

Important: [To upgrade from Quantum HD version 10.21 or earlier to Quantum HD Unity version 10.30 or later requires the flashcard to be changed. These are available through the Baltimore Parts Center, part number 649A1131Gxx.](#)

Compressor Release Notes Q5 11.00 / Q6 12.00

Compressor

Networked Product O.S. Version Message

- Changed the Network List page to update the message requiring all Unity products to be version 10.40 or later.

Sequencing Control

- Added a "Full Load Drive Speed" setpoint on the Sequencing Control page.
- Added a line on the Sequencing page to identify the Sequencing Master Compressor.

Trending – Est. kW

- Added "Estimated kW" as a Trending option that defaults to a calculated kW value when an analog input for kW is not configured by board and channel.

Capacity Slide Position

- Fixed an issue where the Capacity Slide Position on some pages was displayed as the actual analog value instead of a calculated value relative to Vi position.

Skip Frequency Bands

- Changed the Skip Frequency band entering process on the VSD configuration page to prevent overlapping bands.
- Added a "Warning" message when a user attempts to set a Skip Frequency Band range greater than 5%. Message: Skip Frequency Bands Greater than 5% May Cause Uneven Capacity Control. Maximum skip frequency band allowed is 20%.

Remote Capacity Control

- Fixed an issue where the value of the Remote Capacity Control setpoint was not matching on different pages.

IP Address Range

- Added a process check that prevents a user from entering an invalid IP address and port number which causes the controller to lose connectivity with other Quantum HD Unity products.

Setpoint Maintenance

- Fixed an issue where a large saved setpoint filename would cause the submit button on the Restore Setpoint page to be pushed off the screen.
- Added a process check to prevent the entering of invalid characters while saving a setpoints file that causes the save to fail.

Security Users

- Fixed an issue where a default user level (Basic, Operator or Service) could be deleted if it were first moved to another user level.
- Fixed an issue where a Security User could be set up without specifying a PIN code.
- Fixed an issue where editing a Security User caused the associated PIN code to be lost.

Network Configuration

- Added a process check that prevents the entering of invalid network configurations which cause the panel to malfunction due to the operating system not recognizing the network interface settings.

Unity Network

- Added a process check that prevents a user from adding multiple Condenser/Vessel and Engine Room products to the Quantum HD Unity network.

Compressor Overview

- Fixed an issue on the System Overview page where a Unity product in “Shutdown” would be incorrectly shown as being in a “Warning” state.

Panel Temperature Selection

- Fixed an issue where changing the unit of temperature measurement was not reflected on all products within the Quantum HD Unity Network. Changing this value will now be correctly distributed to all connected products.

Number Entry

- Fixed an issue where a user accessing a Quantum HD Unity product remotely would have inconsistencies with the displayed keypad when clicking on a setpoint field in an unexpected way.

On-Screen Keyboard

- Corrected the Shift and Caps Lock function on the onscreen keyboard.

Remote Users Page

- Added a “Session List” to the Security page that allows a user to see other users who are or have been remotely logged in to the panel.

About Screen

- Added additional fields to the “About” page that shows the board type, distinguishing between Q5 and Q6 processors.
- Added range checking to the Sale Order Number and Item Number fields on the “About” page that ensures the numbers entered are valid.

Remote Auto Login

- Fixed an issue where Auto Login failed when the Quantum HD Unity network contained more than one compressor.

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Compressor

WEG Fix

- An issue was corrected where the following 8 alarms were not being checked when the Drive Type was set to SSW (Solid State WEG). Refer to Frick NS Letter NS-15-17 for more details.
 - High Motor Current Shutdown
 - High Motor Current Warning
 - Low Motor Current Shutdown
 - Compressor Auxiliary Shutdown

- Starting Failure – No Compressor Aux
- Starting Failure – Low Motor Amps

- False Running Failure – Compressor Confirmed Running Input
- False Running Failure – Motor Amps

Digital I/O Settings

- On Page 4 of the Digital I/O Configuration, a number of the IO Board and IO Channel selections were displayed incorrectly. The selections did not match the Channel Names that were listed. In addition, some of the Status values were incorrect. These items have been corrected.

Condenser Control

- On the Condenser Configuration page, the Output B VFD speed was always displayed as 0% even when the Output B VFD was operating. This has been corrected to show the Output B VFD speed.

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Compressor

Skip Frequency Bands

- Added 3 new skip frequency bands to the VSD page to increase the total number of bands to 8.

Restore Setpoints

- Fixed an issue where the restoration of setpoints caused the local panel to lose visibility of other Unity products.
- Fixed an issue where the restoration of setpoints would fail if the name given to the saved setpoints was too long.

GEA GM Package

- Added the GEA GM package type as a standard selection.

Capacity Slide Position

- In the System Operating Values (Home Page) and on the User Defined Page, changed the Capacity Slide Position to show the Calculated value instead of the Analog value. The Calculated value is the Capacity Slide value that is displayed on the Home page.

Maintenance Log

- Fixed an issue where messages submitted through the Maintenance Log were not being displayed.

Messages

- Changed the time stamp on created messages to not include the default time zone.
- Fixed an issue where submitted messages were being formatted to only display lowercase characters.

Email Notification

- Changed the email notification for events and alarms to now include the user defined name of the product in the email header.

Ping Command

- Changed the Ping Command function on the Diagnostics Page to now display the entered IP address and to execute the ping when the corresponding button is pressed.

Back Button

- Changed the Back Button style/color on the Retransmitting Output and Superheat Control pages to match the convention used elsewhere throughout the software.

IO Channel Entry

- Changed the setpoint entry box on the Analog Outputs page to display the name of the Analog Output when modifying an IO Channel value.
- Changed the setpoint entry box on the Digital I/O page to display the name of the Output when modifying an IO Channel value.
- Changed the setpoint entry box on the Retransmitting Output page to display the Row Letter when modifying an IO Channel value.

Condenser Step Order

- Changed the Step Order setpoint entry boxes on the Condenser page to display the output that is being modified.

Sequencing System Pages

- Removed the "Order" button from the Sequencing System pages.
- Changed the setpoint entry on the Sequencing System pages to display the row letter of the sequencing setpoint that is being modified.

- Changed instances where "Control Point" was displayed on Sequencing pages to "Control Value" to adhere to a consistent nomenclature.

Timed Digital Output Control

- Changed the Time of Day setpoint entry boxes on the Digital Auxiliaries Page to display channel information for the field that is being modified.

QDB Spreadsheet

- In the QDB spreadsheet when the Suction Pressure Range is changed from the default value, set the Mode 1 Capacity Control Setpoint Limit (Suction Pressure) to the same value.

Shop Ringout Screen

- Updated the Ringout page so that any settings that are changed on this page during the testing process are not retained after power is cycled on the panel.

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Compressor

Economizer Control/WEG

- Fixed an issue where the economizer output would not turn on when the Drive Type was set to SSW (Solid State WEG starter).

WEG Starter Comms

- Fixed an issue where the motor amps would be displayed on the Quantum HD at 1/10th the actual amp draw. This only occurs under the following configuration/condition.
 - The Drive type is selected as “SSW” on the Package Configuration page.
 - The “Read Motor Amps From” parameter is selected as “SSW” on the SSW Starter page in Drive Configuration.
 - The starter size is 820 amp or higher.

On all other starters, the communicated amp draw displayed on the Quantum HD is correct.

Recip Compressor Control

- Added new features to the Recip package type. These include digital output control for Head Cooling, Oil Cooling and Separator Oil Return, VFD control for Recip compressors and updated oil safeties to match the requirements of Recip compressors.
- The Recip Starting logic was updated, allowing the Recip compressor to step load to 100% capacity immediately after starting. In previous versions there was a fixed delay after Starting before the Recip steps were allowed to load.

Economizer Digital Output Override Message

- Added an “Override” message that is displayed when the differential pressure between discharge and suction is too low. This message indicates why the economizer digital output is not energized. The override message and logic are displayed in the Economizer parameter block on the Package Configuration page.

Event Emails

- Fixed an issue where the message attached to a “Clear Recycle Delay” Event was blank.

Email Notification

- Fixed issue where the “Send Notification” button was not working with User Defined settings on the Notifications Screen.

Ethernet Port Blocking

- Added Ethernet ports “44818” (Allen Bradley Ethernet/IP) and “502” (Modbus TCP) to the list of blocked ports.

RDB Compressor Setpoints

- Fixed an issue with the RDB package type where the RDB setpoints on the Configuration > Compressor page were being displayed off the page when all the options were enabled.

Capacity / Volume Calibration Page

- Changed the heading on the upper left corner of the page to display “Capacity Slide”.

RELEASE NOTES FOR 10.50

Compressor

Product Selection Banner

- Updated look and feel of product selection banner. Lowered product selection dropdown, updated dropdown text to “Product Selection” and made product name text display.

Slide Valve Load Inhibit and Force Unload Messages Not Displayed

- The Load Inhibit and Force Unload Messages are now displayed on the Home page when the panel is in a Load Inhibit or Force Unload condition.

Separator Heater Control

- When the Oil Pump type is set to “Full Time” and Oil Level Shutdown is Enabled, the Separator Heater output is now turned “Off” when the Oil Level Input is not energized. This aligns with the logic for No Pump and Demand Pump.

Oil Level Safety

- The Oil Level Safety logic was updated to make sure that the Oil Level Safety is active if the package has an Oil Level Input. These Oil Level Safety changes now align with the Separator Heater changes.

Alarm Output

- Added a selection to allow the Alarm Output to be setup for “Energized” or “De-Energized” with an Alarm.

Portuguese (Brazilian) & Spanish Language

- Added Brazilian Portuguese & Spanish languages to the product.

Email

- Fixed several problems with the Email features. They did not always work in prior versions.

Watchdog Jumper Update

- When the watchdog jumper process is initiated to clear setpoints, all settings are returned to factory defaults.

Compressor Overview - No Comms Message

- If there was a loss of comms between compressors, the wrong error message would display on Compressor Overview page.

Product Scroll (System Networking)

- Allow page to scroll if there are more products than can be displayed on the screen.

Security/Users Scroll

- Added ability to scroll through users when there are more users than can be displayed on the page.

Software Upgrade Limitation

- Only allow upgrades to a newer version. Changing the program to a previous version is no longer allowed.

Enhance Saved Setpoints

- When setpoints are saved, the product name and software version are included within the folder name.

Language selection

- Fixed issue where language selection would not be sent to all connected products.

Capacity Control Modes - Analog Aux inputs K-T

- For the Capacity Control Modes setup, the missing analog aux inputs K-T were added to the Control Input selection.

Filter Differential on Home Screen

- The filter differential value was removed on the home screen if the filter differential check option is set to disabled.

Separator Temp – Recip compressor

- The Separator Temp is removed from the Home screen if the Package Type is Recip and the Separator Temp input is Disabled (Analog Board selection is set to “None”). If the Package Type is not Recip, then the Separator Temp is always displayed on the Home page.

Setpoint Restoration

- Addressed issue where several values would not transfer correctly from legacy setpoints.
 - Process Leaving and Entering Temperature board & channel assignments.
 - Filter Pressure Diff Check.
 - Soft E-Stop Operation (touchscreen) when user is not logged in

Networking

- Fixed issue where networking would not be set correctly when restoring setpoints.

Trending Select Data

- Made the Select Data lists for both Historical and Real Time Trending screens match.

Recycle Delay for VFD or Vyper Drive

- If the Drive Type is set to VFD or Vyper Drive and the Recycle Delay option is Enabled, the Recycle Delay Timer is now displayed on the Home screen.

Vilter Single Screw with Full Time Pump

- Updated the Vilter Single Screw logic to operate properly with a Full Time Pump, usually for a Booster Compressor. This includes changes to the pump logic and the oil safeties. With a Full Time Pump, the Demand Pump Stop CR and Demand Pump Restart CR setpoints are hidden on the Vilter Setpoints screen.

Separator Velocity Reference Setpoint

- Increased the Separator Velocity Reference Setpoint High Limit from 100 to 150.

Touchscreen Calibration

- Added Screen Calibration button to “System Configuration” menu.

Digital I/O – Page 5

- Added missing Digital I/O – Page 5.

RELEASE NOTES FOR 10.40

Compressor

Real Time Trending

- Fixed issue that caused a constant loading screen to appear in certain cases.

Home Page – Setpoint Button

- The Setpoint button now takes the user to the appropriate screen based on the current mode.

Bump Motor Unresponsive

- Fixed issue where the button Bump Motor was unresponsive.

Mapfile Enhancement

- The MapFile is now included when Setpoints are saved.

Stopping Enhancement

- To make an “Instant Stop” more obvious when stopping a machine manually, the “Instant Stop” selection was changed to state “E-Stop” and was made larger and colored RED size to make it an easier selection.

Historical Trending

- Changed wording from “Trending” to “Historical Trending”.

Sequencing

- Enhanced this page to make external keyboard navigation more user friendly.

Software Upgrade

- Added message when no USB-Drive is detected.

Motor Amps/VFD

- Fixed issue where the CT value was not showing up correctly in certain circumstances.

Alarms

- Addressed various issues with Freeze Screen including adding new Analog Values to select from.

Cross Product Communication

Pressure Calibration – Pressure Resolution and Atmospheric Pressure

- Added Atmospheric Pressure setting to all products
- The Pressure Display Resolution was added to handle special compressor applications. This was removed from other applications.

Sub-Navigation (Tabs)

- Sub-Navigation options are now a tab rather than just text.

Alarms – Clear Safety History

- Added confirmation of “Are you sure you want to clear the Safety History?” when clicking the Clear Safety History button.

Networking

- Added a “Add Factory Card” feature that allows you to commission a card on the Unity System where the Unity System’s Gateway has been altered from the original settings.
- You can now successfully restore Setpoints on a panel where the Unity System’s Gateway has been altered from the original settings.
- You can now successfully perform a system upgrade on a panel where the Unity System’s Gateway has been altered from the original settings.

RELEASE NOTES FOR 10.31

Compressor

- Added the "Vyper Info" tab & screen that was missing in ver. 10.30 when a Vyper (RAM) is selected as the drive type
- Rearranged the layout of the Drive > Vyper > Cooling screen to capture all displayed values on the screen
- Corrected an issue where the IP address of the panel is corrupted when the IP address is reset to a default by connecting pins 7-8 jumper of the JP1 jumper on the comms interface board (the default is 192.168.0.170)
- Added spaces to the beginning of a wrapped line in a comms log files
- To properly capture analog data in the "System Data Download", the process for doing this was reverted back to the previous process where all analog input values (configured or not) are included in the created spreadsheet when a "System Data Download" is executed

RELEASE NOTES FOR 10.30

Compressor

- Transitioned Quantum HD compressor program to the "Unity" framework
- implemented the ability to communicate with the WEG SSW-06 and SSW-07 Soft-Starter devices
- Corrected an issue dealing with the conversion of Hg (negative) pressures when the Atmospheric Pressure was set to something other than 14.7 PSI
- Corrected an issue where the units were not being displayed correctly for the
- Setpoint and Actual data on the title bar when an Analog Aux input is selected as the capacity control input
- Changed code to set the output for the superheat control outputs to 0% when one is disabled
- Corrected an issue where upon power up the IP address would reset to 192.168.0.170 and the processor would reboot if a jumper is detected on JP1 pins 7 & 8 of the Communications Interface board.
- Corrected an issue where the IO integrity Check logic did not catch certain conflicts in I/O configuration