.

Typical fan maintenance may include:

- Visual inspection of the fan
- Checking mounting fixings
- Cleaning components
- Inspecting electrical connections

The maintenance alarm should only be reset after the required maintenance work has been completed.

6.5 Resetting the Maintenance Alarm

Once maintenance has been completed:

- Return to the HMI main menu.
- Navigate to the Views Browser.
- Locate the option labelled “Maintenance Alarm Reset.”
- Press the Reset button.

This resets the maintenance timer associated with the component.

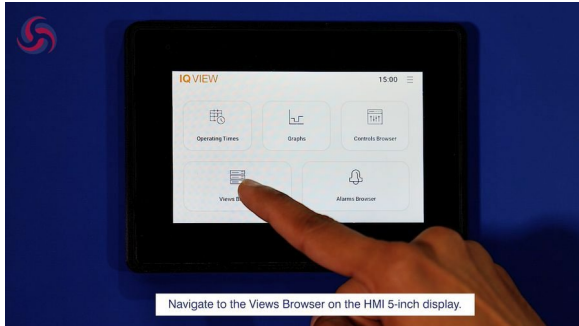


Figure 10. Returning to the HMI home screen and navigating to the Views Browser.

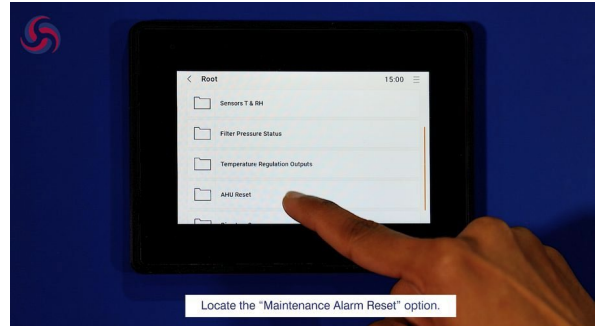


Figure 11. Locating the “Maintenance Alarm Reset” option within the AHU Reset menu.

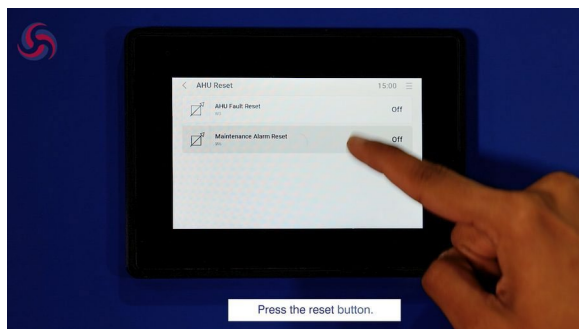


Figure 12. Pressing the reset button to clear the maintenance timer for the selected component.

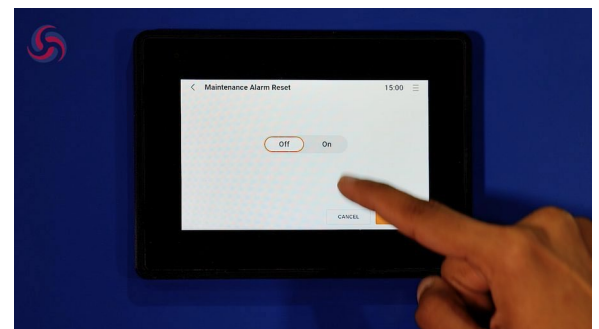


Figure 13. Maintenance Alarm Reset confirmation dialog — confirm the reset action.

6.6 Confirming Alarm Clearance

After resetting the maintenance timer:

- Navigate back to the Alarms Browser.
- Check the alarms list again.

The Fan Maintenance alarm should no longer appear, confirming that the maintenance clock has been reset successfully.

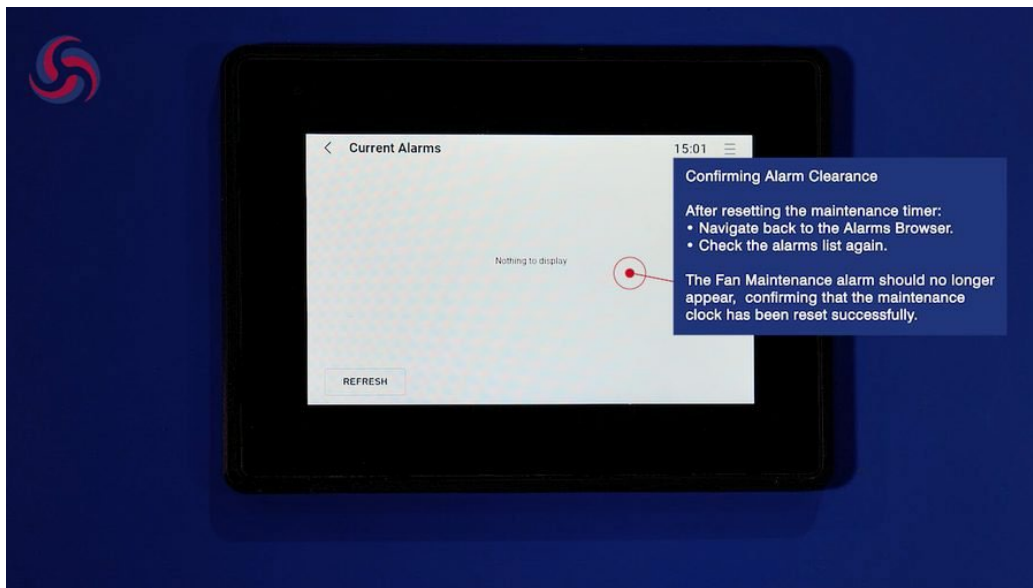


Figure 14. Current Alarms list rechecked after reset — the Fan Maintenance alarm no longer appears, confirming successful clearance.

Confirm that:

- No active maintenance alarms remain.
- System components are operating normally.
- Maintenance timers have restarted.

6.7 Good Maintenance Practice

When resetting maintenance alarms:

- Always complete the required maintenance first.
- Record maintenance activity in the site logbook.
- Confirm that the maintenance timer has reset correctly.
- Monitor equipment operation after reset.

7. Verification / Functional Test

- Control action produces the expected status on the HMI, controller or BMS.
- No active safety, fault or maintenance alarm remains unless it has been intentionally left recorded for follow-up.
- The underlying cause of any alarm or fault has been investigated before reset.
- The system returns to the intended automatic mode after the test or reset.
- Maintenance item has been completed and the alarm clears without reappearing.

Additional Verification Notes

8. Stop-and-Escalate Conditions

STOP: Stop work or stop the review and escalate to the responsible ECE/project technical contact if any of the following apply:

- The AHU reference, asset tag, certified drawing or document revision cannot be confirmed.
- The information found does not match the physical AHU, installed component or project scope.
- Safe access, safe isolation or required site permits cannot be confirmed.
- A required component technical detail, wiring detail, control signal or manufacturer data sheet is missing.
- The task would block or compromise AHU maintenance access, withdrawal routes, isolators, terminal boxes or emergency access.
- The underlying cause of a fault or alarm has not been investigated.
- The reset or test would bypass a protective function.
- The displayed control strategy does not match the project-specific controls description.
- The user is not authorised to make the control change.
- A maintenance alarm has not been physically actioned before reset.
- The reset is being used to conceal overdue maintenance.

9. Final Checks

- Confirm the AHU, component, wiring, control function or approval item has been left in the intended safe and complete condition.
- Confirm access doors, panels, terminal boxes, covers, guards, isolators and labels are secure where applicable.
- Confirm no tools, temporary materials, loose items, debris or packaging remain in or around the AHU.
- Confirm any alarms, faults, abnormal indications or unresolved comments have been recorded and escalated.

10. Records to Complete

Record enough evidence to prove that the task, review or test has been completed using the correct AHU information and by competent personnel.

- Alarm/fault/control action identified
- Cause investigated
- Reset/test result recorded
- Automatic operation restored
- Outstanding actions recorded

Evidence item	Required entry
AHU reference / asset tag	To be completed
Certified drawing revision / document revision	To be completed
Person completing task / review	To be completed
Date completed	To be completed
Result / status	Pass / fail / comment / not applicable
Outstanding actions	To be completed or marked none

11. Completion Checklist

- Correct AHU and guide number confirmed.
- Latest asset information and certified drawing checked.
- Relevant IOM, wiring diagram, controls description or manufacturer data checked where applicable.
- Safety and competency requirements confirmed.
- Procedure completed or approval review completed.
- Verification / functional test completed.
- Stop-and-escalate conditions checked and no unresolved stop condition remains.
- Records to Complete section completed.
- AHU returned to safe condition or review status recorded.

12. Task-Specific Completion Checks

- HMI display accessed
- Alarms Browser opened
- Maintenance alarm identified
- Equipment run hours reviewed
- Maintenance carried out
- Views Browser opened
- Maintenance alarm reset selected
- Alarm cleared from display

13. Learning Outcome

After completing this procedure, viewers will understand:

- How to navigate the HMI interface
- How to locate maintenance alarms
- How to review alarm details
- How to reset maintenance alarms correctly after servicing equipment

This ensures that scheduled maintenance notifications are properly managed and recorded.