


FD Series User Manual

FD-HP Series



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FD-HP User Manual Version 2.2

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Benefits of a Nyle Systems FD-HP Series



Cost Effective

Our dryers cost significantly less than our competitors. This allows you to dry more for less!



User Friendly

All of our units come with intuitive touch screen controls and a flexible user interface.



Higher Quality Output

Our systems are capable of drying at lower temperatures, resulting in higher quality product.



Energy Efficient

Our systems utilize heat pumps, using up to 60% less energy than conventional drying.



Easy Installation

Installation process is simple and does not require ductwork or gas lines to be installed in your facility.



Tech Support

You get the straight answers you need from the professionals that design and build your systems.

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Introduction

General Information

Nyle Systems food dehydrators offer commercial users an energy efficient and controllable means of dehydrating food products in a temperature range of 80° to 160°F. Nyle food dehydrators work by gathering energy from moisture-laden air and through a refrigeration cycle, depositing the extracted energy back into the circulating air to maintain the desired drying temperature. Through this cycle, water is removed from the product.

The Nyle Systems FD-HP Series food dehydrators consists of a dehumidification unit and airflow control components positioned within a pre-fabricated insulated drying chamber. This unit is built specifically for use in small to medium sized commercial batch dehydrating applications where temperature and humidity during the drying process may be closely monitored and controlled.

About the Nyle Systems FD-HP Series

The Nyle Systems FD-HP Series is rated to remove 145 - 675 pounds of water per hour at air conditions of approximately 115°F dry bulb temperature and 70% relative humidity. Actual water removal rates will depend largely on the ability of the food product to release moisture at the desired drying temperature. Nyle Systems encourages experimentation within the confines of the dehydrator operating characteristics to achieve the desired drying cycle time.

Safety Information

Installation and servicing of heat pump equipment can be hazardous due to system pressure and electrical components. Please note that only trained and qualified service personnel should perform installation, repairs, or service on Nyle Systems food dehydrators. When performing installation, repair, or service on the unit, observe precautions in the manual, tags, and labels attached to the unit. Follow all other safety precautions that may apply.

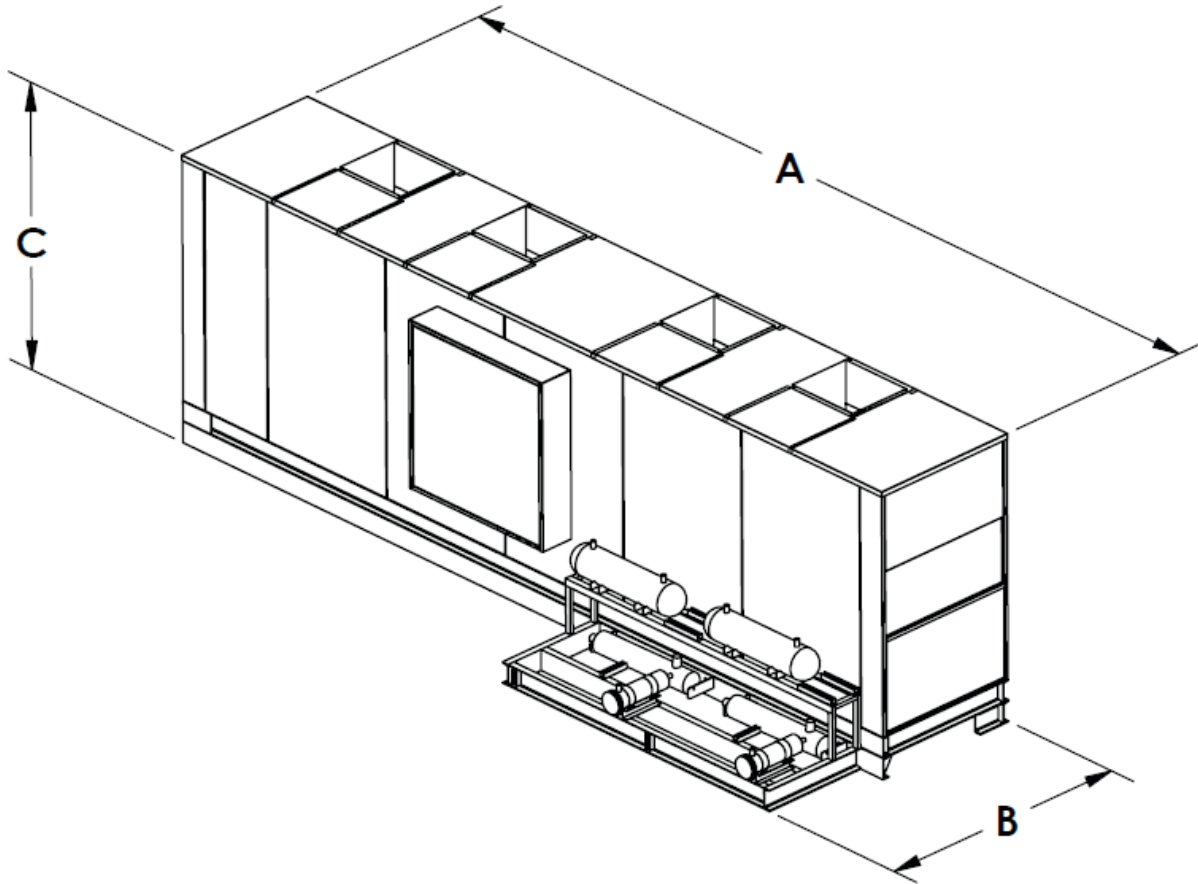
Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock or other hazardous conditions which may cause personal injury or property damage. Always consult a qualified installer, service agency, or your distributor for information or assistance.

- Do not stand or sit on the unit.
- Disconnect all power before removing the control panel.
- There is no need to remove the control panel unless there is a malfunction internally. Only a licensed technician is to remove the control panel.
- Disconnect all power before installing or servicing the Nyle Systems FD unit.
- Ensure the power receptacle is rated for the appropriate load.
- Ensure that the electrical supply has proper over-load fuse or breaker protection rated for at least the appropriate amperage.
- Moving or lifting of Nyle Systems FD unit components should be done with team lifting or appropriate equipment to prevent back injuries or damage to components. Never lift or move the unit alone.

Follow all safety codes. Wear safety glasses and work gloves. Read these instructions thoroughly and follow all warnings or cautions attached to the unit. Consult local building codes and the National Electrical Code (NEC) for special installation requirements.

Model Information

Physical Dimensions

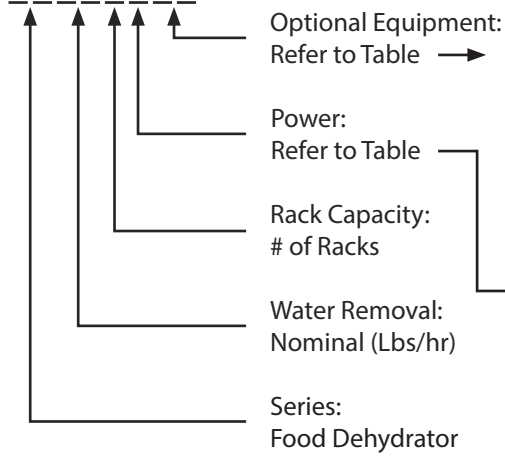


Unit	Rack Capacity (# of Racks)	A (in)	B (in)	C (in)
FD-HP 145	24	102	76	78
FD-HP 175	24	102	76	78
FD-HP 225	24	130	76	78
FD-HP 290	24	192	76	78
FD-HP 350	30	216	76	78
FD-HP 450	30	252	76	82
FD-HP 525	36	324	76	82
FD-HP 675	36	372	76	82

Nomenclature

Model Number System

FDHP



Option	Notes	Designation
Venting	Alternative to external condensor	V
Floor	Adds 4" to dimension C	F

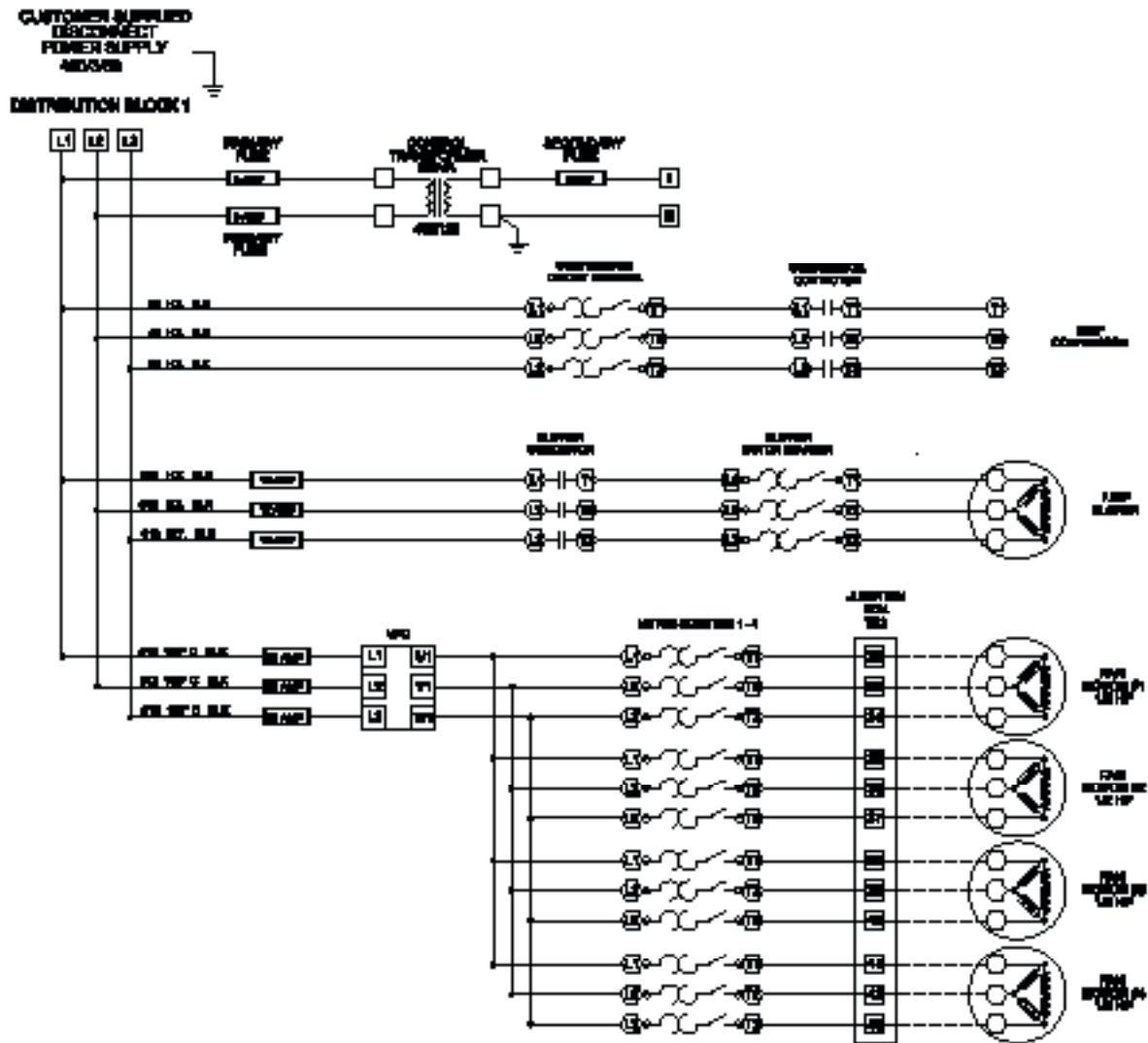
Voltage (V)	Phase (Φ)	Frequency (Hz)	Designation
230	3	60	A
480	3	60	C

Technical Specifications

Model	FD Series
Compressor Type	Semi Hermetic
Refrigerant	R-416a

Model	Water Removal (lb/hr)	Temperature (F)	Rack Capacity (# of Racks)	Auxiliary Watts (KW)	Nominal HP	Shipping Weight
FD-HP 145	145	80 - 160	24	96	25	4,000
FD-HP 175	175	80 - 160	24	96	30	5,500
FD-HP 225	225	80 - 160	24	96	40	6,500
FD-HP 290	290	80 - 160	24	96 - 192	50	9,000
FD-HP 350	350	80 - 160	30	96 - 192	60	11,000
FD-HP 450	450	80 - 160	30	96 - 192	80	13,000
FD-HP 525	525	80 - 160	36	144 - 288	90	16,500
FD-HP 675	675	80 - 160	36	144 - 288	120	19,500

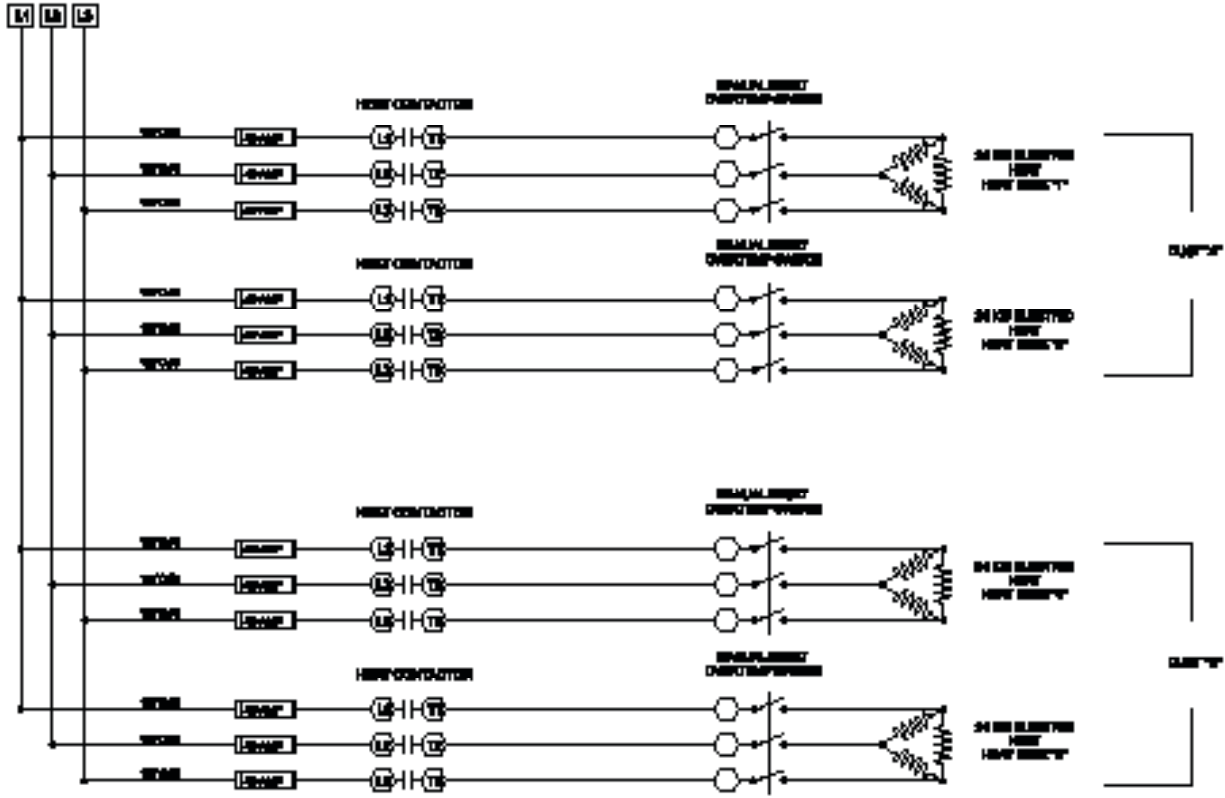
Power Wiring 1



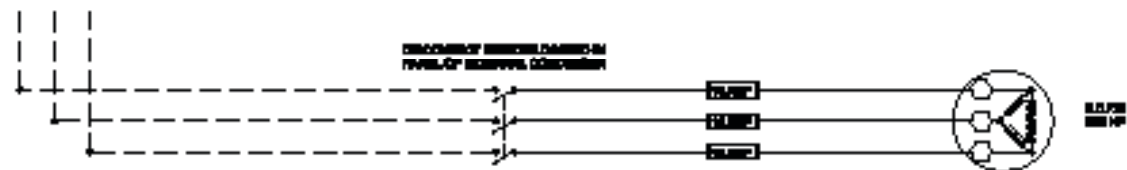
	POWER WIRING 1-1	
	FD-178	
<small>© 2011 ny/e systems All rights reserved. No part of this document may be reproduced without the express written permission of ny/e systems.</small>	<small>DATE</small> <small>BY</small>	<small>DATE</small> <small>BY</small>
<small>DATE</small> <small>BY</small>	<small>DATE</small> <small>BY</small>	<small>DATE</small> <small>BY</small>

Power Wiring 2

CUSTOMER SUPPLIED
 480VAC 3PH 3W
 POWER SUPPLY
 4000VA
 DISTRIBUTION BLOCKS

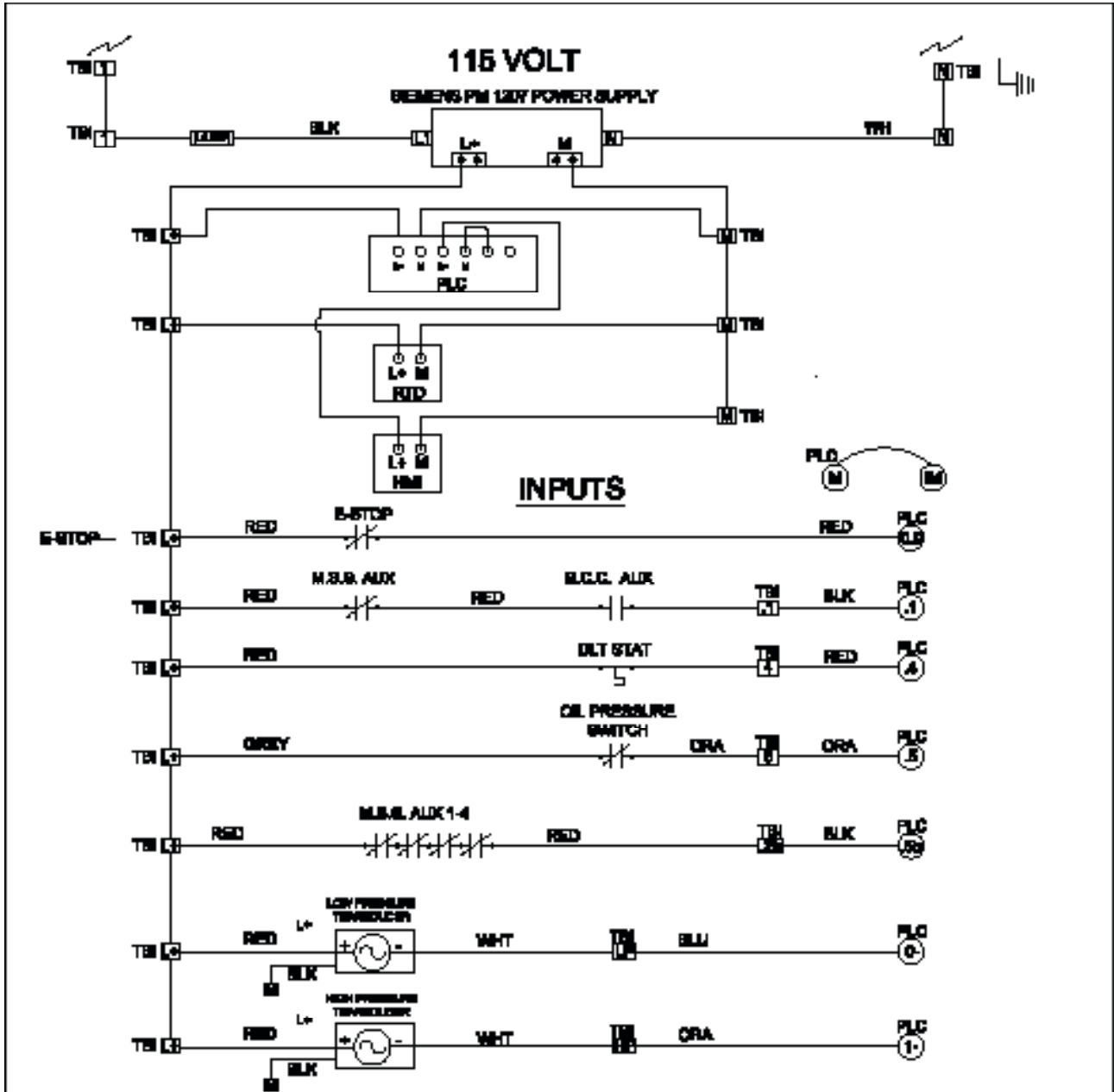


CUSTOMER SUPPLIED
 200/0/0




	POWER WIRING 1-2	
	FD175	
REVISED 1/8	DATE FOR PRICE 1/1/2018	UNIT 10 SET
1/1/2018	PRICE N/A	10 SET

Control Wiring 1

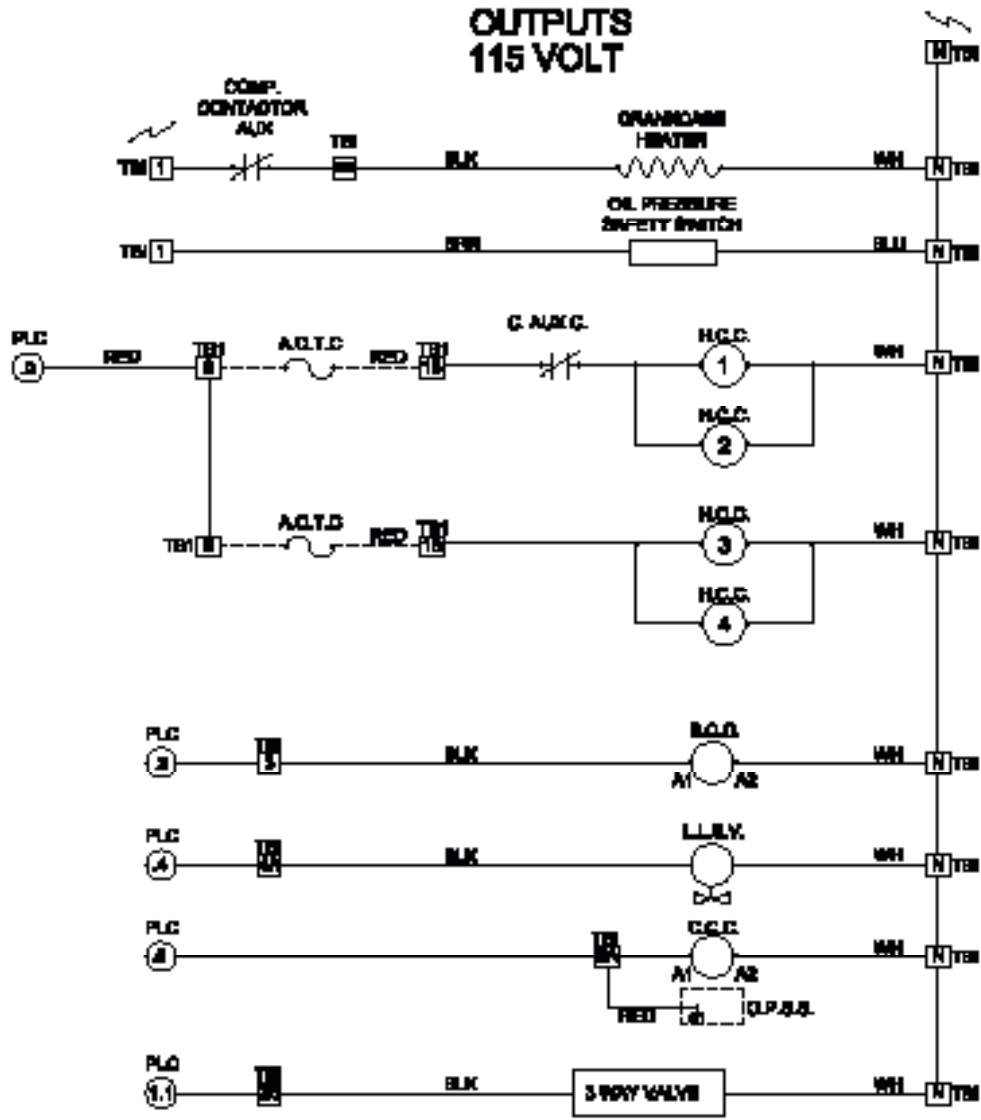


LEGEND:

- TB- TERMINAL BLOCK #1
- LPS- LOW PRESSURE SWITCH
- HPS- HIGH PRESSURE SWITCH
- OPS- OIL PRESSURE SWITCH
- MS- MOTOR STARTER
- C.C.HTR- CRANKCASE HEATER
- BOO-BLOWER CONTACT COIL
- LSLV- LIQUID LINE SOLENOID VALVE
- CCC- COMPRESSOR CONTACTOR COIL
- C.AUX C- COMPRESSOR AUX CONTACTS
- COI- COMPRESSOR OVERLOAD
- VM- VENT MOTOR
- SSO- SPRAY SYSTEM COIL
- HCC- HEAT CONTACTOR COIL
- RCO- RAN CONTACTOR COIL
- COU- COMPRESSOR UNLOADING COIL
- VCC- VENT CONTACTOR COIL
- AUTO- AUTO OVER TEMP CONTACTS
- MOTO- MANUAL OVER TEMP CONTACTS
- CAG- COMPRESSOR AUX SWITCH
- IC- INTERNAL CONDENSER

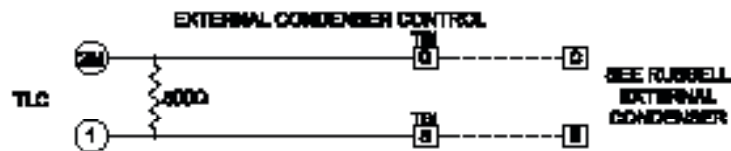
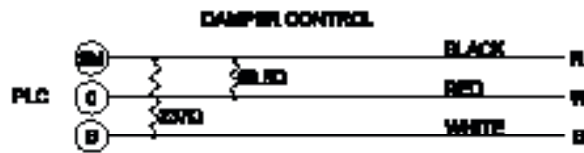
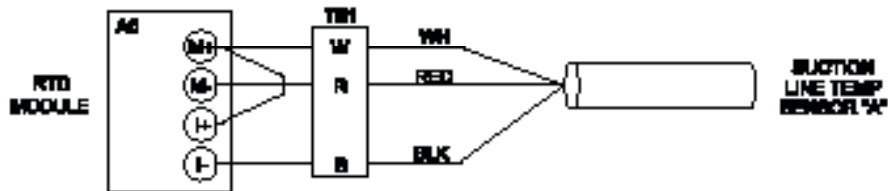
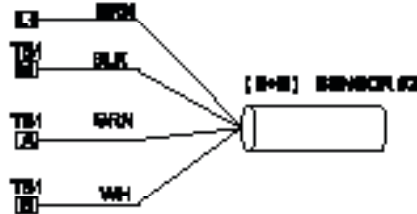
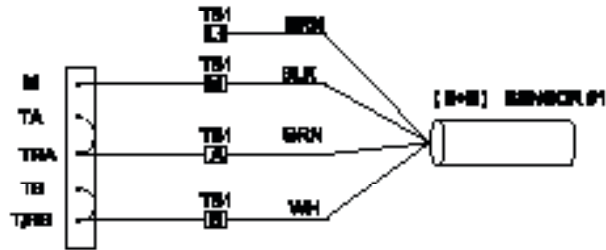
	CONTROL WIRING 1-1	
	FD176	
DRAWN BY J.S. CHECKED BY	REVISED BY DATE REVISION MADE NONE	BY DATE

Control Wiring 2



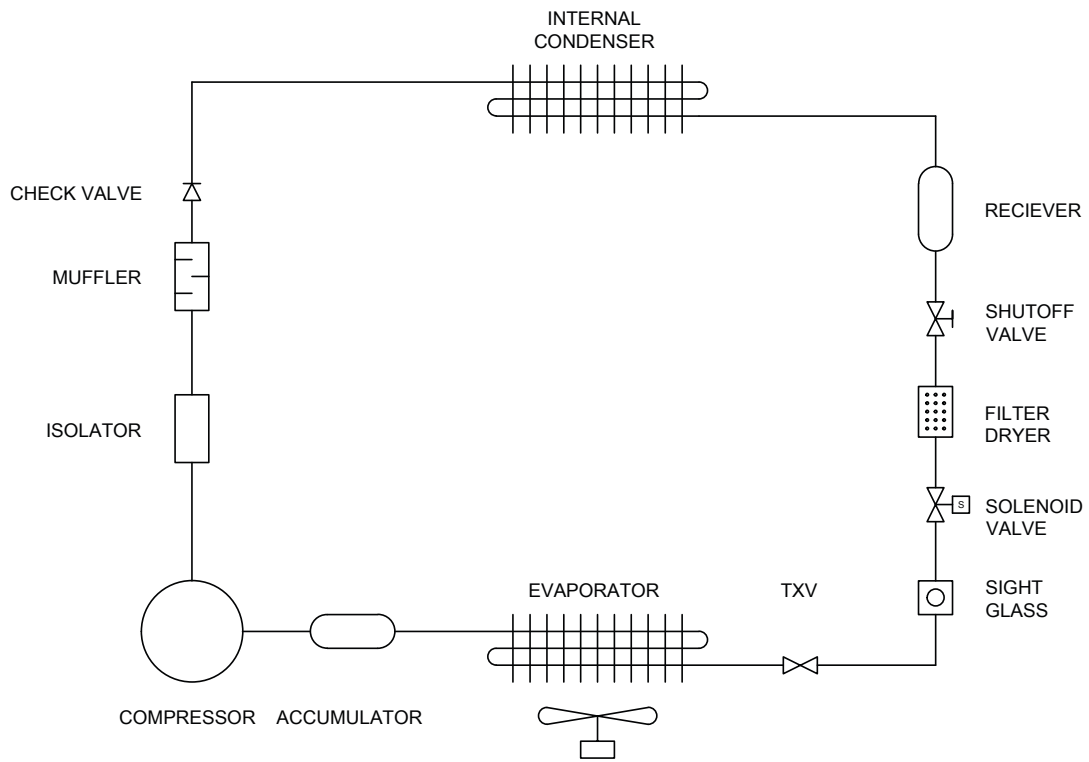
	TITLE CONTROL WIRING 1-2	
	NUMBER FD175	
DRAWN BY JS	CHECKED BY MTB	DATE 11/11/11


Control Wiring 3



	WLS CONTROL WIRING 1-3	
	FD176	
DRAWN BY JG	APPROVED BY (Signature)	DATE NTB

Refrigeration Diagram



 <small>12 Stevens Road Brewer, Maine 04412 Tel: 1-207-989-4335 Int'l: 1-800-777-6953 Fax: 1-207-989-1101 Email: info@nyle.com</small>	TITLE	
	CUSTOMER	
DRAWN BY	DWG FILE NAME	REV
CHECKED	SCALE	SHEET

Preinstallation

IMPORTANT: Please read this entire manual before installation. Be sure to follow all installation steps. Failure to conform to these instructions may decrease food dehydrator performance and could cause severe injury or death. Only qualified, licensed persons should install the equipment and electrical supply. Installation must conform to all applicable local, state, and federal codes.

Receiving and Storage

When receiving shipment at the jobsite, carefully inspect the shipment against the bill of lading. Please make sure that all units have been received as ordered. Inspect each unit's shipping crate/packaging and inspect each unit for damage. If there is a problem, notify the shipping company to make proper notation of any shortages or damage on all copies of the freight bill.

NOTE: It is the responsibility of the purchaser to file all necessary claims with the shipping company.

If the equipment is not needed for immediate installation upon arrival at the jobsite, it should be left in its shipping carton(s) and stored in a clean, dry area of the building. Heat pump units must be stored in an upright position at all times. Do not remove any equipment from its shipping carton(s) until it is needed for installation.

Unit Location

1. Units are for indoor use only.
2. Provide sufficient space for water and electrical connections.
3. Allow enough space for service personnel to perform maintenance.
4. Allow enough space around chamber footprint for chamber construction.
5. If shifting partially assembled chamber walls into a building corner or against a building wall, allow a minimum of 2" clearance between the drying chamber and existing building walls to allow air circulation.
6. Allow enough space for free movement of air to and from the external condenser fan.

Installation

Chamber Installation

Follow the chamber manufacturer instructions for installation of the pre-fabricated insulated drying chamber. These instructions will have been included with the chamber shipment, or will be attached with this manual.

Particular attentions should be given to caulking joints between insulated panels during installation. This will prevent moisture migration into panel joints.

All seams and gaps must be closed using NSF certified gaskets or NSF certified silicone caulking.

Unit must be sealed to floor using NSF certified gaskets or NSF certified silicone caulking.

Internal Components Installation

IMPORTANT: Always wear gloves when handling sheet metal internal components.

1. Install the dehumidification unit. The external condenser housing should slide through the chamber opening located on the right hand side of the chamber when viewed from the front. Roll the unit snugly against the chamber wall and lock the wheels.

2. Install the supply plenum elbow. The elbow fits over the fixed supply plenum of the dehumidification unit and attaches with fasteners on either side.

3. Install the baffle frame. The aluminum baffle frame should be placed in the left side of the chamber with the vertical supports closer to the left wall of the chamber.

3. Install the slanted baffle onto the baffle frame. The slanted baffle will sit over the top back horizontal support and rest on the slanted aluminum portion of the baffle frame. DO NOT install wing bolts through pre-drilled holes at this time.

4. Install the perforated baffle onto the baffle frame. The perforated baffle will sit over the top front horizontal support and rest on the slanted baffle. Install 2 wing bolts at bottom of baffle at this time.

5. Install the false ceiling. The ceiling will need to be carried into the chamber diagonally, with the cutout for the supply plenum fitting through the door to the lower right hand side. Once inside, slide the ceiling all the way to the frame side of the chamber, and lift the cutout end up until the ceiling is nearly level. Slide the ceiling toward the dehumidification unit until the ceiling contacts the chamber wall. Install 4 wing bolts: 2 on the baffle frame side and 2 into the chamber walls on the dehumidification unit side

Connecting Wiring

All electrical work should be performed by a licensed professional, and should adhere to all local and state codes.

The wiring panel is located behind the door which sits outside the D.H. unit. Follow the name plate information located on the unit for proper voltage, phase, amps, breaker sizing, and wire sizing. Locate a fuse disconnect as close as possible to the heat pump.

NOTE: Check to make sure blower is rotating in the correct direction. If blower is running backward, switch the wiring.

System Usage

Before Start Up

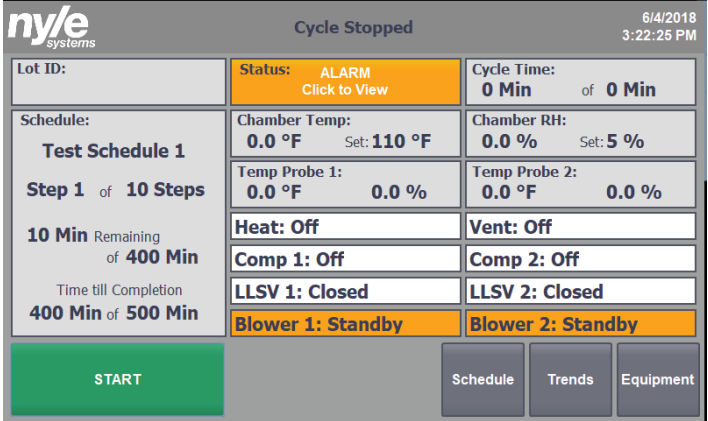
Verify the following:

- Voltage is correct and matches nameplate.
- Temperature/RH sensor is mounted near air intake of the D.H. unit.
- Service panels are in place.
- Emergency stop is deactivated (twist counterclockwise until the button pops out).

Quick Start Guide

1. When the dehumidification unit is energized, the touch screen will undergo a boot process until the Home screen is displayed.

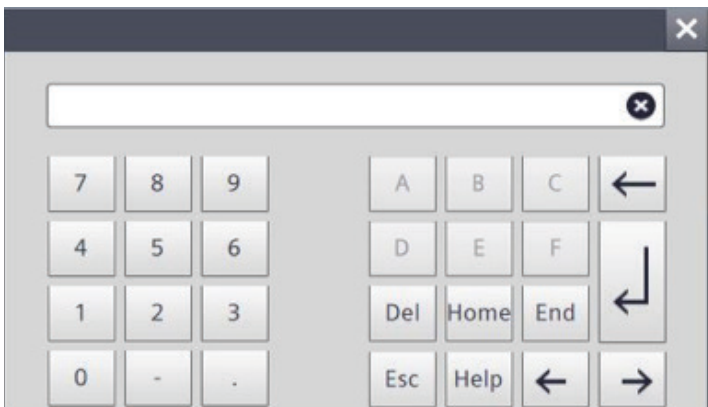
Home Screen:



The home screen provides an overall view of the unit. Set points for chamber temperature and relative humidity will be displayed and there is indicators for heat, vents, compressor 1 and 2, liquid line solenoid valves 1 and 2, blower 1 and 2 and an alarm status.

2. To change set points, touch the box representing the parameter you desire to change. A number pad will appear. Enter the desired set point, and press the return button. The value entered should now be displayed in the appropriate set point box.

Number Pad:

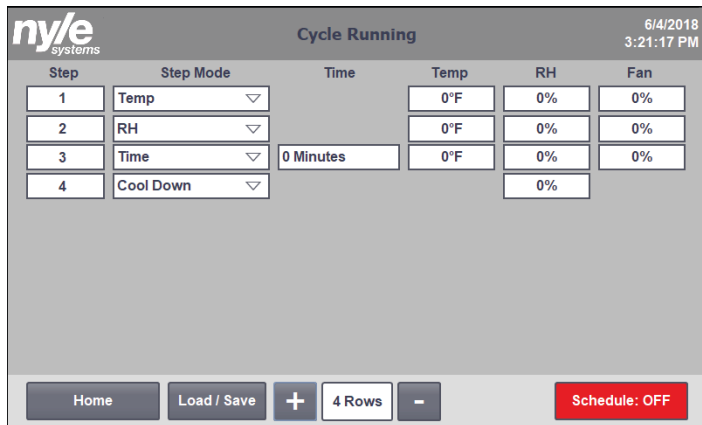


Before starting your cycle, change the cool down set point on the schedule screen to the temperature you desire the chamber to cool down to after reaching the relative humidity setpoint and before shutting down.

3. With your temperature and relative humidity entered, you can start your dehydrator by pressing the “Start” button on the left hand side of the screen. To stop your cycle at any time, press the “Stop” button on the right hand side of the screen. In case of emergency, press the E-stop button below the touch screen.

During a drying cycle, the dehumidification unit will run until the relative humidity set point is reached. At this time the unit will enter a cool down mode prior to shutting down.

Schedule Screen:



4. The schedule screen allows the user to manage dryer scheduling. Further details concerning schedule operation are included in the schedule management portion of the manual on page 16.

Home Screen - Schedule:

When the schedule is active, current schedule step information is displayed on the Home Screen.

“Step Number”: Indicates which step number is active within the loaded schedule.

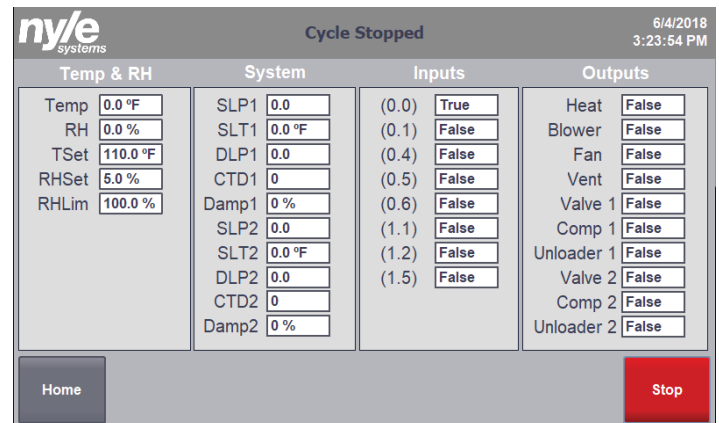
“Time Remaining”: Indicated the run time remaining in the current schedule step (if applicable).

“Temp”: Under the “Chamber Temp” block, the temperature setpoint shown reflects that specified in the active schedule step..

“RH”: Under the “Chamber RH” block, the RH setpoint shown reflects that specified in the active schedule step.

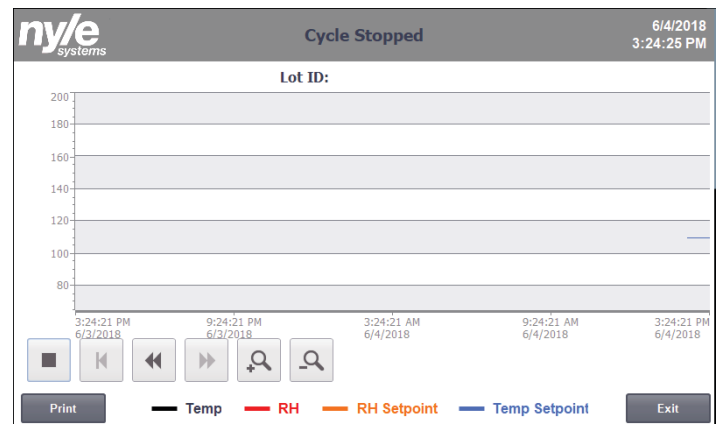
5. The diagnostic screen is accessed by pressing the “Diagnostic” button on the Home screen. The diagnostic screen provides refrigeration system operation information for troubleshooting purposes by a qualified service technician. You may be asked to access this screen during a troubleshooting call with a Nyle technician.

Diagnostic Screen:



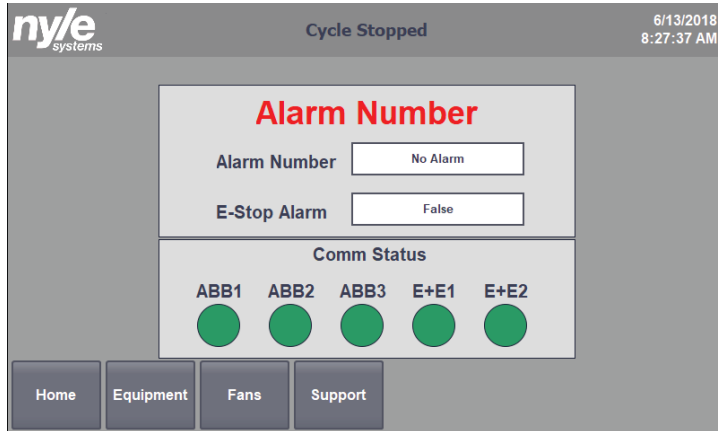
6. The trends screen records data once every minute. This unit records temperature, temperature set point, relative humidity and relative humidity set point. The toolbar stop button freezes the graph on screen but it will still record during this time. The rewind button moves the trend graph backward. The fast forward button moves the trend graph forward. The zoom buttons increase or decrease the time range shown on the graph. The print button in the bottom left corner can be used to print out the trend graph if configured in the HMI.

Trends Screen:



7. If there is an issue with the unit, an alarm indicator will flash at the top center of the home screen. You can select this to view the alarm screen.

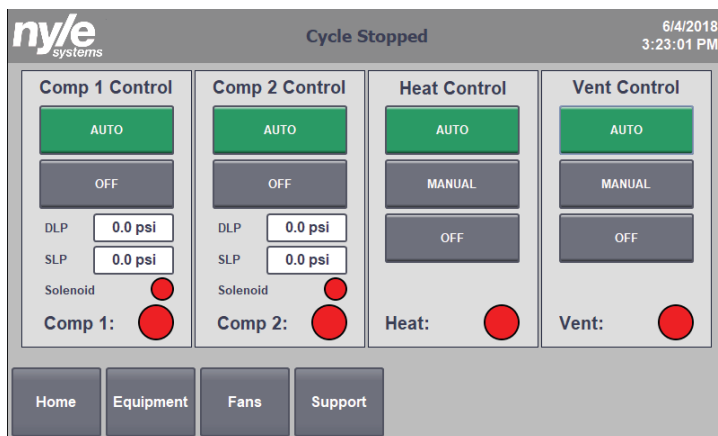
Alarm Screen:



The chart below will provide information on each alarm and steps to take if one is shown.

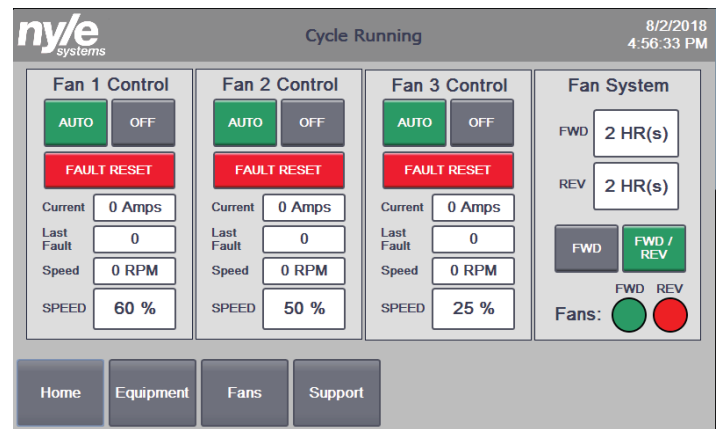
0 - OK	N/A
1 - Estop	Estop is pressed in
2 - Blower Fault	Blower motor starter tripped. Reset switch in panel. Upon multiple trips contact Nyle.
3 - Heat Safety	Overheat safety. Check wiring. Ensure the blower is working. Contact Nyle if issue continues.

Equipment Screen 1:



Each slot indicates the status of the corresponding component. Most of the time these should be set to "Auto". This will allow the unit to run normally off of the program.

Equipment Screen 2:



Each fan control is for the corresponding VFD. If the fault reset button is grey, everything is running as it should. If it turns red you should press to reset it. If it stays red you need to call Nyle Systems support to determine the error in order to get the unit back to normal functionality.

Additions Include:

"SPEED": Allows you to set a setpoint between 25% - 100% for each VFD. Please note if a speed is entered that is below 25% the drive will not change its setpoint to that speed. Speed may be changed during cycle.

"FWD" (Fan System): Setpoint for hours to run forward, this cannot be changed during cycle."

"REV" (Fan System): Setpoint for hours to run reverse, this cannot be changed during cycle.

"FWD + FWD/REV" Buttons (Fan System): Allows to change between only forward operation and forward and reverse operation.

"FWD + REV" Fan Indicators (Fan System): Indicators to show whether the PLC is telling the fans to run forward or reverse.

Schedule Management

Schedule Operation

Before starting your cycle, change the cool down set point on the schedule load/save screen to the temperature you desire the chamber to cool down to after reaching the relative humidity setpoint and before shutting down.

In order to operate a drying schedule, use the schedule management features included with the controls package. From the home screen, tap the schedule button along the bottom of the screen. Up to 10 schedule steps may be programmed into the schedule by using the "+" and "-" buttons on the bottom of the schedule screen.

Schedule flexibility is provided primarily by allowing the user to select from 4 "step modes," including Time, Temp, RH, and Cool Down. Each of the step modes uses different criteria to determine when to advance to the following step within the schedule. Each step mode operates as follows:

Time step mode: A time step allows the user to input a set amount of time in minutes that the step should run for before advancing to the following step. Setpoints available for user input during a time step include Temp, Exhaust, Blower and RH.

NOTE: Do not adjust the time setpoint of a currently active time step. Doing so will cause the current time step to reset or advance to the next step.

Temp step mode: A temperature step allows the user to input a temperature value that the dryer should warm up to before advancing to the following step. Setpoints available for user input during a temp step include Temp, Exhaust, Blower and RH.

RH step mode: A relative humidity step allows the user to input a relative humidity value that the dryer should dry down to before advancing to the following step. Setpoints available for user input during an RH step include Temp, RH, Exhaust, and Blower.

Cool Down step mode: A cool down step allows the user to end a cycle by venting heat from the dryer with no heater input. A cool down mode ends the cycle when chamber temperature is measured to be equal to the setpoint user specified in the schedule load/save screen.

Note that for all of the step modes except for time, the schedule will advance based upon a selected dryer parameter other than time. Therefore, experimentation will be necessary to understand the amount of time a particular schedule will take to run to completion. Factors affecting the run time of a particular schedule include product type, product load size, and ambient air conditions.

To enter and run a new schedule, conduct the following steps:

1. From the home screen, tap the schedule button along the bottom of the screen.
2. Using the "+" and "-" buttons along the bottom of the screen, adjust the number of steps desired for the schedule.
3. For the first step, tap the step to enter the step edit screen. Then select the step mode you desire.
4. Depending upon the step mode selected, continue down the screen until each selectable parameter has been entered for the step. Hit return to navigate back to the schedule menu or change the step input box to any of the other 10 steps to modify them without leaving that screen.
5. Repeat steps 3 and 4 for each step.
6. Return to the home screen.
7. Tap the start button. The dryer will start up based upon the values displayed on the home screen.
8. Return to the schedule screen.
9. Tap the "Schedule: OFF" button in the lower right corner of the schedule screen to activate the schedule. It should then read "Schedule: ON." The dryer should now begin with step 1 of the entered schedule.

Schedule Screen:

Step	Step Mode	Time	Temp	RH	Fan
1	Temp		0°F	0%	0%
2	RH		0°F	0%	0%
3	Time	0 Minutes	0°F	0%	0%
4	Cool Down			0%	

Schedule Monitoring

While a schedule is running, the schedule screen will provide indication of which step is being run, and whether or not a transition is being considered. While a particular step is active, the step number will be highlighted green. When the condition has been met for enough time to filter out sensor flutter, the next step will be highlighted green and dryer equipment will follow the entered conditions for the highlighted step.

As long as an SD card is inserted into the appropriate slot in the back of the control screen (accessed by opening the control panel door), schedules may be saved to or loaded from the SD card from the control schedule load/save screen.

To load or save a schedule, conduct the following steps:

1. From the schedule screen, tap the load/save button to enter the load/save dialog. If a saved schedule is loaded, the "Current Schedule" window will display the name of a previously saved schedule. Otherwise, the "Current Schedule" window will be empty.
2. Tap the load/save value entry window, and enter a name in the value entry screen. Tap the return or enter button.
3. Tap the load or save buttons to either load the entered schedule or save the entered schedule to the selected number slot.
4. Tap the "Return" button to return to the schedule screen.

Load Save Screen:

Current Schedule: nyle

Save Load nyle

Cool Down Setpoint: 90°F

Return

Remote Monitoring

With customer provided IP addresses, Ethernet connection to the dryer PLC and installation of a VNC client on a customer provided device (PC or smart phone), remote monitoring and control are possible. When prompted by the VNC client, enter the following:

IP Address: 192.168.1.61

Password: 100

The HMI screen should appear as it does at the local control box. Using the mouse pointer, buttons may be pressed and values adjusted from this display.

Drying Theory

Dehumidification drying should be understood as a two-step process: dry, moving air absorbs water from a moist product, and a refrigeration system removes water from this air as it is passed over a cold surface. This cycle repeats until the moisture in the product reaches equilibrium with the moisture content of the air. A number of factors affect each step of this drying process, ultimately affecting the drying time achieved by your Nyle dehydrator.

In order for moisture to be removed from the air within your chamber, moisture first needs to be removed from your moist product. This process is affected by air temperature, air velocity, and product characteristics. Generally speaking, higher temperature and air velocity will result in shorter drying cycles. Product characteristics vary widely and include characteristics inherent to the raw product

itself as well as those caused by any processing that takes place prior to beginning the drying process. For example, thinner, more porous products usually dry more quickly than thicker, dense products.

Once moisture is removed from your product and absorbed by air within the chamber, the dehumidification system can remove this moisture and drain it away. The moisture removal capacity of the dehumidification system is most affected by the desired drying temperature. Drying temperatures warmer or cooler than the rated condition (115°F) will tend to change capacity.

To control your drying process, you will choose a drying temperature and relative humidity “target.” The relative humidity target represents the air moisture content at which you wish your product to be in equilibrium with when it is finished. The point at which this equilibrium occurs is known as the “Equilibrium Moisture Content” (EMC), and varies by product and drying temperature. Although published data is available for many products, your results may vary based upon raw product inconsistencies, ambient atmospheric conditions, and proprietary product processing. Some experimentation will be necessary to achieve your desired results.

Data Logging

As long as an SD card is inserted into the appropriate slot in the back of the control screen (accessed by opening the control panel door), operational data may be logged. Data logging functionality is active when:

1. An SD card is present AND
2. A cycle is active.

No further user action is necessary to activate data logging as long as the above conditions are met. Data is logged at a frequency of 1 measurement per minute.

Data is logged to a folder named “NyleDataLogs” on the inserted SD card. If a new SD card is inserted, the folder will be automatically created by the software.

In order to retrieve or otherwise manage data, **do not remove the SD card from the HMI slot.** Data

management may be accomplished from a computer web browser using the following steps:

1. Enter the IP address of your dryer PLC into the web browser address bar. The dryer IP address is: 192.168.1.61
2. Click on the “ENTER” button at the top left of the page.
3. Sign in with the following information:
 - a. Name: Administrator
 - b. Password: 100
4. Press Enter on your keyboard or click on the “Log in” button at the bottom right of the log in context box to enter the PLC management screen.
5. On the left side of the page, locate and select the following: File Browser > SD Card > Nyle Data Logs.
6. You should see data logs collected during previous cycles and named: “Nyle_[schedulingname]”
7. Use the file operations to the right of the file name to download, download and clear, or delete data logs from the SD card.

Maintenance

Ensure that the washable filter on the intake of the DH unit is maintained free of contaminants which would reduce air flow through the DH unit. Reduction of air flow will result in reduced moisture removal capacity and extended cycle times.

Replacement Procedures

When contacting Nyle for service or replacement parts, refer to the model number and serial number of the unit as included on the data sticker attached to the unit. If replacement parts are required, mention the date of installation of the unit and the date of failure, along with an explanation of the malfunctions and a description of the replacement parts required.

Troubleshooting

Compressor Will Not Run

1. The breaker may be open or the circuit breaker is tripped. Check electrical circuits and motor windings for shorts or grounds. Investigate for possible overloading. Replace fuse or reset circuit breakers after fault is corrected.
2. Emergency stop may be depressed. Ensure that E-stop is deactivated.
3. Supply voltage may be too low. Check voltage with a volt meter.
4. Control system may be faulty. Check control for correct wiring of temperature/relative humidity sensor and check the control transformer for proper voltage.
5. Wires may be loose or broken. Replace or tighten.
6. The low pressure switch may have tripped due to one or more of the following:
 - 1) Compressor suction line clogged
 - 2) Low refrigerant
7. The high pressure switch may have tripped due to one or more of the following:
 - 1) Compressor discharge line clogged
 - 2) Air flow in D.H. unit reduced due to blockage
 - 3) Air flow in D.H. unit reduced due to blower malfunction.

Insufficient Heating

1. Check for restriction in air flow.
2. Check for leaks at the intake and exhaust duct and damper openings.
3. Check auxiliary electric heater for appropriate current draw.
4. Consult with a qualified electrician concerning the heating circuit.

Unit Operation is Noisy

1. Check compressor for loosened mounting bolts. Make sure compressor is floating free on its isolator mounts. Check for tubing contact with the compressor or other surfaces.
2. Check screws on all panels.
3. Check for chattering or humming in the contactor or relays due to low voltage or a defective holding coil. Replace the component.
4. Check for abnormally high discharge pressures.
5. Compressor rotation may be incorrect.
6. Check for any loose panels or parts that may be in contact with each other, vibrations from the compressor may cause them to chatter against one another.
7. Check for vibration related to the blower. Debris in the blower wheel may cause an unbalanced condition.

Limited Warranty

The equipment supplied by Nyle is warranted to be free from defects in workmanship and materials for a period of one year from the date of the original installation or 15 months from the date of delivery, whichever comes first. In the event of component failure, a new or remanufactured part will be supplied by Nyle providing the defective part is first returned to Nyle for inspection. The replacement part assumes the unused portion of the warranty. The warranty does not include labor or other costs incurred for diagnosis, repairing or removing, installing or shipping the defective or replacement parts.

Nyle makes no warranty as to the fitness of the equipment for a particular use and shall not be liable for any direct, indirect or consequential damages in conjunction with this contract and/or the use of its equipment. Buyer agrees to indemnify and save harmless Nyle from any claims or demands against Nyle for injuries or damages to third parties resulting from buyer's use or ownership of the equipment.

No other warranties, expressed or implied, will be honored unless in writing by an officer of Nyle Systems.

