

*****Attention Installer!!!*****

**YOU are responsible for the safe installation of the
Versa-Pak control system!**

You must ensure the compactor is properly installed and the equipment and safeguards are adequate and in good working order before installing this control system. If you question the safety of equipment do not install the control system,

LOCK IT AND TAG IT OUT

until it is in safe working order.

Once the controller is installed, please verify the unit is cycling properly and verify proper operation of the START, REVERSE, STOP, and ON/OFF switches.

Make sure the appropriate people are aware of the new operational characteristics of the Versa-Pak System.

Please call if you have any questions. Kevin Long 352-636-9083.

Versa-Pak Photo Eye Installation

For Versa-Pak **V4.2 and after** units.

PLEASE make safety your first priority! If it's not safe, don't do it!

Please follow ANSI standards for auto-starting units.

Use a warning buzzer and light with a 20 second delay before ram moves.

Photo eyes are not desirable in most situations. They are best used in applications where access to the charge chamber is limited (like in an apt style unit).

It is easy to make your Versa-Pak powered compactor start with an eye.

1. Wire the N.O. contact parallel to the start button (#4 and #8)
2. Wire the eye power to #4 (hot) and #1 (common)
3. Set timer "#2" (NOT T2!!- go to parameters, press ok, left arrow, up arrow until you get to #0, right arrow, up to #2) to 5 seconds or so. This delays the starting of the compactor so that items can pass through the eye without starting the compactor every time. This is also a delay for the start button- you'll have to hold the start button for this amount of time to start.
4. Make sure T7 is set at 20.00 (Factory setting, ANSI delay start)
5. Wire warning light and buzzer to #1 and #10

Call me if you have any questions. Kevin 352-636-9083

*****ATTENTION INSTALLER*****

To initiate AUTO-START feature you must first make sure the compactor safety features are working and the conditions are safe for unit to auto start.

Then locate the control buttons on the front of the controller.

Press button **ESC 0** – Screen should be blank

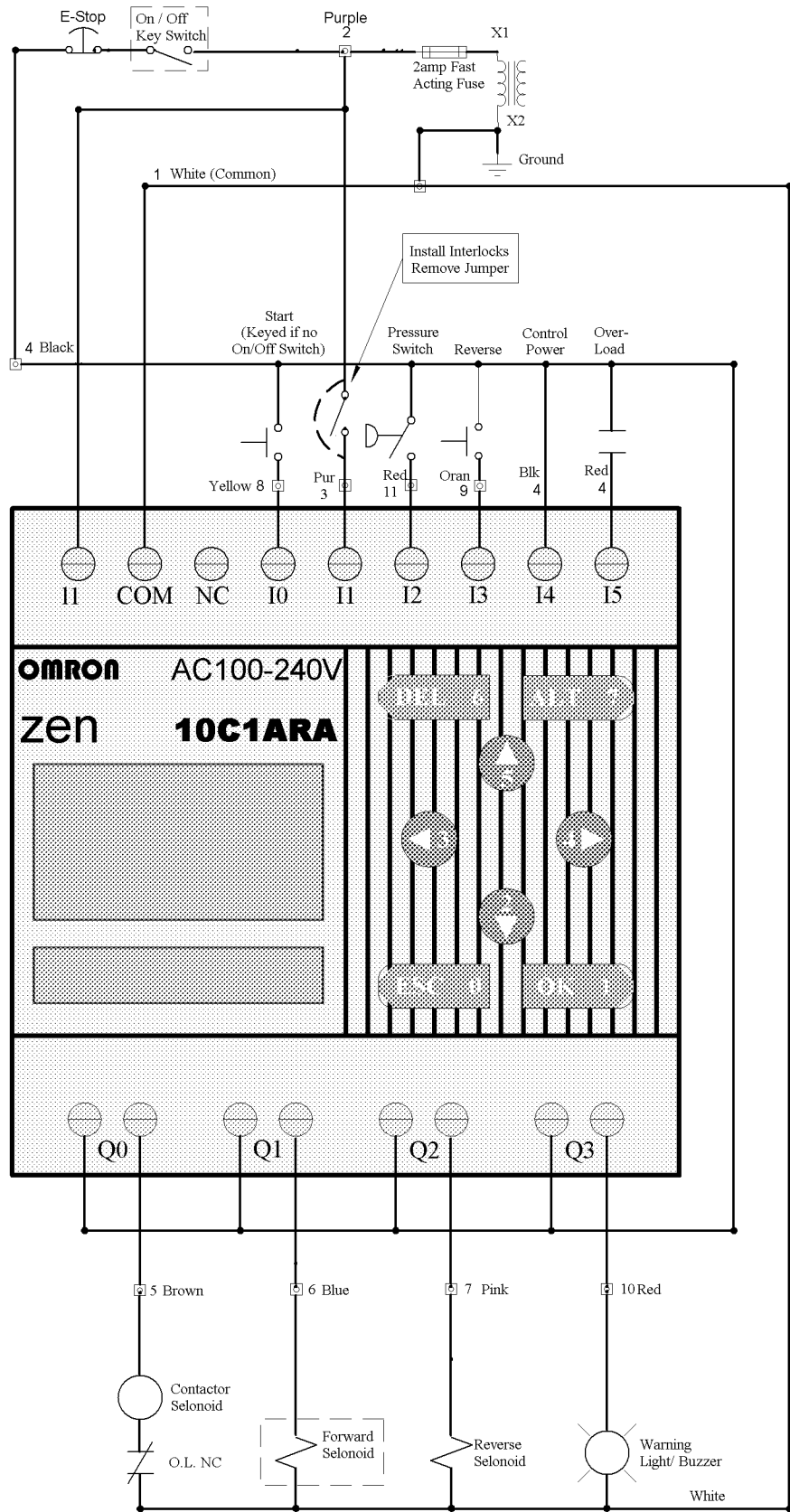
Press buttons **DEL 6** and **ALT 7** together

Screen should say “Auto-Count” at the top.

If power is lost to the compactor for more than 2 days this step will have to be repeated.

Call me if you have any questions-

Kevin Cell- 352-636-9083



NOTE: The two control wires going to drive are NOT hot. Q0 simply connects the two together. See drive for manual for drive connection details.

Danger		Description: Versa-Pak V4.0	
High voltage control cabinet to be opened by qualified personnel only.			
Warning		PSI Waste Equipment Services, Inc. claims all proprietary rights to the information contained herein. This document is issued in confidence and is not to be reproduced or used in any way that may be contrary to the best interests of PSI Waste Equipment Services, Inc.	
Only qualified personnel over the age of 18 years old shall attempt to service this machine.			
		Drawn By: Kevin E. Long	
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Versa-Pak V4- Getting Started

Versa-Pak Field Install Kits include

- Manual, and extra wiring sketch for panel
- Prewired controller, terminal blocks, wire whip
- DIN rail with self-drill and tap screws
- 12 zip ties, 6 wire nuts
- Decal with version and tech support number

The Versa-Pak is a universal compactor control system that will run most stationary or self contained compactor from most manufacturers. It is a timer shifting unit and has a smart-shift feature that shifts the compactor into reverse if it deadheads for more than a few seconds. This system is easy to install, troubleshoot, and understand. It's best to read the included information so you get the most out of your system. There are a lot of great features for field techs such as indicator lights and control buttons on the ZEN panel to bypass the remote and run the power unit from the ZEN.

A few things to remember

- Get familiar with the Versa-Pak system by studying the drawings included. It will not only save you time, but there are a lot of great features you'll want to use. Refer to it frequently.
- You will use OK, Esc, Up, Down, Left, and Right Keys
- Most user adjustable settings are in PARAMETERS. Press OK, Select PARAMETERS using Down arrow.
- You change digits not numbers. In other words if the number is 10 and you are on the zero and press down one time it will be 19 because the 0 will turn into a 9.
- When setting counter you will go to PARAMETERS, press OK, and then select LEFT and then go up until you see C0.
- When changing settings or navigating through PARAMETERS you will use OK a lot. OK indicates you want to change the setting or parameter or you are done changing the setting or parameter.
- When you use the panel buttons to operate the compactor, you are also navigating the menu. So after each command, press escape (Button 0).

Parameters most commonly set:

Forward- T0
Reverse- T1
Multi-Cycle- T2
Auto Shut-Down- T3

Auto Count: **REQUIRES WARNING LIGHT AND BUZZER! REQUIRES LIMITED ACCESS TO CHARGEBOX AND INTERLOCKS ON ALL DOORS!**

Counter- C0 (set for # of counts before unit starts) .

On version 4.1 and later, you must initiate the auto-count feature by pressing Buttons 6 and 7 at the same time. Also, if compactor has no power for more than 2 days, you'll have to re-initiate count.

As always, if you have any problems, please call me on my cell at 352-636-9083!

Versa-Pak V4 is the 4th generation of PSI Waste's aftermarket compactor control system designed especially for used stationary, self-contained and apartment style compactors. It provides all of your favorite features including safety and equipment longevity features you won't find in OEM units. Versa-Pak was designed by Kevin Long at PSI Waste Equipment Services, Inc. many years ago and can be found all over the US and Canada. It's simple, powerful, and universal.

- It's basically a Timer Shifting system so it is universal and works well with bypassing cylinders and in the winter
- It is also Pressure Shifting (Smart Shift)- if the unit deadheads forward for 3 seconds it shifts into reverse, so it works well with pressure shifting cylinders.
- Includes Multi-Cycle Timer and Auto Shut Down (shuts down if unit runs for 10mins (adjustable) continuously)
- Has Auto Count built in and works well with photo eyes.
- Reverse button is momentary (hold to reverse) for safety and serves as an alternate means of stopping the unit (like when the Stop button head is missing or the maintenance guy puts a screw clamp behind it!)
- Works well with Motor Drives and 1 phase motors (time delay forward, time delay motor off)
- Will fit in most any panel and run most any compactor as good or better than the OEM system.
- It's simple to install and troubleshooting is easy- simple wiring and indicator lights help to diagnose problems.

Basic Timer Settings (at the top of screen you'll see either "S" (seconds) or "M:S" (minutes.seconds). This has changed since V3. It enables more accurate timer settings to prevent deadheading of cylinders- especially on shorter strokes.

- T0- Forward Time (S) (in seconds so 20.50 equals 20 ½ seconds)
- T1- Reverse Time (S)
- T2- Multi Cycle Timer (MM.SS)
- T3- Auto Shut Down (MM.SS) (Shuts unit down if continuously running- default is 10min)
- T4- (MM.SS) Full Shut Down (to enable 100% full shut down set at 1 or 2 seconds. Unit will shut off when full. Reset with E-Stop. Default 6seconds- Disables feature)
- T5- (S) Forward Delay. For 1phase motors or motor drives (requires open or tandem center valve). Allows motor to start under a no load condition.
- T6- (S) Motor Off Delay. For 1phase motors (requires open or tandem center valve). Prevents motor from stopping and starting every time the door is opened. Set for 20 or 30 seconds and when the door is opened the unit will shift into neutral and wait for the signal to start again. After time is up unit will shut off.
- T7- (S) Auto Start Warning Delay- this is set for 20 seconds. This is the time required for warning light and buzzer when compactor is starting automatically.
- **Auto Count-** Auto-Count starts the compactor automatically when the interlocked door (wired to I1) is opened and closed the number of times set on C0. Loss of power, e-stop, reverse and start all reset the counts (C0) to 0. **YOU MUST INSTALL A WARNING LIGHT AND HORN** according to ANSI standards and common sense! **Safety First!** Also DO NOT install Auto Count with time delay horn disconnected. This may fool a tech, maint man, etc. into thinking the unit is not running and put him in harm's way!!!

Once you have ensured it is safe, you can enable auto count by doing the following.

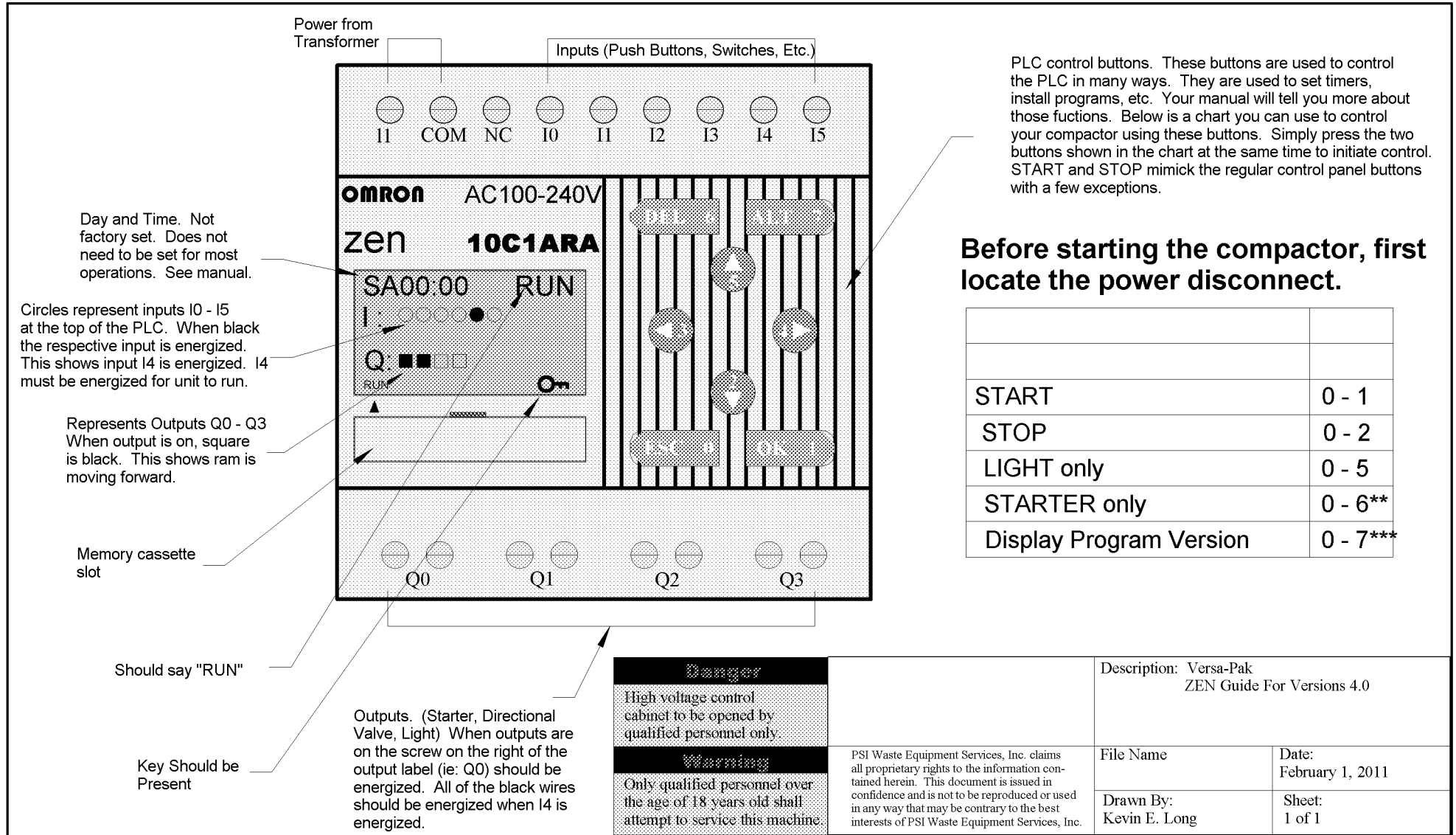
- Push B7 and B6 at the same time. This will enable Auto Count. (new to V4.1)
- Install light and buzzer to Q3 (new to V4- in V3 and earlier this was used for 80% and full light but rarely used)
- C0 is the counter. If this is set the unit will start automatically (Default setting is 9999). C1 is the cycle interrupted counter. If you want the unit to start again on the first door close after the cycle was interrupted then set this for 1. If cycle is interrupted the unit will start after the 20 second warning is up.
- To cancel Auto Count Push B7 and B5 at the same time. Remember to set C0 to 9999 also as an additional precaution.
- DO NOT change any other settings!!!

Buttons

Buttons on the front of the ZEN perform multiple functions. In addition to setting parameters you can operate the compactor using these buttons. Before attempting this make sure you know where the power disconnect is. Press the indicated combination of buttons below to perform the listed task. FYI- the buttons still navigate the menu screen so after each command hit the "ESC 0" button to exit the menu so you don't accidentally change a parameter or something. Some commands available in V3 are no longer available because of programming limits.

- 0 and 1 - START
- 0 and 2 - STOP
- 0 and 5 - LIGHT
- 0 and 7 - PROGRAM VERSION ALWAYS VERIFY VERSION BEFORE CHANGING SETTINGS!

FOR MORE INFO KEEP READING OR CALL 352-636-9083



Day and Time. Not factory set. Does not need to be set for most operations. See manual.

Circles represent inputs I0 - I5 at the top of the PLC. When black the respective input is energized. This shows input I4 is energized. I4 must be energized for unit to run.

Represents Outputs Q0 - Q3. When output is on, square is black. This shows ram is moving forward.

Memory cassette slot

Should say "RUN"

Key Should be Present

Outputs. (Starter, Directional Valve, Light) When outputs are on the screw on the right of the output label (ie: Q0) should be energized. All of the black wires should be energized when I4 is energized.

PLC control buttons. These buttons are used to control the PLC in many ways. They are used to set timers, install programs, etc. Your manual will tell you more about those functions. Below is a chart you can use to control your compactor using these buttons. Simply press the two buttons shown in the chart at the same time to initiate control. START and STOP mimic the regular control panel buttons with a few exceptions.

Before starting the compactor, first locate the power disconnect.

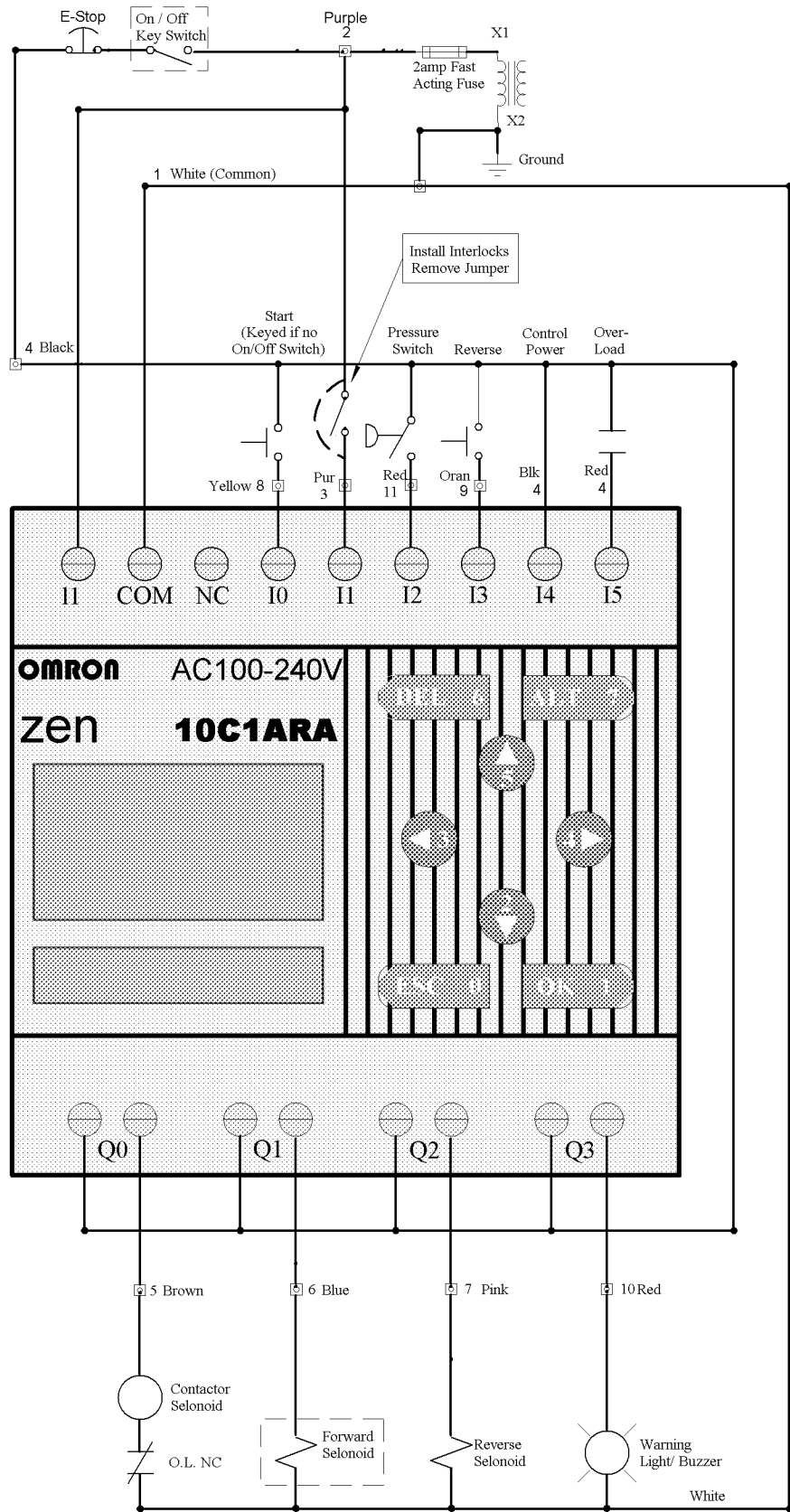
START	0 - 1
STOP	0 - 2
LIGHT only	0 - 5
STARTER only	0 - 6**
Display Program Version	0 - 7***

Danger
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Warning
Only qualified personnel over the age of 18 years old shall attempt to service this machine.

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Description: Versa-Pak ZEN Guide For Versions 4.0	
File Name	Date: February 1, 2011
Drawn By: Kevin E. Long	Sheet: 1 of 1



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