

# Quest DRY115

## Installation, Operation and Maintenance Instructions

### – Read and Save These Instructions –

*This manual is provided to acquaint you with the dehumidifier so that installation, operation and maintenance can proceed successfully. Ultimate satisfaction depends on the quality of installation and a thorough understanding of this equipment. The dehumidifier is built around tested engineering principles and has passed a thorough inspection for quality of workmanship and function.*

#### Quest DRY 115:

- Low dewpoint operation
- 115 Pints/Day @ AHAM
- Wide operating range
- 22 Amps total power consumption
- Factory installed 115VAC power cords (2 required @ 15 Amps each)
- Simple ON/OFF operation with available low voltage control kit for remote/dehumidistat operation
- Vertical or horizontal operation
- Multiple ducting options



#### Water Removal Rates (Pints/Day)

56 Pints	100°F, 20%
160 Pints	90° F, 90%
135 Pints	80° F, 80%
<b>115 Pints</b>	<b>80° F, 60% (AHAM)</b>
115 Pints	70° F, 80%
105 Pints	70° F, 60%
105 Pints	60° F, 80%
100 Pints	60° F, 60%
110 Pints	50° F, 80%
90 Pints	50° F, 60%
25 Pints	10° F, 80%



**Therma-Stor<sup>®</sup> LLC**

Driven by performance. Powered by design.™

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Serial No. \_\_\_\_\_

Purchase Date \_\_\_\_\_

Dealer's Name \_\_\_\_\_



## Safety Precautions

Read the installation, operation and maintenance instructions carefully before installing and operating this device. Proper adherence to these instructions is essential to obtain maximum benefit from your Quest *DRY 115*.

## READ AND SAVE THESE INSTRUCTIONS

The Quest *DRY 115* can be installed in a variety of locations to meet the owner's needs as listed below. In all cases, keep the following cautions in mind:

- The Quest *DRY 115* is designed to be installed **INDOORS ONLY**.
- If used near water, the unit should be plugged into GFCI circuits
- **DO NOT** use the Quest *DRY 115* as a bench or table
- Avoid discharging the process air directly at people
- Reactivation outlet air **MUST** be discharged into a location that can tolerate high temperature, moist air.
- If the reactivation outlet ductwork passes through a cold space, the duct must be insulated to prevent condensation from forming inside the duct.

The Quest *DRY 115* supports multi-position operation and multiple ducting options. In **EVERY** case the Reactivation Outlet air **MUST** be ducted out of the drying space and to a location tolerant of high temperature moist air (usually outside).



## 1. Specifications

**Part Number:** 4027110

**Power:** 2 Circuits; 11Amps, 115VAC each  
22 Amps total power consumption

**Kilowatts:** 2.5 (63 KWh/Day)

**Capacity  
per Day:** 115 Pints (80°F 60%RH)

**Blower:** 385 CFM Process Airflow @ 0" ESP  
75 CFM Reactivation Airflow @ 0"ESP

**Temperature  
Range:** 10°F to 140°F\*

**Filters:** Process Filter Size: 16" X 20" X 2"  
Reactivation Filter Size: 12" X 12" X 1"

### Reactivation

**Duct:** 6" (Start collars included)

### Process

**Duct:** 8" (Start collars included)

**Range:** 10°F to 140°F\*

**Warranty:** 1 Year Parts and Labor

*\*Low temperature performance is dependent on reactivation air source. Supplying warmer reactivation air will significantly increase water removal.*

### Dimensions :

	Unit	Shipping
<b>Width</b>	20"	25"
<b>Height</b>	36"	47"
<b>Depth</b>	20"	24"
<b>Weight</b>	105 Lb	125 Lb

### Accessories:

4026859 6" Metalized Polyester Flex-Duct 25' (for Reactivation)

4020128 6" Insulated Flex-Duct 25' (for Reactivation)

4027198 Low Voltage Control Kit

### Process Air Filter Replacement:

4021475 16" x 20" x 2" MERV 11 Filter (Standard)

4024969 16" x 20" x 2" MERV 6 Filter (Optional)

### Reactivation Air Filter Replacement:

4026860 12" x 12" x 1" MERV 7 Filter



## 2. Installation

### 2.1 Electrical Requirements

The Quest *DRY* 115 draws a total of 22 Amps at 115VAC. For convenience, this can be supplied by two standard 15 Amp outlets on separate circuits (cords provided). The Quest *DRY* 115 also allows for direct wiring of electrical service, or the connection of either high or low voltage remote dehumidistat controls (sold separately).

### 2.2 Inside Drying Space with Single Reactivation Outlet Duct (Simplest Hookup)

- Reactivation air exhausts moisture, makeup air infiltrates uncontrolled into space
- Creates a slight negative pressure on drying space
- Works well if infiltrating air is conditioned and drying space is not "tight"

### 2.3 Inside Drying Space with Isolated Reactivation Duct

- Requires reactivation air ducted into and back out of drying space.
- Works well on tightly sealed drying spaces.
- Keeps separation between air inside and air outside of drying space.

### 2.4 Outside Drying Space

- Requires process air to be ducted out of and back into drying space
- Works well if drying space is too small for mounting unit inside.
- Reduces heat load on drying space.

## 3. Operation

The Quest *DRY* 115 comes complete and can be plugged in and turned on. Connected this way, the Quest *DRY* 115 will run continuously. With the addition of a high or low voltage humidistat or a duty cycle timer, the ON/OFF switch will act as an override.

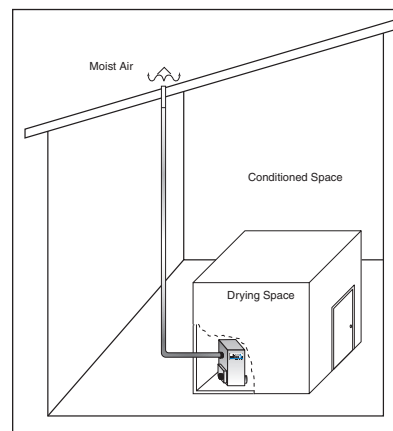
**Note:** Check for airflow at all inlets and outlets. **DO NOT** run unit if no airflow is detected.

## 4. Maintenance

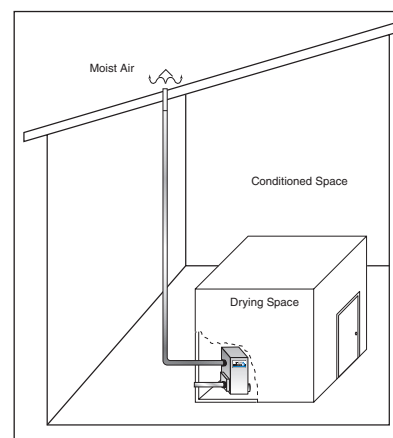
The Quest *DRY* 115 is equipped with two pleated fabric air filters that must be checked regularly. The larger process filter is 16"X20"X2" and is located at the 8" duct inlet. The smaller reactivation filter is 12"X12"X1" and is located at the 6" duct inlet.

Operating the unit with dirty filters will reduce its capacity and efficiency, and could cause the heater to cut out on thermal overload.

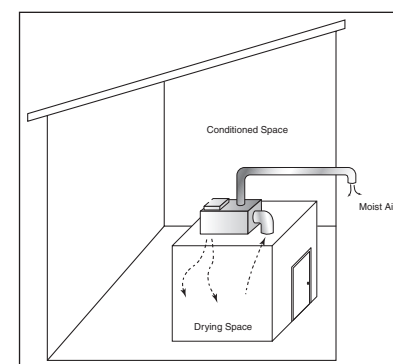
**DO NOT** operate the unit without the filters as the desiccant wheel inside the unit will become clogged and require disassembly to clean.



**Figure 2.2**  
Single Reactivation Outlet duct

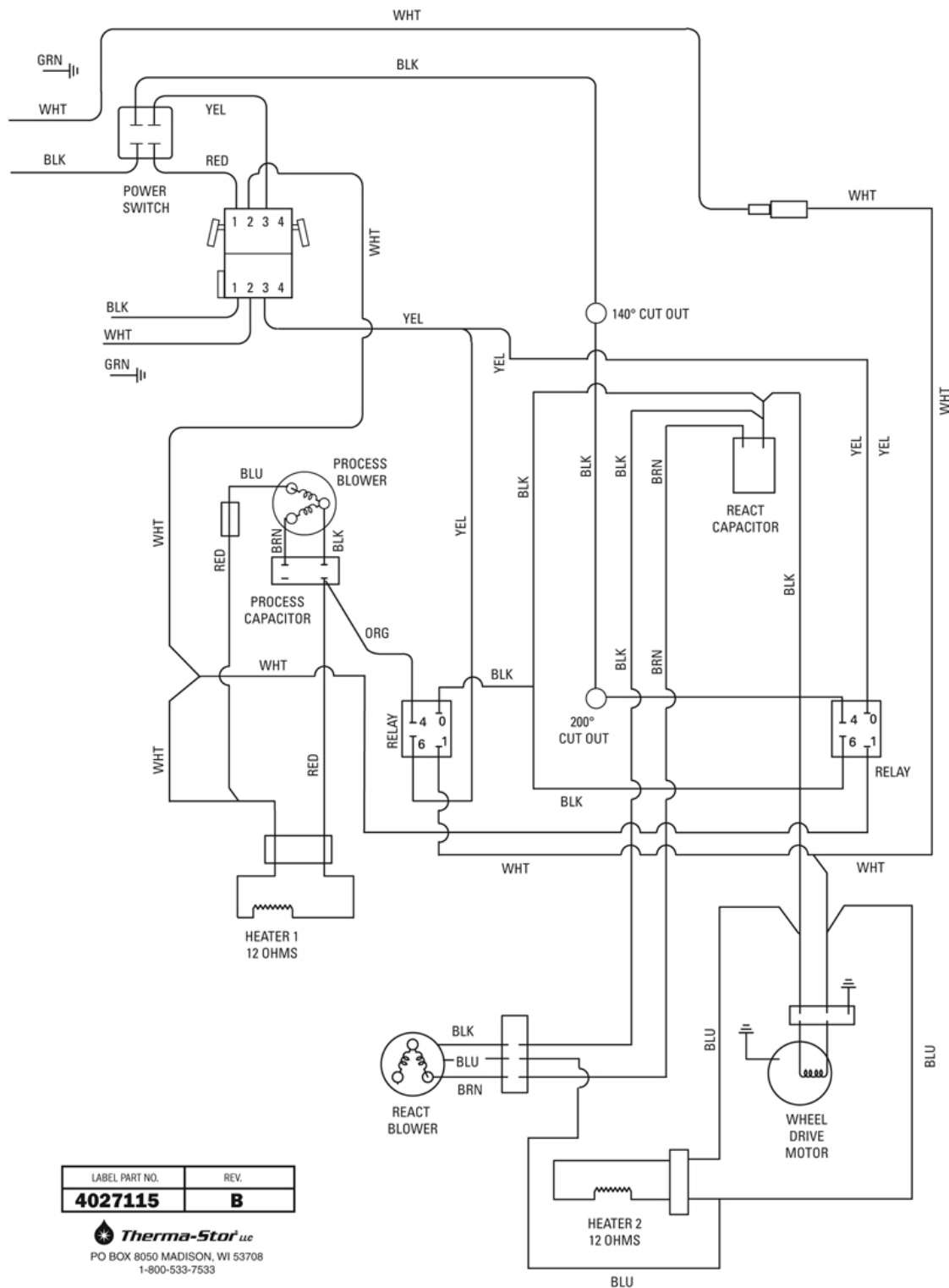


**Figure 2.3**  
Isolated Reactivation Outlet Duct



**Figure 2.4**  
Outside Drying Space

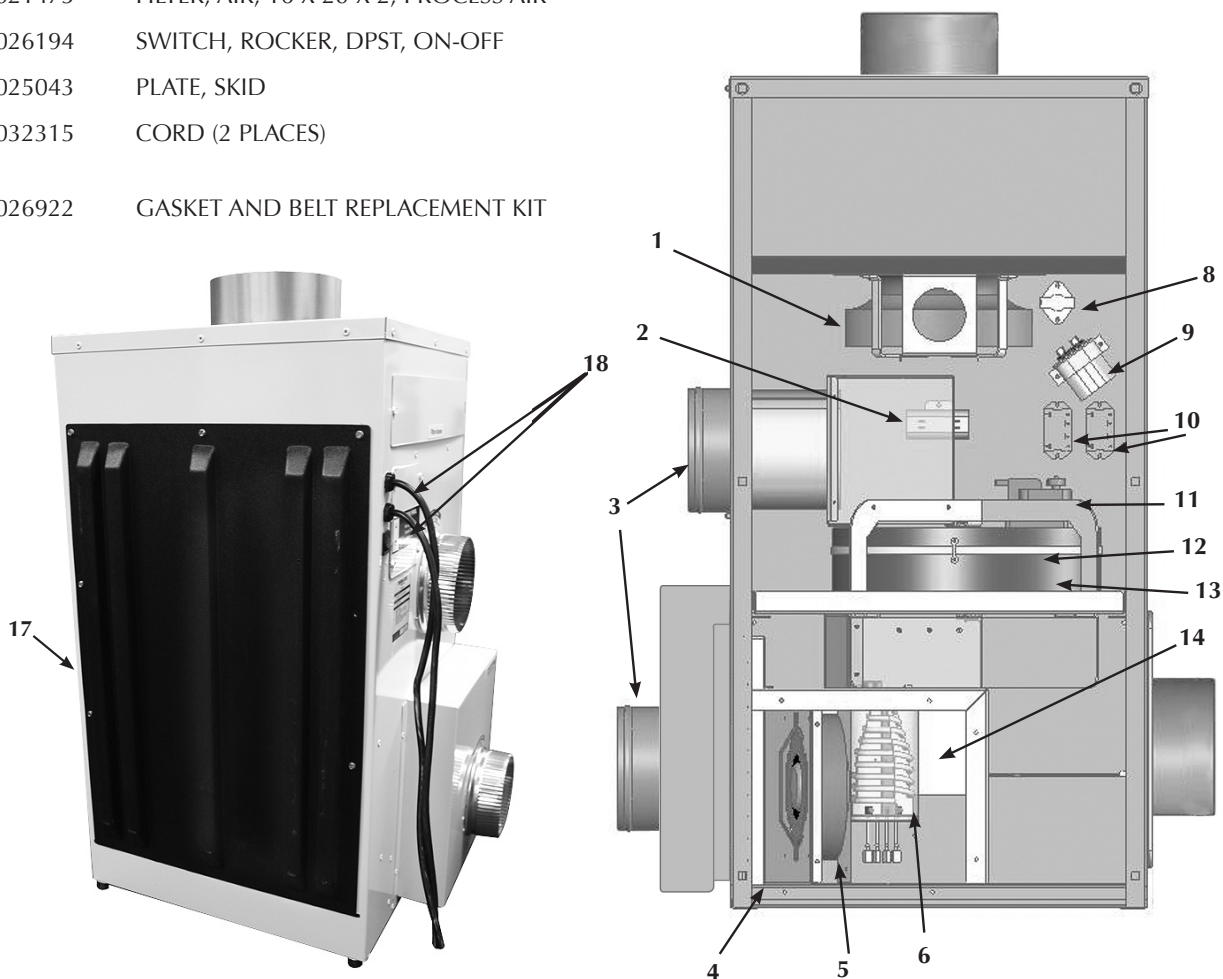
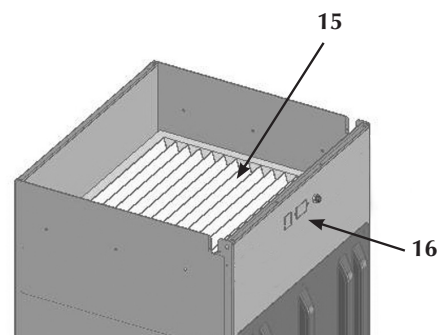
## 5. Wiring diagram



## 6. Service Parts List

Item	Part No.	Description
1	4025076	FAN, MOTORIZED IMPELLER, PROCESS AIR
2	4033031-07	CAPACITOR, RUN, 15 MFD, 370V, DRY, PROCESS AIR
3	4019652	COLLAR, 6" (2 PLACES)
4	4026860	FILTER, AIR, 12 X 12 X 1, REACTIVATION AIR
5	4026798	FAN, MOTORIZED IMPELLER, REACTIVATION AIR
6	4026799	HEATER CORE
8	4026898	THERMAL OVERLOAD CUT-OUT SWITCH, PROCESS AIR
9	4026830	CAPACITOR, RUN, 8 MFD, DRY, REACTIVATION AIR
10	1970010	CONTROL RELAY SPST 110VAC COIL 25AMP CONTACTS (2)
11	4026773	MOTOR, DESICCANT WHEEL
12	4026795	BELT, DRIVE, PHOENIX DESICCANT
13	4026772	WHEEL, DESICCANT
14	4028077	THERMAL OVERLOAD CUT-OUT SWITCH, REACTIVATION AIR
15	4021475	FILTER, AIR, 16 X 20 X 2, PROCESS AIR
16	4026194	SWITCH, ROCKER, DPST, ON-OFF
17	4025043	PLATE, SKID
18	4032315	CORD (2 PLACES)

**Not Shown** 4026922 GASKET AND BELT REPLACEMENT KIT



## Quest *DRY* 115 Dehumidifier Limited Warranty

**Warrantor:**

Therma-Stor LLC  
4201 Lien Rd  
Madison, WI 53704  
Telephone: 1-800-533-7533

**Who Is Covered:** This warranty extends only to the original end-user of the Quest *DRY* 115 dehumidifier, and may not be assigned or transferred.

**One Year Warranty:** Therma-Stor LLC warrants that, for one (1) year the Quest *DRY* 115 dehumidifier will operate free from any defects in materials and workmanship, or Therma-Stor LLC will, at its option, repair or replace the defective part(s), free of any charge.

**End-User Responsibilities:** Warranty service must be performed by a Servicer authorized by Therma-Stor LLC. If the end-user is unable to locate or obtain warranty service from an authorized Servicer, the end-user should call Therma-Stor LLC at the above number and ask for the Therma-Stor Service Department, which will then arrange for covered warranty service. Warranty service will be performed during normal working hours.

The end-user must present proof of purchase (lease) upon request, by use of the warranty card or other reasonable and reliable means. The end-user is responsible for normal care. This warranty does not cover any defect, malfunction, etc. resulting from misuse, abuse, lack of normal care, corrosion, freezing, tampering, modification, unauthorized or improper repair or installation, accident, acts of nature or any other cause beyond Therma-Stor LLC's reasonable control.

**Limitations and Exclusions:** If any Quest *DRY* 115 Dehumidifier part is repaired or replaced, the new part shall be warranted for only the remainder of the original warranty period applicable thereto (but all warranty periods will be extended by the period of time, if any, that the Quest *DRY* 115 Dehumidifier is out of service while awaiting covered warranty service).

UPON THE EXPIRATION OF THE WRITTEN WARRANTY APPLICABLE TO THE QUEST *DRY* 115 DEHUMIDIFIER OR ANY PART THEREOF, ALL OTHER WARRANTIES IMPLIED BY LAW, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL ALSO EXPIRE. ALL WARRANTIES MADE BY THERMA-STOR LLC ARE SET FORTH HEREIN, AND NO CLAIM MAY BE MADE AGAINST THERMA-STOR LLC BASED ON ANY ORAL WARRANTY. IN NO EVENT SHALL THERMA-STOR LLC, IN CONNECTION WITH THE SALE, INSTALLATION, USE, REPAIR OR REPLACEMENT OF ANY QUEST *DRY* 115 DEHUMIDIFIER OR PART THEREOF BE LIABLE UNDER ANY LEGAL THEORY FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATION WATER DAMAGE (THE END-USER SHOULD TAKE PRECAUTIONS AGAINST SAME), LOST PROFITS, DELAY, OR LOSS OF USE OR DAMAGE TO ANY REAL OR PERSONAL PROPERTY.

Some states do not allow limitations on how long an implied warranty lasts, and some do not allow the exclusion or limitation of incidental or consequential damages, so one or both of these limitation may not apply to you.

**Legal Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

