

**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 Frick Parts Center, part number 649A1131Gxx.

## Release Notes

### Quantum HD Unity Compressor

#### Version Q6 12.34

##### HeatPAC Recip

- Added support for the HeatPAC Recip package
- Added HeatPAC Recip package selection
- Added HPO 24-28, HPC 104-116 and HPX 704-716 compressor model selections
- Added a new service intervals page for HPO, HPC, and HPX compressors
- Added a new compressor Heating Cooling Loop page for HPO, HPC, and HPX compressors
- Added a new compressor differential pressure safety

##### Phd Plus Profiles Added

- HPS 273, 343, and 407 Phd Plus profiles have been added

##### New Safeties

- Added new superheat safeties to the Heat Pump page
- Added a new Entering / Leaving Process safeties page under “Pressure / Temperature Safeties”

##### Various Improvements

- Fixed an issue where Modbus remote comms was not reverting to auto mode after 5 mins of no established connection
- Updated wording for the “No Pump” oil pump selection to “No Pump / Prelube”
- Balance Piston Target Pressure now available on Freeze Screen
- Fixed an issue where the successful calibration pop-up was appearing remotely.
- Updated the configuration-page button from “Discharge / Suction / Oil” to Pressure / Temperature Safeties
- Fixed an issue where the analog input range was not resetting when changing from a custom range sensor to an ICTD sensor type
- Updated the System Overview button to navigate to the Compressor Overview when no other products are connected

## Version Q6 12.33

### HPS Compressor Models

- Added support for the HPS compressor models 273, 343, and 407
- Added HPS 166-724 package selection
- Added HPSS and HPSD 2709-4012 compressor model selections

### New Safety

- Added a new Capacity Slide Not Loading Shutdown

### Superheat Safety Range

- Changed the minimum low of suction superheat from 0°F to 2°F

### Modulating Main Oil Injection Valve

- Added new Modulating Main Oil Injection Valve page in the Options tab on the Package screen

### Calibration Of Linear Transmitters

- Disable calibration of Slide Valve and Slide Stop when the compressor has been above 24 BarA discharge pressure since running

### VI Range

- Added the 1.3-1.96 range to the list of selectable VI ranges
- Fixed an issue where setting the VI Range to one of the defined ranges (ex 2.2-5) and power cycling the panel caused the range to change to “User Defined”
- Fixed an issue where the VI range was not being set correctly when changing the package selection

### PHD Plus

- Added better error handling when loading PHD Plus profiles

### Compressor Stop Button

- Modified the compressor stop button to always be enabled when viewing the panel remotely from a browser

## **Touchscreen Calibration**

- Fixed an issue where touchscreen calibration would not save after power cycle
- Fixed an issue that would not properly allow the touchscreen calibration process to continue if the touchscreen cable was flipped

## **Cloud Data Analytics**

- Removed support for cloud data analytics

## **Security Updates**

- Applied several security updates

## **About Screen – MAC Address**

- Added a field to the about screen to display the MAC address of the board

## **Advanced Network Settings**

- Fixed an issue that prevented users from setting the primary and secondary DNS to “8.8.8.8” and “8.8.4.4,” respectively, when changing the DNS for the first time

## **Session Management**

- Fixed an issue where the webpage failed to refresh immediately after a user's session expired, causing users to mistakenly believe they were still logged in
- Changed session timeout behavior so that users are now logged out one hour after their last page navigation, rather than one hour after login
- Enhanced session handling to keep users logged in across multiple remote panels until they manually log out or let their session expire

## **Version Q6 12.32**

### **Security Updates**

- Applied several security updates

### **AcuAir Factory Card**

- Added AcuAir to the available products for the “Add Factory Card” process

### **Advanced Service**

- Fixed an issue that was causing temperature and pressure units to not display correctly on the Service -> Advanced screen

## **Version Q6 12.31**

### **Security Updates**

- Applied several security updates and enhancements

### **Analog Outputs**

- Added Balance Piston Motorized Valve and Fluid Bypass Valve to the Analog Outputs page

### **Digital Auxiliaries**

- Added a Warning When Off option for digital auxiliaries

### **Supported Refrigerants**

- Updated the list of supported refrigerants

### **Capacity and Volume**

- Added new Capacity and Volume tab on Compressor Configuration page
- Moved existing capacity and volume options to new Capacity and Volume tab
- Standardized Vi range selections with an option for a User Defined range

### **Heat Pump**

- Added new Heat Pump tab on Package Configuration page
- Moved existing heat pump safety options to new Heat Pump tab
- Added controls for heat pump Condenser Supply and Bypass motorized valves
- Added Low Suction Superheat safety

### **Balance Piston Safeties**

- Added Motorized Balance Piston pressure safeties on Compressor Configuration page

### **Balance Piston Control**

- Added an option for Standard or Motorized Balance Piston control

## **Version Q6 12.30**

### **Security Updates**

- Applied several security updates

## **Version Q5 11.23 / Q6 12.23**

### **PhD Plus – IFM VYE004 Module**

- Added support for the IFM VYE004 module for use with PhD Plus vibration monitoring

### **HPS Package – Oil Pump**

- Removed the 5 minute post-lube timer for the HPS package type

### **Security Improvements**

- Improved various front-end script functions to ensure product stability

## **Version Q6 12.23**

### **USB Setpoint Save**

- Fixed an issue that could cause setpoints to not be saved to a USB thumb drive before a success message is displayed

### **Analytics Page Access Level**

- Analytics page access level changed from Operator to Service

## **Version Q5 11.22 / Q6 12.22**

### **Suction Pressure Rate of Increase Shutdown Delay**

- Added a fixed 10 second suction pressure rate of increase shutdown delay while starting

### **Notifications – Improved Failure Feedback**

- Added Event feedback notifying the user if and why a Notification Email failed to send

### **Product Sequencing Communication Update**

- Sequencing communication changes resulting in incompatibility with previous software versions

## Version Q5 11.22

### **Sequencing - High Stage**

- Fixed an issue where the high stage compressors were not recognized as running, resulting in a “Start Inhibit No High Stage Compressor Running” error

### **Software Upgrade - MD5 File Validation**

- Added a validation process to the software upgrade process to ensure a software upgrade package has not been corrupted or altered

### **Notifications - Mobile Phone**

- Implemented a toggle on the Security page to allow a user to optionally receive mobile notifications in addition to the standard email notifications for events and alarms

### **Setpoint Restore - Capacity Mode**

- Fixed an issue where the Capacity Mode setpoints were not being restored correctly

### **Control Input Selection Button Text**

- Fixed an issue that caused some text to be off center and uneven in some buttons for the control input selection pop-up window

### **PAC Chiller Option Removed**

- Unused package configuration option for PAC Chiller was removed

### **Package Options - Heat Pump Safeties Page Added**

- Added a page for enabling and configuring heat pump package safeties

### **Calibration Page - Channel Name Display Text Change**

- Channel name display text on the Calibration page changed to “Leaving Process” and “Entering Process” for consistency

### **Motor Stator Temperature - Shutdown Values**

- Changed maximum temperature limits to align with insulation class maximum temperature limits
- Changed insulation class H upper temperature limit

### **User Actions - Display Text Change**

- Fixed an issue that was causing the display text for certain actions in the User Action log to not be displayed correctly

### **Custom SMTP Server - Sending Error**

- Fixed an issue that was causing email notifications to not send when using a custom SMTP server.

## Version Q6 12.21

### **Sequencing - High Stage**

- Fixed an issue where the high stage compressors were not recognized as running, resulting in a “Start Inhibit No High Stage Compressor Running” error

### **Software Upgrade - MD5 File Validation**

- Added a validation process to the software upgrade process to ensure a software upgrade package has not been corrupted or altered

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## Version Q6 12.20

### **Touchscreen Driver**

- Added a Q6 processor board (640D0198H02) touchscreen driver

### **WEG SSW-900**

- Added support for the WEG SSW-900 soft starter.

### **Russian Language**

- Added Russian language support.

### **PhD Plus**

- Increased data value precision to three decimal places in exported trending data.

### **Setpoint Restore**

- Fixed an issue where setpoint files for Quantum HD Unity products other than Compressor were displayed in the setpoint file list.
- Fixed an issue where some values such as user-defined names were not retained when restoring setpoints or upgrading to a newer version.

### **Freeze Screen**

- Updated the alarm freeze screen information to include the date and time that the alarm occurred.
- Changed the name and the order of some freeze screen items for clarity.

### **Map File – Update**

- Updated values in the default map file.

### **Trending – Download System Data**

- Fixed an issue where users below the Service level were not able to download System Data.

### **System Operating Values – Selection Order**

- Changed the order of selected System Operating Values to match the selection modal.

### **Analog Outputs – 0-10VDC Option**

- Added the option for a 0-10VDC signal to the Retransmitting, PI and Superheat analog outputs.

### **Setpoint Filename – Custom Keyboard**

- Added a custom keyboard to prevent certain characters from being entered when saving setpoint files.

### **Analog Aux Input – High/Low Safety Toggle**

- Added toggles to allow each channel to have high and low safeties enabled or disabled independently.

## Version Q5 11.14 / Q6 12.14

### Analytics – C-Comms Process Issue

- Fixed an issue that was causing the C-Comms Analytics process to show a Process Timeout Error in the event log when Operational Data Gathering was disabled.

## Version Q5 11.13 / Q6 12.13

### WEG Starter – Control Type Setting

- Updated the SSW Comms Process to force the Control Type to always be “Current Limit”.
- Changed the dropdown on the SSW Configuration page to be read only.

### Vilter Single Screw Vi Control

- Updated the calculations and setpoints to improve VSS Vi control while at low compressor ratio and in a part load condition.

### PHD Plus - Update

- Updated the parameter sets to V2 which will now be reflected when an IFM profile is loaded.

### High Motor Stator - Safeties

- Fixed an issue where the logic for the High Motor Stator #2 Temperature and High Motor Stator Temperature #3 safeties was not using the correct temperature inputs.

### VSD Cooling Temp - Safeties

- Added logic for VSD drives to include a 15 minute time period after starting the compressor where the Low Temp Warning and Low Temp Shutdown are disabled to assist with running the compressor in cold conditions.

### Trender History – Watchdog Reboot

- Fixed an issue that was causing the graphical engine associated with plotting Historical Trending data to experience delays resulting in watchdog reboots.

### Cloud – Analytics Reporting

- Added an option to copy the Device ID to the clipboard while viewing the Analytics page remotely.
- Updated the Analytics configuration backend to allow for saved configuration settings to persist through software upgrades.
- Added selectable methods of time syncing to the Analytics page to ensure reliable timestamps in the cloud. These methods include:
  - System Time – Using the default panel time
  - HTTP – Specifying an HTTP server to obtain accurate time
  - NTP – Specifying an NTP server to obtain accurate time

## Version Q5 11.12 / Q6 12.12

### Control Oil Disable

- Added logic to automatically disable the Control Oil Pump Enable and the Low Control Oil Pressure Enable when a compressor type other than RWH is selected so the related safeties do not occur.

#### **High Level Liquid Shutdown Delay**

- Changed the default value for a High Level Liquid Shutdown from 5 seconds to 2 seconds.

#### **Maintenance – Check Motor Grease Time**

- Changed the default Check Motor Grease Time from 1200 hours to 1100 hours on the Maintenance page.

#### **VFD Control – GEA, GL/GLX Compressors**

- Added VFD Control to the GEA GL/GLX compressor packages

#### **WEG Starter Changes**

- Changed some of the values written to the WEG starters (SSW06 and SSW07)
- Updated the Start Configuration (P202) to Current Limit (1)
- Changed the Acceleration Ramp Time (P102) default to 20 seconds
- Set the P278 register to Shunt Trip (13)
- Changed the SSW Nominal Current (P295) and Motor Nominal Current (P401) to no longer be written from the Quantum HD. These values will be set from the WEG factory.

#### **Cloud Analytics Data**

- Fixed an issue that was causing the cloud services to time out resulting in a message in the event log
- Improved the efficiency of transmitting data from the Quantum HD controller to the cloud

### **Version Q5 11.11 / Q6 12.11**

#### **Operational Data – Proxy Settings**

- Fixed an issue where configurations for proxy settings on the Operational Data configuration screen were not working.

#### **Analytics Page**

- Changed the text on the Analytics page to “Operational Data” to match the language on the EULA screen.

#### **Maintenance – Check Motor Grease Time**

- Changed the default Check Motor Grease Time from 1200 hours to 1100 hours on the Maintenance page.

#### **PHD Plus – Decimal Accuracy**

- Changed the decimal accuracy of PHD plus Modbus read values to be three places instead of two.

#### **Condenser Control Logic**

- Fixed an issue in the Condenser Control logic where the Fan B output was being modulated when the Fan A output should have been the one being modulated.

## Version Q5 11.10 / Q6 12.10

### End User License Agreement

- Added an End User License Agreement to the product that must be accepted before the software is used. An online version of the EULA can be found at the following address: [johnsoncontrols.com/buildings/legal/digital/generaleula](http://johnsoncontrols.com/buildings/legal/digital/generaleula).

### HPS Compressor – Remote Load

- Fixed an issue where the speed was not increasing after sending a remote load command to an HPS compressor type.

### Control Oil Menu Option

- Changed the Control Oil section to only be displayed if the package type RWH is selected.

### Operational Data

- Added a toggle to enable Operational Data collection which allows system data to be collected and sent to a cloud storage location.
- Added an Analytics configuration page located under the System Overview menu options where a user can configure network settings related to Operational Data Collection.

### Email Notifications – Custom SMTP

- Fixed an issue where custom SMTP settings were not using the user assigned “From Address”.

## Version Q5 11.02 / Q6 12.02

### PhD Plus

- Added the PhD Plus vibration monitoring system. The PhD Plus system reads vibration data from the IFM VSE002 module to track the compressor’s vibration signals.

### Semi Hermetic Compressor

- Added the RSHC package type for the new Semi Hermetic compressor with the control logic for this compressor. The RSHC compressor does not use any Capacity or Volume control and is used with a VSD.

### System Data Download/Trending

- Changed the tabs on a downloaded System Data excel file so that the trending data tab appears first
- Provided the same System Data excel file to the user when the Download Trending Data is selected on the Trending screen as when Download System Data is selected on the Service screen
- Included the data units in the column headings in a downloaded trending file
- Saved the trending data in a number format instead of a text format so that calculations can be performed on the data and the numbers can easily be graphed

## **Atmospheric Pressure**

- Fixed an issue where the Atmospheric Pressure setpoint was being truncated to a whole number

## **Slide Valve Calibration Screen**

- Changed the arrangement of manual slide valve calibration steps to more clearly represent the order in which the operations should take place
- Added numerical indicators to the manual slide valve calibration steps and a note to reference the manual for further instruction
- Improved the status indicator of auto calibration to report the status of the operation and report when the process has failed

## **Analog Auxiliary Sensor Configuration Units**

- Fixed an issue where the panel would sometimes reboot if there was a space embedded in the unit fields of an Auxiliary Analog Input when the unit type was set to “Other”
- Fixed an issue where a user could type in custom units that were too long to display on the screen. The Units field is now limited to 8 characters.

## **Motor Stator Temperature Monitoring Page**

- Added an enhancement to the application to allow a user to review the Motor Stator temperatures and profile the temperatures. The existing Motor Stator configuration page was updated, and a new section was added under the Service menu.

## **Updated Product List**

- Enhanced the Product List section under the Networking settings to separate the local panel from other connected panels

## **DX Circuit Control**

- Changed the DX Circuit control to be active when the Compressor is in “Stopping” mode to unload the slide valve

## **Map File Terminology**

- Changed the terminology used on the map file upload and download page when viewing the panel remotely to be more consistent with how the interface looks while viewing the panel locally

## **Download System Data**

- Fixed an issue where the panel would restart unexpectedly while downloading System Data when the file was very large

## **Data Selections**

- Improved the sort selection and display logic around showing data points in the various data select modals (System Operating Values, Trending, User Defined) throughout the application
- Fixed an issue where the user was able to select more than 50 options from the user defined modal

## **Contacts Page - Navigation**

- Fixed an issue where navigating from the Contacts page to the System Overview page would cause the application to redirect the user to the product home page

## **System Restore**

- Fixed an issue that could cause a card to not boot after restoring setpoints and rebooting the panel shortly after

## **Trending – Reset Zoom Button**

- Fixed an issue where the Reset Zoom button could appear in the middle of the Trending graph

## **Temperature Units - Spelling**

- Corrected the spelling of the word “Celsius” in the Temperature Units selection on the Panel page

## **Language Support**

- Fixed an issue where larger Chinese characters caused certain text lines within the application to wrap and push user interface elements off the screen
- Added support for the Korean Language

## **Trending Data Point Selections**

- Fixed an issue where certain trending data points were not being saved when the power to the panel was cycled
- Fixed an issue where the modal to select trending data points was not correctly calculating how many points were being selected

## **Sequencing Mode**

- Fixed an issue where Remote Sequencing Mode was reverting to Auto Mode when the same IP address was entered into two systems even when one of the systems was disabled

## **Vyper – Restoring Setpoints**

- Fixed an issue that could occur when setpoints related to a Vyper drive are restored from version 11.00 or earlier to version 11.01. In this case in version 11.01 the Vyper cooling setpoints were disabled even through the Drive type was set to Vyper.

## **Remote Trending - Time**

- Changed the date and time displayed on the trending graph when viewed remotely to now align with the system time on the panel

## **500 Error Page**

- Updated the 500 Error page to allow a user to return to the Menu in the rare case of an internal server error. Previously when this occurred, the user would have to reboot the panel.
- Fixed an issue where navigating to the Home page immediately after changing a setpoint value resulted in a 500 Error being displayed

## **Recip – Liquid Injection Option**

- Removed the Liquid Injection option from Control Setpoints when the package type was set to Recip

## **Liquid Injection I/O**

- Fixed an issue where the Liquid Injection setpoints were referencing a digital value rather than an analog value

## **System Interface Panel Compatibility**

- Added support on the HD Unity Compressor for all Q6 SIP versions 3.0 or higher

## **Version Q5 11.01 / Q6 12.01**

### **GEA GM Package**

- The GEA GM package control was updated to better unload the slide valve when the compressor is Off. For a GEA GM package with no oil pump, if the compressor is Off, the Capacity Mode is in Auto and the Slide Valve Position is above 5%, the Slide Valve Load and Unload outputs are energized at the same time. After the Slide Valve Position drops below 5%, both outputs will turn off. These outputs are energized to equalize the pressure on either side of the slide valve piston allowing the internal spring in the compressor to unload the Slide Valve.

### **Automatic Capacity Mode – Minimum Slide Valve Position**

- Fixed an issue where a compressor was unable to unload to 0% while the Capacity Mode was Auto or the Sequencing feature was being used. The compressor was not able to unload to 0% due to a hidden minimum slide valve setting which has been removed.

### **Pull Down Feature**

- With an RDB package, the “Force Unload Load Inhibit” timer to be turned off on startup if the Pull Down feature is enabled to prevent the two Load Inhibits from being in conflict

### **Capacity Control Display**

- Fixed an issue where the current capacity control mode was not being updated on the banner at the top of the screen
- Enhanced the Capacity Control page to include the title and description of the current mode being modified

### **Serial Communications**

- Fixed an issue where the bad packet counter was not being incremented when DBS or SSW communication was configured
- Fixed an issue where having multiple serial port communication protocols enabled was generating a condition that caused random bursts of data to be periodically transmitted on the activated ports.

### **User Defined Refrigerants**

- Updated the user defined refrigerant selections to include the most recent language data.
- Fixed an issue where certain user defined refrigerant selections were displaying the incorrect text

### **Event Log**

- Fixed an issue where the event log was not showing the proper text readout causing incorrect language data to be displayed

### **Analog I/O Modal**

- Fixed an issue where selectable values in the modals on the Analog I/O configuration page were being displayed off the screen

### **Trending**

- Enhanced the Trending feature to allow a user to select up to 10 channels for both Historical and Real Time Trending
- Updated the file downloaded from the Trending pages to now indicate in the file name if the data is Historical or Real Time Trending data

### **Contacts**

- Enhanced the Contacts page to now be shared and distributed to other Unity Compressor product panels

### **Pressure Resolution**

- Moved the “Pressure Resolution” setpoint to the panel page and changed the value to be shared and distributed between other Unity Compressor product panels

### **Analog Outputs**

- Added the option on the Analog Output page to change the Sensor Output to 0-10v

### **Network Factory Settings**

- Enhanced the process of restoring network settings to default by using the (Q6) dipswitch/ (Q5) jumper configuration to clear and rewrite all network settings to avoid potential sync issues

### **Email Notifications**

- Enhanced the notifications email server to reliably send new events and alarms on a one minute cycle as new events and alarms occur
- Combined the email notifications and group pages into one page to simplify managing notification configurations

### **Clean Screen Timeout**

- Changed the default timer for the Clean Screen feature from 1 minute to 30 seconds
- Changed the units for the Clean Screen timer to be seconds rather than minutes

### **Setpoint Maintenance**

- Updated the feedback message that informs the user that invalid characters were entered when trying to save a setpoint file to be more specific and contain all of the characters considered illegal by the controller

### **URL Field**

- Removed the URL field from the Edit page in the product list

### **Advanced Network Settings**

- Added an “Advanced Network” dropdown located on the Network page which will hide or display advanced networking configurations
- Added the option to configure the Dynamic Name Server used by the panel. This option is located on the Networking page from the System Overview after setting Advanced Networking to be “Displayed”

## **Delete Saved Setpoints**

- Enhanced the “Delete Setpoints” operation to no longer require the server to be restarted

## **Touchscreen Calibration**

- Added a modal to be displayed after the user performs a touchscreen calibration indicating the result of the calibration. If calibration fails for any reason, the user will be prompted to retry

## **Email - SMTP Factory Settings #2**

- Fixed an authorization mismatch that was causing emails and notifications using the Factory Settings #2 option to fail to send

## **Email – SMTP Password**

- Added a mask to the SMTP password field that will hide the plain-text saved passwords

## **Panel Time**

- Removed an automatic service that was causing the panel time to be reverted after rebooting while connected to a network with internet access
- Added a dropdown for the user to select a time zone
- Changing the date format from US to European format will not update the date fields on the screen to be shown in the correct order

## **Add Factory Card Page**

- Fixed an issue where a user was not able to open the System Overview menu modal while accessing the Add Factory Card page

## **Panel Temperature Selection**

- Fixed an issue where changing the temperature units was not distributed to all products within the Quantum HD Unity Network

## **About Screen**

- Changed the size of the CFast/CompactFlash card id column so the text would not wrap to the next row

## **Network Restore**

- Fixed an issue that prevented the changing of network settings after performing a network restore via the (Q6) dipswitch/ (Q5) jumper

## **Security Users**

- Fixed an issue where attempting to delete the currently logged in user would log out prematurely and cause the operation to fail
- Implemented a feature that automatically logs a User out if they choose to restore default users while not being logged in as one of those groups

## **Remote Users Page**

- Fixed an issue on the Remote Users page where expired sessions were not being removed from the Sessions List

## **500 Error Page**

- Updated the 500 error page to allow a user to redirect in the rare case of an internal server error rather than be forced to reboot the panel

## **Freeze Screen Update**

- Updated the Alarms page to now have a “Freeze Data” button that will display a modal with the data values captured when the alarm occurred.
- Enhanced the Freeze Screen modal to show more data and corrected instances where the wrong text index was being displayed

## **Version Q5 11.00 / Q6 12.00**

### **Networked Product 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. (PUC-344)
- Fixed an issue where the Sequencing Master Compressor was not identified on the Sequencing page

### **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.

### **Capacity Slide Position**

- Fixed an issue where the Capacity Slide Position on various pages was being incorrectly displayed as an analog value instead of a calculated value.

### **Skip Frequency Bands**

- Fixed an issue where a user was able to enter overlapping Skip Frequencies on the VSD configuration page.
- Added a warning message when a user tries to set a Skip Frequency Band range greater than 5% while preventing a range greater than 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**

- Fixed an issue that allowed a user to enter an invalid IP address and port number which would cause the panel to lose connection with other 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.
- Fixed an issue where entering invalid characters while saving setpoints caused the save to fail.

### **Security Users**

- Fixed an issue where one of the default user levels could be removed.
- 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**

- Fixed an issue where entering invalid network configurations would cause the panel to malfunction due to the operating system not recognizing the network interface settings.

## **Unity Network**

- Fixed an issue where a user could add multiple Condenser/Vessel and Engine Room products to the Unity network.

## **Compressor Overview**

- Fixed an issue on the System Overview page where a Unity product in shutdown would incorrectly be shown as in a warning state.

## **Panel Temperature Selection**

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

## **Number Entry**

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

## **On-Screen Keyboard**

- Fixed an issue with the onscreen keyboard where the behavior of Shift and Caps Lock was not consistent.
- Changed the onscreen keyboard Shift key to now toggle "off" after typing one character instead of remaining active.

## **Remote Users Page**

- Added a Session List to the Security page that allows a user to see other users who are 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 Order Number and Sales Number fields on the About screen to ensure that the numbers entered are valid.

## **Remote Auto Login**

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

## **Factory Menu**

- Fixed an issue where the Menu and the Compressor Controller Buttons were overlapping while logged in at the Factory level.

## **Demo Mode**

- Fixed an issue where the language field was allowed to be changed on the demo panels.

## Version 10.53

- 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.

## Version 10.52

### Skip Frequency Bands

- Added 3 skip frequency bands to the VSD page, increasing 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

- On 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 on Maintenance Log page.

## **Messages**

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

## **Condenser Step Order**

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

## **Compressor 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.

## **Version 10.51**

### **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”

## **Version 10.50**

### **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.

### **Version 10.40**

#### **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.

### **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.

- 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

### **Version 10.30**

- 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