Donaldson
Torit®

Contura Control Panel

Installation and Operation Manual

Installation, Operation, and Service Information

This manual contains specific precautions related to worker safety. The hazard alert image denotes safety related instructions and warnings in this manual. DO NOT install, operate, or perform maintenance on this equipment until you have read and understood the instructions, precautions and warnings contained within this manual.

English
Master Language

IOM AG8869001 (ENG)
Revision 0

IMPORTANT NOTES

This manual has been supplied to assist with the installation, operation and maintenance for the dust collector accessory purchased. Please read the manual before installing, operating, or performing maintenance on the accessory as it contains specific precautions for worker safety. It is the owner's responsibility to ensure that this manual is available for use by installers, operators and maintenance personnel that will be working with this dust collector accessory. This manual is the property of the owner and should be left with the collector when the accessory installation has been completed. DO NOT operate the collector until you have read and understood the instructions and warnings located in the installation and operation manual.

For additional copies of this manual, contact Donaldson Torit.

The Safety Alert Symbol indicates a hazardous situation which, if not avoided could result in death or serious injury. Obey all safety messages following this symbol to avoid possible injury or death. The possible hazards are explained in the associated text messages.

NOTICE

NOTICE indicates a potential situation or practice which is not expected to result in personal injury, but which if not avoided, may result in damage to equipment.

Contents

IMPORTANT NOTES I
1 SAFETY COMMUNICATION 1
2 PRODUCT DESCRIPTION 3
3 HMI INTERFACE 4
HOME PAGE 6
HOME PAGE NAVIGATION 7
General Navigation Buttons 8
USER LEVEL SCREENS 9
APPENDIX A - INSTALLATION 12
CONTURA CONTROL PANEL SETUP - ENGINEER LEVEL 14
Blower Motor Starter 15
Ancillary Motors 16
Pulse Valve Setup 17
CLEANING 18
Cleaning Mode Selection 18
I/O Configuration Setup 20
PRESSURE CONFIGURATION 24
Optional - Setting Static Pressure and HEPA Pressure Sensors 26
TROUBLESHOOTING 28
APPENDIX B - ADVANCED SETUP OPTIONS 30
Blower VFD Settings - Digital 31
Blower VFD Settings - Analog 31
Optional Cleaning Mode Manifold Pressure Based 32
Optional Motor Controls 32
DIAGNOSTICS 34
Trend Graphs 34
MAINTENANCE 36
Valve Setup 36
Valve Status 36
Valve Sequence 36
Factory Reset 37
HMI SYSTEM SETTINGS 37
PRODUCT INFORMATION 38
SERVICE NOTES 39
DONALDSON INDUSTRIAL AIR FILTRATION WARRANTY 40

1 Safety Communication

Improper operation of dust, fume or mist collectors and/or dust, fume or mist control systems may contribute to conditions in a work area or facility which could result in severe personal injury, and product or property damage. All dust, fume or mist collection equipment should be used only for its intended purpose and should be properly selected and sized for its intended use.

Process owners have important responsibilities relating to identifying and addressing potential hazards in their processes. When the potential for handling combustible particulate exists within a process the process owner should include combustion hazards in their risk management activities and should comply with applicable codes and standards relating to combustible hazards.

Electrical installation must be performed by a qualified electrician.

This equipment is not designed to support site ducts, piping, or electrical services. All ducts, piping, or electrical services must be adequately supported to prevent injury and/or property damage.

Site selection must account for applicable load conditions such as wind, seismic and snow.

Equipment may reach peak sound pressure levels above 80 dB (A). Noise levels should be considered when selecting collector location.

Some components may be heavier than they appear. Use appropriate lifting methods to avoid personal injury and/or property damage.

Combustible Dust Hazards

Among other considerations, the current NFPA standards require owners whose processes involve potentially combustible materials to have a current Dust Hazard Analysis (DHA), which can serve as the foundation for their process hazard mitigation strategy. Mitigation may include but is not limited to:

- Prevention of all ignition sources from entering any dust, fume, or mist collection equipment.
- Selection and implementation of fire and explosion mitigation, suppression, and isolation strategies appropriate for the risks in their process.
- Development and use of work practices to maintain safe operating conditions, and to ensure combustible particulate does not accumulate within their plant or process equipment.

Donaldson designs, manufactures, and sells industrial air filtration products for a wide variety of applications. Some applications may include processes or materials with inherent fire and explosion hazards. Donaldson is neither an expert nor a certified consultant in fire, spark, or explosion detection, suppression, or control. Donaldson does not provide engineering consulting services related to process or dust hazard analyses, or code and standard compliance. Complying with applicable codes and standards and managing the risks associated with the process or materials remains the responsibility of the process owner/ operator. Donaldson may provide referrals to consultants, suppliers of equipment or services related to the detection and/ or mitigation of sparks, fires and/or explosions, but Donaldson does not assume responsibility for any such referrals, nor does Donaldson assume any liability for the fitness of a mitigation strategy or product for a particular installation or application. The process owner's final selection of dust, fume, or mist collection equipment and risk mitigation strategies should be based on the outcome of a Dust Hazard / Process Hazard Analysis performed by the process owner. Although early engagement of a dust collector manufacturer provides helpful insights on the availability and features of various products, process owners should consult with a combustible dust expert and/or a process safety expert before making actual product and mitigation strategy selections.

Donaldson recommends that all industrial air filtration system designs be reviewed and approved by an expert consultant who is responsible for the integrity of the system design and compliance with applicable codes and standards. It is the process owner's responsibility to understand the risks in their process and mitigate those risks in accordance with all applicable laws, regulations and standards, including those published by the NFPA. Donaldson also recommends that proper maintenance and housekeeping procedures and work practices be evaluated, developed, and followed to maintain any industrial air filtration products in safe operating condition.

Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the Donaldson products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, and data (airflow, capacity, dimensions, or availability) are subject to change without notice, and may vary by region or country.

2 Product Description

Contura Controller

The Contura Controller monitors differential pressure between the dirty air and clean air plenums, differential pressure for secondary filters and external sensors such as the compressed air manifold pressure. It also manages filter pressure drop through online and offline (downtime) adjustable pulse cleaning functions. The Contura Controller can also be connected to a VFD to provide airflow control functionality. In addition, it tracks pulse valve health and provides connections which allow a range of additional alarms and sensors to be integrated.

Delta P Options

The Delta P and Delta P Plus controllers are available to control the cleaning based on HIGH, LOW and ALARM setpoints. Both controllers provide a visual indicator for filter loading and the ability to set the on-demand cleaning using the HIGH, LOW and ALARM setpoints. When exceeded, the HIGH setpoint turns the cleaning on, dropping below the LOW turns the cleaning off and the ALARM setting, when exceeded, changes the state of a set of dry contacts that can be connected to external equipment. The Delta P Plus controller adds the functionality of downtime cleaning to the Delta P functions previously listed.

Airflow Controller

The Airflow Controller is designed to maintain a constant airflow in a dust collection system by adjusting the speed of the system airflow fan using a Variable Frequency Drive (VFD) in response to changes in system static pressure. The Airflow Controller offers two user set points (Low and High) and displays the current system static pressure at the static pressure sampling point. Typical system results of the Airflow Controller operation are more consistent dust collection airflow, reduced fan energy consumption, and longer dust collector filter life.

Connected Technology Through iCue

The iCue platform, through the Contura controller or a separate Gateway, captures data from sensors and transmits it wirelessly via a cellular connection to the web-based Donaldson iCue application.

The Contura Controller is a touch screen and micro controller-based solution for advanced dust collector system management, integrating the key functionalities of the Delta P, Delta P Plus, Airflow Controller and Valve Pulse Sequencer. Designed to help drive your productivity and uptime. Powered by iCue™ Connected Filtration Technology, the system simplifies your equipment management, delivering cloud-based monitoring for a comprehensive view of your dust collection system.

The system activates easily and quickly delivers data, trend tracking, and troubleshooting information so you can address potential issues before they can impact productivity.

For collectors without Contura, the standalone iCue Gateway includes internal sensors for differential pressure and compressed air manifold pressure in a pre-mounted location on the collector or through a stand-alone enclosure. This platform operates independently of the dust collector control system.

3 HMI Interface

Electrical work during installation, service or maintenance must be performed by a qualified electrician and comply with all applicable national and local codes.

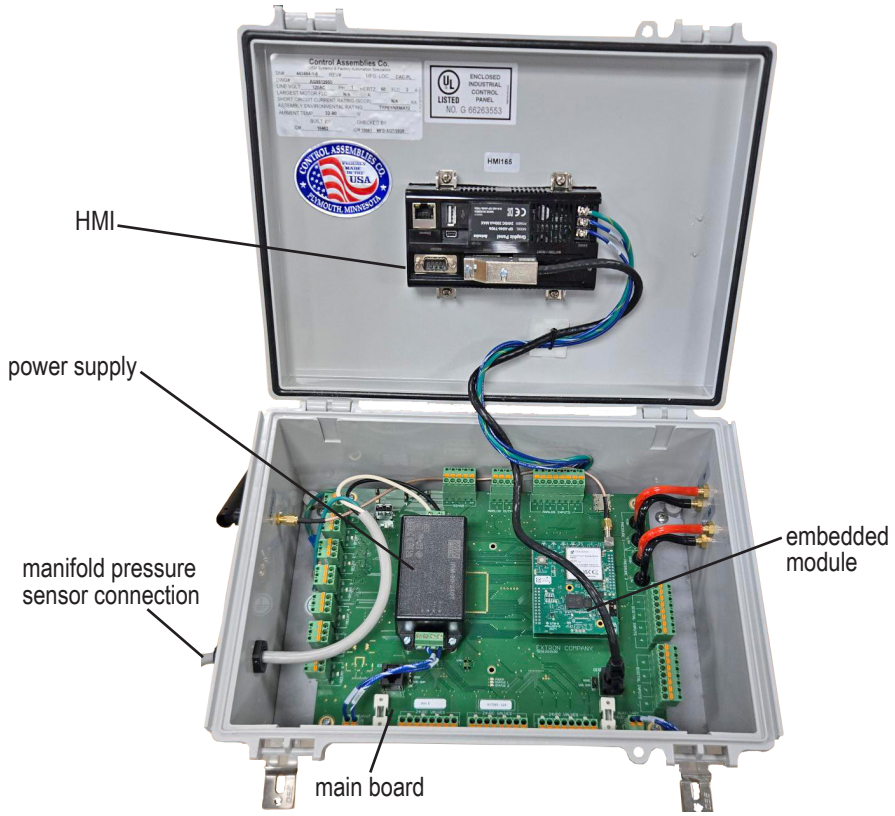
Turn all power off and lock out all power before performing service or maintenance work.

Check that the collector is clear and free of all debris before starting.

Standard product comes in a NEMA 12 enclosure and is rated for indoor use only. Do not install in classified hazardous atmospheres without an enclosure rated for the application.

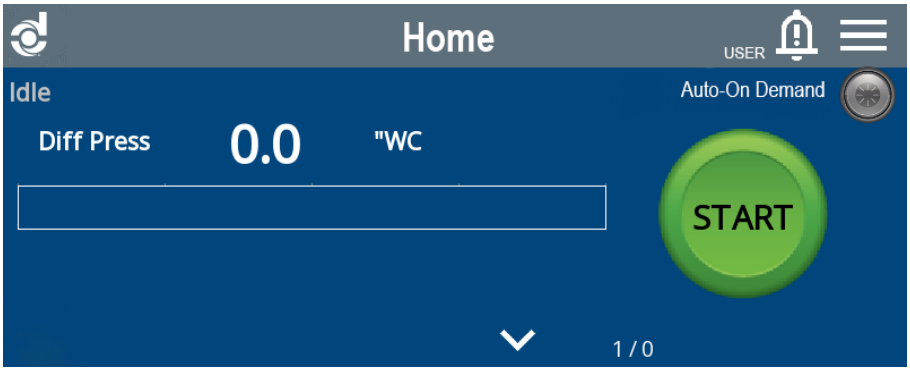
A touchscreen interface located on the control panel allowing full control of the system from a graphical user interface which is also equipped with monitoring capabilities.


antenna
hinge
Pressure Sensor 1 (PS1)
HMI
High Low
Pressure Sensor 2 (PS2)
High Low
mounting feet
latch and lock clasp
Donaldson
Smart Collector


HMI
power supply
manifold pressure sensor connection
embedded module
main board

HOME PAGE

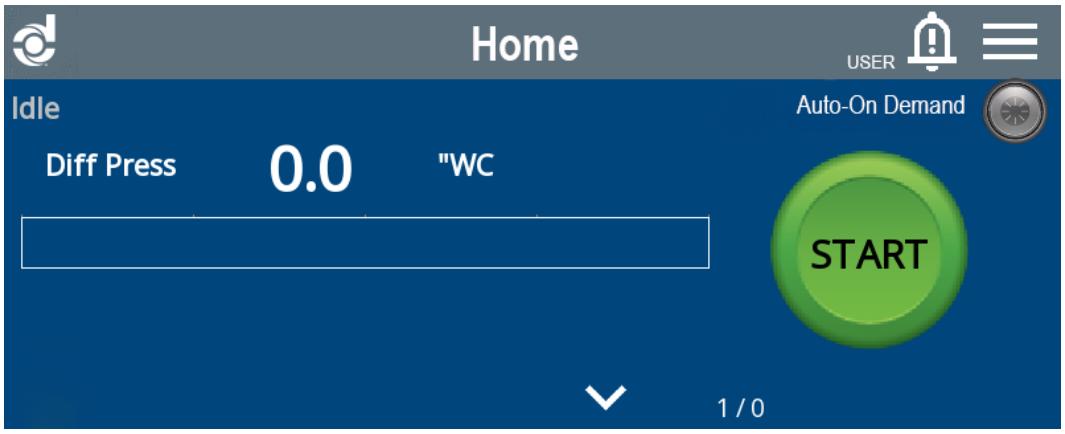
After turning on the Contura Control Panel, the Donaldson logo will be displayed for a short time before the HOME page is loaded.

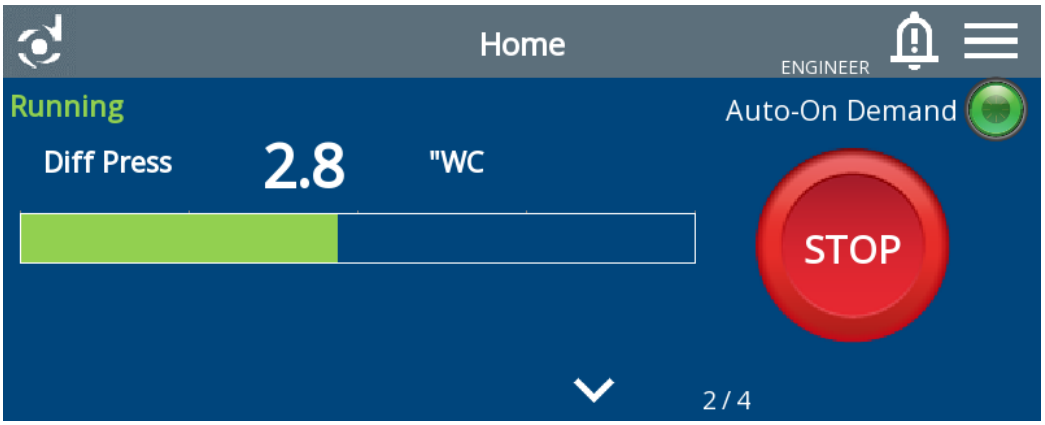


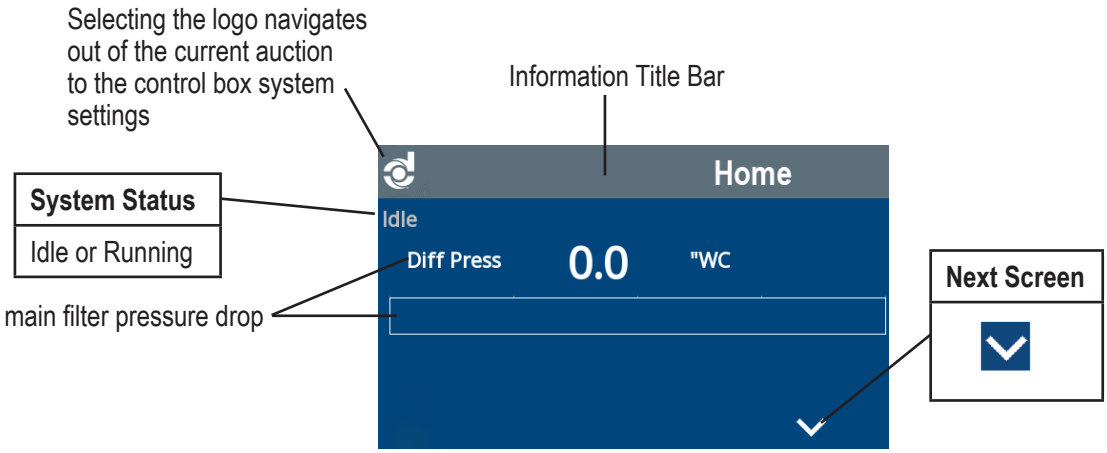
The Contura will automatically login at the USER level. To set or change other detailed features not available at the USER level, reference Contura Control Panel Setup.

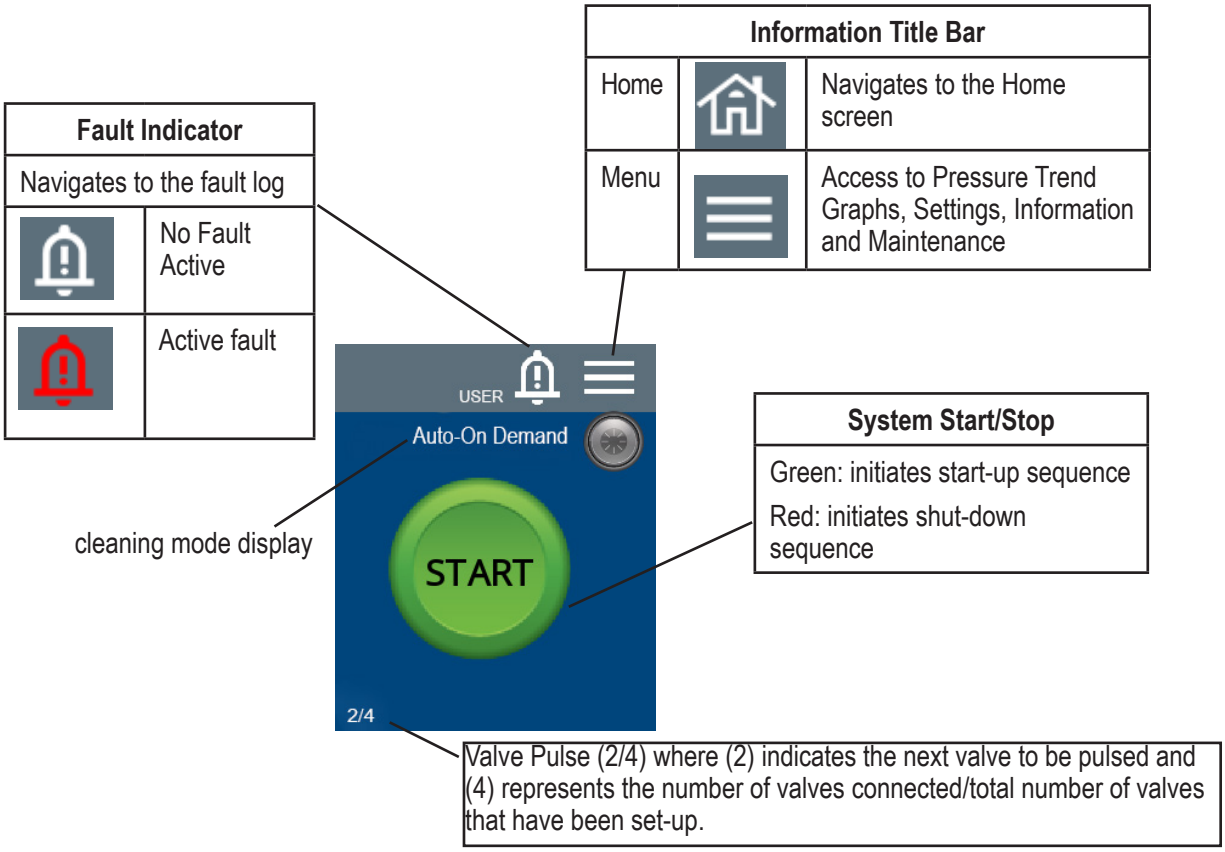
HOME PAGE NAVIGATION

Use the arrow key(s) and icons in the upper right hand screen to navigate between pages.



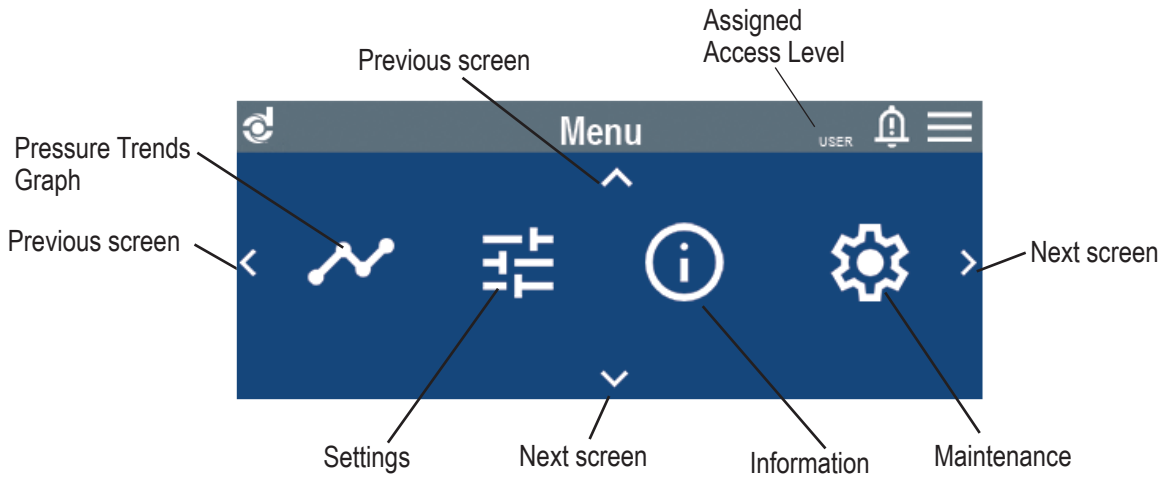






General Navigation Buttons

From the Home screen, select the Menu icon to access additional features.

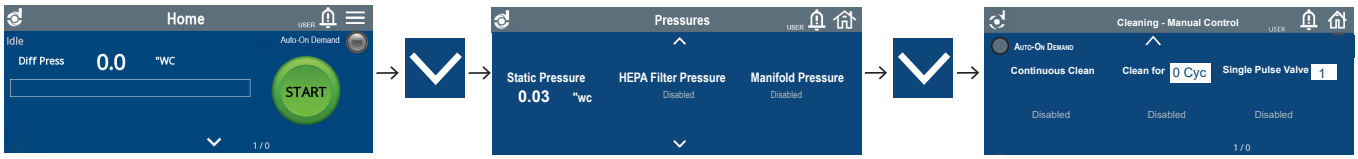


USER LEVEL SCREENS

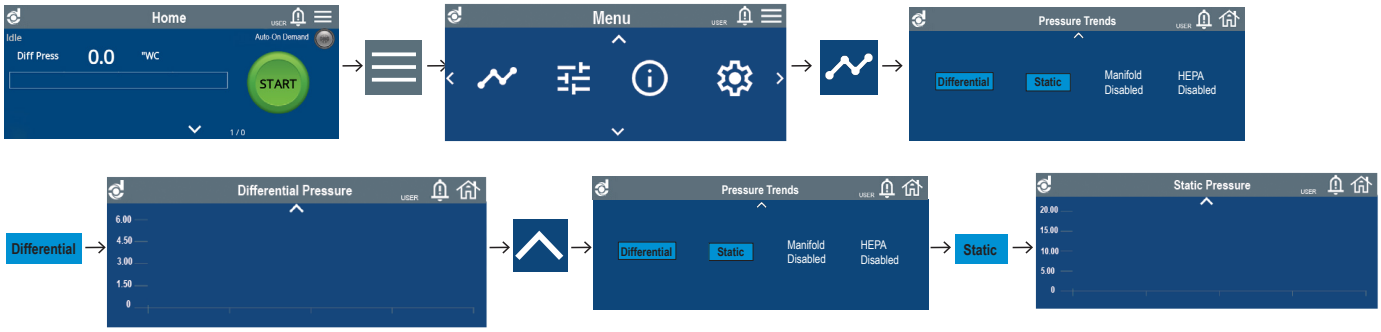
The following screens can be accessed while in the USER function. Individual setpoints are not adjustable as they have been defined during the system set-up.

Pressure

Home > Pressures > Cleaning - Manual Control



Home > Menu > Pressures > > Differential Pressure

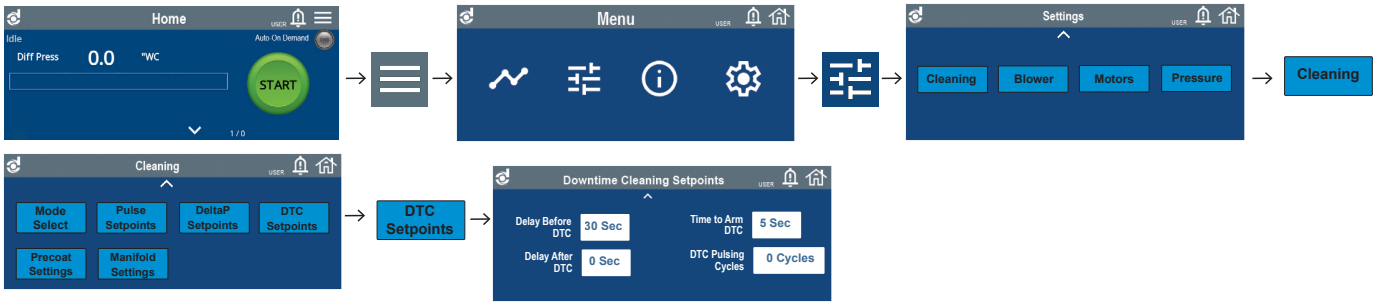


Settings > Cleaning

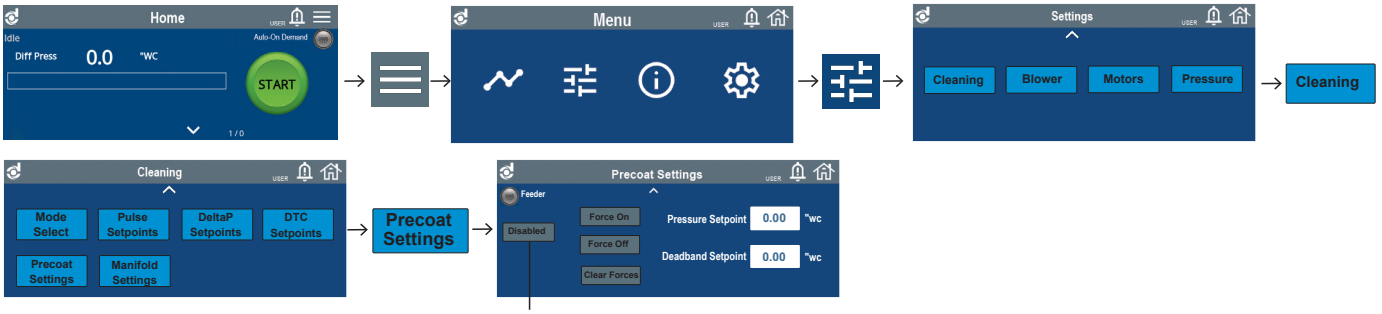
Home > Menu > Settings > Cleaning > Pulse Setpoints

Home > Menu > Settings > Cleaning > Delta P Setpoints

Home > Menu > Settings > Cleaning > Downtime Cleaning Setpoints



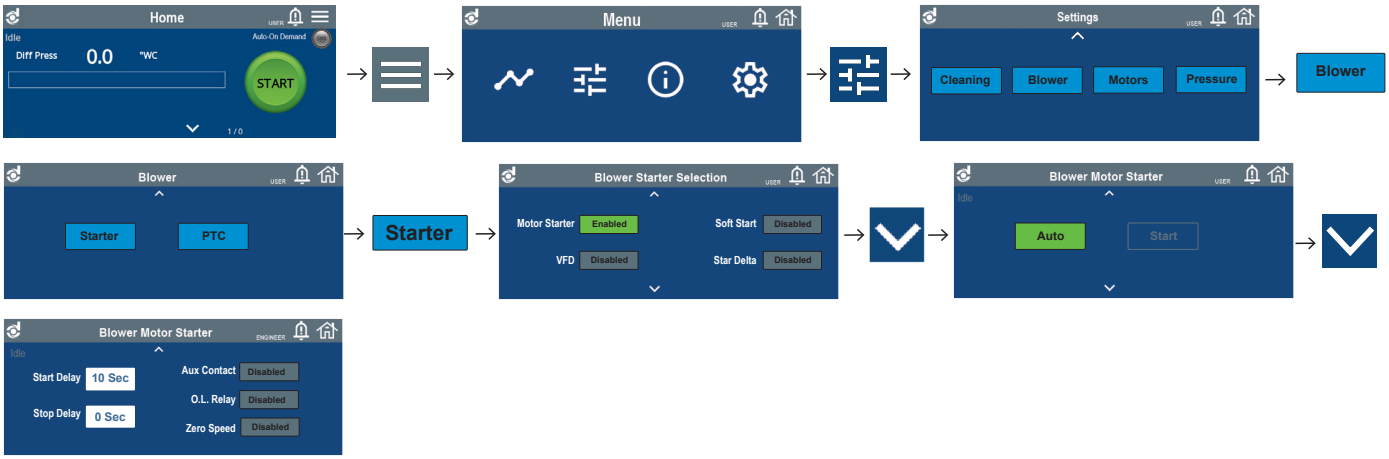
Home > Menu > Settings > Cleaning > Precoat Settings



Precoat settings is pre-set by customer and will show as either disable or enable.

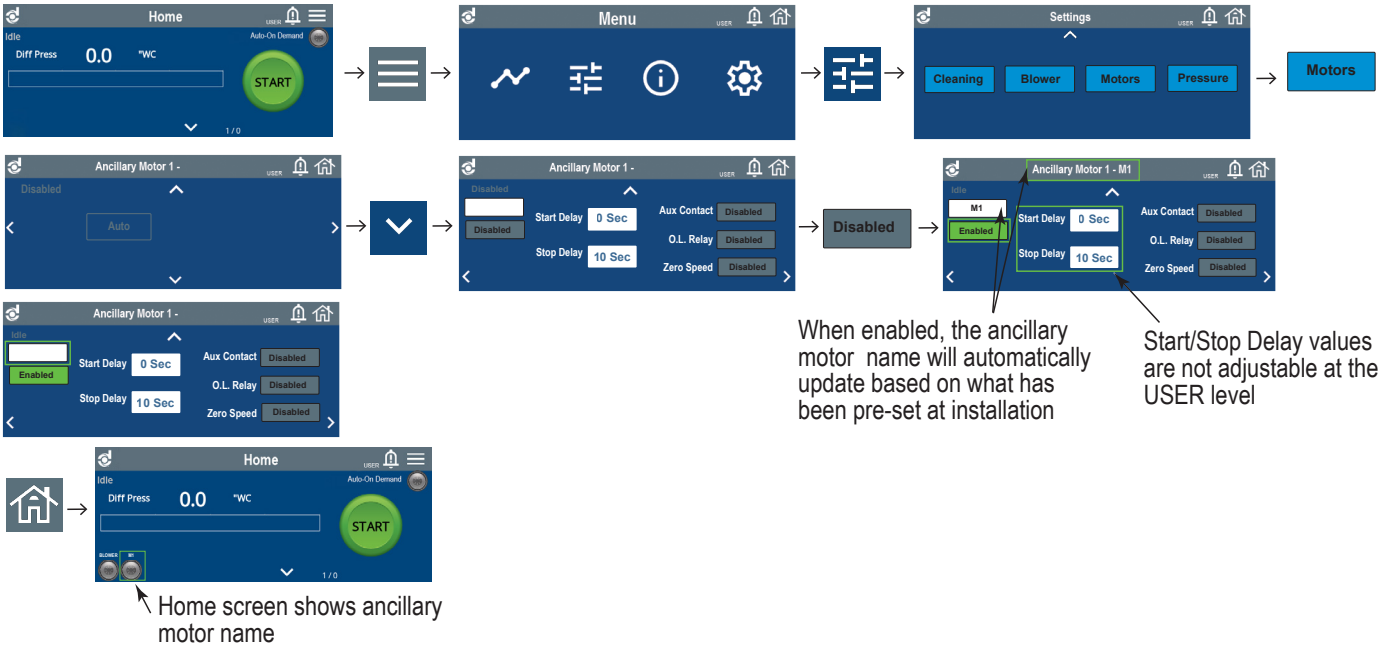
Settings > Blower

Home > Settings > Blower > Blower Motor Starter



Settings > Motor

Home > Settings > Motors > Ancillary Motor



Appendix A - Installation

Installation

Electrical Installation (including bonding and grounding of the collector) must be performed by a qualified electrician.

Do not install in classified hazardous atmospheres without an enclosure rated for the application.

Service must be performed by trained and qualified maintenance personnel.

Turn all power off and lock out all power before performing service or maintenance work. It is not unusual for the equipment to be operated from a remote location, so equipment may start or stop unexpectedly.

Location and Site Selection

Codes may regulate recirculating filtered air in your facility. Consult with the appropriate authorities having jurisdiction to ensure compliance with all national and local codes regarding recirculating filtered air.

Equipment location must conform to all codes and standards, should be suitable for the type of dust being handled and should ensure easy access for service and utility connections. Site selection must account for applicable load conditions such as wind, seismic and snow.

Delivery and Inspection

Upon arrival inspect equipment and report any damage to delivery carrier. File any damage claims with the delivery carrier. Request a written inspection report from the Claims Inspector to substantiate all damage claims.

Compare the equipment received with the description of product ordered. Report any incomplete shipments to the delivery carrier and your Donaldson Torit representative.

Unloading and Positioning

Equipment should be lifted only by qualified crane or fork truck operators.

Failure to lift the equipment correctly can result in severe personal injury and/or property damage.

1. Remove any crates or shipping straps.
2. Inspect for any damage and/or missing parts and report to freight carrier.
3. Check for any hardware which may have become loose during shipment and tighten as necessary.

CONTURA CONTROL PANEL SETUP - ENGINEER LEVEL

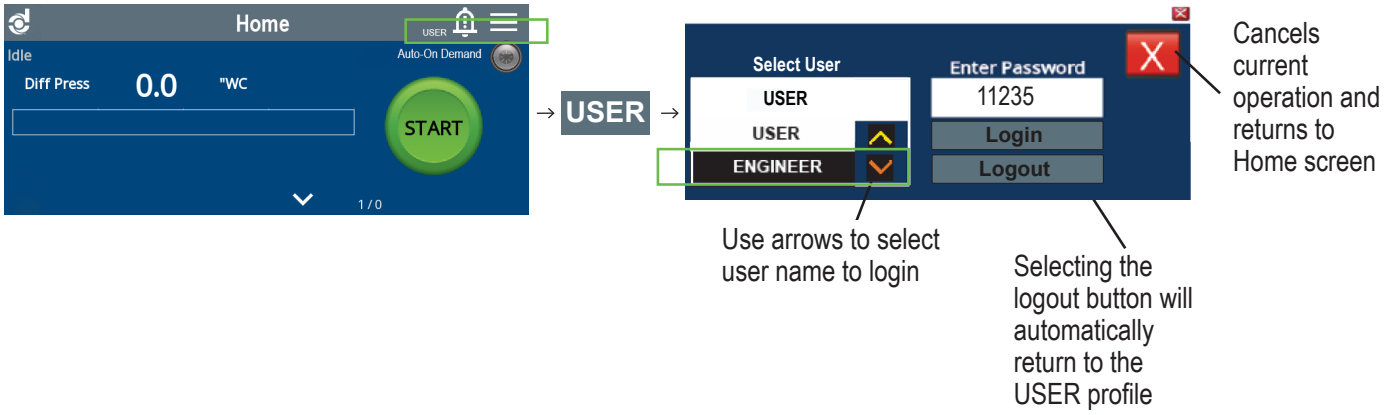
Changing Login Access

To set up or change Contura Control Panel functions, the access level must be changed to the Engineer level. USER access level does not allow control panel changes to the Contura.

To change the access level:

1. Press the User icon located on the information title bar to open the login screen.
2. Select User to enable the drop down arrow selection.
3. Select the down arrow to pick Engineer or Admin.
4. Enter the password for the selected access level.
5. Select Enter.
6. Select Login.

   Note: selecting Logout will automatically return to the USER profile.



HMI USERNAMES & PASSWORDS

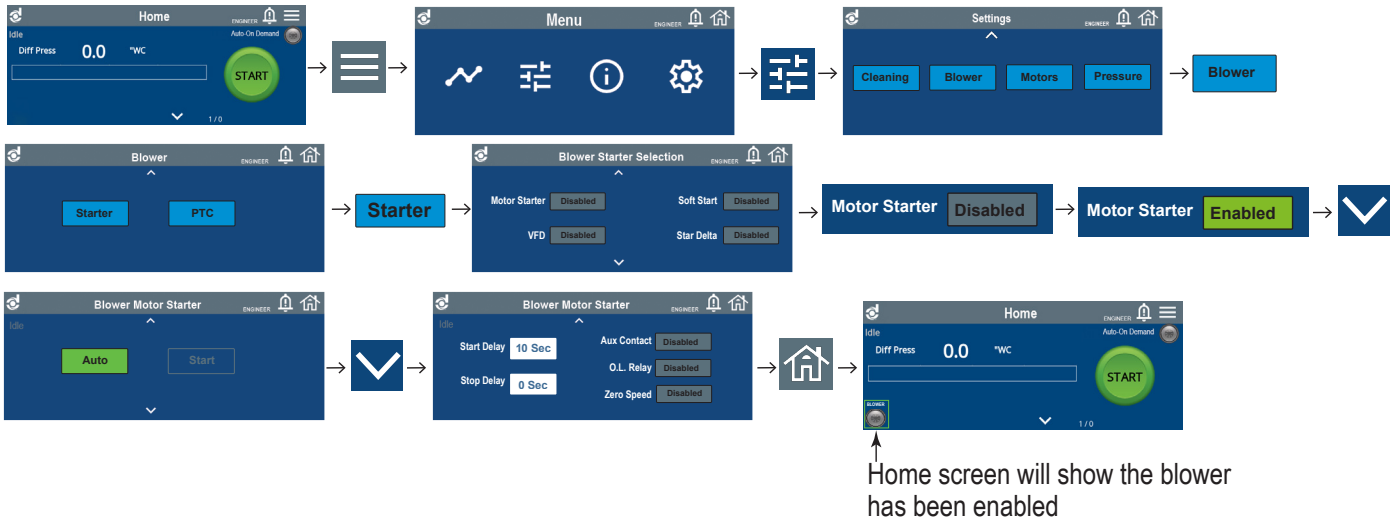
USER: 9999

ENGINEER: 11235

Blower Motor Starter

Follow this setup for standard motors. For VFD, Soft Start or Star Delta, reference setup information in Appendix B. For applications that do not require a blower starter selection or ancillary motors, proceed to Cleaning Mode Selection.

Home > Menu > Settings > Blower > Starter



Home screen will show the blower has been enabled

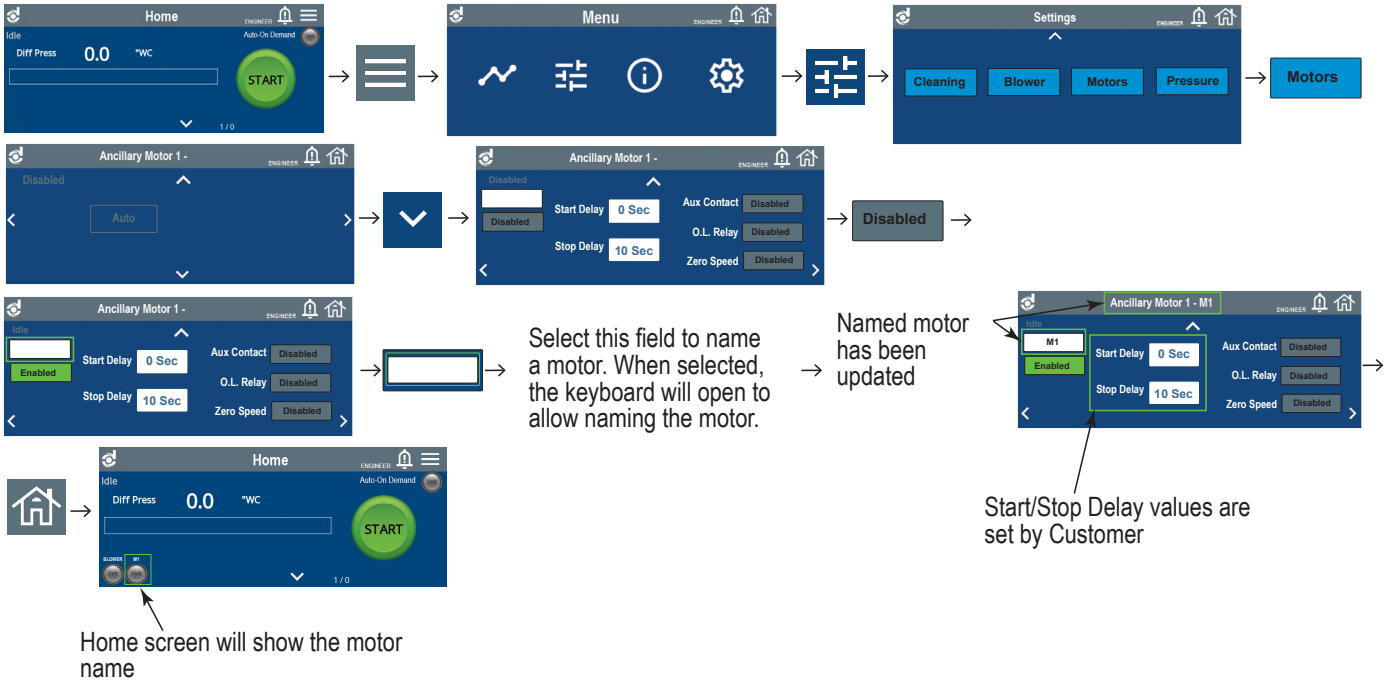
Ancillary Motors

For applications that do not require ancillary motors, proceed to Cleaning Mode Selection.

Home > Menu > Settings > Motors > Ancillary Motor 1.

Enable Ancillary Motor 1 and set up a name for the motor following the screens below. When selecting the white box, an alpha numeric keypad will open to allow entry of the data to be set. Selecting the Enter key will close the keypad.

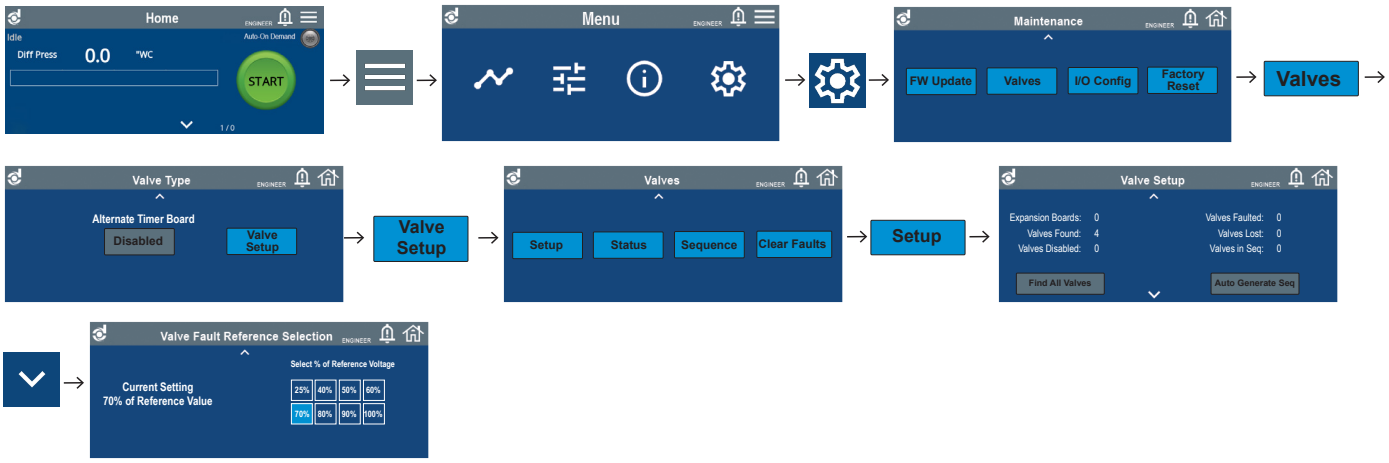
Up to three motors can be set up using the left or right arrow keys to scroll through the Ancillary Motors 1-3.



Pulse Valve Setup

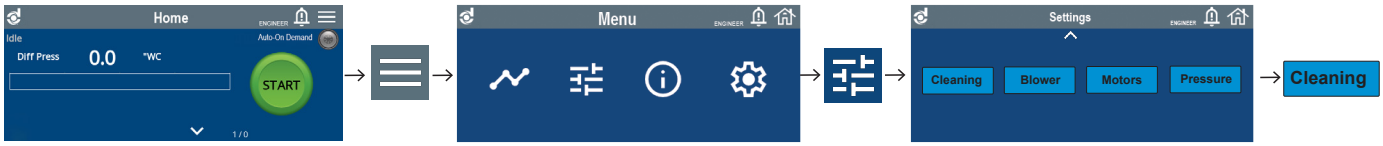
Home > Menu > Maintenance > Valves > Setup

Selecting Find All Valves followed by Auto Generate Seq, the Contura will automatically generate and populate the fields.



CLEANING

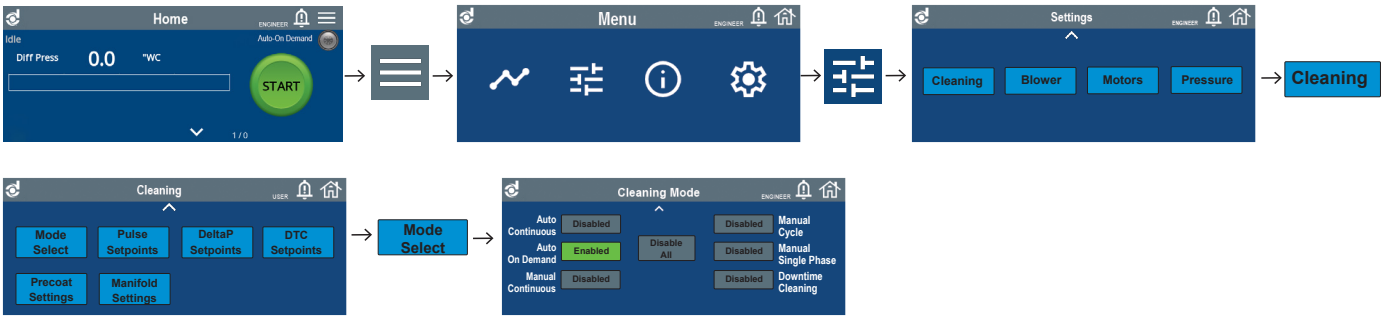
Home > Menu > Settings > Cleaning



Cleaning Mode Selection

Home > Menu > Settings > Cleaning > Mode Select > Cleaning Mode

The default cleaning mode is enabled for Auto On Demand. Select any other cleaning mode to disable Auto On Demand to switch to another cleaning mode.



Cleaning Modes	
Auto Continuous	Cleans filters continuously while the system is running
Auto On Demand	Cleans filters based on pressure operation setpoints
Manual Continuous*	User operated cleaning cycle-cleaning is continuous until turned off
Manual Cycle*	User operated cleaning cycle-cleans for set number of cycles
Manual Single Pulse*	This mode pulses through the solenoid valves
Downtime Cleaning	Cleans filters for a set number of cycles after the system has been stopped
Disable All	Turns off all the cleaning mode selections
*Only one manual mode is allowed at a time	

Combination Cleaning Modes	
Auto Continuous and Downtime Cleaning	Cleans while the system is running and for a set number of cycles upon shutdown
Auto On Demand and Downtime Cleaning	Cleans while the system is running and the pressure is within the setpoints and for a set number of cycles upon shutdown

Delta P Operational Setpoints

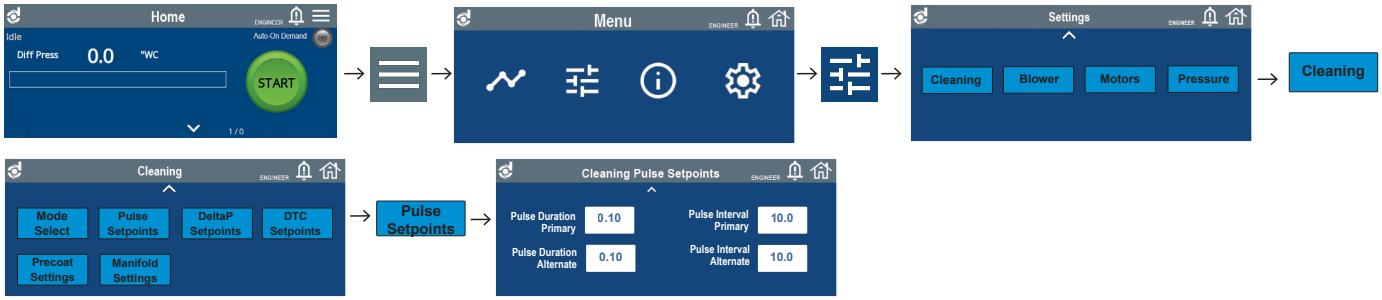
Home > Menu > Settings > Cleaning > Delta P Setpoints

Default values for Cleaning Delta P Setpoints Operation are preset to Low = 2.00 “wc and High = 4.00 “wc. These can be adjusted to the requirement of the process.

Pulse Setpoints

Home > Menu > Settings > Cleaning > Pulse Setpoints

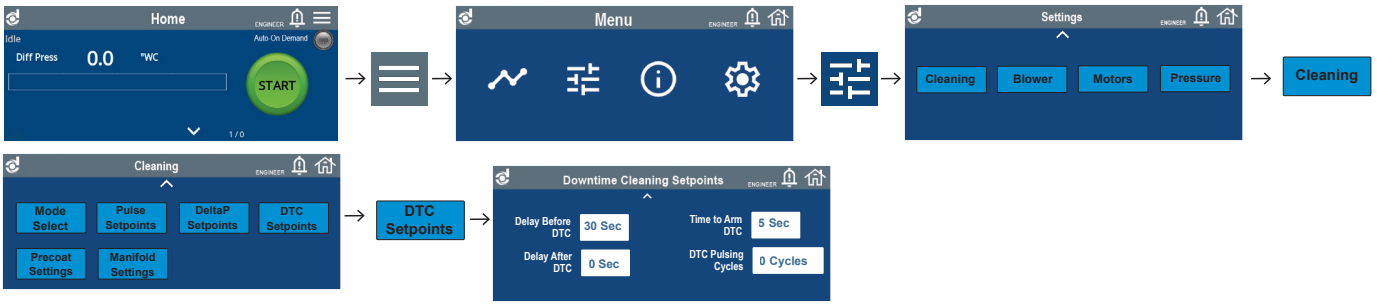
The Cleaning Pulse Setpoints are set by default and should not need to be adjusted.



Downtime Cleaning Setpoints

Home > Menu > Settings > Cleaning > Downtime Cleaning Setpoints

Downtime Cleaning Setpoints are user defined and can be adjusted.

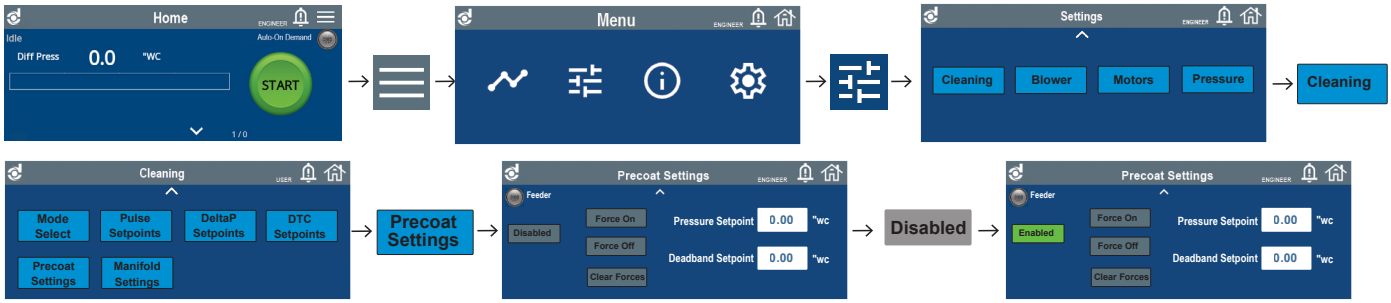


*Settings on this screen are user defined and can be adjusted

Precoat Settings

Home > Menu > Settings > Cleaning > Precoat Setting

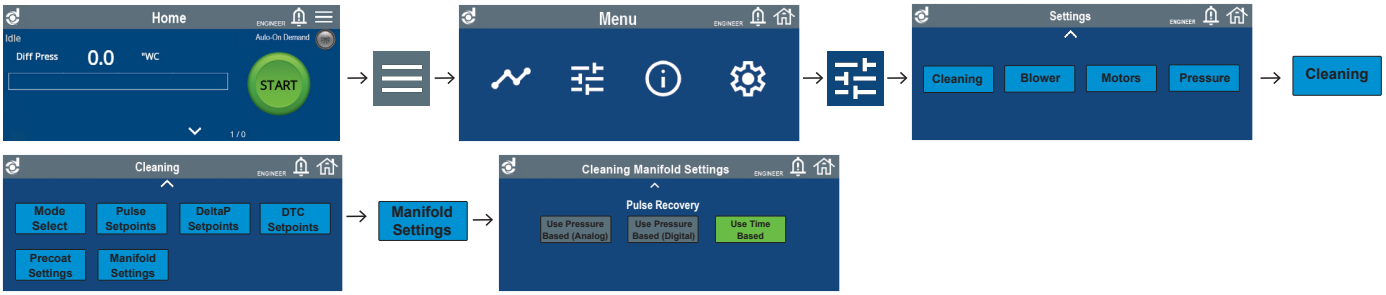
After Enabling Precoat Settings, set the Pressure Setpoint by selecting the white box and a numeric keypad will open to allow entry of the pressure setpoint according to the process being used. Selecting the Enter key will close the keypad.



Manifold Settings

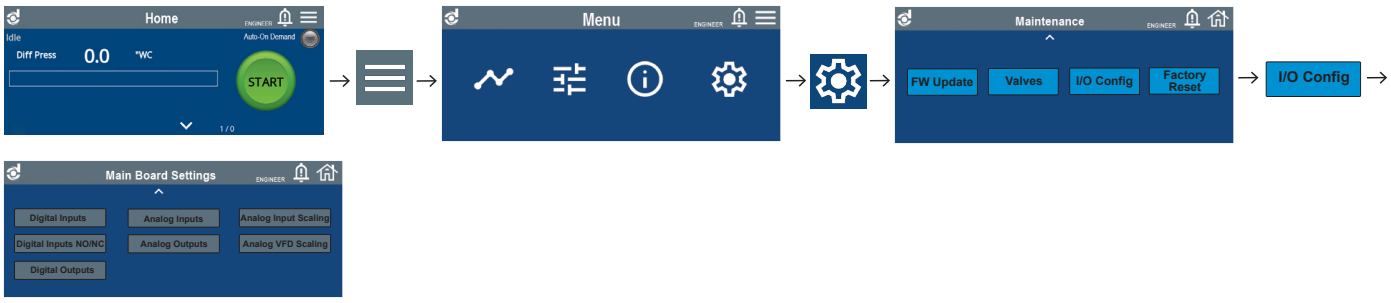
Home > Menu > Settings > Cleaning > Manifold Settings

The Cleaning Manifold Setting Pulse Recovery selection of Use Time Based is set by default. Optional cleaning modes can be found in Appendix B.



I/O Configuration Setup

Home > Menu > Maintenance > I/O Config > Main Board Settings



I/O Configuration Setup Continued

Home > Menu > Maintenance > I/O Config > Main Board Settings

Digital Input / Digital Input NO/NC Settings

Function Code	Configurable As		Notes
	NC (Normally Closed)	NO (Normally Open)	
Alarm Reset	X	X	Reset and acknowledge active alarm
Blower Motor Starter Running Feedback	X	X	Reads auxiliary contacts on the blower motor starter to confirm the contactor closed
Motor 1 Running Feedback	X	X	Reads auxiliary contacts on the ancillary motor 1 starter to confirm the contactor closed
Motor 2 Running Feedback	X	X	Reads auxiliary contacts on the ancillary motor 2 starter to confirm the contactor closed
Motor 3 Running Feedback	X	X	Reads auxiliary contacts on the ancillary motor 3 starter to confirm the contactor closed
Blower Overload Relay	X	X	Reads overload contacts on the main blower motor starter overload
Motor 1 Overload Relay	X	X	Reads overload contacts on the ancillary motor 1 overload
Motor 2 Overload Relay	X	X	Reads overload contacts on the ancillary motor 2 overload
Motor 3 Overload Relay	X	X	Reads overload contacts on the ancillary motor 3 overload
Blower VFD Faulted Feedback	X	X	Reads fault contacts on the blower VFD
Blower Zero Speed Switch	X	X	Reads contacts on the blower zero speed switch
Remote Run	X	X	When local/remote is in remote this function starts and stops the system
Manual Continuous Remote Clean	X	X	Enables/disables continuous cleaning
Manual Cycle Remote Clean	X	X	Starts a cleaning cycle that runs for a set number of cycles
Pause Cleaning	X	X	Pauses cleaning until input is released
Use Alternate Pulse Settings	X	X	Switches pulse settings to the alternate settings
*E-Stop	X		Stops all system functions immediately
*Bursting Disc	X		Stops all system functions immediately - must be used with appropriate IS barriers and equipment
Blower Soft Starter Run Feedback	X	X	Reads the run feedback contacts on the blower motor soft starter
Blower VFD Run Feedback	X	X	Reads the run feedback contacts on the blower motor VFD
Blower SD Star Run Feedback	X	X	Reads the run feedback contacts on the blower star contactor
Blower SD Main Run Feedback	X	X	Reads the run feedback contacts on the blower main contactor
Blower SD Delta Run Feedback	X	X	Reads the run feedback contacts on the blower delta contactor
Motor 1 Zero Speed Switch	X	X	Reads contacts on the motor 1 zero speed switch
Motor 2 Zero Speed Switch	X	X	Reads contacts on the motor 2 zero speed switch
Motor 3 Zero Speed Switch	X	X	Reads contacts on the motor 3 zero speed switch
Manifold Pressure Switch	X	X	Reads the contacts on a manifold pressure switch
Local Remote Selection		X	Selects local or remote mode energized is "remote".
*Alarm only			

Digital Output Settings

Digital Output 1 through Digital Output 6 are available for selection. Each digital output offers the same selections as shown below.

*Note: all digital outputs have normally open, common and normally closed contacts.

Function Code	Description
Blower Motor Starter Run	Used to signal a basic blower motor starter to start/stop
Motor 1 Run	Used to signal a basic ancillary motor starter to start/stop based on the sequence set in the controller settings
Motor 2 Run	
Motor 3 Run	
Blower MOP Increase	For use with a VFD for airflow control to increase the frequency
Blower MOP Decrease	For use with a VFD for airflow control to decrease the frequency
Active Alarm	Indicates that an alarm condition is active
Active Warning	Indicates that a warning condition is active
VFD Fault Reset	Can be used to reset a fault code on a VFD
Cleaning Active	Indicates that a cleaning cycle is currently running
High Differential Pressure Alarm	Indicates that a high filter DP alarm is active
System Fully Running	Indicates that the system has successfully started up
Pre-Coating Feeder	Used to signal an ancillary precoating feeder to start or stop
Blower Soft Starter Run	Used to signal a soft starter for the blower to start/stop
Blower VFD Run	Used to signal a VFD for the blower to start/stop
Blower SD Star Run	Used to signal the star configured motor starter to engage/disengage
Blower SD Main Run	Used to signal the main contactor for the star/delta configuration to engage/disengage
Blower SD Delta Run	Used to signal the delta configured motor starter to engage/disengage
Dwyer Timer Board	Used to signal the ancillary timer board to start/stop cleaning

Analog Input Settings

Analog Input 1 through Analog Input 4 are available for selection. Each analog inputs offers the same selections as shown below.

Analog inputs for pressure functions below can have values set as warnings (message displayed) or alarms (shutdown). By default, the warnings and alarms are disabled. To enable, the limits need to be set in the pressure menu by selecting the pressure type, scrolling to the warning or alarm page and changing the low or high limit and the delay time (buffer) to prevent false events.

Function Code	Description
VFD Output Frequency	Monitor VFD Frequency in iCue
VFD Motor Current	Monitor VFD motor current in iCue
Differential Pressure	Monitor filter differential pressure
Static Pressure	Monitor static pressure, can be used for airflow control
Manifold Pressure	Monitor manifold compressed air pressure
HEPA Filter Pressure	Monitor HEPA filter pressure

Analog Output Settings

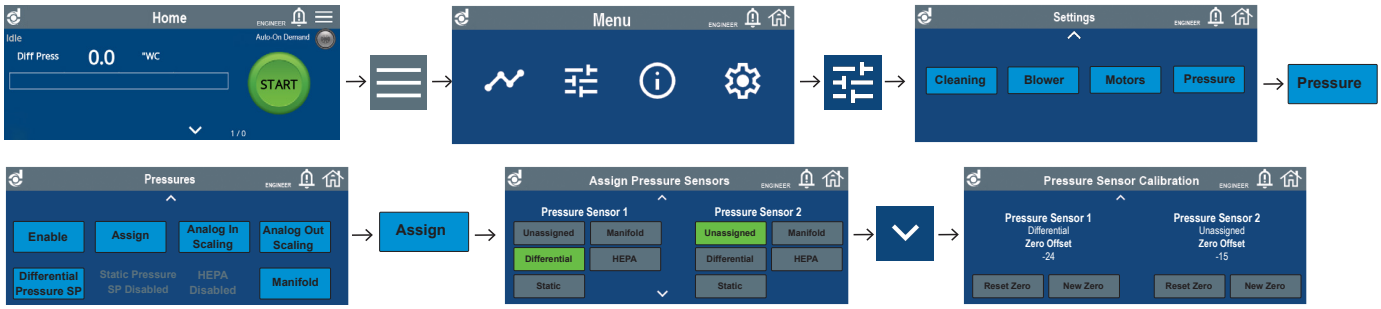
Analog Output 1 and Analog Output 2 are available for selection. Each analog output offers the same selections as shown below.

Function Code	Description
Blower VFD Speed Setpoint	This value adjusts to increase or decrease the speed of the VFD based on the static pressure setpoint
Differential Pressure	Repeats the differential pressure from the input assigned to differential pressure
Static Pressure	Repeats the static pressure from the input assigned to static pressure
Manifold Pressure	Repeats the manifold pressure from the input assigned to manifold pressure
HEPA Filter Pressure	Repeats the HEPA pressure from the input assigned to HEPA pressure

PRESSURE CONFIGURATION

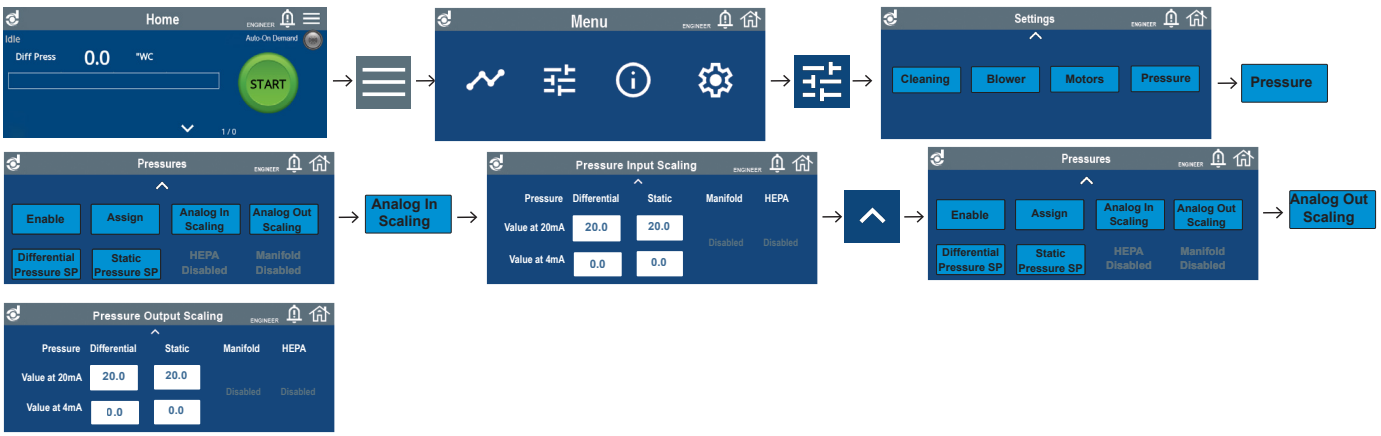
Home > Menu > Settings > Assign > Pressure Sensors

Differential Pressure and Manifold Pressure are enabled as the default on the Contura.

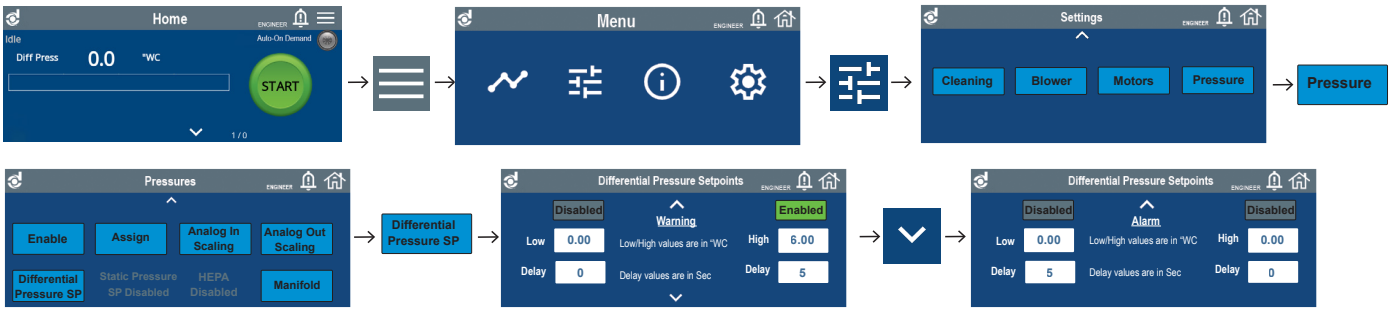


Home > Menu > Settings > Pressure > Analog In or Analog Out Scaling

Default for Analog In and Analog Out Scaling are set to work with the provided sensors. Any additional sensors may require adjustments.



Home > Menu > Settings > Pressure > Differential Pressure Setpoint



Home > Menu > Settings > Pressure > Manifold Pressure Setpoint

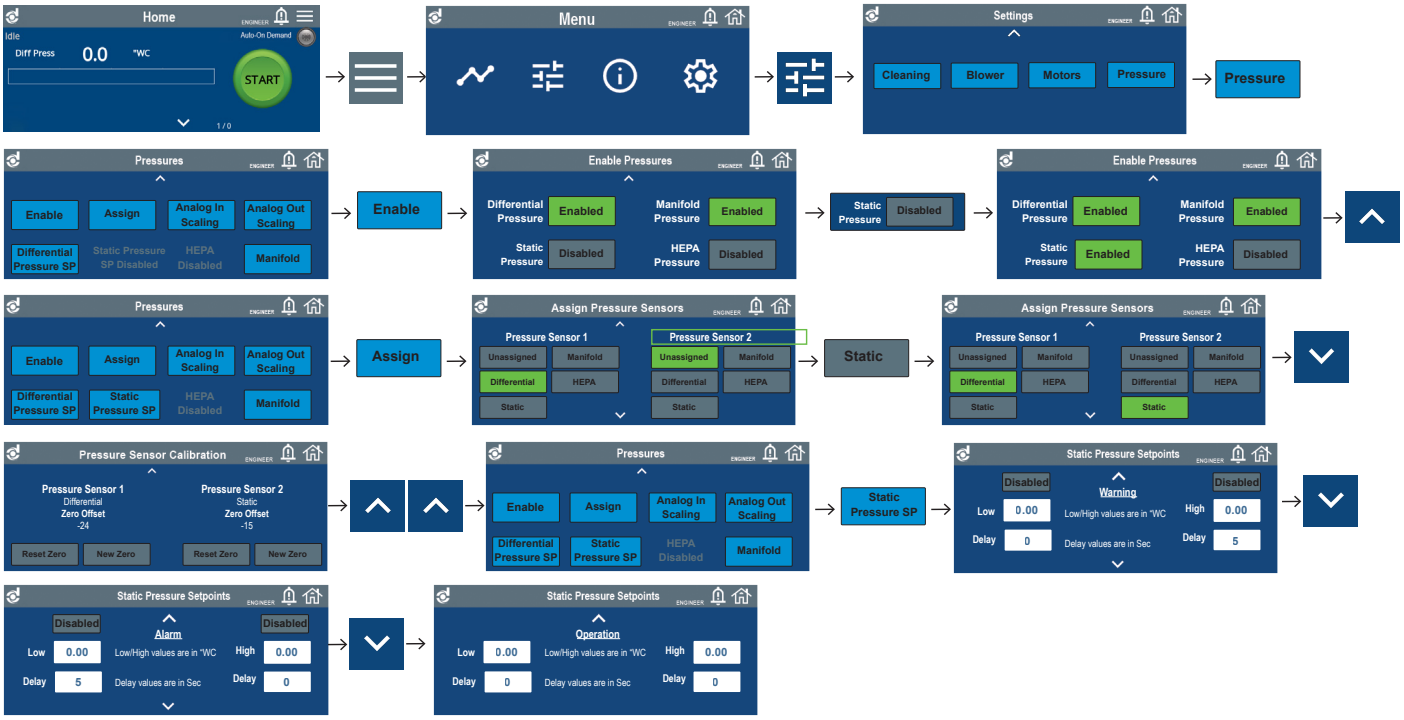
Note: Manifold pressure is read from the Analog Input 1. Wiring details can be found on the control panel drawing shipped with the control panel.

Optional - Setting Static Pressure and HEPA Pressure Sensors

Static Pressure Setpoint and HEPA Pressure Setpoint are optional and can be enabled individually along with the default settings of Differential Pressure and Manifold Pressure or all four (Differential, Manifold, Static and HEPA) can be enabled at the same time.

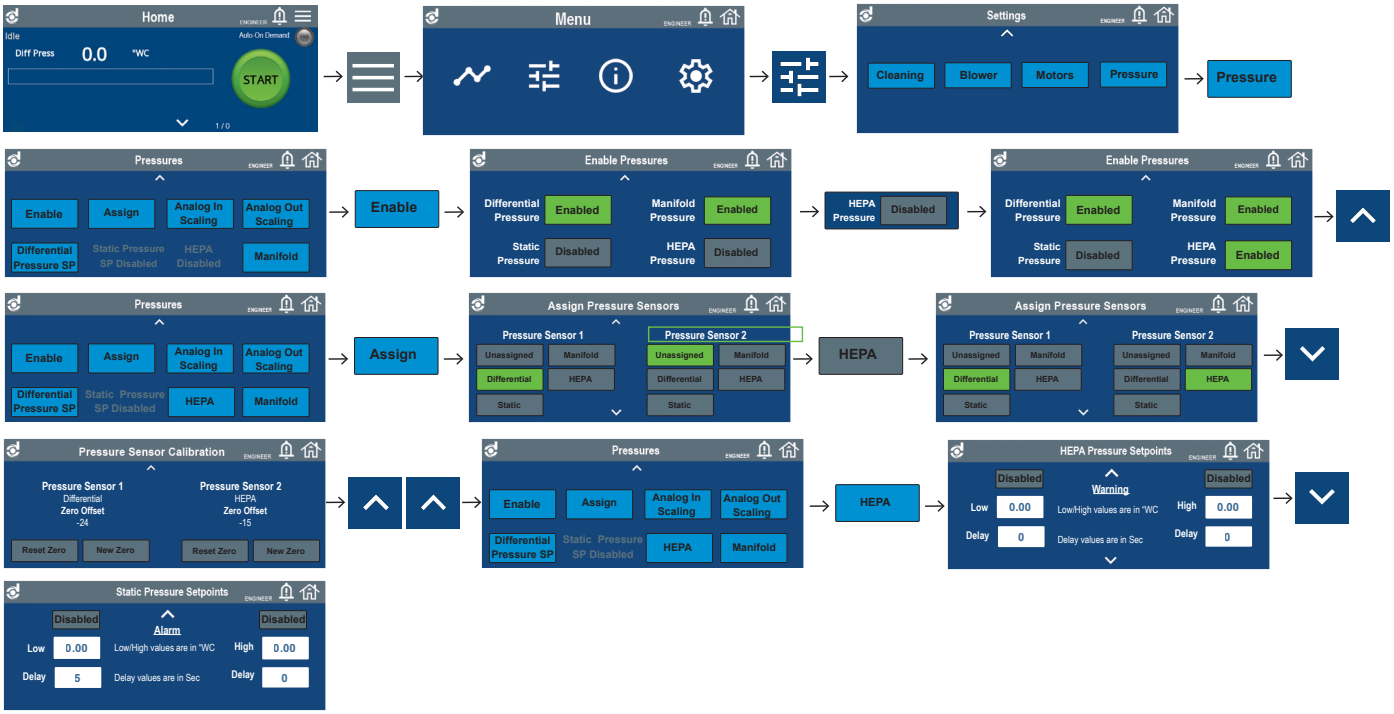
Static Pressure Setpoints for the Warning and Alarm screens are customer defined by selecting the white box and entering the customer preferred low/delay and high/delay values applicable to the application.

Home > Menu > Settings > Pressure > Enable > Static Pressure Setpoint



Operation setpoint is used when controlling airflow with a VFD and the setpont will be based on static pressure measured at commissioning

Home > Menu > Settings > Pressure > Enable > HEPA Pressure Setpoint



Troubleshooting

Problem	Probable Cause	Remedy
Motor Alarm Failed to Start	Motor starter or VFD did not signal the controller that the motor had started	Check and correct motor starter/VFD overload settings and run status (remote/local).
	Motor starter or VFD not properly configured	Check and correct signal wiring between PLC and motor starter/VFD.
	Motor under excessive load	Check and correct all power connections at the motor starter/VFD and at the motor.
	Bad communications between starter or VFD and PLC	Check for blocked or inoperable driven equipment and correct as needed. Acknowledge alarm and attempt to start the system. If the problem persists contact Donaldson Torit.
Motor Alarm Failed to Run	Motor starter or VFD started, but the motor starter/VFD fails to stay in the running state	Check and correct motor starter/VFD overload settings (remote/local).
	Motor starter or VFD not properly configured	Check and correct signal wiring between PLC and motor starter/VFD.
	Motor under excessive load	Check and correct all power connections at the motor starter/VFD and at the motor.
	Bad communications between starter or VFD and PLC	Check driven components for excess drag or lack of lubrication and correct as needed. Acknowledge alarm and attempt to start the system. If the problem persists contact Donaldson Torit.
Motor Alarm Failed to Stop	Motor has been requested to stop but continues running after the configured STOP time has elapsed	Check and correct signal wiring between PLC and motor starter/VFD. Acknowledge alarm and attempt to start the system. If the problem persists contact Donaldson Torit.
PLC/HMI Specific Alarms	Communication issues between HMI and PLC	Contact Donaldson Torit.
High Differential Pressure	Clogged pressure line	Check all pressure lines for blockage between controller and collector.
	Improper setting for High Pressure Alarm	Only blow into lines toward the collector (excess pressure will damage sensors, check for other devices connected to pressure lines before blowing out the blockage).
	Cleaning disabled	Check setting for High Differential Pressure alarm and review for suitability in the application (permitting may require a certain value to be used).
	Cleaning system not functioning correctly	Check cleaning status and adjust as needed (some applications only use downtime cleaning).
	Filters have reached end of life	Verify operation of cleaning system components and status of the air supply for pulse cleaning. Remove and replace using genuine Donaldson replacement filters as needed or required by site defined process.

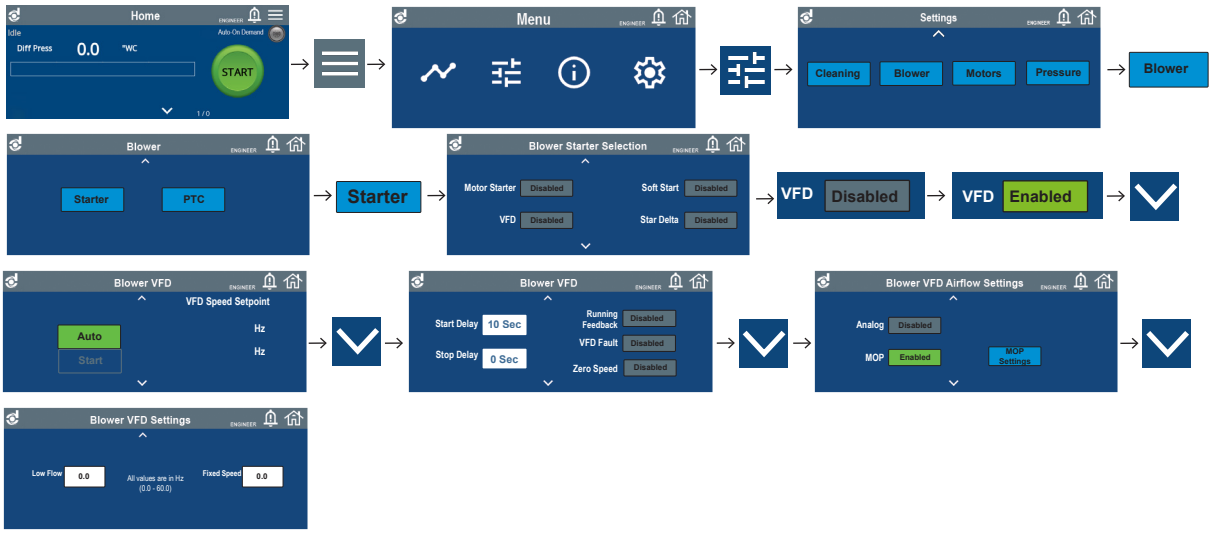
Troubleshooting

Problem	Probable Cause	Remedy
Low Differential Pressure	Clogged pressure line	Check all pressure lines for blockage between controller and collector.
	Improper setting for Low Pressure Alarm	Only blow into lines toward the collector (excess pressure will damage sensors, check for other devices connected to pressure lines before blowing out the blockage).
	Filter bypass	Check setting for Low Differential Pressure alarm and review for suitability in the application (permitting may require a certain value to be used). Check for filter bypass and diagnose the cause if bypass is found.
Differential Pressure Under Range	Clogged pressure line	Check all pressure lines for blockage between controller and collector.
	Poor connection to pressure sensors	Only blow into lines toward the collector (excess pressure will damage sensors, check for other devices connected to pressure lines before blowing out the blockage). Check connection between pressure sensors and PLC.

Appendix B - Advanced Setup Options

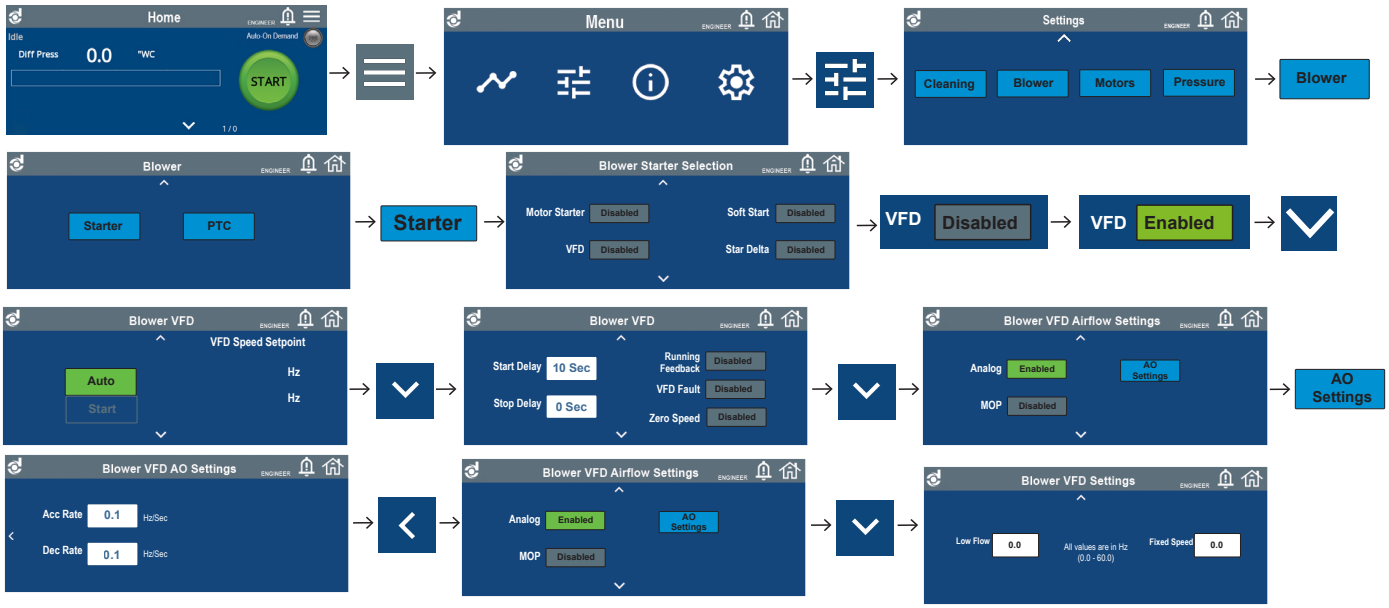
Blower VFD Settings - Digital

Home > Menu > Settings > Blower > Starter > Blower Starter Selection > Blower VFD > Blower VFD Airflow Settings > Blower VFD Settings Motor Operated Potentiometer (MOP)



Blower VFD Settings - Analog

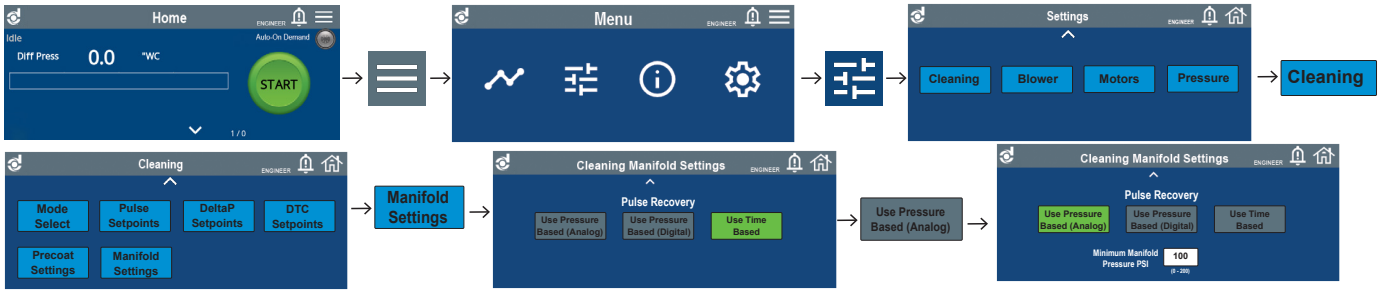
Home > Menu > Settings > Blower > Starter > VFD > Blower VFD Airflow Settings



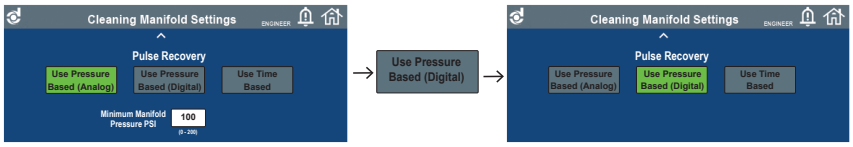
Optional Cleaning Mode Manifold Pressure Based

Home > Menu > Settings > Cleaning > Cleaning Manifold Settings

Two additional cleaning modes are available for Pressure Based Cleaning.



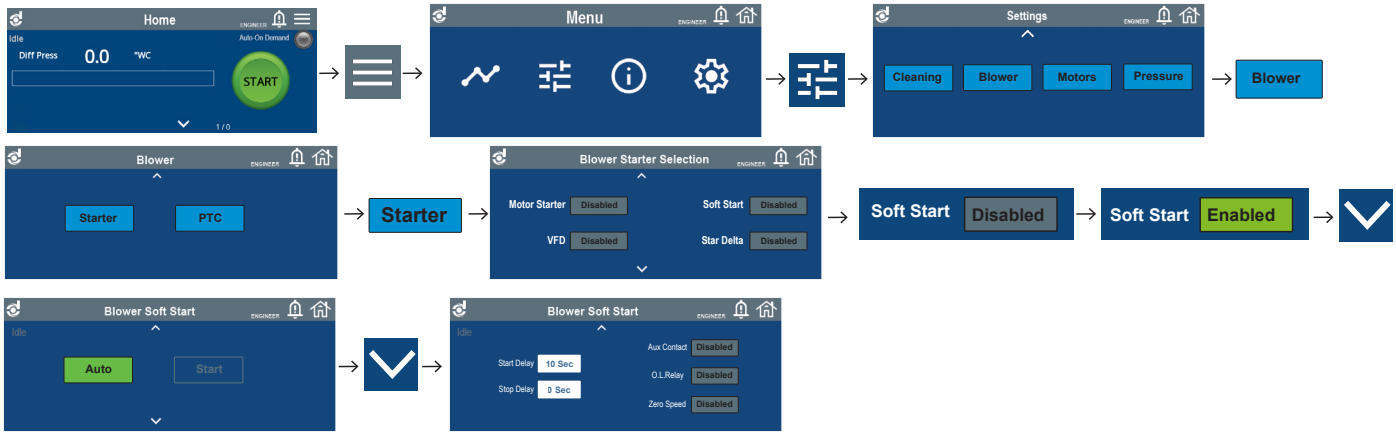
Selecting Use Pressure Based (Digital), from this screen will switch the setting.



Optional Motor Controls

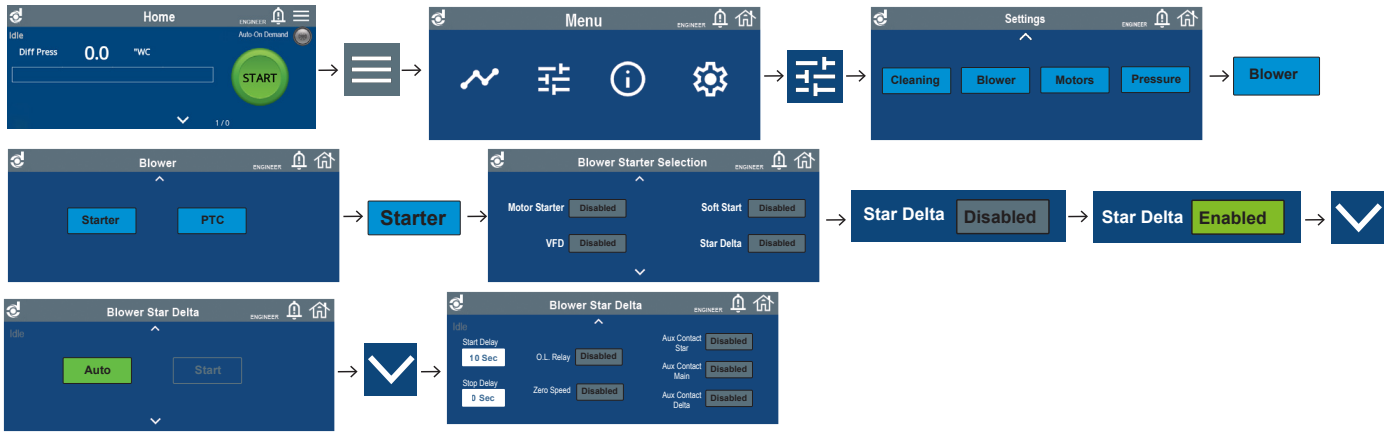
Soft Start

Home > Menu > Settings > Blower > Starter > Soft Start



Star Delta

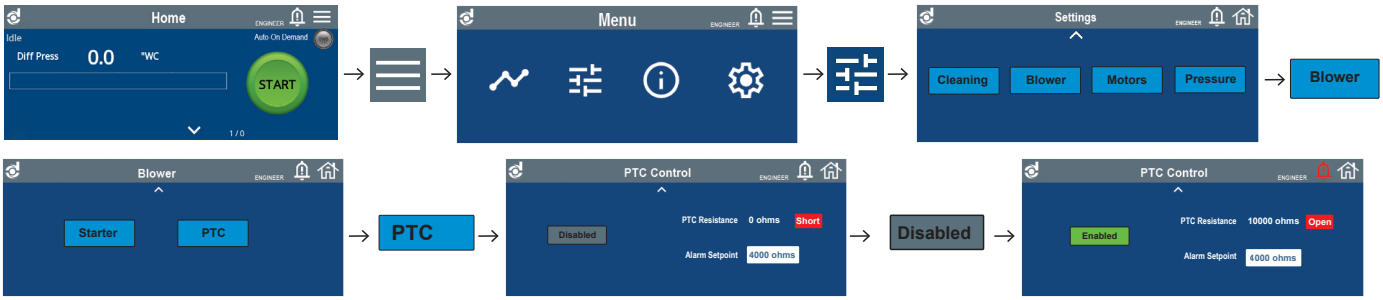
Home > Menu > Settings > Blower > Starter > Star Delta



Positive Temperature Coefficient (PTC)

The PTC function is used with an internal thermistor provided with motor to monitor internal motor temperature. When PTC is enabled, the PTC Resistance will change from Short to Open and the Alarm Setpoint can be adjusted. Deselecting the Enabled button will return to the Disabled mode. PTC alarm setpoint can be obtained from motor manufacturer.

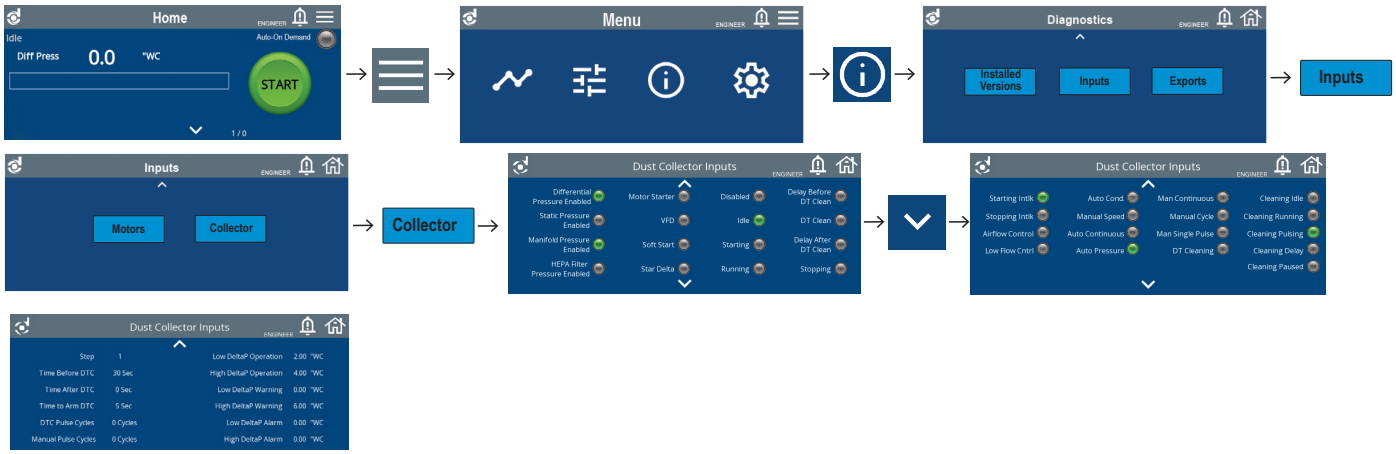
Home > Menu > Settings > Blower > PTC > PTC Control



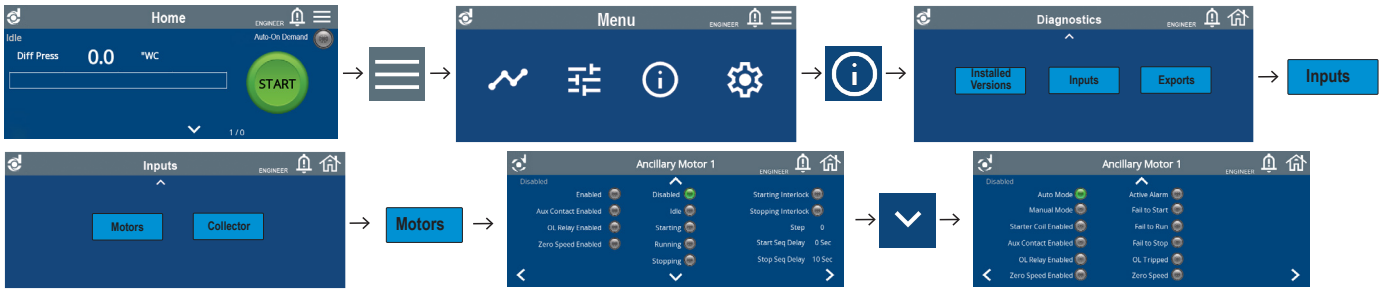
DIAGNOSTICS

The Contura offers diagnostic tools to view all controller settings i.e. pressure readings, motor and collector input LEDs, trend graphs and alarms.

Home > Menu > Diagnostics > Inputs > Collector



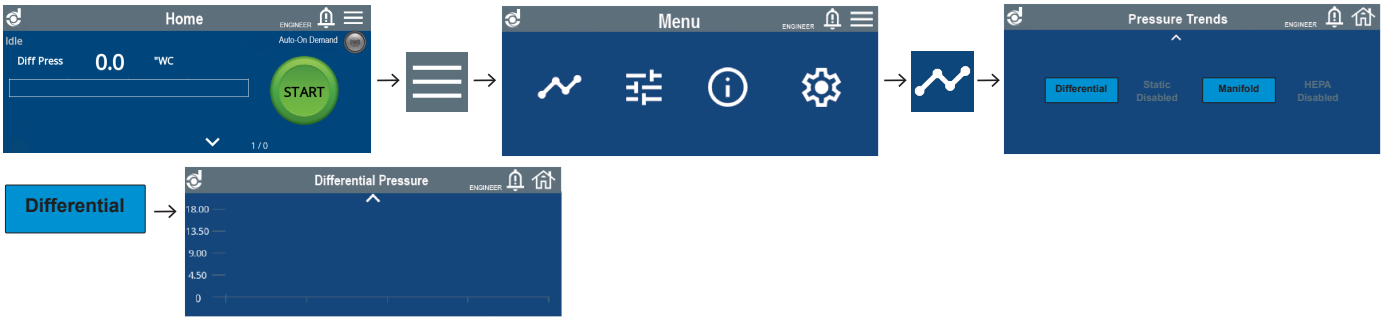
Home > Menu > Diagnostics > Inputs > Motors



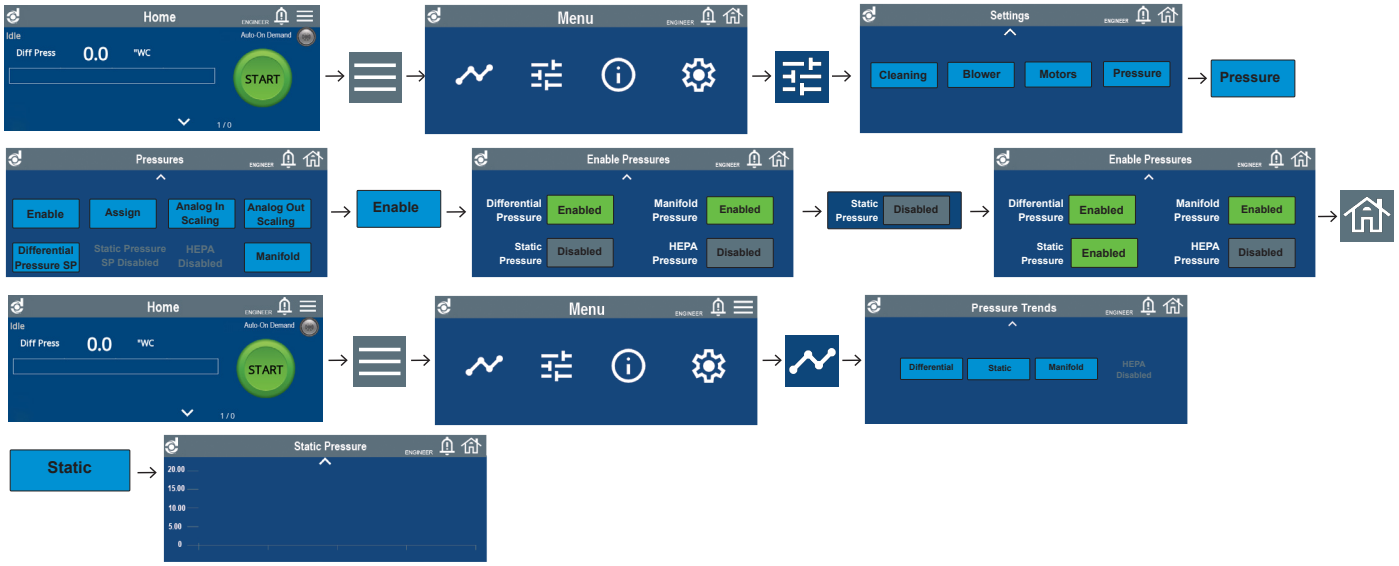
Trend Graphs

To access the trend graphs, Differential, Static, Manifold or HEPA pressure must first be enabled through the settings. Return to Home and select Pressure Trends to generate the specific graphs following the illustrations below.

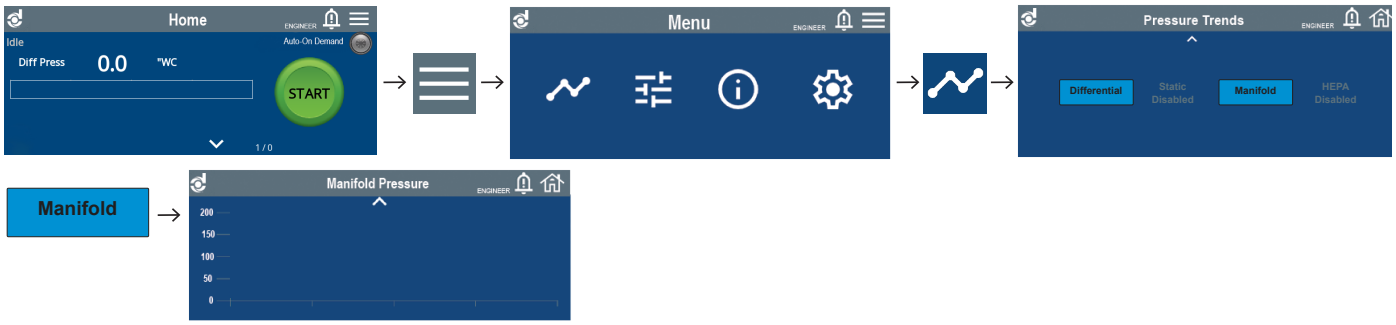
Differential Pressure Graph:



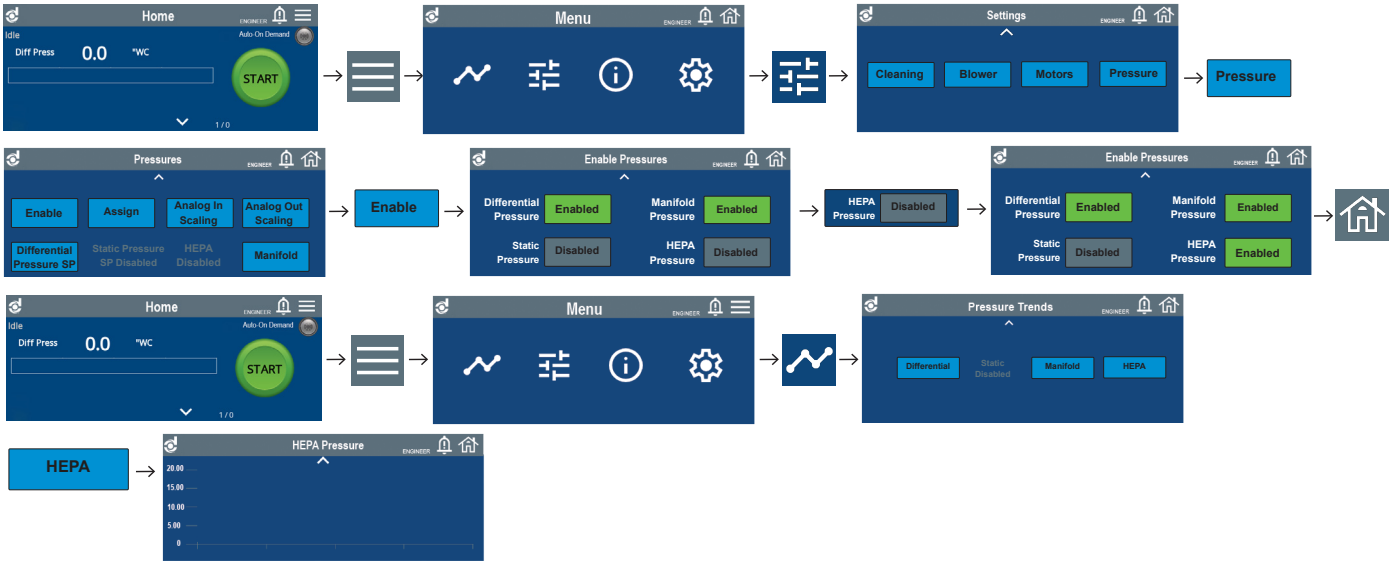
Static Pressure Graph:



Manifold Pressure Graph:



HEPA Pressure Graph:



MAINTENANCE

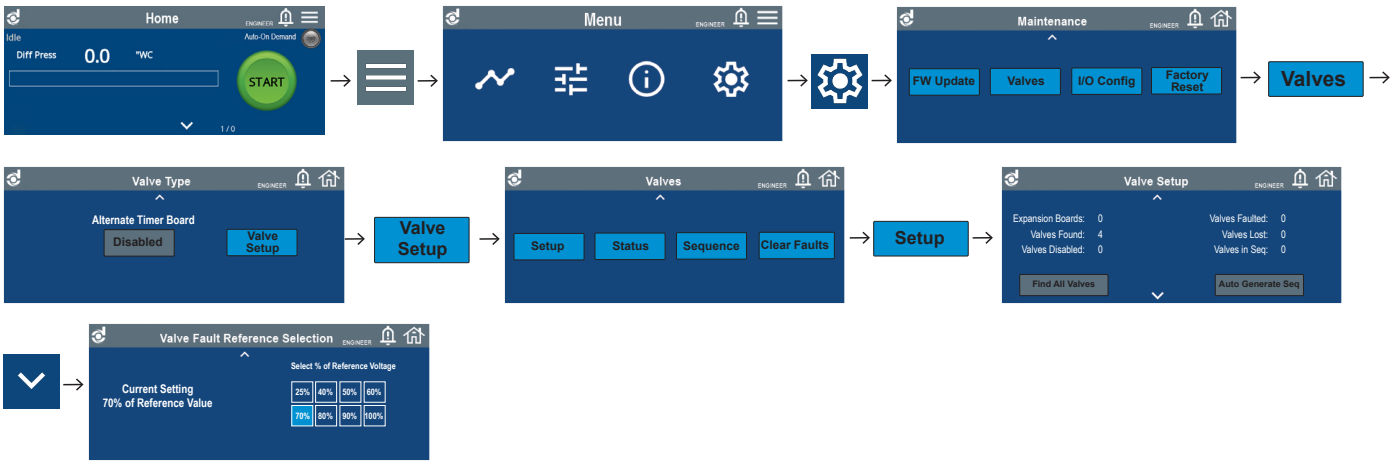
NOTICE

Modifications to pulse cleaning valve setup can affect the performance of the dust collector.

Do not change settings if not familiar with the pulsing sequence on the collector. Damage to the equipment can result from the changes.

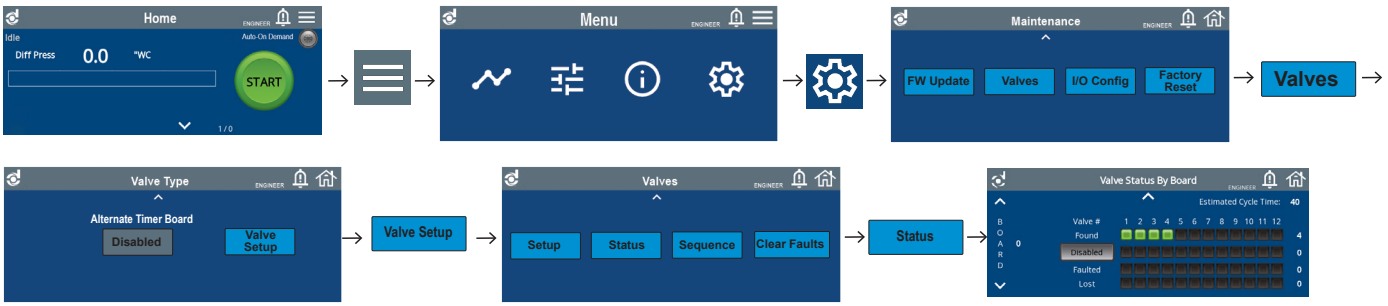
Valve Setup

Home > Menu > Maintenance > Valves > Valve Setup



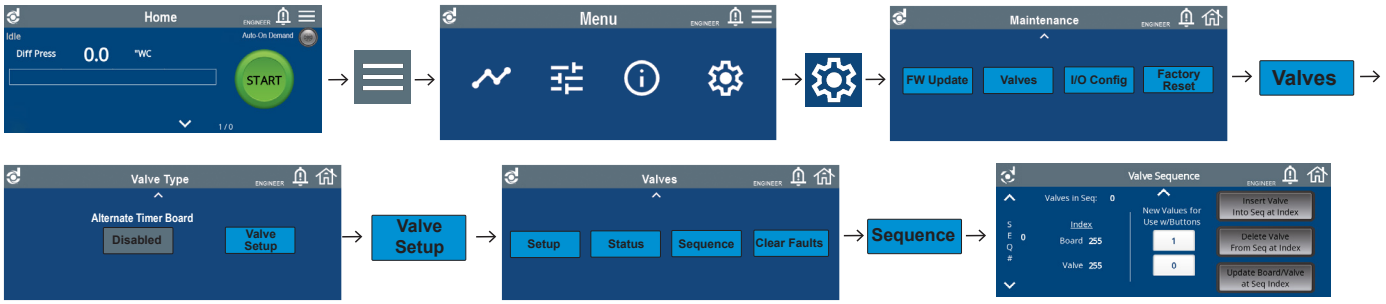
Valve Status

Home > Menu > Maintenance > Valves > Status



Valve Sequence

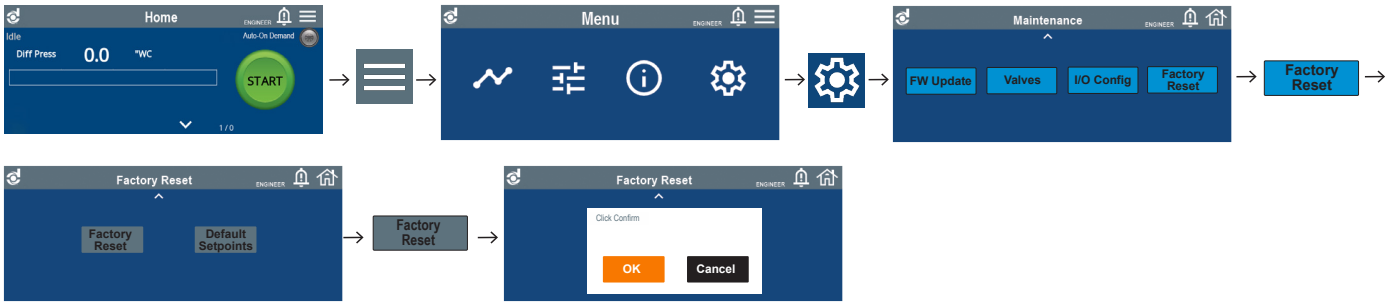
Home > Menu > Maintenance > Valves > Sequence



Factory Reset

Select Factory Reset if Motor Starters need to be reset. If nothing is selected within the time allotted and confirm is not selected, factory reset has not been activated. Selecting OK will reset the Contura to original Factory Settings.

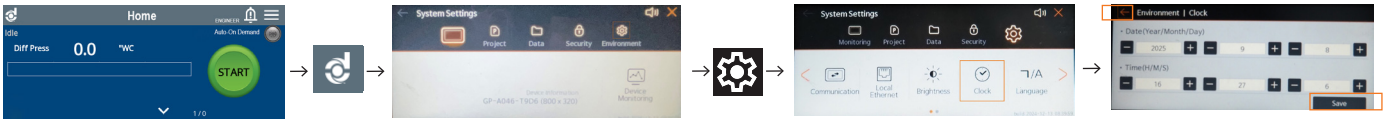
Home > Menu > Maintenance > Factory Reset



HMI SYSTEM SETTINGS

System settings can be adjusted to customer specifications to set the clock/date for the current location of the control panel, adjust the brightness of the screen and turn on or turn off the sound on the Contura Control Panel.

Clock Settings:



Screen Brightness:

Sound:

Product Information

(Process Owner to complete and retain for your records)

Model Number _____ Serial Number _____

Ship Date _____ Installation Date _____

Filter Type_____

Collected Dust _____

Dust Properties: Kst _____Pmax_____ MIE _____MEC _____

Accessories _____

Other _____

_____

Service Notes

Date	Service Performed	Notes

Donaldson Industrial Air Filtration Warranty

Donaldson warrants to the original purchaser only that the Goods will be free from defects in material and manufacture for the applicable time periods stated below: (1) Major structural components for a period of ten (10) years from the date of shipment; (2) Non-Structural, Donaldson-built components and accessories including Donaldson Airlocks, TBI Fans, TRB Fans, Fume Collector products, Donaldson built electrical control components, and Donaldson-built Afterfilter housings for a period of twelve (12) months from date of shipment; and (3) Donaldson-built filter elements for a period of eighteen (18) months from date of shipment.

Buyer is solely responsible for determining if goods fit Buyer's particular purpose and are suitable for Buyer's process and application. Seller's statements, engineering and technical information, and recommendations are provided for the Buyer's convenience and the accuracy or completeness thereof is not warranted. If, after Seller receives written notice, within the warranty period, that any goods allegedly do not meet Seller's warranty, and Seller, in its sole discretion, determines that such claim is valid, Seller's sole obligation and Buyer's exclusive remedy for breach of the foregoing warranty or any Seller published warranty, will be, at Seller's option, either: (i) repair or replacement of such goods or (ii) credit or refund to Buyer for the purchase price from Seller. In the case of repair or replacement, Seller will be responsible for the cost of shipping the parts but not for labor to remove, repair, replace or reinstall the allegedly defective goods. Refurbished goods may be used to repair or replace the goods and the warranty on such repaired or replaced goods shall be the balance of the warranty remaining on the goods which were repaired or replaced. Any repair or rework made by anyone other than Seller is not permitted without prior written authorization by Seller, and voids the warranty set forth herein. Seller warrants to Buyer that it will perform services in accordance with the Sales Documents using personnel of required skill, experience and qualifications and in a professional and workmanlike manner in accordance with generally recognized industry standards for similar services. With respect to any services subject to a claim under the warranty set forth above, Seller shall, in its sole discretion, (i) repair or re-perform the applicable services or (ii) credit or refund the price of such services at the pro rata contract rate and such shall be Seller's sole obligation and the exclusive remedy for breach of the foregoing warranty on services. Products manufactured by a third party ("Third Party Product") may constitute, contain, be contained in, incorporated into, attached to or packaged together with, the goods. Buyer agrees that: (a) Third Party Products are excluded from Seller's warranty in this Section 7 and carry only the warranty extended by the original manufacturer, and (b) Seller's liability in all cases is limited to goods of Seller's design and manufacture only. EXCEPT FOR SELLER'S WARRANTY OF TITLE TO THE GOODS, SELLER EXPRESSLY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES WHATSOEVER, WHETHER, EXPRESSED OR IMPLIED, ORAL, STATUTORY, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY AND ANY WARRANTIES ARISING FROM TECHNICAL ADVICE OR RECOMMENDATIONS, COURSE OF DEALING OR OF PERFORMANCE, CUSTOM OR USAGE OF TRADE. Seller's obligations do not cover normal wear and tear or deterioration, defects in or damage to any goods resulting from improper installation, accident or any utilization, maintenance, repair or modification of the goods, or any use that is inconsistent with Seller's instructions as to the storage, installation, commissioning or use of the goods or the designed capabilities of the goods or that, in its sole judgment, the performance or reliability thereof is adversely affected thereby, or which is subjected to abuse, mishandling, misuse or neglect or any damage caused by connections, interfacing or use in unforeseen or unintended environments or any other cause not the sole fault of Seller, and shall be at Buyer's expense. Seller's warranty is contingent upon the accuracy of all information provided by Buyer. Any changes to or inaccuracies in any information or data provided by Buyer voids this warranty. Seller does not warrant that the operation of the goods will be uninterrupted or error-free, that the functions of the goods will meet Buyer's or its customer's requirements unless specifically agreed to, or that the goods will operate in combination with other products selected by Buyer or Buyer's customer for its use.

The terms of this warranty may only be modified by a special warranty document signed by a Director, General Manager or Vice President of Donaldson. To ensure proper operational performance of your equipment, use only genuine Donaldson replacement parts.

This Product is provided subject to and conditioned upon Donaldson's Terms of Sale ("Terms"), a current copy of which is located at termsofsale.donaldson.com. These Terms are incorporated herein by reference. By purchasing or using this Product, the user accepts these Terms. The Terms are available on our website or by calling our customer service line at 1-800-365-1331.

Donaldson Company, Inc.
Minneapolis, MN

donaldson.com • shop.donaldson.com

North America
Email: donaldsontorit@donaldson.com
Phone: (USA): +1-800-365-1331 • (MX): +1-800-343-3639

Latinoamerica
Phone: +52-449-300-2442
Email: industrialair@donaldson.com
Toll Free: (CO) (57) 601-580-1611
(CL) +800-914-544 • (PE) +800-712-10
(BR) +55 (11) 99707-6689

China
Email: info.cn@donaldson.com
Phone: +86-400-921-7956

Donaldson Europe B.V.
Email: IAF-europe@donaldson.com
Phone: +32-16-38-3811

India
Email: info.difs@donaldson.com
Phone: +91-124-4807-400 • +18001035018

Australasia
Email: marketing.australia@donaldson.com
Phone: +61-02-4350-2066
Toll Free: (AU) +1800-345-837 • (NZ) +0800-743-387

Korea
Email: contactus.kr@donaldson.com
Phone: +82-2-517-3333

South Africa
Email: SAMarketing@donaldson.com
Phone: +27-11-997-6000

Southeast Asia
Email: IAF.SEA@donaldson.com
Phone: +65-6311-7373

Japan
Email: jp-ndl.ifsweb@donaldson.com
Phone: +81-42-540-4114

IOM AG8869001 ENG, Revision 0 (September 2025)