

# INSTRUCTION MANUAL

for

## DDAD30HC-F, Electric Heated Dryers

The dryer must not be stored or installed where it will be exposed to water and/or weather and is suitable for use in room temperatures between 40F and 105F (5C and 45C.)

Post the following “**For Your Safety**” caution in a prominent location:

**FOR YOUR SAFETY**

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance or machine.

It is important that you read this Manual and retain it for future reference.

For service or replacement parts, contact the Dexter Distributor in your area or the manufacturer.

## **WARNING – Risk of Fire**

Clothes dryer installation must be performed by a qualified installer.

Install the clothes dryer according to the manufacturer’s instructions and local codes.

Do not install a clothes dryer with flexible plastic venting materials. If flexible metal (foil type) duct is installed, use duct that has been investigated and found acceptable for use with clothes dryers. Flexible venting materials are known to collapse, be easily crushed, and trap lint. These conditions will obstruct clothes dryer airflow and increase the risk of fire.

To reduce the risk of severe injury or death, follow all installation instructions.

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### WARNINGS ABOUT USE AND OPERATION

It is **ABSOLUTELY ESSENTIAL** that the dryer be grounded to a known earth (zero) ground. This is not only for personal safety, but is necessary for proper operation.

**KEEP SHIELDS, GUARDS AND COVERS IN PLACE.** These safety devices are provided to protect everyone from injury.

**A DRYER SHOULD BE CONNECTED TO POWER FOR THREE (3) MINUTES** before it is operated or before a program change is made. Operation or program changes, which occur during this "power up" period, are subject to loss in case of power interruption. After the initial three minutes, all programmed data is protected from power interruptions of any length and the customer's individual cycle is protected up to 3 seconds. This is done without batteries.

**LEAVE THE ELECTRICAL POWER TO THE DRYER ON AT ALL TIMES** except when necessary for service or other similar activities. The hour meter function adds only full hours to its reading. If the power is shut off every night, any fraction of an hour of time that is on the machine at that time will be lost. Turning the power off every night could also have some effect on the long-term life of the memory after a number of years. Turning power off occasionally won't affect the unit.

**THIS DRYER IS EQUIPPED WITH A MANUALLY RESETTABLE OVER-TEMPERATURE THERMOSTAT** located on the top of the exhaust duct beside the motor. Should the dryer cease to heat, reset the thermostat by inserting a wooden (nonconductive) pencil or dowel through the guide bushing in the cover. Should the thermostat continue to trip, the dryer must be inspected by a qualified service person.

**CHECK THE THERMOSTAT WHEN INSTALLING DRYER** to assure it is not tripped. Impacts, such as rough handling in shipment, may trip the thermostat. It may be reset by inserting a wooden (nonconductive) pencil or dowel through the guide bushing in the cover.

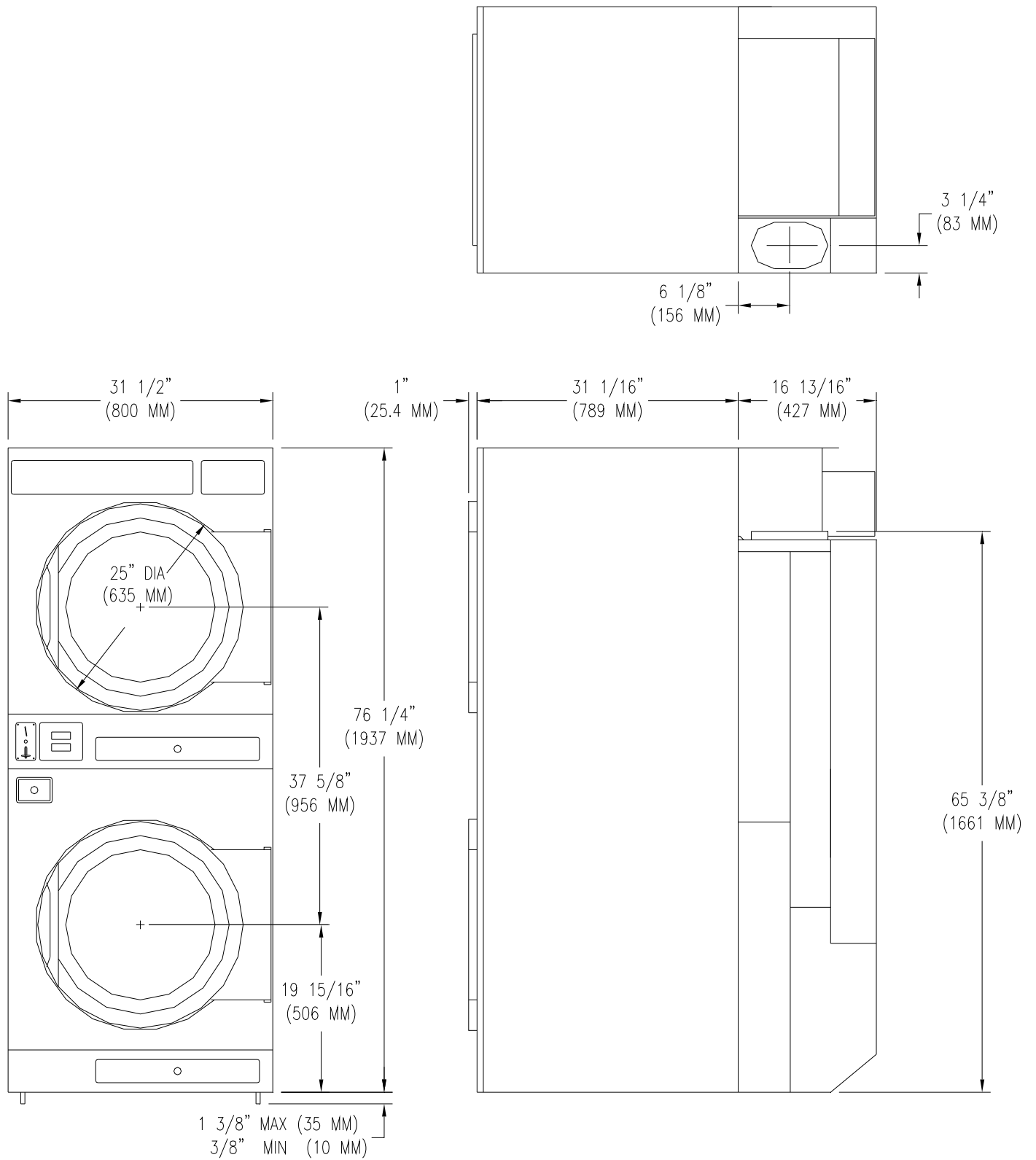


FIGURE 1— Dryer Dimensions  
inches (MM)

## INSTALLATION AND OPERATING INSTRUCTIONS

### UNCRATING

Tools Required: 3/4" hex socket & ratchet driver, wood block 4" or 5" thick, a knife and a groove joint pliers, which will open to 1 3/8".

1. Remove and discard packaging.
2. The crate base is attached to the dryer by (4) cap screws driven upward from below the crate base. Remove crate base from dryer, by tipping dryer sidewise and place block under crate base rail in center of dryer. Using a ratchet and 3/4" hex socket, remove and discard (2) crating bolts from side, which is raised. Remove block from under crate base. Repeat for other side.
3. Install leveling legs. Using a walking motion, move dryer sideways about 6" off crate base. Tip dryer up and place block under edge of dryer. Thread two leveling legs about two-thirds into the T-nuts on the base from which the crating bolts were removed. Remove block from under dryer.

With a walking motion move dryer completely off crate base. Discard crate base.

Tip dryer sidewise, as previously done, and place block under edge of dryer on raised side. Thread leveling legs into nuts as was done for the first side.

Slide unit into position where it will be installed. Adjust leveling legs, using the groove joint pliers, to level and align dryer with adjacent units.

### DRYER INSTALLATION

1. **CODE CONFORMITY:** All commercial dryer installations must conform to the local and national codes for the location of installation. Prior to installation, ensure that the local distribution conditions (identification of the type) and the adjustment of the appliance are compatible.

2. **INSTALLATION CLEARANCES:** This unit may be installed at the following alcove clearance.

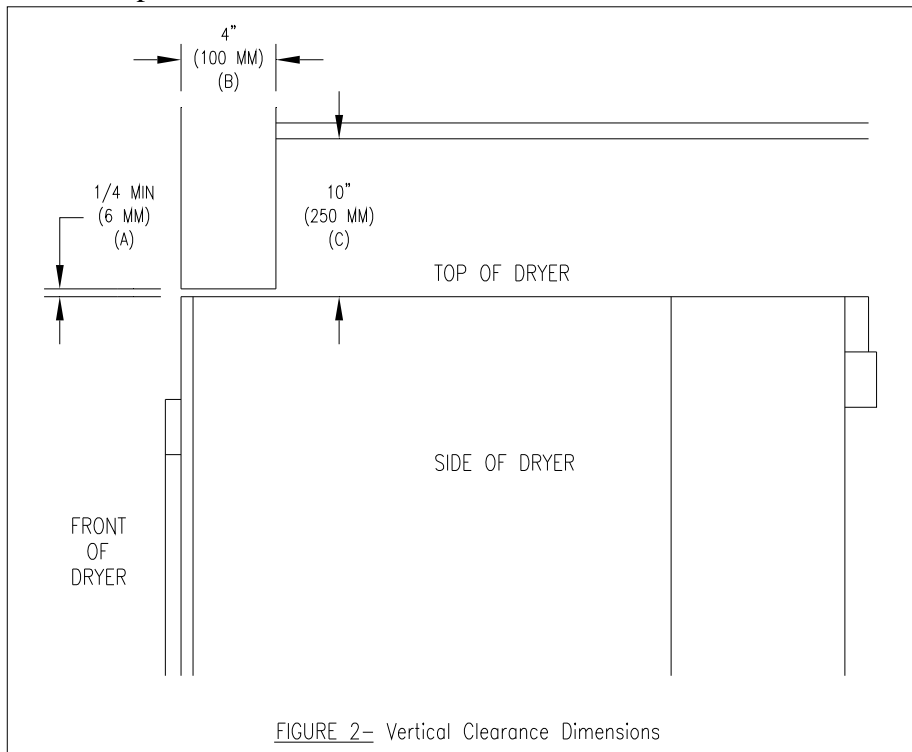
- |                |   |
|----------------|---|
| I. Left Side   | 0 in.   |
| II. Right Side | 0 in.   |
| III. Back      | 18 in. (457 mm) (Certified for 6 in. (152 mm) clearance; however, 18 in. (457 mm) clearance is necessary behind the motors to allow servicing and maintenance.)   |
| IV. Front      | 48 in. (1220 mm) to allow use of dryer.   |
| V. Top         | Refer to figure labeled "Vertical Clearance Dimensions".<br>AB. Certification allows 0 in. clearance at the top 4 in. (102 mm) back from the front. However, a 1/4 in. (6 mm) clearance should be allowed in case the dryer needs moving. |

- VI. Floor                      C. A 10 in. (254 mm) clearance is required from top at all other points.  
    This unit may be installed upon a combustible floor.

Do not obstruct the flow of combustion and ventilation air.

Maintain minimum of 1 in. (25 mm) clearance between duct and combustible material.

Refer to the label attached to the Belt Guard on the rear of the dryer for other installation information and start-up instructions.



3. MAKE-UP AIR. Adequate make-up air (600CFM/DRUM (17 m<sup>3</sup>/Min.), 1200CFM/DRYER) (34 m<sup>3</sup>/Min.) must be supplied to replace air exhausted by dryers on all types of installations. Provide a minimum of 1.5 sq. ft. (.14 m<sup>2</sup>) make-up air opening to the outside of each dryer. This is a net requirement of effective area. Screens, grills or louvers, which will restrict the flow of air, must be considered. Consult the supplier to determine the free area equivalent for the grill being used.

The source of make-up air should be located sufficiently away from the dryers to allow an even airflow to the air intakes of all dryers. Multiple openings should be provided.

4. ELECTRICAL REQUIREMENTS:

The electrical installation must be performed by a qualified electrical technician.

The electrical power requirements for both power sources to operate the unit satisfactorily are listed on the serial plate located on the back panel of each dryer. The electrical connection

should be made at the terminal blocks in the two control boxes on the rear of the unit using conductors rated at 75 C (167 F) and a wire size adequate to handle the amperage and voltage listed on the serial plate (see table on the next page for recommended minimum sizes). It is absolutely necessary that the dryer be grounded to a known (earth) ground (No. 8 AWG copper conductor recommended). Knockouts are provided for the connection of 1-inch conduit for the power supply conductors and 3/8-inch conduit for the external grounding conductor.

HEATING ELEMENT SIZE (kW)	SUPPLY VOLTAGE (PHASE / V.)	MINIMUM DUAL ELEMENT TIME DELAY FUSE SIZE AT FUSED DISCONNECT (A.)	MINIMUM WIRE SIZE FROM FUSED DISCONNECT TO DRYER TERMINAL BLOCK (75°C COPPER WIRE)
20	1 / 208	125	# 1/0
20	1 / 220	110	#1/0
20	1 / 240	110	# 1/0
24	3 / 208	90	# 2
24	3 / 240	80	# 3
24	3 / 400	50	# 6
30	3 / 400	60	# 4
36	3 / 400	70	# 3

For 240V power supplies, an earthed mid-point of a phase is required. The “high” leg of the 3-phase electrical supply (delta) must be connected to terminal L3. A neutral is required for all electrical supply variations; see the wiring diagram in the control box on the back of the dryer.

The installation must meet the electrical requirements of the country, state and locality of the installation. The installer may be required to provide a disconnect switch which will interrupt all lines. It may be a local or national requirement to provide an electrical interruption switch visible and accessible from the room in which the dryer is installed. The wiring diagram is located in the control box on the back of the dryer.

#### MISE À LA TERRE

Cet appareil doit être relié à une canalisation électrique métallique fixe ou la dérivation doit comporter un conducteur de terre connecté à la borne ou au fil de terre de l'appareil.

6. EXHAUST INSTALLATION. (Refer to Figure 3) Exhausting of the dryer(s) should be planned and constructed so that no air restrictions occur. Any restriction due to pipe size or type of installation can cause slow drying time, excessive heat, and lint in the room.

From an operational standpoint, incorrect or inadequate exhausting can cause a cycling of the high limit thermostat, which shuts off the heating elements and results in inefficient drying.

The oval exhaust duct connection near the top of the dryer will accept a compressed 8” round duct. Individual exhausting of the dryers is recommended. A pipe of the proper diameter should be attached to the dryer adapter collar and extended out through an outside wall to exhaust all heat, moisture, and lint outside. This pipe must be very smooth on the inside, as rough surfaces

tend to collect lint, which will eventually clog the duct and prevent the dryer from exhausting properly. All elbows must be smooth on the inside. All joints must be made so the exhaust end of one pipe is inside the next one downstream. The addition of an exhaust pipe tends to reduce the amount of air the blower can exhaust. This does not affect the dryer operation if held within practical limits. For the most efficient operation, it is recommended that no more than 14 ft. (4.25 m) of straight 8 in. (204 mm) diameter pipe is used with two right angle elbows. When more than two elbows are used, 2 ft. (610 mm) of straight pipe should be removed for each additional elbow. No more than four right angle elbows should be used to exhaust a dryer.

Maintain a minimum of 1" (25mm) clearance between duct and combustible material.

If the exhaust pipe passes through a wall, a metal sleeve of slightly larger diameter should be set in the wall and the exhaust pipe passed through this sleeve. This practice is required by some local codes and is recommended in all cases to protect the wall. This type of installation should have a means provided to prevent rain and high winds from entering the exhaust when the dryer is not in use. A hood with a hinged damper can be used for this purpose. Another method would be to point the outlet end of the pipe downward to prevent entrance of wind and rain. In either case, the outlet should be kept clear, by at least 24 in. (610 mm), of any objects, which would cause air restriction.

Provide a screen or grill over the termination of the exhaust or flue outlet such as will prevent the entry of a ball of 16 mm in diameter while the machine is not operating but will allow entry of a ball 6 mm in diameter while operating.

When exhausting a dryer straight up through a roof, the overall length of the duct has the same limits as exhausting through a wall. A rain cap must be placed on top of the exhaust and must be of such a type as to be free from clogging. The type using a cone shaped "roof" over the pipe is suitable for this application.

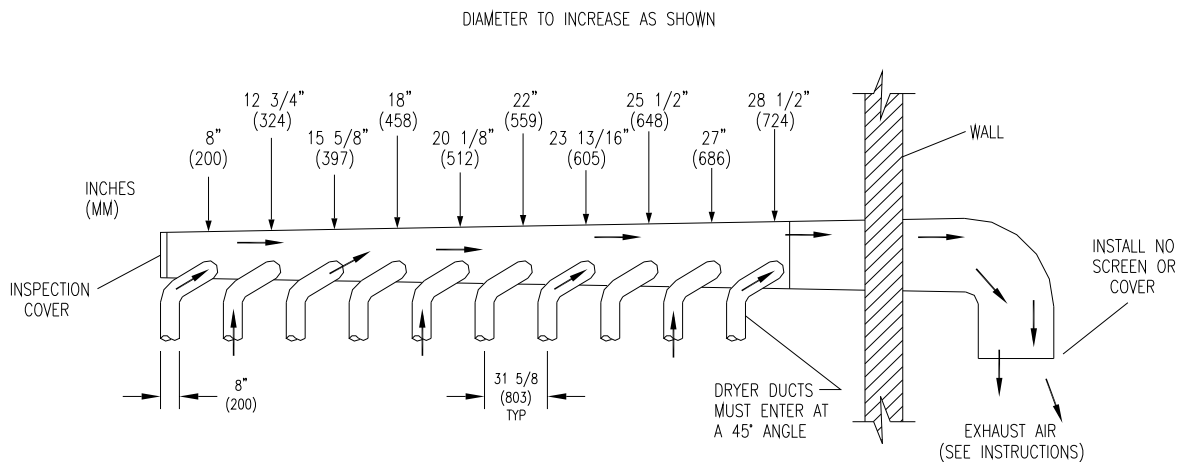


FIGURE 3- Dryer Exhausting Using A Main Discharge Duct.

Exhausting the dryer into a chimney or under a building is not permitted. The exhaust air should not be vented into a wall, a ceiling, or a concealed space of building. In these cases, there is a danger of lint buildup, which can be highly combustible.

Installation of several dryers, where a main discharge duct is necessary, will need the following considerations for installation (see Figure 3). Individual ducts from the dryers into the main discharge duct should be at a 45-degree angle in the direction of discharge airflow.

**NOTE:** Never install the individual ducts at a right angle into the main discharge duct. The individual ducts from the dryers can enter at the sides or bottom of the main discharge duct. Figure 3 indicates the various round main duct diameters to use with the individual dryer ducts. The main duct can be rectangular or round, provided adequate airflow is maintained. For each individual dryer, the total exhausting (main discharge duct plus duct outlet from the dryer) should not exceed the equivalent of 14 ft. (4.25 m) and two elbows. The diameter of the main discharge duct, at the last dryer, must be maintained to exhaust end.

NOTE: A small diameter duct will restrict airflow; a large diameter duct will reduce air velocity - both contributing to lint build up. An inspection door should be provided for periodic clean out of the main duct.

<p><b>Caution</b> - A clothes dryer produces combustible lint and should be exhausted outdoors. The area around the clothes dryer should be kept free of lint.</p>
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#### **DRYER SHUTDOWN**

To render the dryer inoperative, disconnect electrical supply to the dryer.

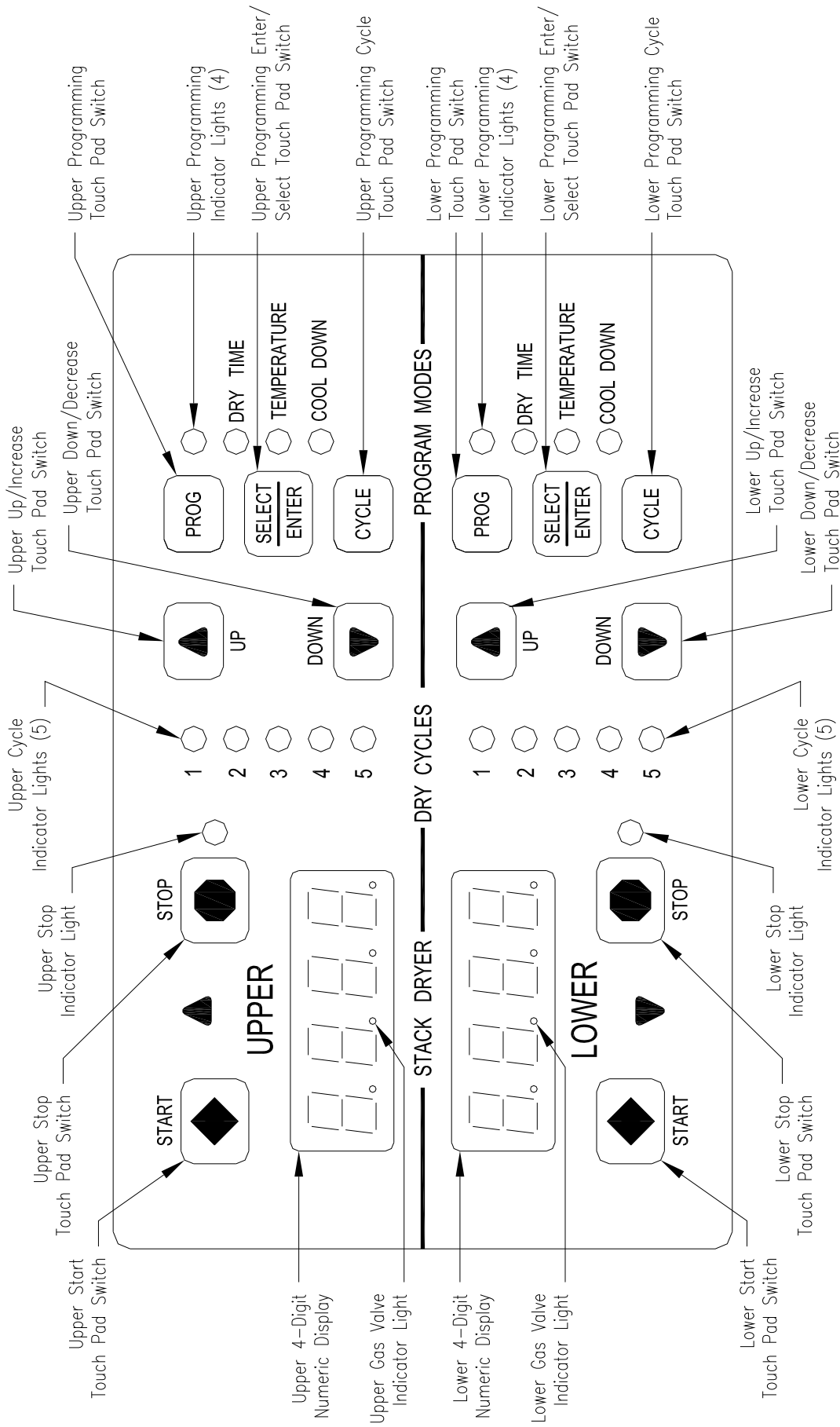


Figure 4: Non-Reversing Dryer Controller Interface

## DRYER CONTROLLER FACTORY DEFAULT PROGRAM SETTINGS

DRY CYCLE	COOL DOWN TIME (MINUTES)	TOTAL CYCLE TIME (MINUTES)	DRYING TEMPERATURE		DRYER LOAD
			(°F)	(°C)	
1	5	35	180	82	<b>Towels, pads, heavy cotton</b>
2	2	20	170	77	Sheets, blended materials
3	5	25	180	82	Cotton
4	2	20	130	54	Synthetic materials
5	2	25	175	79	Blended materials

### DRYER FAULT CODES

FAULT#	FAULT DESCRIPTION	ACTION
F1	Shorted thermostat sensor.	Dryer stops and "F1" flashes on the 4-digit display. When short circuit on sensor input is removed, "LOAD" appears on the 4-digit display and the remaining dry time is reset.
F2	Open thermostat sensor.	Dryer stops and "F2" flashes on the 4-digit display. When a good sensor is connected to sensor input, "LOAD" appears on the 4-digit display and the remaining dry time is reset.
F3	EEPROM corrupted.	Dryer will not start and "F3" appears on the 4-digit display. The power to the dryer must be cycled to reset the controller. Fault should only occur when starting a dry cycle.
F4	Gas valve on fault.	The drying temperature did not increase 1 F. in 15 minutes. "F4" will flash on the display and the dry cycle will finish without calling for heat (energizing gas valve). Opening the door or pressing the STOP key will reset the fault and clear the remaining time in the dry cycle.
F5	Temperature fault.	The drying temperature is at least 25 F. above the temperature setting. "F5" will flash on the 4-digit display and the dry cycle will finish without calling for heat (energizing the gas valve). The power to the dryer must be cycled to reset the controller.

# TOUCH PAD DESCRIPTION

## INDICATOR LIGHTS (L.E.D.s)

### Description

Cycle (1 through 5)	These L.E.D.s are on solid when a particular cycle is chosen for operation or programming.
Gas Valve	This L.E.D. is part of the 4-digit numeric display and will be on solid during the drying part of a cycle when the gas valve does <u>not</u> need to be on. The L.E.D. will be blinking when the gas valve needs to be on. The L.E.D. will <u>not</u> be on solid or blinking (off) if the cycle is stopped, complete, in cool down, or terminated.
Programming	These L.E.D.s are on solid as they are selected during the programming of the dryer controller.
Stop	This L.E.D. is on solid when either the STOP button is pressed once or the door is opened during an operating cycle.

## SWITCHES (Pushbuttons)

### Description



UP  
Up/Increase

This touch pad switch will increment (increase) dry time, cool down time, and drying temperature. It will also scroll upwards when selecting a dry cycle.



DOWN  
Down/Decrease

This touch pad switch will decrement (decrease) dry time, cool down time and drying temperature. It will also scroll downwards when selecting a dry cycle.



Program

This touch pad switch allows the dryer controller to enter the permanent programming mode.



Select/Enter

This touch pad switch will select one of the three variable parts of the dry cycle (dry time, temperature, or cool down) by sequencing through them. Once one of the variable parts of the dry cycle is chosen and changed, this touch pad switch will enter the new (changed) value into the dry cycle program.

## SWITCHES (Pushbuttons) - continued



Cycle

This touch pad switch allows the dryer controller to enter the temporary programming mode.



STOP

Stop

This touch pad switch will stop the dryer during a dry cycle without clearing the present drying cycle if pressed once. If pressed and released twice, consecutively, the present dry cycle will be cleared.



START

Start

This touch pad switch will start the operation of a dry cycle if pressed and released once. Pressing and holding this touch pad switch will display the current temperature of the dryer heat sensor as long as it is held in the depressed position.

## 4-DIGIT NUMERICAL DISPLAY MESSAGES

### Message

### Description

LOAD

This message is displayed after a dry cycle is complete and the dryer loading door has been opened or the STOP touch pad key on the dryer controller has been pressed and released twice.

donE

This message blinks immediately after completion of the dry cycle and continues to blink until the stop key on the dryer controller touch pad is pressed or the dryer loading door is opened.

Prog

This message is displayed when entering the permanent programming mode.

.15

This message appears while the dryer is in the heating time of a dry cycle. The decimal point will blink if the output for the gas valve is on, or remain on constantly if the output for the gas valve is not on. The number represents the total time left in the dry cycle (includes cool down time).

C02

This message appears when the cool down time of the dry cycle is reached. The letter "C" represents the cool down (non-heating) part of the dry cycle. The number(s) after the letter "C" represent(s) the total time remaining in the dry cycle.

F5

This message appears if there is a dryer fault. The letter "F" indicates a fault and the number after the "F" represents the specific fault that has occurred. There are five different faults that can appear (F1 through F5).

## OPERATING INSTRUCTIONS

To dry a load of items, you must choose one of the five-programmed dry cycles. Each of these five dry cycles may be modified in two different ways to match your load. Please refer to the “Permanent Dryer Controller Programming” or “Temporary Dryer Controller Programming” section of this manual.

There are two parts to each dry cycle. The first part is the heating time, which is when the gas valve is cycled on and off according to the temperature setting in the dry cycle program. The second part is the cool down time, which is after the heating part of the dry cycle, and is when the cylinder continues to turn, but no heat is applied.

There will always be at least two minutes of cool down time for each dry cycle. The maximum amount of cool down time is 60 minutes.

The default value of the five dry cycles is shown in the “DRYER CONTROLLER FACTORY DEFAULT PROGRAM SETTINGS” table in this manual.

To improve the drying capabilities of this dryer, you should always separate (untangle) the individual articles in your load before using the dryer.

In the following instruction steps, things that are displayed on the 4-digit numerical display will be in “quotation marks” and any keys on the dryer controller touch pad that physically need to be pressed will be in **CAPITAL AND BOLD LETTERS**.

- 1) Place your untangled load into the dryer cylinder and close the dryer loading door. Notice that the dryer controller 4-digit numerical display should show the word “LOAD”. If it does not show this word, then press and release the **STOP** touch pad key on the dryer controller twice.
- 2) Press and release the **UP** or **DOWN** arrow touch pad key on the dryer controller to select a dry cycle.
- 3) Once the desired dry cycle is selected, press and release the **START** touch pad key.

After the dryer controller **START** touch pad key is pressed, the dryer cylinder will start rotating and the two-digit total dry cycle time, along with a decimal point, will appear on the dryer controller display.

The time shown on the dryer controller display will count down to the programmed cool down time. At that time, the display will change from the decimal point and two-digit number to a letter “C” and two digits.

The letter “C” represents the cool down portion of the dry cycle. The two digits represent the amount of time remaining in the dry cycle. The two-digit time, shown on the dryer controller display, will count down to zero.

When the time decrements to zero, the dryer controller display will flash the word “donE” and the end of cycle tone will sound.

At that point, the wrinkle free cycle will automatically begin. This cycle will wait two minutes, if the door is not opened or the **STOP** touch pad key on the dryer controller is not pressed, and then rotate the cylinder for 10 seconds and stop. This idle time of two minutes and tumble time of 10 seconds

will repeat a total of 10 times, at which time the wrinkle free cycle stops. The cylinder will not rotate again until a new dry cycle is started.

During the wrinkle free cycle the gas valve will not be operated and there will be no heat applied to the load. The word “donE” will also continue to flash and do so even after the wrinkle free cycle is finished. When the dryer loading door is opened, or the **STOP** touch pad key is pressed, the word “donE” will change to the word “LOAD” on the dryer controller display. The dryer will then be ready for another dry cycle.

During the dry cycle, either pressing the STOP touch pad key on the dryer controller or opening the dryer loading door, will stop the dry cycle and not clear it. If you press the STOP touch pad key on the controller and then open the dryer loading door the dry cycle will not be cleared. However, if you open (or open and close) the dryer loading door and then press the STOP touch pad key on the dryer controller, the present dry cycle will be cleared and the word “LOAD” will appear on the dryer controller display.

There are two jumpers and one push button on the component side of the dryer controller printed circuit board.

The jumper located at the back right side of the each circuit board controls whether the controller display shows and operates in the Fahrenheit or Celsius mode. This jumper is labeled as TEMP SELECT and has three pins. The back and middle pins are for Celsius and the front and middle pins are for Fahrenheit, which is indicated by the letter C for Celsius and the letter F for Fahrenheit.

The other jumper, located at the back middle side of each circuit board controls, is used for choosing either a reversing or non-reversing type of dryer. This jumper is labeled as REV and NON-REV. This jumper must be in the non-reversing position, which are the front and middle pins. If the jumper is in the reversing position, the heating part of the dry cycle will not operate properly. The dryer will not reverse direction either.

The push button, which is located at the middle center of each circuit board controls, is used to reset all five of the dry cycles to the factory default settings. It is labeled as DEFAULT SETTINGS. Even the dry cycles that have been modified using the permanent programming procedure will be changed back to the factory default settings when using this push button. This push button must be pressed and held for at least three seconds with power applied to the dryer controller circuit board.

If changing a jumper, remove power before moving jumper and then move jumper. Before restoring power, press and hold the DEFAULT SETTINGS pushbutton. Then, restore power and release the DEFAULT SETTINGS pushbutton after three seconds of restoring power.

## TEMPORARY DRYER CONTROLLER PROGRAMMING

The temporary programming mode will allow the change of the stored dry cycle settings in the dryer controller for one complete dry cycle. After the dry cycle is complete, the default settings that existed before the temporary change are restored. The temporary dry cycle can be stopped and cleared at any time during the dry cycle operation.

To temporarily change a dryer controller cycle, follow the procedures below. Things that are displayed on the 4-digit numeric display will be in “quotation marks”. Keys on the dryer controller touch pad that physically need to be pressed will be in **CAPITAL AND BOLD LETTERS**.

If, at any time, you want to escape the temporary programming mode while changing the program settings, you can press the **STOP** key on the dryer controller touch pad if the 4-digit numeric display is not flashing. The **SELECT/ENTER** key on the dryer controller touch pad can be pressed and released to enter the flashing value shown on the 4-digit numeric display and allow you to escape.

If you press and release the **STOP** key on the dryer controller touch pad, when the 4-digit numeric display is not flashing, the temporary changes to the dry cycle program will be cancelled. The stored dry cycle settings that existed before the temporary change will then be restored.

If, at any time, you want to start the temporary dry cycle during the temporary programming mode, press and release the **START** key on the dryer controller touch pad if the 4-digit numeric display is not flashing. The **SELECT/ENTER** key on the dryer controller touch pad can be pressed and released to enter the flashing value shown on the 4-digit numeric display and allow you to start the temporary dry cycle. If you start the temporary dry cycle, the 4-digit numerical display will change to the total dry time and count down to 0 as the dry cycle progresses.

### PROCEDURE

- 1) Make sure the dryer is not in a dry cycle. The 4-digit numeric display on the dryer controller will show “LOAD” when the dryer is not in a dry cycle.
- 2) Press and release the **UP** or **DOWN** arrow keys on the dryer controller touch pad to choose the dry cycle that you want to change (dry cycle 1 through 5). The dry cycle L.E.D. will illuminate to indicate which dry cycle you are choosing. If you press either arrow key and hold it down, the controller will sequence through the five dry cycles.
- 3) Press and release the **CYCLE** key on the dryer controller touch pad once you have chosen the dry cycle you want to change. After you press this key, the programming L.E.D. and the dry time L.E.D. will illuminate. The dry cycle L.E.D. will remain illuminated. The total dry time will also be displayed on the 4-digit numeric display.
- 4) Press and release the **UP** or **DOWN** arrow keys to change the total cycle time. Once either of the arrow keys is pressed, the dry time L.E.D. and the total dry time on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) through the total dry times available (1 through 60 minutes). This displayed dry time includes the cool down time along with the heated time. To not change the total dry time, do not press the arrow keys to change the total dry time.
- 5) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the dry time L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the

temperature L.E.D. will illuminate. The drying temperature will also be shown on the 4-digit numeric display.

- 6) Press and release the **UP** or **DOWN** arrow keys to change the drying temperature. Each press and release of the arrow keys will either increase or decrease the temperature by five degrees Fahrenheit or three degrees Celsius, depending on how your dryer controller is set up. Once either of the arrow keys is pressed, the temperature L.E.D. and the drying temperature on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) your way through the available drying temperatures (105° Fahrenheit or 40° Celsius, up to 195° Fahrenheit or 91° Celsius). If you do not want to change the drying temperature, do not press the arrow keys. Go to the next step.
- 7) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the temperature L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the cool down L.E.D. will illuminate. The cool down time will also be shown on the 4-digit numeric display.
- 8) Press and release the **UP** or **DOWN** arrow keys to change the cool down time. Once either of the arrow keys is pressed, the cool down L.E.D. and the cool down time on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) through the cool down times available (2 through 60 minutes). To not change the cool down time, do not press the arrow keys. Go to the next step.
- 9) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the cool down L.E.D. and the programming L.E.D. will switch off, and the dry cycle L.E.D. will remain on. The flashing cool down time on the 4-digit display will stop flashing and remain.
- 10) At this point, you have two choices. 1) You can perform the modified dry cycle by pressing and releasing the **START** key on the dryer controller touch pad, or 2) You can clear the modified dry cycle program by pressing and releasing the **STOP** key once. If you start the modified cycle, the total dry time will appear on the 4-digit numeric display and it will count down to 0 as the dry cycle progresses. If you choose to clear the modified dry cycle, the 4-digit numeric display will change to “LOAD”.

## **TEMPORARY DRYER CONTROLLER PROGRAMMING EXAMPLE**

REQUIREMENTS: Dry a load with 40 minutes of actual heat at 185°F and five minutes of cool down.

The following procedure will show you how to temporarily modify the existing dry cycle 1 program for one cycle of drying. It is based on the assumption that the factory defaults have not been permanently changed. If they have been changed, the steps of this procedure will be the same, but the values that are displayed will be different. The amount of times that the dryer controller touch pad UP or DOWN keys must be pressed and released may also be different.

If you want the change to be permanent, go to the “PERMANENT DRYER CONTROLLER PROGRAMMING” section of this manual.

## PROCEDURE

- 1) After the load has been placed in the dryer, press and release the **UP** or **DOWN** touch pad key on the dryer controller until the L.E.D. for dry cycle 1 is illuminated.
- 2) Press and release the **CYCLE** key on the dryer controller touch pad. You will see the number “35” on the dryer controller display. The programming L.E.D. and dry time L.E.D. will be illuminated.
- 3) Press and release the **UP** arrow key on the dryer controller touch pad 10 times so the display will show a flashing “45”. When the UP arrow touch pad key is pressed the first time, the number “36” will be flashing on the dryer controller display. Each number after that will also flash.
- 4) Now, press and release the **SELECT/ENTER** touch pad key on the dryer controller. The number “45” will stop flashing and the dry time L.E.D. will switch off. The dryer controller display will now show “180”, the temperature L.E.D. will illuminate, and the programming L.E.D. and dry cycle 1 L.E.D. will remain on.
- 5) Press and release the **UP** arrow key on the dryer controller touch pad one time so the controller display will show a flashing “185”. Each press of the UP arrow key will increment the temperature by five degrees.
- 6) Now, press and release the **SELECT/ENTER** touch pad key on the dryer controller. The number “185” will stop flashing and the temperature L.E.D. will switch off. The dryer control display will now show a number “5”, the cool down L.E.D. will illuminate, and the programming L.E.D. and dry cycle 1 L.E.D. will remain on.
- 7) Press and release the **SELECT/ENTER** key on the dryer controller touch pad, since the desired cool down time is five minutes. After you press the SELECT/ENTER touch pad key on the controller, the cool down L.E.D. and programming L.E.D. will switch off. The controller display will remain at “5” and the cycle 1 L.E.D. will remain on.

You are now ready to start the new dry cycle. This new dry cycle will be in effect for one dry cycle only. After the dry cycle is done, or if the STOP touch pad key on the dryer controller is pressed and released twice, consecutively, the cycle 1 program will revert to the factory default settings.

If you press the START touch pad key on the dryer controller, the controller display will change from the number “5” to the number “45” and dry cycle 1 will begin.

## PERMANENT DRYER CONTROLLER PROGRAMMING

The permanent programming mode will allow the change of the stored dry cycle settings in the dryer controller until the operator physically changes them again. The factory default settings can be restored in the dryer controller by pressing the default settings pushbutton on the back (component) side of the dryer controller circuit board. It is labeled and located at the lower middle side of the printed circuit board, as you face the component side of the board. It must be pressed and held down for at least three seconds.

To permanently change a dryer controller cycle, follow the procedure below. Things that are displayed on the 4-digit numeric display will be in “quotation marks”. Keys on the touch pad that physically need to be pressed will be in **CAPITAL AND BOLD LETTERS**.

If, at any time, you want to escape the permanent programming mode while changing the settings, you can press the **STOP** key on the dryer controller touch pad if the 4-digit numeric display is not flashing. The **SELECT/ENTER** key on the dryer controller touch pad can be pressed and released to enter the flashing value shown on the 4-digit numeric display and allow you to escape.

### PROCEDURE

- 1) Make sure the dryer is not in a dry cycle. The 4-digit numeric display on the dryer controller will show “LOAD” when the dryer is not in a dry cycle.
- 2) Press and release the **PROG** key on the dryer controller touch pad.
- 3) Press and release the **UP** arrow key on the dryer controller touch pad. The programming L.E.D. will illuminate and the 4-digit numeric display on the dryer controller will change to “Prog”.
- 4) Press and release the **UP** or **DOWN** arrow keys to choose the dry cycle you want to change (dry cycle 1 through 5). The dry cycle L.E.D. will illuminate to indicate which dry cycle you are choosing. If you press either arrow key and hold it down, the controller will sequence through the five dry cycles.
- 5) Press and release the **SELECT/ENTER** key once you have chosen the dry cycle you want to change. After you press this key, the dry time L.E.D. will illuminate. The dry cycle L.E.D. and the programming L.E.D. will remain illuminated. The total dry time will also be displayed on the 4-digit numeric display.
- 6) Press and release the **UP** or **DOWN** arrow keys to change the total dry time. Once either of the arrow keys is pressed, the dry time L.E.D. and the total dry time on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) through the total dry times available (1 through 60 minutes). This displayed dry time includes the cool down time along with the heated time. To not change the total dry time, do not press the arrow keys. Go to the next step.
- 7) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the dry time L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the temperature L.E.D. will illuminate. The drying temperature will also be shown on the 4-digit numeric display.
- 8) Press and release the **UP** or **DOWN** arrow keys to change the drying temperature. Each press and release of the arrow keys will either increase or decrease the temperature by five degrees Fahrenheit or

three degrees Celsius, depending on how your dryer controller is set up. Once either of the arrow keys is pressed, the temperature L.E.D. and the drying temperature on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) your way through the available drying temperatures (105° Fahrenheit or 40° Celsius, up to 195° Fahrenheit or 91° Celsius). If you do not want to change the drying temperature, do not press the arrow keys. Go to the next step.

- 9) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the temperature L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the cool down L.E.D. will illuminate. The cool down time will also be shown on the 4-digit numeric display.
- 10) Press and release the **UP** or **DOWN** arrow keys to change the cool down time. Once either of the arrow keys is pressed, the cool down L.E.D. and the cool down time on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) through the cool down times available (2 through 60 minutes). To not change the cool down time, do not press the arrow keys. Go to the next step.
- 11) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the cool down L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the 4-digit numeric display will change to “Prog”.
- 12) Press and release the **STOP** key to save the cycle program and escape the programming mode. If you want to change the same dry cycle program again, press the **SELECT/ENTER** key and continue at step 6 of this procedure. If you want to modify another dry cycle program, go to step 4 of this procedure and continue.
- 13) If you pressed the **STOP** key to escape the programming mode, you may now start the dry cycle by pressing the **START** key.

## **PERMANENT DRYER CONTROLLER PROGRAMMING EXAMPLE**

REQUIREMENTS: Dry a load with 50 minutes of actual heat at 195° F and three minutes of cool down.

The following procedure will show you how to permanently modify the existing dry cycle 1 program for one cycle of drying. It is based on the assumption that the factory defaults have not been permanently changed. If they have been changed, the steps of this procedure will be the same, but the values that are displayed will be different. The amount of times that the dryer controller touch pad UP or DOWN keys must be pressed and released may also be different.

If you want the change to be temporary (for only one dry cycle), go to the “TEMPORARY DRYER CONTROLLER PROGRAMMING” section of this manual.

### **PROCEDURE**

- 1) After the load has been placed in the dryer, press and release the **UP** or **DOWN** touch pad key on the dryer controller until the L.E.D. for dry cycle 1 is illuminated.

- 2) Press and release the **PROG** touch pad key on the dryer controller. The dryer controller display will not change.
- 3) Immediately, press and release the **UP** arrow key on the dryer controller touch pad. The controller display will change from “LOAd” to “Prog”. You have now entered the permanent programming mode. The dry time L.E.D. will remain on and the programming L.E.D. will illuminate.
- 4) Press and release the **SELECT/ENTER** touch pad key once. The dry time L.E.D. and programming L.E.D. will remain on and the dry time L.E.D. will illuminate. The dryer controller will also show the number “35”.
- 5) Press the **UP** arrow touch pad key 18 times until the dryer controller display shows the number “53”.
- 6) Press and release the **SELECT/ENTER** touch pad key once. The dry time L.E.D. and programming L.E.D. will remain on and the dry time L.E.D. will switch off. The temperature L.E.D. will illuminate and the dryer controller display will show the number “180”.
- 7) Press and release the **UP** arrow touch pad key three times until the dryer controller display shows the number “195”.
- 8) Press and release the **SELECT/ENTER** touch pad key. The dry time L.E.D. and the programming L.E.D. will remain on and the temperature L.E.D. will switch off. The cool down L.E.D. will illuminate and the dryer controller display will show the number “5”.
- 9) Press and release the **DOWN** arrow touch pad key twice until the dryer controller display shows the number “3”.
- 10) Press and release the **SELECT/ENTER** touch pad key. The dry time L.E.D. and the programming L.E.D. will remain on and the cool down L.E.D. will switch off. The dryer controller display will change to “Prog”.
- 11) Press and release the **STOP** touch pad key. The dry time L.E.D. will remain on and the programming L.E.D. will switch off. The dryer controller display will change to the word “LOAd”.

The dryer is now ready for the new modified dry cycle to start. This modified dry cycle 1 program will remain in the dryer controller memory until the default settings push button is pressed. This default settings push button is located on the component side of the dryer controller printed circuit board at the middle center side of each circuit board controls.

## SERVICING THE DRYER

Note: A key with the markings “6324” is provided for service access to controller by a qualified person. This key should be stored in a secure place away from the dryer.

### Routine Non-Technical Maintenance and Cleaning:

#### **DAILY**

1. Clean lint screens. Use soft brush if necessary. Failure to do so will slow drying, increase temperatures throughout the dryer and increase the risk of fire. Dryer must not be operated without lint screen in place. Without the lint screen in place, lint will accumulate in the ductwork and flue exit reducing ventilation of exhaust gases.
2. Check lint screens for tears. Replace if necessary. Failure to replace a torn lint screen can result in lint accumulation and reduced ventilation of exhaust gases.

#### **MONTHLY**

1. Removal of accumulated lint using a brush and vacuum cleaner. (Disconnect power to dryer before beginning.)
  - a. Clean lint from lint screen compartments.
  - b. Remove lint accumulation from end bells of motors.
  - c. Vacuum the openings in the burner primary air openings.
  - d. Remove any lint from control compartment.
  - e. Remove lint and dirt accumulation from top of the dryer and all areas above, below, and around the burners and burner housing. Failure to keep this portion of the dryer clean can lead to a build up of lint creating a fire hazard.
2. Apply a few drops of light oil on top and bottom pivots of the loading door hinges to keep in good working order.
3. Grease intermediate pulley bearings and shafts using pressure grease gun and lithium base grease. Failure to do so can result in reduced product life.

#### **QUARTERLY**

1. Inspect door gasket for excessive wear.

Maintenance Requiring Technical and Mechanical Skills:

**Note: All procedures must be performed by a service engineer or competent person when the dryer is not running.**

(Disconnect power to dryer before beginning.)

**QUARTERLY**

1. Check tumbler shaft nuts, and, if lose, retighten to 150 lb. ft. (200 Nm).
2. Check belts for wear needing replacement to prevent reduced performance.

**SEMI-ANNUALLY**

1. Clean burners. Blow out burners, around primary air opening, and orifices with compressed air. Run the dryer to assure operation and ignition and purge any dislodged lint from drying chamber. Failure to do so can result in the risk of fire.

**ANNUALLY**

1. Check intermediate pulley bearings for wear.
2. Check and remove any lint accumulation from exhaust system. Lint accumulation causes reduced drying performance, reduced ventilation of exhaust gases and an increased risk of fire.

<u>SERVICE PARTS</u>	<u>PART NUMBER</u>
DRIVE BELT, MOTOR	9040-077-001
DRIVE BELT, TUMBLER	9040-073-009
LINT SCREEN FILTER	9555-057-002

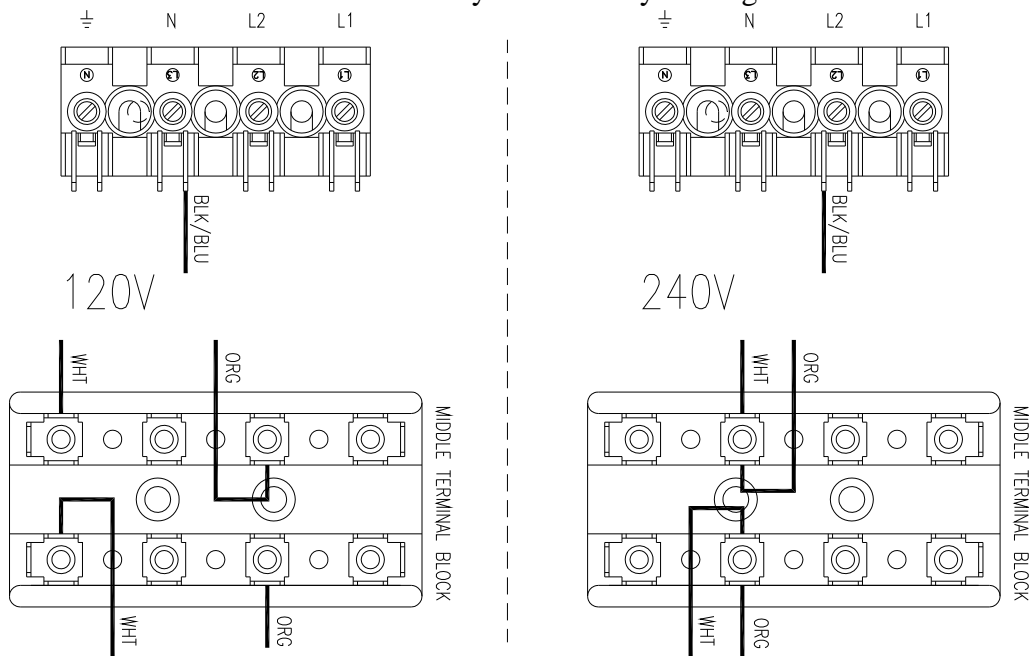
For service and parts information contact your local Dexter agent. If a Dexter agent is not available, contact **Dexter Laundry, Inc.** directly as listed below:

Mailing Address: 2211 West Grimes Avenue Phone: 1 + 641-472-5131 (USA)  
Fairfield, IA 52556 Fax: 1 + 641-472-6336 (USA)  
USA

Website: [www.dexter.com/laundry/](http://www.dexter.com/laundry/)

# Instructions - Convert a Dual Voltage Stack Dryer from 120V to 208-240V with Neutral Wire Only

1. Remove incoming power from the dryer. Use a known working voltmeter to check power.
2. Remove the cover of the control box assembly from the dryer using a 5/16" wrench.
3. Move the black/blue wire from the N position of the main power terminal block to the L2 position of the main power terminal block in the control box assembly. See Figure 6 below.
4. Move the white wire of the upper motor harness to an upper inner left terminal in the middle terminal block in the control box assembly. See Figure 6 below.
5. Move the orange wire of the upper motor harness to an upper inner left terminal in the middle terminal block control box assembly. See Figure 6 below.
6. Move the white wire of the lower motor harness to a lower inner left terminal in the middle terminal block in the control box assembly. See Figure 6 below.
7. Move the orange wire of the lower motor harness to a lower inner left terminal in the middle terminal block control box assembly. See Figure 6 below.
8. Reconnect power to the dryer and test to ensure proper operation; one line voltage to L1, one line voltage to L2, the neutral to N, and the earth ground to E.
9. Reinstall the cover of the control box assembly from the dryer using a 5/16" wrench.



**Figure 6 Dual Voltage Stack Dryer Voltage Conversion**