WILKINSON HI-RISE

CHUTE MANUFACTURERS SINCE 1923

Operation and Maintenance Instructions for the

Wilkinson Hi-Rise

Compaction Systems Manual

Models 350-C5 / 400-C5 / 600-C5

Compactors / 45K Extruder

3rd GEN - Revision 8.0

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1. USING THIS MANUAL

A. INSTRUCTION MANUAL

This document contains an Operation & Maintenance Instruction Manual for Wilkinson Hi-Rise's (*now referred to as Wilkinson*) **Trash Compactor Systems.** This manual is divided into six (8) basic sections:

1. Using this manual
2. System Description
3. Equipment Safety
4. Installation & Start Up
5. System Operation
6. Periodic and Preventive Maintenance
7. Troubleshooting
8. Schematics and Drawings

B. SPECIAL ATTENTION BOXES

Throughout this manual, special attention boxes are provided to supplement the instructions and make special notice to potential hazards and important aspects of the operation of the system. The definition of these special attention boxes is as follows:

WARNING!
Indicates a condition or hazard, which will cause severe personal injury, death or property damage.

NOTICE!
The special attention box contains information pertaining to the system.

C. LOCATION OF THIS MANUAL

WILKINSON strongly advises that the end user reads this manual prior operating the system; And to have this accessible to maintenance and operators of the equipment.
If there is any service required for the unit, make sure it is performed by trained personnel only. If required contact WILKINSON for technical support and advice on how to get your system in working condition

2. SYSTEM DESCRIPTION

A. GENERAL

2.1 The Wilkinson **Trash Compactor System** is a flexible system designed to fulfill the needs of apartment compaction of bagged trash on to Trash containers. Depending on the volume of waste to be processed, the system can be furnished on three different sizes as standard units

600-C5 Compactor is our largest unit designed to manage High Rise Buildings with a high volume of waste. Designed for Chute Fed or as an optional Hand feed if properly Specified.

400-C5 Compactor, the most common choice for chute fed applications where the footprint is limited, Dual cross arm cylinder operation for greater compaction ratios when needed.

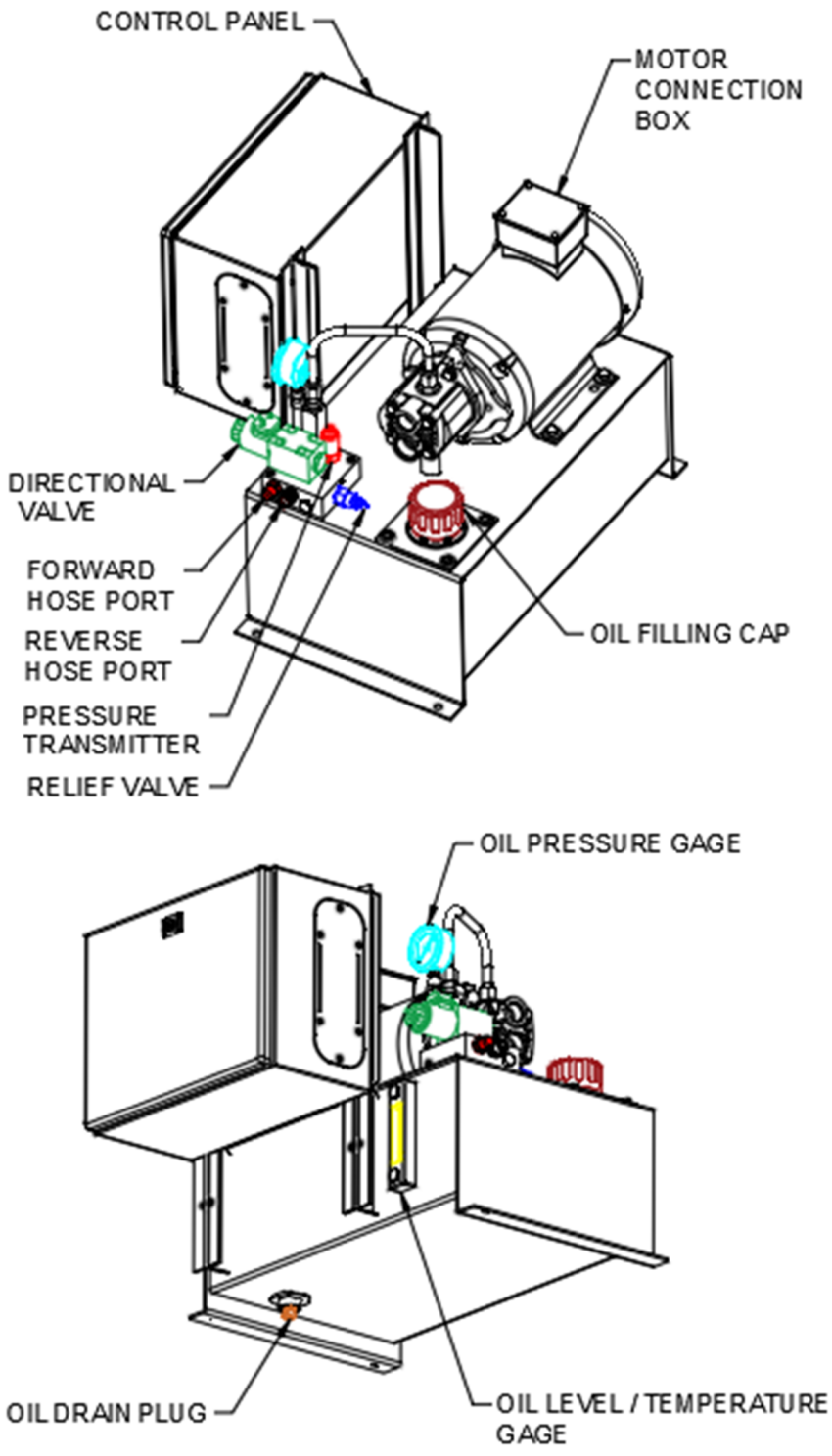
350-C5 Compactor, specifically designed and engineered to suit high rise buildings where garbage room space is limited, Customizable hopper fed, is the choice for applications where a sorter unit would be integrated on the recycling system.

45K Extruder, is designed to extrude trash on its hopper to be use with "sausage" garbage bags, when required, or when there are space limitations. Bag Switch Controls the Automatic Shut off operation of the extruder.

Common Features on all our compaction equipment

- Fully automatic photo-eyed operation with time delay starts and stops unattended
- Standard safety feature includes hopper door shut off switches and emergency stop
- Hydraulic Powerpack for dependable operation

2.2 POWERPACK TYPICAL COMPONENTS



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The Powerpack Unit shown provides the necessary interconnection with the compactor unit for mointoring and operation.

2.3 TYPICAL POWERPACK CONTROL PANEL

From Left to right:

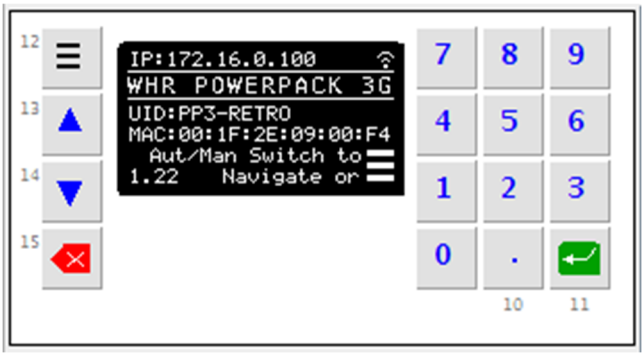
(1) **DISPLAY Controller**: Provide visual status of Powerpack operation.

(2) **Audible Alarm (Buzzer):** Emits a Sound as per Powerpack Status.

(3) **Visual Alarm (Red Light):** Lights ON as per powerpack status.

(4) **Mode Switch:** Use it to move between the AUTO and MANUAL mode and on MANUAL Mode to command the RAM to move Forward or Reverse.

(5) Emergency Stop:interrumpts the DC Power Supply to all controls



2.4 DISPLAY CONTROLLER – KEYS

(0-9) Numeric Keyboard: Use it to enter parameters on the program

(11) ENTER KEY: Use to accept or confirma data/actions on the software

(12) MENU KEY: Use to go to the Main/Initial Screen and to return on certain sections of the program

(13) UP ARROW KEY: Use for navigation between menus

(14) DOWN ARROW KEY: Use for navigation between menus

(15) BACK KEY: Use to cancel operation modes and to return in certain sctions of the program

3. EQUIPMENT SAFETY

1. Never place any part of the body inside the compactor. The moving Ram may cause serious body injury.

2. Always wear safety Glasses, gloves, steel-tipped shoes, and a hard hat when you work a compactor.

3. If for any reason, the compactor does not function properly, do not try to repair it, shut off power at the main disconnect and o the compactor e-stop at the control panel and contact a factory certified technician to repair this equipment

4. Never Climb or reach into the compactor to retrieve objects or articles. Always access the compaction chamber with power off and by using the Access door protected by the Electric Safety Detector. Close access door and restore power to continue operation.

5. No person shall operate the compact unit until the person is thoroughly trained in proper and safe operating procedures.

6. Operators shall use all applicable safety features provided on the compaction equipment; by passing on these features will void the manufacturer's warranty for this equipment

7. Operators should be certain that all individuals are clear of the point of operation and pinch point area before starting the compactor.

8. Operators shall report any damage to, or malfunction of the compaction equipment by submitting a report to the employer or a responsible authority.

9. The work area must always be kept clean and be maintained in a safe condition.

10. Never render inoperative, damage or remove any mechanical, hydraulic or electric device used to provide safe operating condition.

11. Comply with all applicable requirements of the following documents:

    - ANSI Z245.2-2013 – STATIONARY COMPACTORS – SAFETY REQUIREMENTS FOR INSTALLATION, MAINTENANCE AND OPERATION EQUIPMENT.
    - ANSI A12.1-1973 - SAFETY REQUIREMENTS FOR FLOOR AND WALL OPENINGS, RAILINGS AND TOE BOARDS.
    - OCCUPATIONAL HEALTH AND SAFETY ACT- (OSHA**)**

4. SYSTEM INSTALLATION & START-UP

A. INSTALLATION

! WARNING
Only experienced personnel should attempt to install, service, or operate this equipment. Installing this equipment requires the installer to work with high voltage electrical connections, which can cause serious injury or death.

4.1 Introduction

This Compaction system is designed for use in buildings that have a level of access to waste pickup points. Ramps or sills can only be navigated with special handling equipment to accommodate the wheeled waste containers used in the system.

Enough information is included to help qualified personnel in correctly installing, operating and maintaining the compactor. Added technical help is available through your local manufacturer's representative or directly from the manufacturer.

Refer to the appropriate sources as required.

Read the entire Installation Chapter before installing Wilkinson 350-C5 / 400-C5 / 600-C5 Compactors 45K Extruders. It is assumed that a specific location for the compactor has already been established with the assistance of the Wilkinson distributor and qualified personnel will be utilized to install this equipment.

4.2 Compactor Placement

Position the compactor with its hopper under the building's waste chute.

4.2.1 New Construction

In new construction involving a metal waste chute, the chute will normally have been supplied in a configuration to feed directly into the compactor without modification or addition.

4.2.2 Retrofit Construction

In existing installations, a transition section is generally required to connect the compactor hopper to the bottom delivery end of the building waste chute.
If a transition section is used, it should be constructed of welded material to prevent waste from getting stuck on exposed bolts, rivets or screws. Use welded angle iron sections as corner elements and hang the component from the ceiling of the compactor room, if possible. If the transition is to be welded to the compactor hopper, brace the hopper as needed.

4.3 Anchoring the Compactor

Mounting holes are in the legs of the compactor. The Compactor must be installed on a level floor with four legs on the same level plane.

Using a spirit level to check, place shims under the legs of the machine to level it to its final horizontal position.

NOTE: ½" expansion bolts can be used at each leg to anchor the machine with the bolts passing through the shims to prevent future slippage of the shims. If the holes permit larger bolts to be used, use larger size.

4.4 Electrical Installation

Power requirements for this unit are

STANDARD: 208 - 220 VAC 60 HZ, 30 Amps 3 PHASE

(4) 10AWG THHN WIRES: Line 1, Line 2, Line 3 &
GROUND (SOLIDLY EARTHED)

OPTIONAL: 440 - 480VAC 60HZ 20 Amps 3 PHASE

(5) 10 AWG THHN WIRES, LINE 1, LINE 2, LINE 3 , NEUTRAL &
GROUND (SOLIDLY EARTHED)

VOLTAGE BETWEEN PHASE LINE AND NEUTRAL MUST BE 208 – 220V

! WARNING
Other voltage would require modifications to the wiring/component configuration, Make sure power requirements are met before turning the compactor On. Any deviation from this can cause serious damage to the unit

4.4.1 Interconnection Service Box

It is recommended to install a fused power disconnect for the powerpack unit ONLY to perform maintenance and/or service activities on the unit

Proper observance of lockout and tag gout guidelines shall be followed in accordance with the applicable building/site code regulations

Install the conduit run with 10 AWG (or larger) conductors between the fused power disconnect and the POWER UNIT control panel.

Connect the three power supply conductors as per the POWER PACK WIRING DIAGRAM.

WARNING: DO NOT ATTEMPT TO TEST RUN THE COMPACTOR AT THIS TIME

4.5 Installing the Power Pack

The Power Pack is the hydraulic system used to operate the compactor. It is a self-contained unit that includes motor, pump, valves and associated controls.

The installation of the Power Pack must meet local mechanical and electrical codes and should be installed by qualified personnel.

4.5.1 Locating and Mounting

4.5.1.1 Locate the Power Pack within six (6) feet of the compactor, use anchor floor as needed

4.5.1.2 if it is required to locate the unit at a longer distance as above specified, do not interconnect extensions hoses, as it could lead to leaks, high pressure oil flows during powerpack operation and constitutes a safety risk/hazard. Contact the manufacturer for a special hose for the application.

4.5.1.2 Leave adequate clearance around the unit for both service access and for ventilation.

4.5.1.3 Attach the unit to the floor (or shelf) using the appropriate fasteners.

4.5.2 The Hydraulic Fittings and Oil

4.5.2.1 Connect the hoses attached to the power pack to the compactor:

4.5.2.2 Attach same color hose fitting from the power pack to the same color fitting on the compactor.

4.5.2.3. Fill the Power Pack reservoir tank with hydraulic oil (ISO-22 or equivalent) to the top mark on the oil level on the sight gauge mounted on the front of the oil reservoir.

4.5.3 System Wiring

Connect the wiring between the compactor electrical disconnect and the power pack in accordance with the referenced wiring diagram contained in this document Follow local codes for the installation.

! WARNING
All electrical work must be carried out in accordance with the National Electrical Code (NEC) and all State and Local Electrical Codes. Only Licensed Electricians should perform the work.

4.5.3.1 Connect all similarly colored wires together (black to black, white to white, red to red, etc.)

4.5.3.2 ALWAYS connect the GREEN ground wires to ensure that the unit is properly grounded.

4.5.4 Electrical Checks (Motor Rotation)

Place MODE switch in MANUAL mode and turn the MANUAL SWITCH to the forward position momentarily. Observe the rotation of the motor while performing this procedure. The motor should rotate in the direction of the arrow on top of the motor. Another way to confirm proper rotation is to face the motor back and make sure it rotates clockwise. If rotation is in the opposite direction, **shut off power** at the electrical disconnect and, **CAREFULLY**, interchange any two of the three main electrical wires leading from the power pack control panel to the electrical disconnect. Turn power ON and REPEAT procedure. Motor should operate in the reverse the direction and should be in the proper direction now.

4.5.5 Internet Access Setup

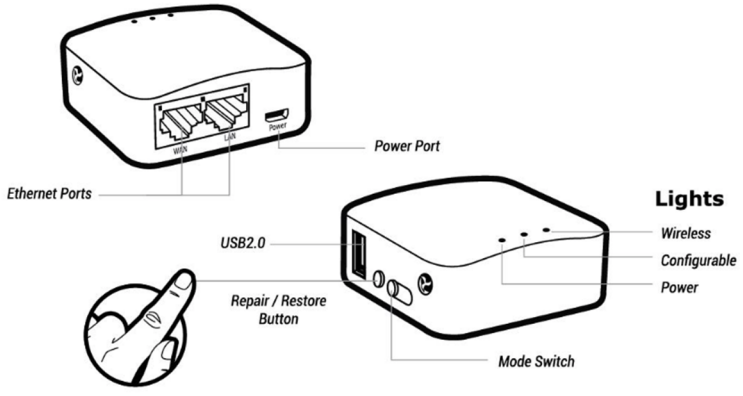
The powerpack requires internet access to be able to connect remotely to the email servers for alarm notifications, get remote tech support and be updated over the air for future software updates

To do this, an Ethernet Internet cable needs to be provided by the building and this to be connected to the remote monitoring kit, located at the trash room.

Once Powerpack can establish connection to the remote monitoring kit, it will show an IP address on the top of the display.

4.5.6 Remote Monitoring Kit

The remote monitoring kit consists of a pre-configured from factory router, that has already been configured to provide internet connectivity to the Powerpack and wireless communication to the internet to operate. (See Remote Monitoring Kit for Installation Instructions).



4.6. START-UP

4.6.1 Checks before Initial Start-up

After all the wiring is complete and power has been connected to the electrical disconnect, check to ensure that connection follows local codes and safety requirements.

4.6.2 Power Pack Oil Level Check

Before powering up the system, check the oil level in the power pack reservoir via sight glass on the right side of the reservoir tank. If oil is needed, add **ISO 22 or Mobil DTE13 or equivalent.**

4.6.4 Hydraulic Connections to the Compactor

Make sure there are no leaks at the connections of the powerpack hoses and at the hydraulic terminals at the compartment. If there is STOP the unit and retighten the connections.

4.6.5 Installing the Waste Container

To connect the wheeled waste container to accept waste from the compactor in the standard configuration, follow the following instructions:

CHAIN BINDERS

1. Press the RED Emergency button to turn off the power to system.
2. Move the container's open end over the open end of the compactor. Engage the ratchet hooks into the container rings.
3. Work each ratchet to bring the container to within ½" of the compactor.

SINGLE SIDE LATCH

1. Press the RED Emergency button to turn off the power to system.
2.. Move the container's open end over the open end of the compactor. Engage the hooks on the container unit, make sure it is secure and proceed to the operation.

INSTALLING THE SAUSAGE BAG ON THE 45k EXTRUDER

Roll up over the compactor nose the desired length of bag to be used

- Connect the Roller bag Switch Clip to the end closer to the switch to stop the extruder

5. SYSTEM OPERATION

Operation

5.1 Description of Operation *Overview*

• The Wilkinson 350-C5 / 400-C5 / 600-C5 Compactors are designed for loading and compaction of waste into totally enclosed wheeled waste containers as defined on ANSI Z245.2 - 2013

• The Wilkinson 45K Extruder, uses a “sausage” style bag to contain the waste, a bag switch located at the nose of the unit, will be activated at selected length of the desired garbage sausage and will cut power to the unit for safety as defined on ANSI Z245.2-2013

• The waste containers are removed from the compactor when full. These containers can then be rolled into an intermediate storage area or directly to the location where the local Trash authorities will unload the containers.

• The hopper on top of the compactor receives the waste and directs it into the compaction chamber. A photocell, installed in the lower portion of this chamber, detects waste and initiates the moving of the ram that compacts the waste.

• The hydraulically actuated ram is energized and driven forward for a controlled period to force the waste into the wheel container. The ram continues to travel back and forth, compacting the waste against the material already compacted in the container until the photocell no longer detects waste in the body of the compactor. The ram will stop in the rearmost position until waste is again detected.

• When the container is packed to a pre-determined density, the compactor automatically shuts down. The RED FULL light illuminates to indicate the need to switch containers.

5.2 Preparation for Operation

Prior to operating Wilkinson 350-C5 / 400-C5 / 600-C5 Compactors and 45K, the hopper safety gate (if applicable) or all waste intake doors must be closed before continuing with the following start-up activities.

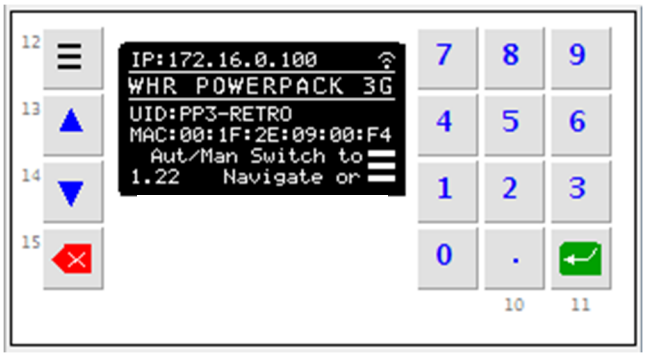
5.2.1 Start-up

For normal operation of the Wilkinson 350-C5 / 400-C5 / 600-C5 Compactors and 45K:

1. Lock an empty waste container in position per Section 4.6.5 of this manual. Ensure the hold-down bar on top of the container is in place.

2. Turn on the main power at the electrical disconnect switch.

3. Pull out the red Emergency push-button, System will boot up and **Home screen** will show indicating ready to operate

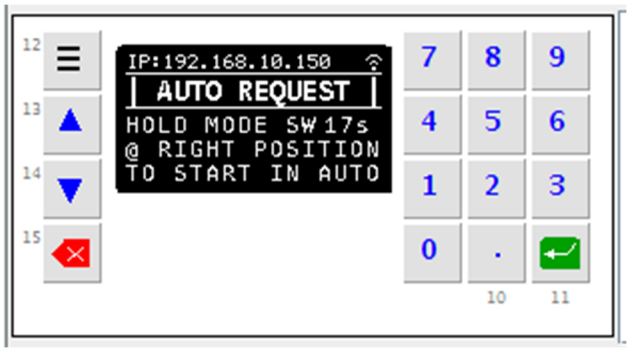


4. If the hopper has been sealed off from delivery of waste, withdraw the stop rod to permit the hopper gate to open. Lock the gate in the open position with the stop rod. (If applicable, some compactors do not come equipped with a lock gate.)

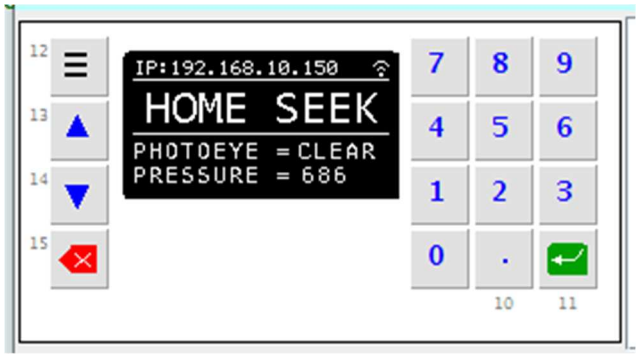
5.2.2 AUTOMATIC OPERATION MODE

On this mode, the Compactor will operate upon the signal from the photo eye installed on the compactor chamber.

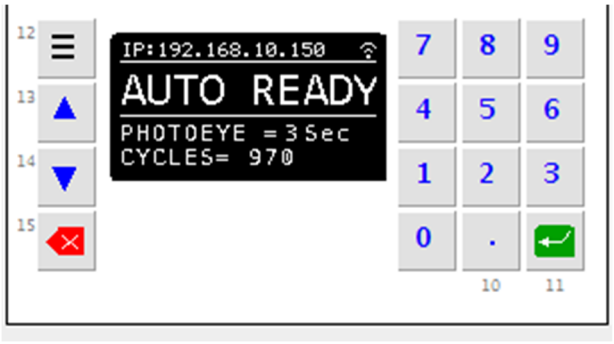
Turn the MODE Switch to the RIGHT To the “AUTO” position and hold it for 20 seconds, the screen below will appear on the DISPLAY Controller indicating the request and the remaining time to engage on this mode.



You must hold the MODE Switch for 20 seconds and then release it. If you prematurely release it, AUTOMATIC OPERATION Mode will not initiate, and you will need to start over. If a power supply failure happens or an alarm gets triggered, the unit will get out of AUTOMATIC Operation Mode and to resume, you will have to start this procedure again. If the RAM is not at the Home Position (All the way retracted inside the chamber, the following screen will appear

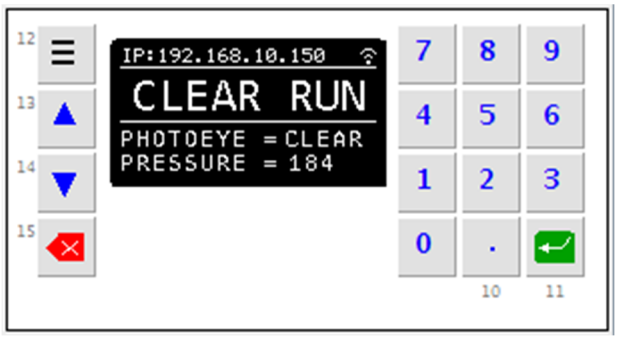


Once Compactor reachs home and if there is no trash on the compaction changer It will show the below.

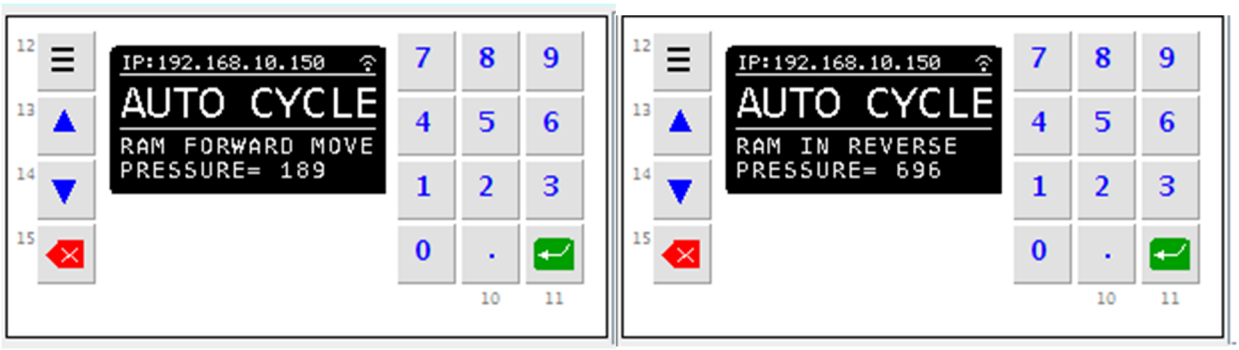


The compactor is now ready to accept waste and will continue to operate automatically. This is the Standby Screen for the AUTO Mode – It shows the delay on the photo eye and the current number of cycles of the unit.

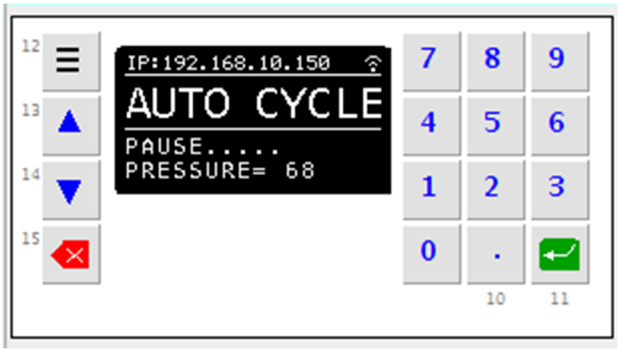
If at this screen you want to try the system with a Single RUN Cycle, you can press and hold for 3 seconds the KEY [1] on the DISPLAY Controller to execute it, RAM will move all the way to the front and then will stop in the back.



When the photo eye is blocked for more than 5 seconds, it will send the signal to the controller to initiate the compaction process. The screens below shows the movement of the RAM and the Pressure at each point of the Cycle.



If a Thru wall Door is installed on the compactor, this needs to be configured on the controller to automatically pause the operation when someone opens the door, the following screen represents a PAUSE on the AUTO Mode.



To Resume the operation, just close the door and the compactor will continue running until the compaction chamber clears the photo eye.

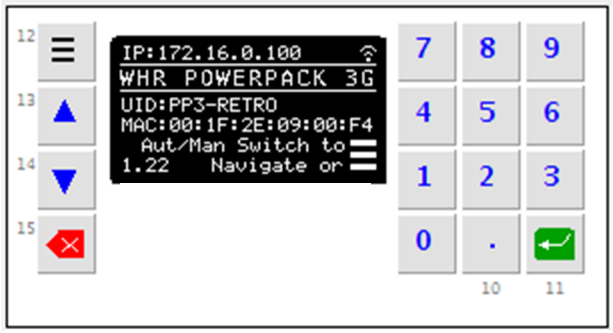
If the service door is opened, the one with the Roller Switch, the systems will be kicked out of Auto MODE.

If power is lost and compactor power is restored, you must reinitiate the Automatic Operation Procedure outlined in step 5.

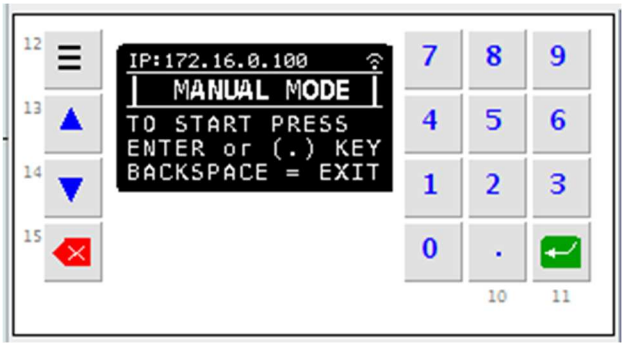
5.2.3 MANUAL MODE

To manually Operate the Compactor (NOT RECOMMENDED), or to do some service, or container changeover, the Manual Mode is required.

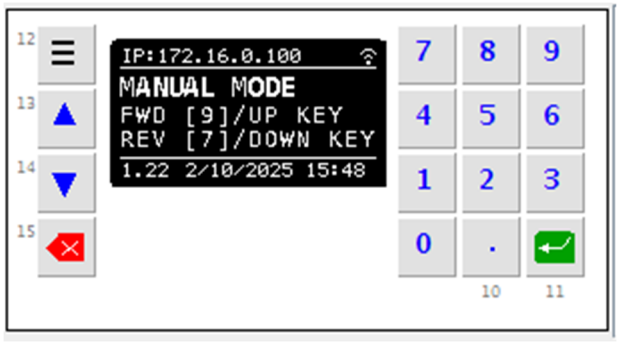
Press the BACK Key on the DISPLAY Controller and the home screen will appear



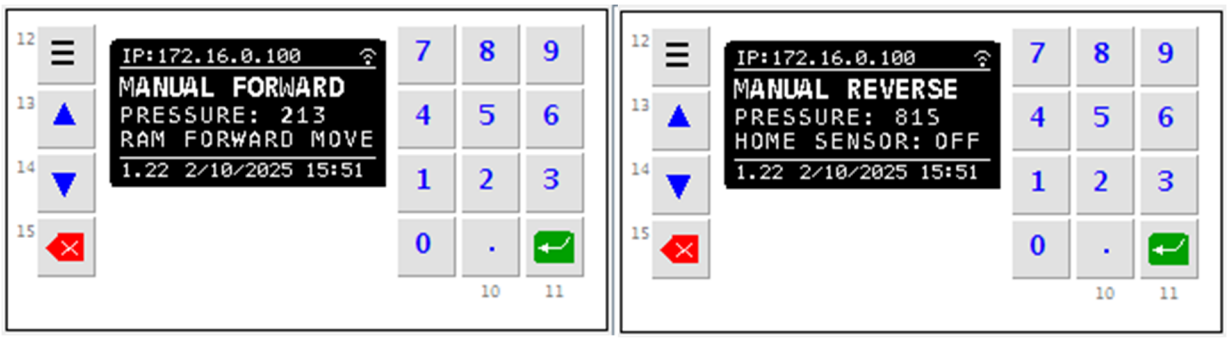
From this screen, use the MODE SWITCH to turn to the LEFT and the screen below will appear, to request the MANUAL MODE



As screen says, to start manual mode, confirm by pressing the ENTER KEY [11] or the PERIOD “.” [10] once that is confirmed screen will show as



Now the MODE SWITCH operates as the FORWARD and REVERSE commands the system. Alternative you can use the KEY [9] or UP ARROW KEY [13] to move FORWARD and the KEY [7] or DOWN ARROW KEY [14] to move in Reverse.



When compactor is moving in manual mode, the screes indicate the pressure during the action and in reverse, the condition of the Home Sensors, indicates “OFF” when the has not reached all the way back, ON when the Home Sensors (or the max Pressure) is reached indicating home position.

5.2.2 Replacing a Full Container

Once the RED-LIGHT illuminates, replace the full container as follows:

1. Place the machine in the MANUAL MODE.

2. Reverse the ram several inches to relieve pressure on the waste that is contained in the container by using the MANUAL switch REVERSE. The ram will reverse.

3. Push the RED EMERGENCY STOP button and if applicable, swing the hopper gate to its shut position to stop further delivery of waste. OR be sure to LOCK OUT each intake door so no waste is deposited into the chute while the container is being replaced.

4. Release tension on the ratchets or release the single side latch until the container is free to move.

5. Pull the container from the compactor and close the door to the end of the container. Move the container to the desired location to pick up.

6. Roll in and lock an empty container in place.

7. Swing the hopper gate back to its standby position or unlock chute intake doors.

8. Pull out the RED EMERGENCY STOP push-button.

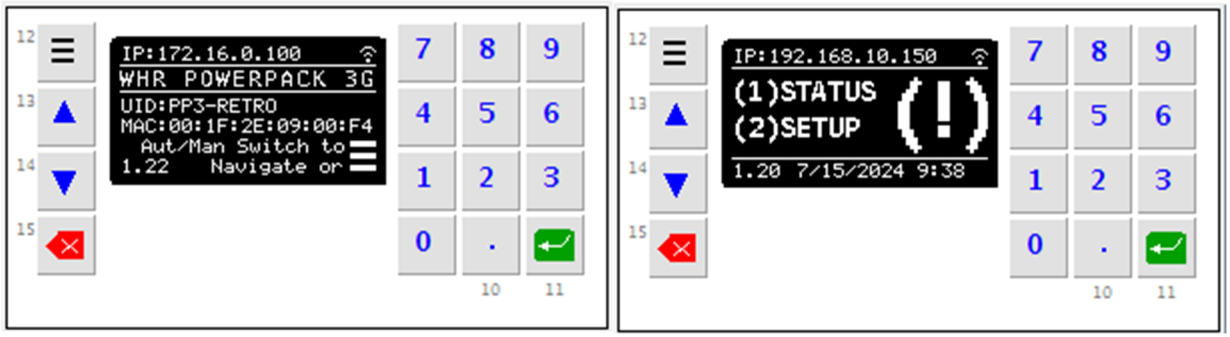
9. Select the MODE SW and initiate Automatic operation as defined on 5.2.2

10. System is ready for operation.

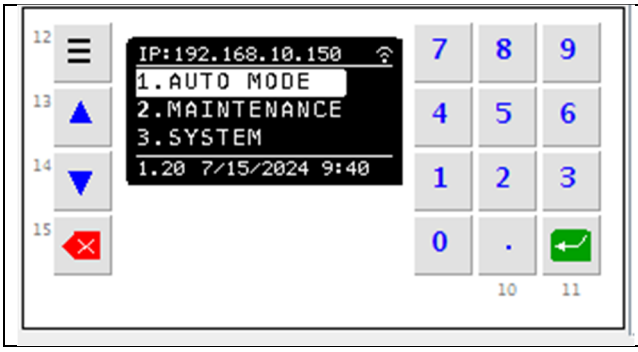
5.3 SYSTEM CONFIGURATION

Powerpack Controller comes preconfigured from factory. In case you need to adjust some parameters due to replacement and/or changes.

From the Home Screen press the HOME KEY [12] again and the dual option screen will appear; by pressing option KEY [1] you will go to the STATUS section for service statistics and by pressing option KEY [2] you will enter the SETUP section

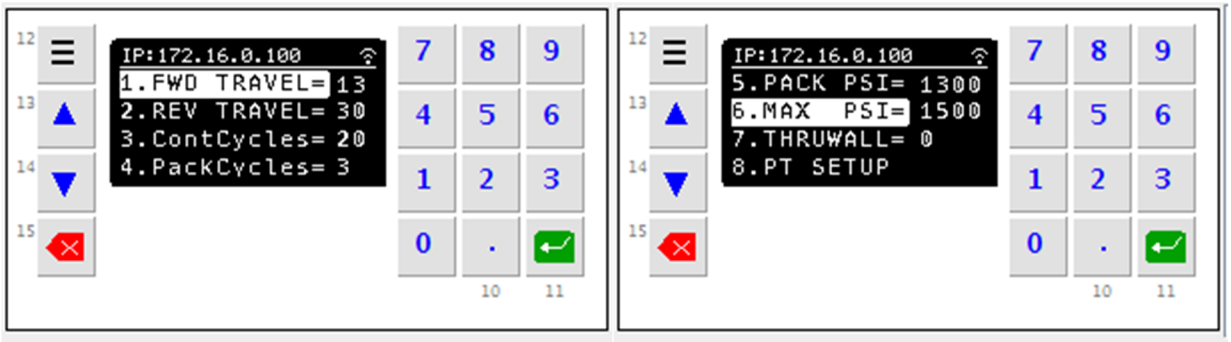


The setup section as shown below has three options.



1. AUTO MODE: Defines the parameters for auto operation.
2. MAINTENANCE: Self explanatory
3. SYSTEM: To update parameters like hour, time, Internet WIFI, Email etc.

By selecting option 1 and then pressing ENTER KEY [11] you will get to these menus screens, to navigate use the ARROW KEYS [13],[14] to enter each option.



5.3.1 AUTO MODE OPERATION – PARAMETERS SETTINGS

1. FWD Travel: Forward Travel is the “Time” in seconds the compactor will travel towards the container compacting. Set in Seconds, the correct time is around 12-13 seconds depending on the compactor model, the age of the unit etc.

2. REV TIME: Reverse Travel is the “Time” in seconds to allow the compactor to travel forward and reach the home position before an alarm is triggered, if the compactor do not travel in that time due a mechanical issue or a defective home, or pressure transmitter, an alarm will be shown on the DISPLAY controller screen.

3. ContCycles: Is the maximum number of continuous cycles the unit will be able to run once the photo eye is interrupted. After this occurred the system will trigger an alarm to be shown on the DISPLAY Controller Screen

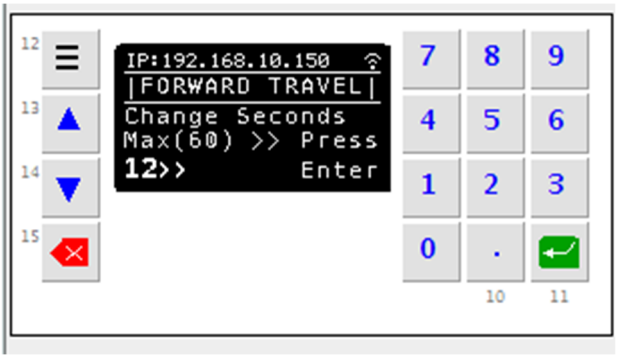
4. PackCycles: Is the number of cycles that the unit will be allowed to detect continuously before indicating a container full condition.

5. Pack PSI: Is the maximum COMPACTION PRESSURE that the system will allow during the forward travel to indicate a pack cycle.

6. Max PSI: Is the maximum pressure generated by the Hydraulic System set by the relief valve on the hydraulic manifold.

7. THRUWALL: Indicates with a “1” the presence of an Actual Door to dispose trash that will pause the operation of the compactor

8. PT Setup: Sets the Factory Default Protected Pressure Transmitter Calibration.



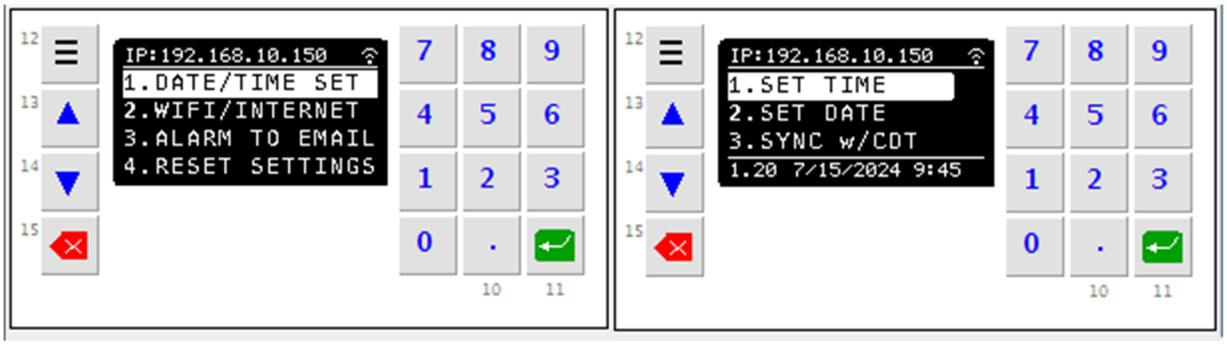
This is a Sample Screen of the parameters change

Press ENTER KEY [11] to accept the changes.

5.3.2 SYSTEM CONFIGURATIONS – ADVANCED

This option refers to advanced functions being cautious when changing those ones.

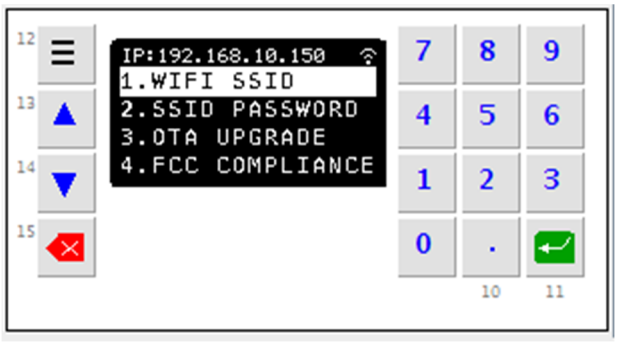
5.3.2.1 DATE / TIME SET



This option enables us to change the time and date of the controller.

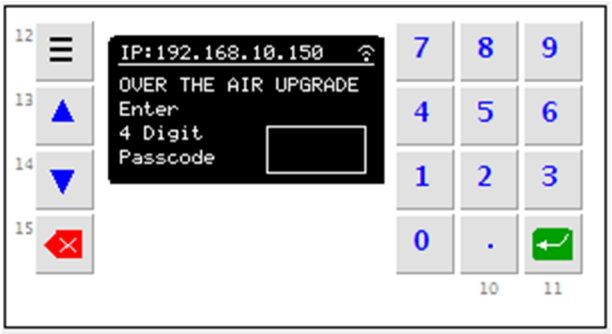
5.3.2.2 WIFI SSID

This screen option, allow you to change the WIFI Name and Password – THIS IS PRECONFIGURED FROM FACTORY TO OPERATE WITH THE REMOTE MONITORING KIT, ANY CHANGE WILL NT ALLOW TO USE THIS ACCESSORY. If the REMOTE Monitoring Kit is installed, it will automatically obtain an IP address, which will be displayed at the top of the screen.



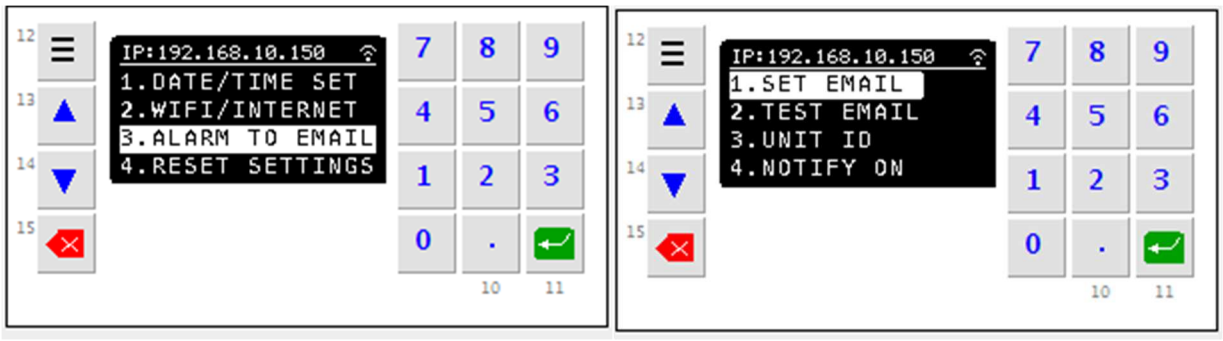
5.3.2.3 OTA UPGRADE:

This option is password protected and upon entering the code shared by the factory will execute an “OVER THE AIR” upgrade, updating the software to the latest version use it will caution and ONLY with Factory supervision.



5.3.2.4 FCC COMPLIANCE: Some information about the FCC information

5.3.3 ALARM TO EMAIL: This screen option is available when the compactor is connected to the Remote Monitoring Kit supplied by the factory



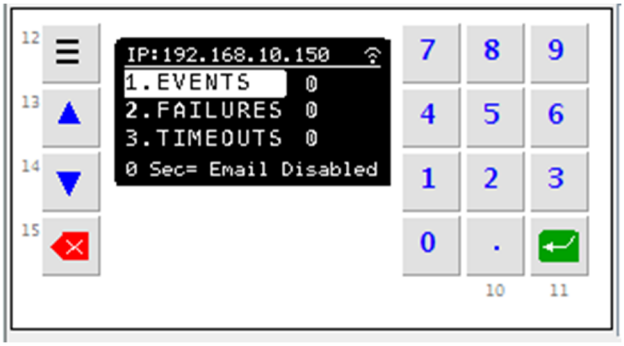
Options for setting up the email are as follows:

SET EMAIL: Allows you to define an email address where the alarms will be sent via the internet. Email will be received from the alerts@whrservice.com make sure the email is not sent to the Junk Folder on the designated email recipient.

TEST EMAIL: Test to validate the email address

UNIT ID: Allow you to define a friendly name for the unit to be included in the emails

NOTIFY ON: Allow you to enable or disable notification to specific events, failures or timeouts if this option is set to 0 the specific notification is disabled.



DETAILED LIST OF EVENTS, FAILURES AND TIMEOUT NOTIFICATIONS sent via email alarm

Events: 10: "BAG FULL, please replace and Reset Unit"

12: "CONTAINER FULL, Please Replace and Reset Unit"

Failures: 21: "Motor Overload Detected, check the motor for malfunction"

22: "Compactor ran the max continuous cycle, check for excessive trash or defective photo eye sensor"

23: "Compactor Failed to detect home position, Check Home Switch for Dirt or Damage"

24: "Compactor Safety Door has been open, Close to continue"

Timeouts: 31: "THRU WALL DOOR KEPT OPEN FOR EXCESSIVE AMOUNT OF TIME"

32: "COMPACTOR NOT READY TO OPERATE FOR TOO MUCH TIME"

6. PERIODIC AND PREVENTIVE MAINTENANCE

6.1 Introduction

As with any mechanical device, this system must be regularly maintained to ensure the system will operate long-term and trouble-free.
The periodic maintenance is regular cleaning and inspection of the systems and their accessories. Like most mechanical devices, they need to keep free of dust, lint or other foreign objects. It is recommended the following procedures be followed:

6.2 Daily Maintenance

Daily, perform the following tasks
1. Clean the photocell reflector with soft damp cloth
2. Clean the photocell lens with a soft damp cloth
3. Clean the compactor and power pack
4. Check for hydraulic oil leaks
5. Check for unsafe conditions such as:
    a. Broken or malfunctioning safety equipment, either electrical or mechanical
    b. Parts of the compactor worn or requiring repair or replacement
    c. Missing or misplaced guards, enclosures, etc., that might permit injury
    d. Frayed hoses or cables, loose conduit

These conditions must be reported to the proper personnel for correction IMMEDIATELY. DO NOT OPERATE THE COMPACTOR UNTIL THESE ISSUES HAVE BEEN CORRECTED.

6.3 Weekly Maintenance

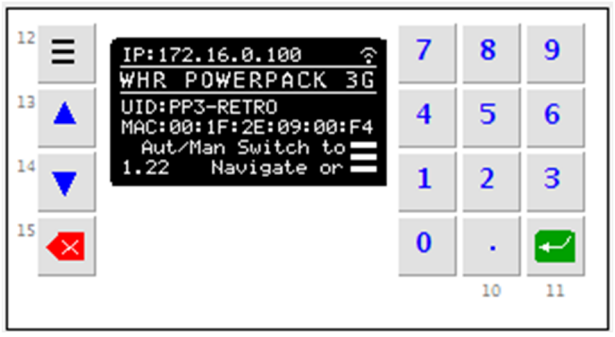
In addition to the daily maintenance procedures listed above, perform the following tasks weekly:
1. Check oil level in the hydraulic oil reservoir utilizing the sight gauge installed on the front of the reservoir tank. If oil is required, add ISO-22 or Mobil DTE13 or equivalent to
the reservoir until the gauge reads FULL.

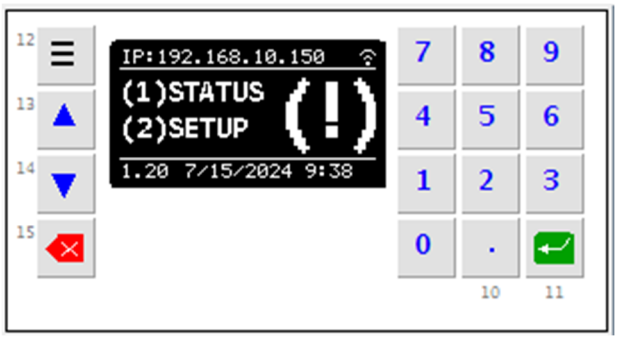
6.4 PERIODIC MAINTENANCE – METERS

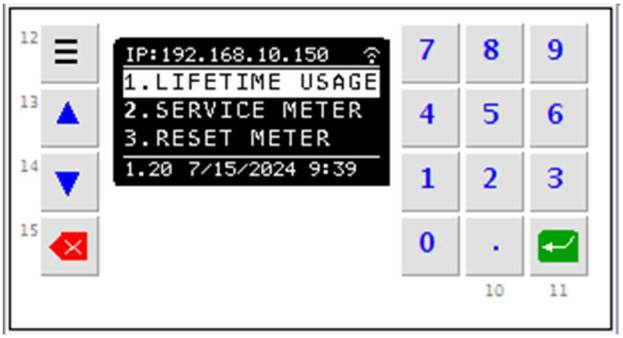
The New integrated Controller has the capacity to keep a record of cycles and hours of operation using two independent meters

Lifetime Usage: Keeps track of the overall motor operational hours and the overall cycles ran during all the life of the powerpack. This meter is non resettable.

Service Meter: Keeps the track of the motor operation hours and the cycles ran between each service. This meter can be reset every time a major change happens like oil change, preventive maintenance service event etc.

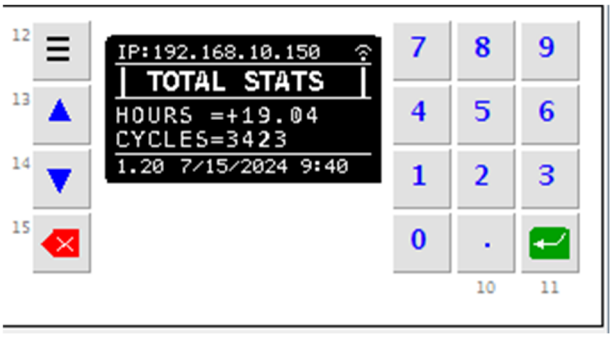






To access this service meters, go to the HOME screen then press the HOME Key [12] and select option (1) STATUS

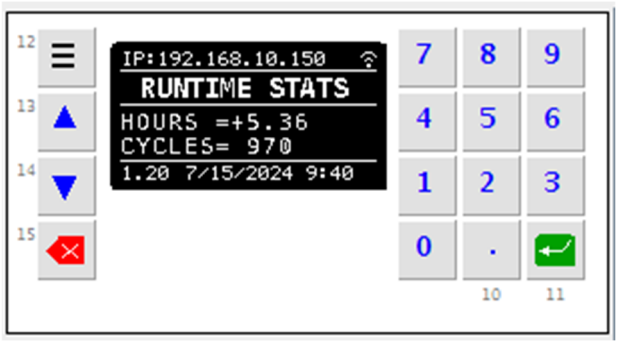
1. LIFETIME USAGE
2. SERVICE METER
3. RESET METER – THIS option will reset the service meter only



Option 1LIFETIME USAGE

Screen showing the total operational Motor Hours and the total amount of cycles ran

Press MENU Key [12] to Return to the previous menu



Option 2 – SERVICE METER

Screen showing the total amount of Motor hours and cycles ran since the last Reset Press MENU Key [12] to Return to the previous menu

Use Option 3 to Reset this meter

6.4 PERIODIC PREVENTIVE MAINTENANCE

6.4.1 Hydraulic Fluid Replacement. The hydraulic system must be drained, flushed and refilled with clean oil every six months. The suction screen at the end of the hydraulic pump is changed too at the same time. The drainage port is located at the bottom of the tank.

It is recommended that a factory certified service representative perform this service.

6.4.1 Hydraulic Fluid Contamination
The hydraulic oil reservoir should be checked for water contamination every three (3) months. This task is performed as follows:

1. Shut down the system for a minimum of 2 hours prior to oil test

2. Wipe off the top of the reservoir carefully so no impurities will drop into the Reservoir

3. Remove the dipstick/breather cap

4. Remove a sample of the oil in the reservoir from the bottom to the tank. This is done using a plastic tube and aspirator bulb, which can be used to collect oil at the bottom of the tank. (A plastic tube/aspirator bulb and gas siphoning kit works well)

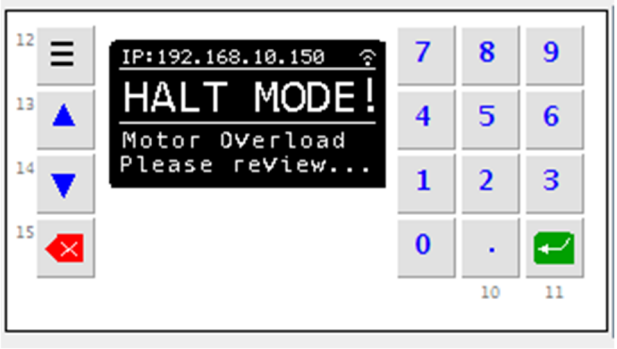
5. Check the oil sample color. If it has a milky white appearance, water is present in the hydraulic fluid and the fluid in the hydraulic system must be drained and flushed and replaced with new oil.

7. TROUBLESHOOTING

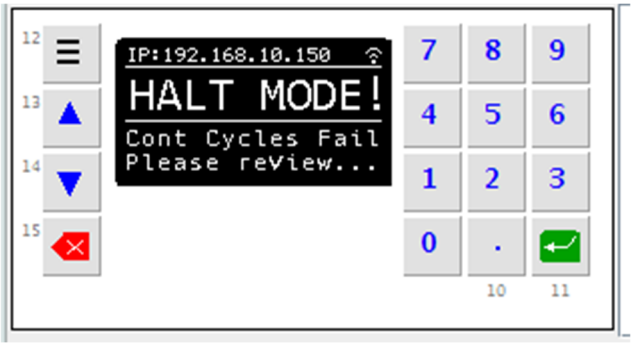
The controller includes a DISPLAY Screen that provides the current condition and status of the unit. Any Error code will appear here. Most of the time an Alarm displayed on the screen will also light up the red light AND the Buzzer Alarm. – a HALT MODE indicates that condition as follow.

In addition, a section of the manual below identifies inputs and outputs on the screen and you can also diagnose by reading the LED on the Main Board inside the panel.

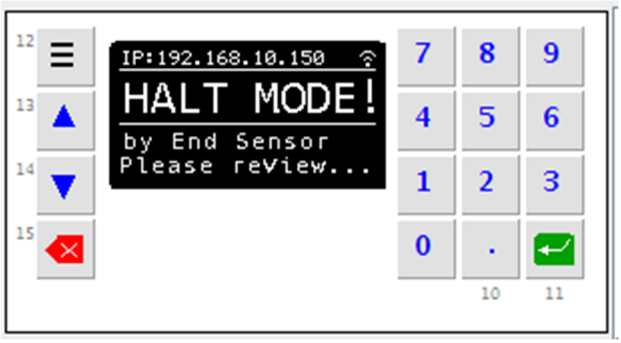
The following are the most common self-diagnostic message on the controller screen



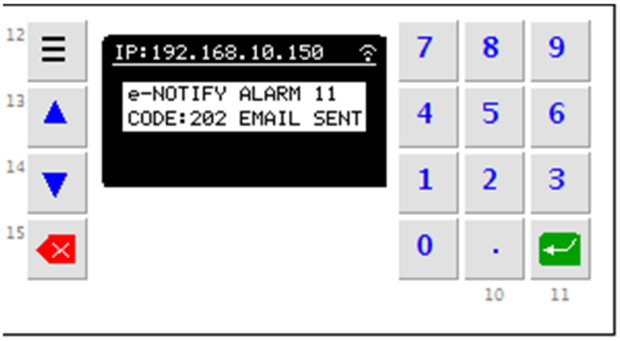
HALT MODE- Motor Overload
The motor overload relay has been tripped, indicating a motor condition that can be causing an abnormal increase of current consumption, like poor ventilation, damaged ventilation fan, repetitive manual starts etc. – To clear, locate the reset button on the unit and cycle the power connection off and back on to reset.



Continues Cycles Fail.
Compactor ran more than 20 Cycles continuously; this might indicate a failure on the photo eye or a short on the photo eye wiring.



END Sensor (45K Extruder Only)
This indicates that the Plastic bag located at the end has reached its end, and you should replace with a new one and re-set the bag End Sensor – Similar to Container FULL



EMAIL Notification
This pop message screen will appear when an email has been sent successfully, upon competition it will disappear resuming operations.

7.2 TROUBLESHOOTING NOTES

! WARNING

ONLY QUALIFIED TECHNICIANS SHOULD CARRY OUT HYDRAULIC AND ELECTRICAL ADJUSTMENTS ON THE COMPACTOR AND ITS COMPONENTS.

- Ram does not go FORWARD or REVERSE

1. Be sure that the photo eye is clean and operable. If not, check system wiring and voltage and, if correctly, replace the photocell.
2. Check to see if the motor starter is not tripped or defective.
3. Check to see that the RED stop button is not pushed in.
4. Check to see if the container is full. If the bulb in the RED light is bad, it will not illuminate thus not allowing the operator to know if the container is FULL.
5. Call a factory certified technician for service if the items listed above do not fix the problem.

- Motor does not start when photocell beam is activated

1. Check the power to the unit is turned on.
2. Check the RED STOP push-button is pulled out.
3. Check that the hopper access door is closed and locked.
4. If this is equipped with a Thru Wall Door Mounted on the hopper make sure it is closed or inspect for any damage on the wiring between the door and the powerpack.

- Motor starts but ram does not move in either direction

1. Check the hydraulic oil level in sight gauge and to be sure oil level is at least 60% on gauge. Replenish oil as necessary. Do not MIX Hydraulic Oil Types – Use only ISO 22 Hydraulic Oil.

2. If the System has been idle for an extended period, the pump may need to be primed.
    a. Remove the cap from the quick disconnect fitting on top of the pump and place a folded piece of cloth over this fitting.
    b. Cycle motor on and off to prime system.
    c. Repeat this several times until oil comes out of the quick disconnect.

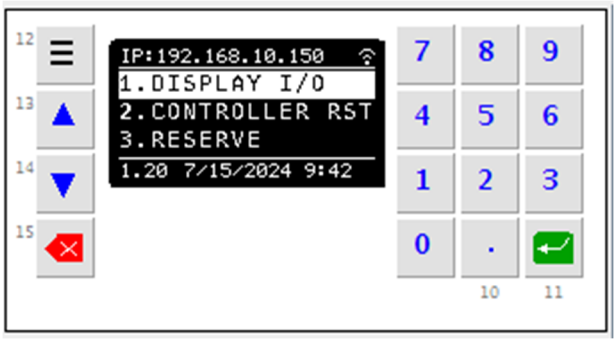
3. Be sure that the photo eye is clean and operable. Check the indicators on the photocell should be illuminated when the photo eye is clear. If not, check system wiring and voltage and, if correctly, replace the photocell.
4. Check to see if the motor starter is not tripped or defective.
5. Check to see that the RED EMERGENCY button is not pushed in.
6. Check to see if the container is full. If the bulb in the RED light is bad, it will not illuminate thus not allowing the operator to know if the container is FULL.
7. Call a factory for service if the items listed above do not fix the problem.

- Power Pack circuit breaker keeps tripping
1. Check wires supplying the power pack and compactor for possible shorts to ground or to adjacent wiring.
2. Check to see if something is stuck in the compactor chamber. Follow necessary shut-down requirements before checking the compactor chamber.
3. Call a factory certified technician for service if the items listed above do not fix the problem.

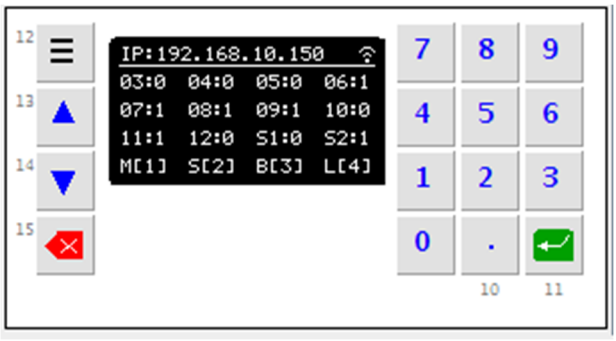
- The system does not work in manual / automatic mode when display is ON
1. Turn OFF the control panel.
2. Locate the thermal reset button in the Motor starter Module.
3. Press the reset button located on the motor starter just below the coil.
4. Check wires supplying the power pack and compactor for possible shorts to ground or to adjacent wiring.
5. Check to see if something is stuck in the compactor chamber. Follow necessary shut-down requirements before checking the compactor chamber.
6. Place compactor in MANUAL MODE and test to see if the motor is working.
7. Call a factory certified technician for service if the items listed above do not fix the problem.

- DISPLAY does not illuminate when system is turned on
1. Turn OFF the control panel.
2. Check the fuses located at the top of the control panel to ensure that they are not blown; change, as necessary.
3. Turn ON the EMERGENCY PUSH BUTTON.
4. Check to see if internal Power supply is ON – LED display.
5. Call a factory certified technician for service if the items listed above are not fixed the problem.

7.3 TROUBLESHOOTING INPUTS/OUTPUTS



Additionally, you can get into the Maintenance Section of the DISPLAY CONTROLLER to review the actual signals into the Controller (0=off, 1= ON) indicates the status of the input.



DISPLAY I/O INPUT SCREEN

INPUTS

03:0/1 Indicates the signal from the Mode SW Indicating AUTO or FWD in Manual Mode

04:0/1 Indicates the signal from the Mode SW indicating MANUAL or REV in Manual mode

05:0/1 When Active indicates the Motor Overload has been activated protecting the motor

06:0/1 It is the Photo Eye Input Sensor Mounted at the compactor

07:0/1 Home Input Sensor – it indicates when the compactor ram is fully retracted

08:0/1 Safety Switch input – is the signal from the safety door this stop auto mode

09:0/1 Thru-Wall Door input mounted on the compactor this pauses auto mode operation

10:0/1 Bad END sensor applicable to 45K Extruder like container full on Compactors

11:0/1 Power Interrupt – System signal

12:0/1 RESERVED

S1:0/1 DIP Switch PC Configuration – DO NOT MOVE

S2:0/1 DIP Switch 2 ROPTS Configuration – DO NOT MOVE

OUTPUTS

M[1] = Motor contactor, press KEY [1] to energize output latching

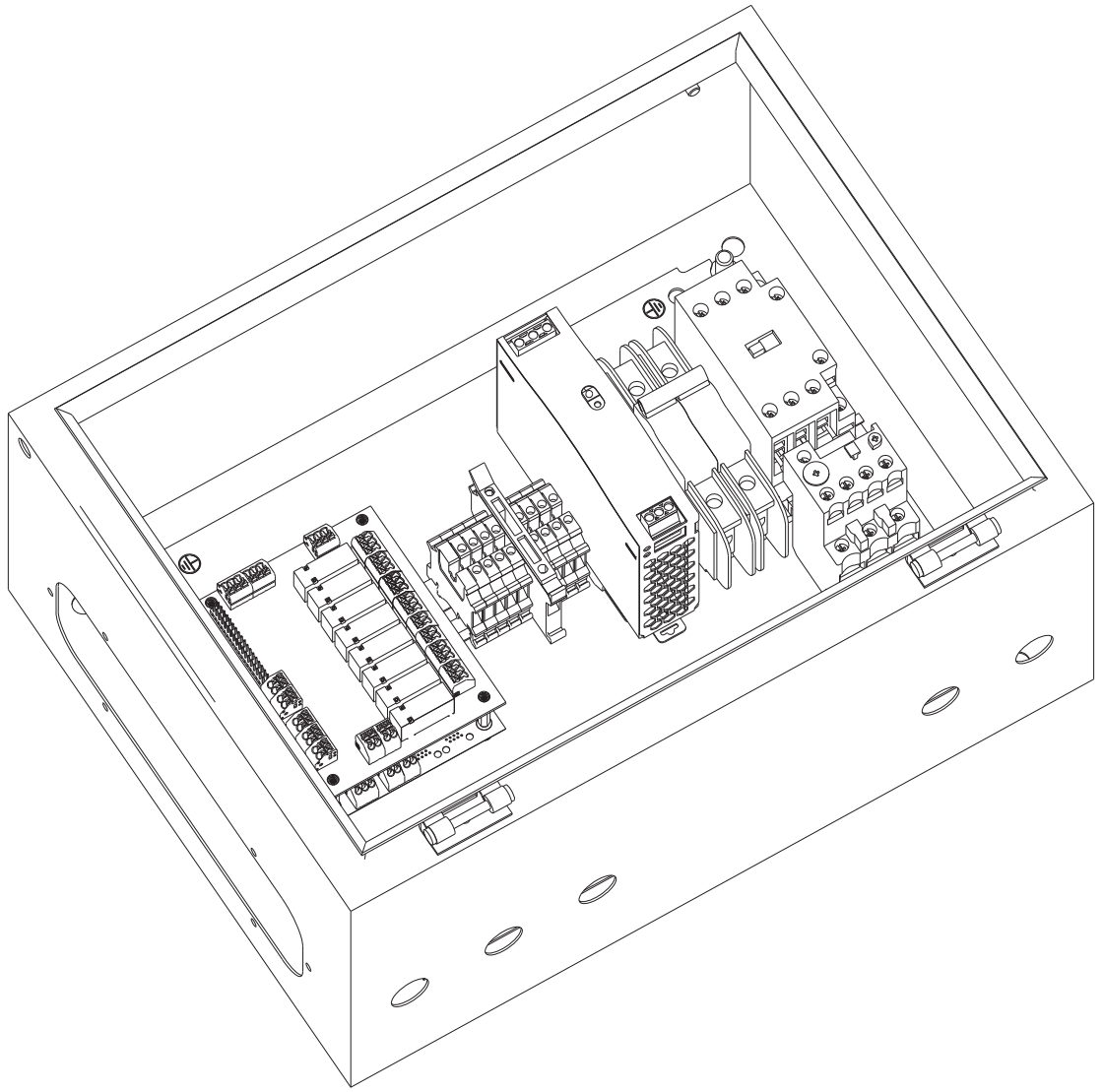
S[2] = Directional Valve for RAM RETURN Press KEY [2] to energize output latching

B[3] = Audible Buzzer, press Key (3) to momentary Energize

L[4] = Visible Red Light, press KEY [4] to Momentary Energize

The above outputs are Turned off (All at once) when press BACKSPACE KEY [15]

8. SCHEMATICS AND DRAWINGS



MATERIAL NOTES	TOLERANCES
As Noted	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES ALT.UNITS [ ] DECIMALS FRACTIONAL ± 1/8" .XX ± 0.040 ANGULAR ± 1° .XXX ± 0.020 TIME ± .5 SEC

FINISH NOTES	APPROVALS		
As Noted	DRAWN	GU	02/25/25
	REVIEWED	AG	02/25/25
	APPROVED	Ag	02/25/25

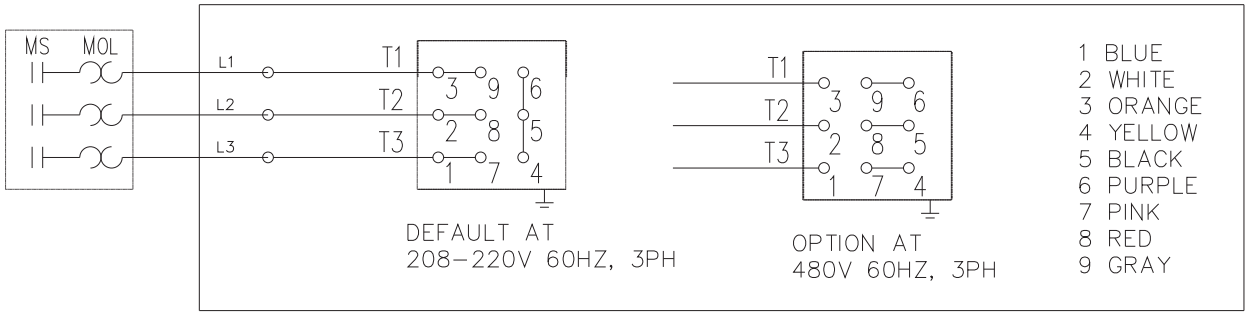
REV	DESCRIPTION	DATE	BY
0	ISSUED FOR PRODUCTION	02/25/25	GU
1	MODEL REVISION FOR MFG	08/04/25	Ag

WILKINSON-HI-RISE
3402 Sw 26Th Terrace Unit B-10
Dania Beach, FL 33312
www.whrise.com Tel: 800 231 3888

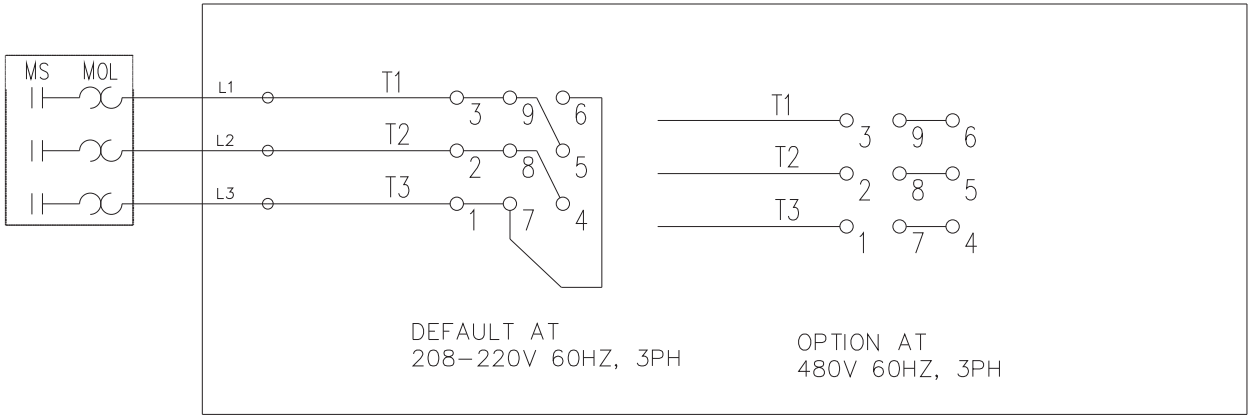
TITLE: POWER PACK 3RD GEN (PP3)
P/N: 32011P3G(W)

DWG: 32011P3G | SCALE: NTS | SHEET: 1 OF 12

P/N 917604 – BALDOR MOTOR 5HP
P/N 917609 – 5/8 SHAFT , 5GPM PUMP



P/N 917643 – WEG MOTOR 5HP
P/N 917661 – 3/4 SHAFT , 5GPM PUMP



MATERIAL NOTES	TOLERANCES
As Noted	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES ALT.UNITS [ ] DECIMALS FRACTIONAL ± 1/16" .XX ± 0.040 ANGULAR ± 1° .XXX ± 0.020 TIME ± .5 SEC

FINISH NOTES	APPROVALS		
As Noted	DRAWN	GU	02/25/25
	REVIEWED	AG	02/25/25
	APPROVED	Ag	02/25/25

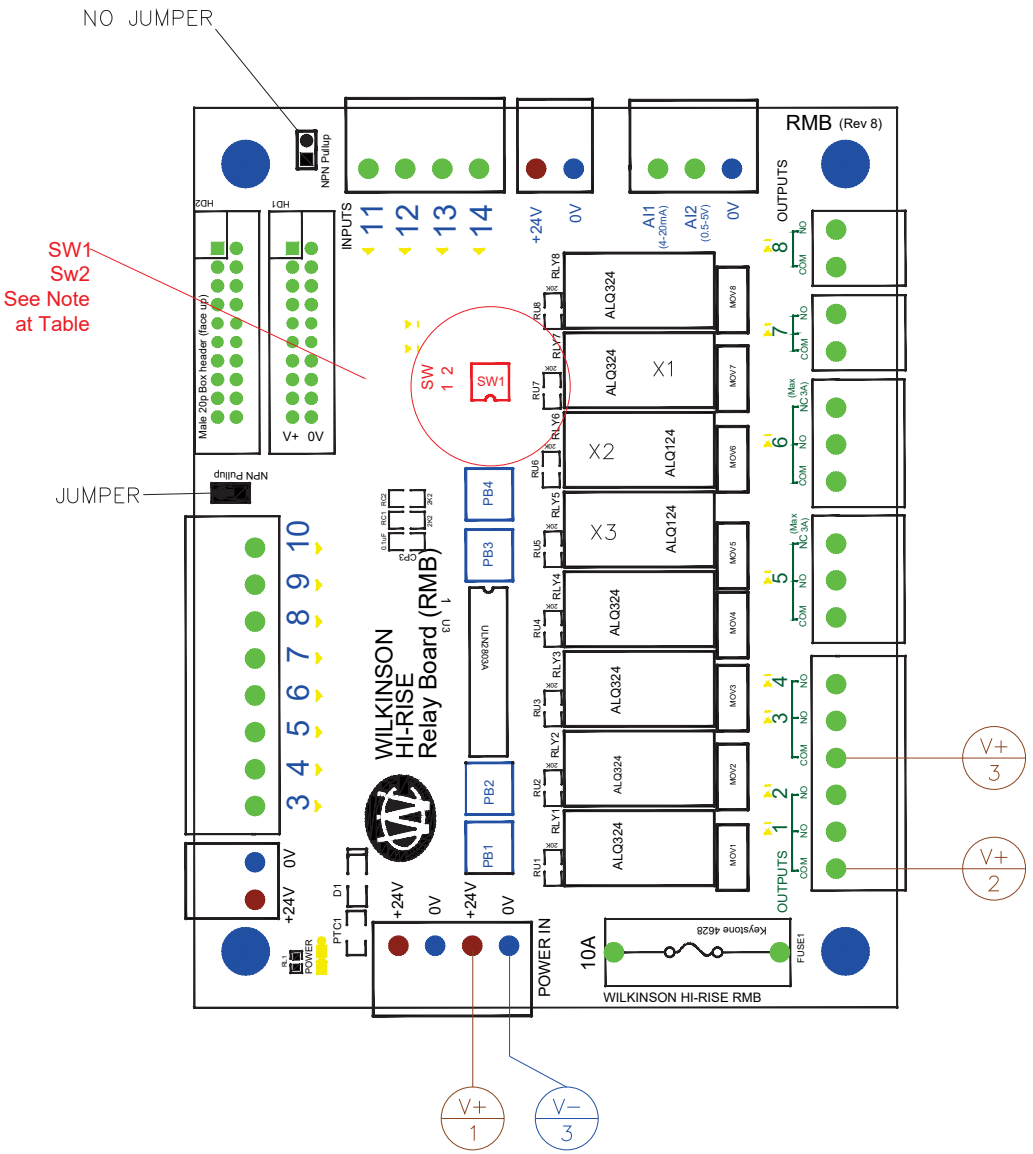
REV	DESCRIPTION	DATE	BY
0	ISSUED FOR PRODUCTION	02/25/25	GU
1	MODEL REVISION FOR MFG	08/04/25	Ag

WILKINSON-HI-RISE
3402 Sw 26Th Terrace Unit B-10
Dania Beach, FL 33312
www.whrise.com Tel: 800 231 3888

TITLE: MOTOR 220/440V CONNECTIONS

DWG: 32011P3G | SCALE: NTS | SHEET: 4 OF 12

NO.	T#	TYPE	DESCRIPTION	COMMENTS
1	Y1	OUTPUT	MOTOR COIL (MC)	
2	Y2	OUTPUT	RETURN SOLENOID VALVE (RTC)	
3	Y3	OUTPUT	AUDIBLE ALARM	
4	Y4	OUTPUT	VISIBLE ALARM	
XC	XC	OUTPUT	COMP INTERFACE COMMON	LEGACY AVAILABLE
5	X3	OUTPUT	COMP INTERFACE MOTOR O/L	LEGACY AVAILABLE
6	X2	OUTPUT	COMP INTERFACE CONT FULL	LEGACY AVAILABLE
7	X1	OUTPUT	COMP INTERFACE POWER ON	LEGACY AVAILABLE
8	8	OUTPUT	DRY CONTACT OUTPUT DMS INT	WHEN REQUIRED
8C	8C	OUTPUT	DRY CONTACT OUTPUT DMS INT	WHEN REQUIRED
9	9	OUTPUT	DRY CONTACT OUTPUT SPST	AT FMB BOARD
10	10	OUTPUT	DRY CONTACT OUTPUT SPDT	AT FMB BOARD
13	13	OUTPUT	LED 2 OUTPUT	AT RMB BOARD
14	14	OUTPUT	LED 1 OUTPUT	AT RMB BOARD
1	AI	ANALOG IN	PRESSURE GAGE (4-20 mA)	
2	AI	ANALOG IN	RESERVE (0.5 - 5 V)	
3	3	INPUT NPN	AUTO MODE INPUT	INPUT AT PANEL
4	4	INPUT NPN	MANUAL MODE INPUT	INPUT AT PANEL
5	5	INPUT NPN	MOTOR READY / NOT OVERLOAD	INPUT AT PANEL
6	6	INPUT NPN	PHOTO EYE INPUT	JB INPUT #6 BLK
7	7	INPUT NPN	HOME INPUT SENSOR	JB INPUT #7 GRN
8	8	INPUT NPN	SAFETY SWITCHES	JB INPUT #8 ORA
9	9	INPUT NPN	THRU WALL	JB INPUT #9 WHT
10	10	INPUT NPN	BAG SWITCH/OTHER INTERLOCK	JB INPUT #10 RED
11	11	INPUT PNP	POWER ON INTERRUPT LINE	INPUT AT PANEL
12	12	INPUT PNP	RESERVE	SOURCING INPUT
13	13	INPUT PNP	RESERVE	SOURCING INPUT
14	14	INPUT PNP	RESERVE	SOURCING INPUT
15	15	DIP SW1	RETROFIT MODE (PRESSURE CUT OUT)	** OFF POSITION **
16	16	DIP SW2	ENABLE ROPTS	** OFF POSITION **



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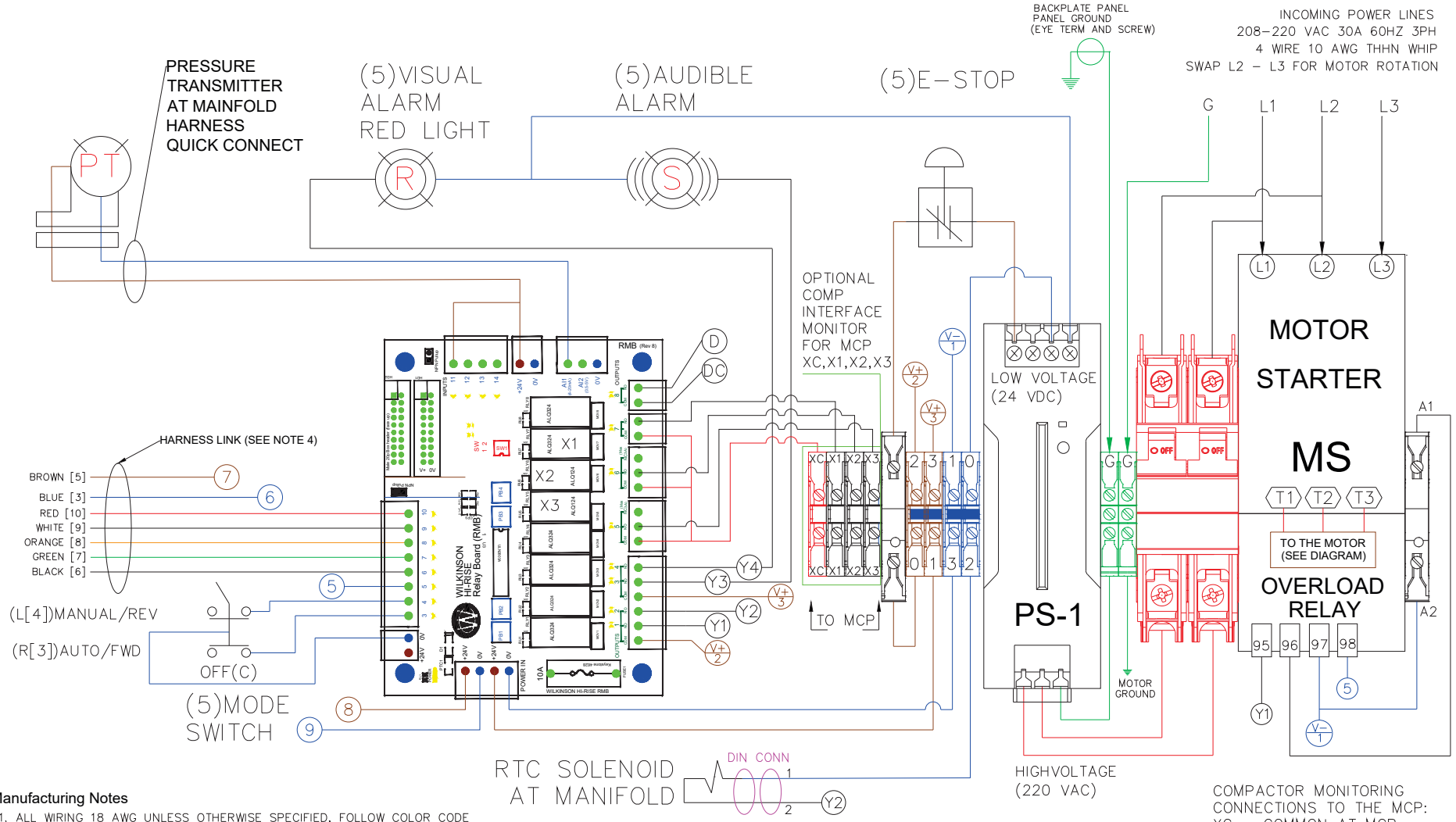
MATERIAL NOTES	TOLERANCES		
As Noted	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES ALT.UNITS [ ]		
	DECIMALS	FRACTIONAL	± 1/8"
	.XX ± 0.040	ANGULAR	± 1°
	.XXX ± 0.020	TIME	± .5 SEC
	APPROVALS		
FINISH NOTES	DRAWN	GU	02/25/25
As Noted	REVIEWED	AG	02/25/25
	APPROVED	Ag	02/25/25

REV	DESCRIPTION	DATE	BY
0	ISSUED FOR PRODUCTION	02/25/25	GU
1	MODEL REVISION FOR MFG	08/04/25	Ag

WILKINSON-HI-RISE
3402 Sw 26Th Terrace Unit B-10
Dania Beach, FL 33312
www.whrise.com Tel: 800 231 3888

TITLE: WIRING SCHEDULE ON RELAY MASTER BOARD

DWG: 32011P3G | SCALE: NTS | SHEET: 5 OF 12



Manufacturing Notes

1. ALL WIRING 18 AWG UNLESS OTHERWISE SPECIFIED, FOLLOW COLOR CODE
2. WIRING FOR (D) AND (DC) OPTIONALS ONLY WITH DMS INTERFACE
3. WIRING FOR (XC),(X1),(X2),(X3) AND (DC) OPTIONAL ONLY WITH LEGACY RECYCLING INTERFACE
4. HARNESS LINK USE ALPHA CABLE #881808 8Cx18AWG (91A285) - FOLLOW COLOR CODE AS INDICATED
5. CONTROLS LOCATED ON DOOR PANEL

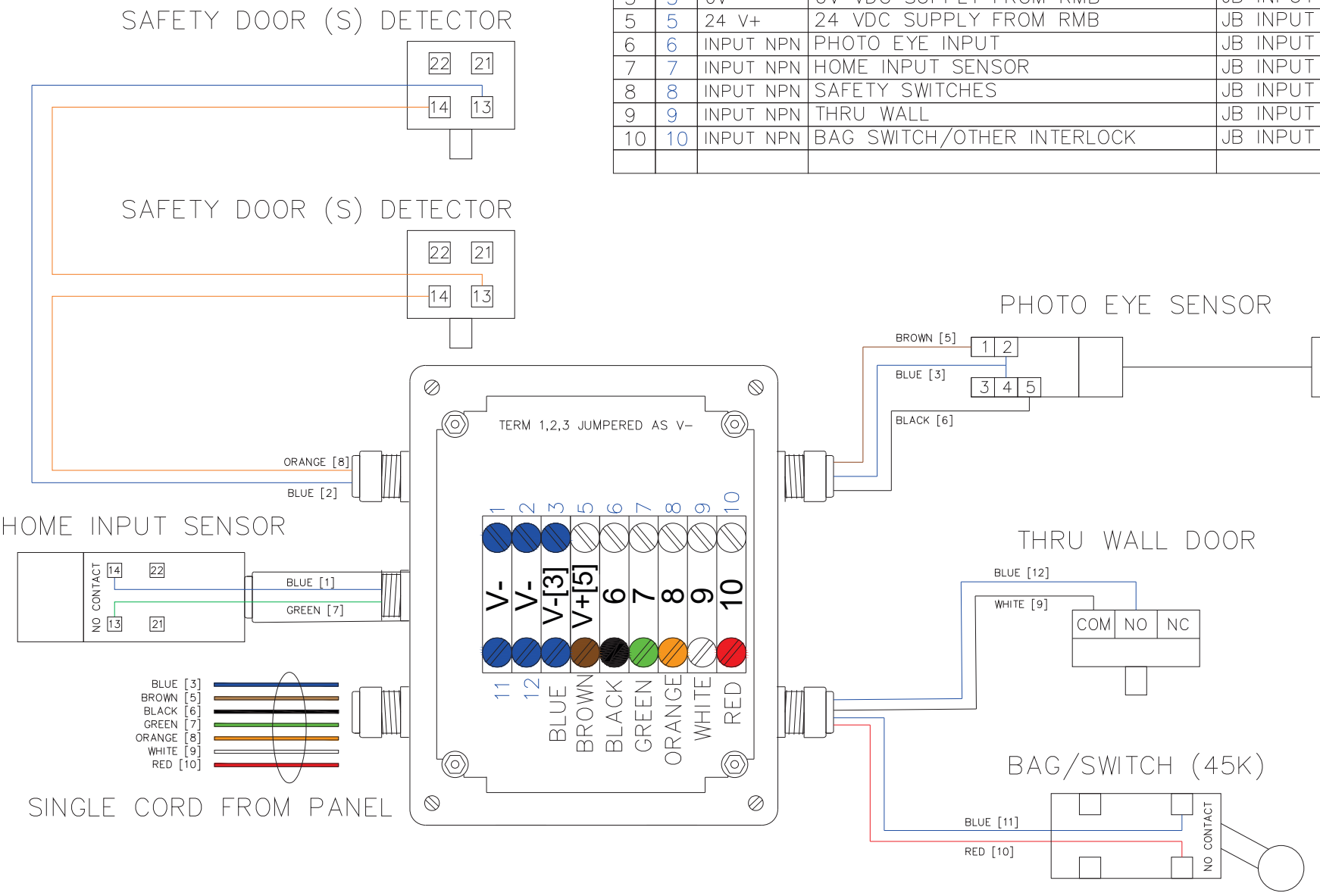
MATERIAL NOTES	TOLERANCES			REV	DESCRIPTION	DATE	BY
As Noted	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES ALT.UNITS [ ] DECIMALS .XX ± 0.040 .XXX ± 0.020 FRACTIONAL ± 1/8" ANGULAR ± 1° TIME ± .5 SEC			0	ISSUED FOR PRODUCTION	02/25/25	GU
				1	MODEL REVISION FOR MFG	08/04/25	Ag
	APPROVALS						
FINISH NOTES	DRAWN	GU	02/25/25				
As Noted	REVIEWED	AG	02/25/25				
	APPROVED	Ag	02/25/25				

WILKINSON-HI-RISE
3402 Sw 26Th Terrace Unit B-10
Dania Beach, FL 33312
www.whrise.com Tel: 800 231 3888

TITLE: WIRING SCHEDULE

DWG: 32011P3G | SCALE: NTS | SHEET: 6 OF 12

NO.	T#	TYPE	RMB CONNECTIONS	COMMENTS
3	3	0V	0V VDC SUPPLY FROM RMB	JB INPUT V-3 BLU
5	5	24 V+	24 VDC SUPPLY FROM RMB	JB INPUT V+5 BRN
6	6	INPUT NPN	PHOTO EYE INPUT	JB INPUT #6 BLK
7	7	INPUT NPN	HOME INPUT SENSOR	JB INPUT #7 GRN
8	8	INPUT NPN	SAFETY SWITCHES	JB INPUT #8 ORA
9	9	INPUT NPN	THRU WALL	JB INPUT #9 WHT
10	10	INPUT NPN	BAG SWITCH/OTHER INTERLOCK	JB INPUT #10 RED



MATERIAL NOTES	TOLERANCES		
As Noted	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES ALT.UNITS [ ]		
	DECIMALS	FRACTIONAL	± 1/8"
	.XX ± 0.040	ANGULAR	± 1°
	.XXX ± 0.020	TIME	± .5 SEC
	APPROVALS		
FINISH NOTES	DRAWN	GU	02/25/25
As Noted	REVIEWED	AG	02/25/25
	APPROVED	Ag	02/25/25

REV	DESCRIPTION	DATE	BY
0	ISSUED FOR PRODUCTION	02/25/25	GU
1	MODEL REVISION FOR MFG	08/04/25	Ag

WILKINSON-HI-RISE
3402 Sw 26Th Terrace Unit B-10
Dania Beach, FL 33312
www.whrise.com Tel: 800 231 3888

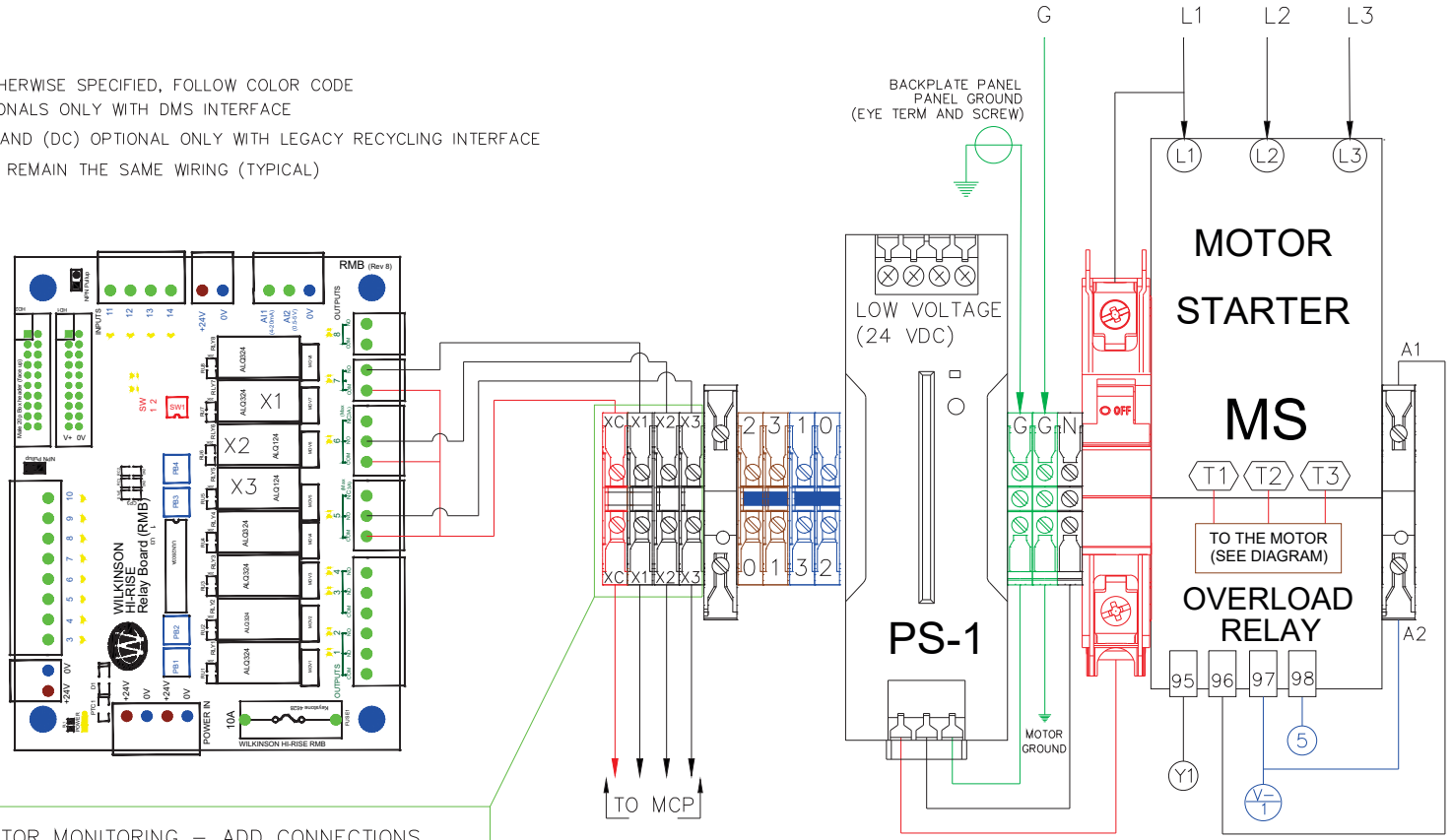
TITLE: COMPACTOR BODY - JUNCTION BOX

DWG: 32011P3G | SCALE: NTS | SHEET: 7 OF 12

NO.	T#	TYPE	DESCRIPTION	COMMENTS
XC	XC	OUTPUT	COMP INTERFACE COMMON	LEGACY AVAILABLE
5	X3	OUTPUT	COMP INTERFACE MOTOR O/L	LEGACY AVAILABLE
6	X2	OUTPUT	COMP INTERFACE CONT FULL	LEGACY AVAILABLE
7	X1	OUTPUT	COMP INTERFACE POWER ON	LEGACY AVAILABLE

Manufacturing Notes

1. ALL WIRING 18 AWG UNLESS OTHERWISE SPECIFIED, FOLLOW COLOR CODE
2. WIRING FOR (D) AND (DC) OPTIONALS ONLY WITH DMS INTERFACE
3. WIRING FOR (XC),(X1),(X2),(X3) AND (DC) OPTIONAL ONLY WITH LEGACY RECYCLING INTERFACE
4. ADD-ON TO DIFFERENT MODELS REMAIN THE SAME WIRING (TYPICAL)



COMPACTOR MONITORING – ADD CONNECTIONS
FOR THE MCP AT SORTER WITH PREPARATION FOR

XC = COMMON AT MCP
X1 = POWER ON SIGNAL
X2 = CONTAINER FULL
X3 = OVERLOAD

MATERIAL NOTES	TOLERANCES		
As Noted	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES ALT.UNITS [ ]		
	DECIMALS	FRACTIONAL	± 1/8"
	.XX ± 0.040	ANGULAR	± 1°
	.XXX ± 0.020	TIME	± .5 SEC
	APPROVALS		
FINISH NOTES	DRAWN	GU	02/25/25
As Noted	REVIEWED	AG	02/25/25
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REV	DESCRIPTION	DATE	BY
0	ISSUED FOR PRODUCTION	02/25/25	GU
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TITLE
COMPACTOR MONITOR WIRING FOR WHR MCP 4TH GEN

DWG: 32011P3GR | SCALE: NTS | SHEET: 12 OF 12