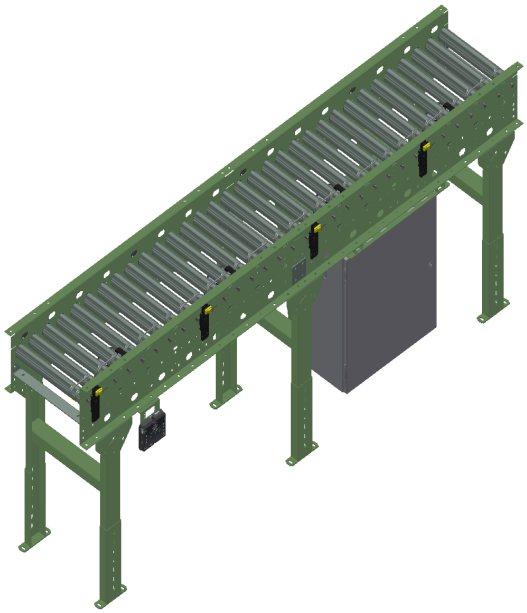
EZLOGIC® NET MODELS INSTALLATION AND MAINTENANCE MANUAL



MODELS	BULLETIN	EFFECTIVE DATE
EZLOGIC® NET	# 758	AUGUST 2025

870.935.3700 | www.Hytrol.com | 2020 Hytrol St. Jonesboro, AR 72401

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1 INTRODUCTION

This manual provides guidelines and procedures for installing, operating, and maintaining your conveyor. A complete parts list is provided with recommended spare parts highlighted in gray.

Important safety information is also provided throughout the manual. For safety to personnel and for proper operation of your conveyor, it is recommended that you read and follow the instructions provided in this manual.

1.1 RECEIVING AND UNCRATING

- Check the number of items received against the bill of lading.
- Examine condition of equipment to determine if any damage occurred during shipment.
- Move all crates to area of installation.
- Remove crating and check for optional equipment that may be fastened to the conveyor. Make sure these parts (or any foreign pieces) are removed.

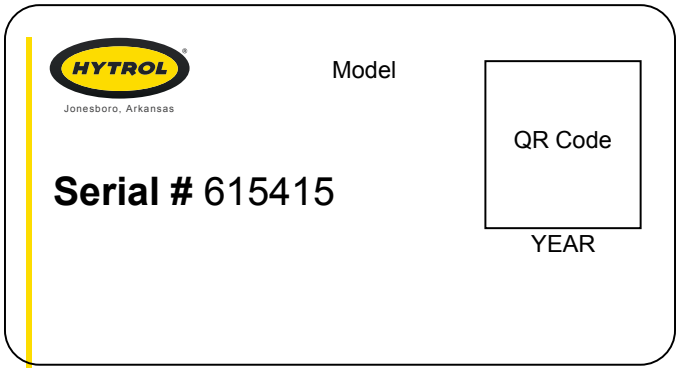
1.2 HOW TO ORDER REPLACEMENT PARTS

Included in this manual are parts drawings with complete replacement parts lists. Minor fasteners, such as nuts and bolts, are not included.

When ordering replacement parts:

- Contact dealer from whom conveyor was purchased or nearest Hytrol Integration Partner.
- Give Conveyor **Factory Order Number.**
- Give complete description from **Parts List.**
- If you are in a breakdown situation, call our Customer Care team at 1-844-4HYTROL.

NOTE:
If damage has occurred or freight is missing, contact your Hytrol Integration Partner.



2 SAFETY INFORMATION

2.1 INSTALLATION

GUARDS AND GUARDING

Interfacing of Equipment: When two or more pieces of equipment are interfaced, special attention shall be given to the interfaced area to ensure the presence of adequate guarding and safety devices.

Guarding Exceptions: Whenever conditions prevail that would require guarding under these standards, but such guarding would render the conveyor unusable, prominent warning means shall be provided in the area or on the equipment in lieu of guarding.

Guarded by Location or Position: Where necessary for the protection of employees from hazards, all exposed moving machinery parts that present a hazard to employees at their work station shall be mechanically or electrically guarded, or guarded by location or position.

- Remoteness from frequent presence of public or employed personnel shall constitute guarding by location.
- When a conveyor passes over a walkway, roadway, or work station, it is considered guarded solely by location or position if all moving parts are at least 8 ft. (2.44 m) above the floor or walking surface or are otherwise located so that the employee cannot inadvertently come in contact with hazardous moving parts.
- Although overhead conveyors may be guarded by location, spill guards, pan guards, or equivalent shall be provided if the product may fall off the conveyor for any reason and if personnel would be endangered.

Headroom

- When conveyors are installed above exit passageways, aisles, or corridors, there shall be provided a minimum clearance of 6 ft. 8 in. (2.032 m) measured vertically from the floor or walking surface to the lowest part of the conveyor or guards.
- Where system function will be impaired by providing the minimum clearance of 6 ft. 8 in. (2.032 m) through an emergency clearance, alternate passageways shall be provided.
- It is permissible to allow passage under conveyors with less that 6 ft. 8 in. (2.032 m) clearance from the floor for other than emergency exits if a suitable warning indicates low headroom.

2.2 OPERATION

- Only trained employees shall be permitted to operate conveyors. Training shall include instruction in operation under normal conditions and emergency situations.
- Where employee safety is dependent upon stopping and/or starting devices, they shall be kept free of obstructions to permit ready access.
- The area around loading and unloading points shall be kept clear of obstructions which could endanger personnel.
- No person shall ride the load-carrying element of a conveyor under any circumstances unless that person is specifically authorized by the owner or employer to do so. Under those circumstances, such employee shall only ride a conveyor which incorporates within its supporting structure platforms or control stations specifically designed for carrying personnel. Under no circumstances shall any person ride on any element of a vertical conveyor.
- Personnel working on or near a conveyor shall be instructed as to the location and operation of pertinent stopping devices.
- A conveyor shall be used to transport only material it is capable of handling safely.
- Under no circumstances shall the safety characteristics of the conveyor be altered if such alterations would endanger personnel.
- Routine inspections and preventive and corrective maintenance programs shall be conducted to ensure that all safety features and devices are retained and function properly.
- Personnel should be alerted to the potential hazard of entanglement in conveyors caused by items such as long hair, loose clothing, and jewelry.
- Conveyors shall not be maintained or serviced while in operation unless proper maintenance or service requires the conveyor to be in motion. In this case, personnel shall be made aware of the hazards and how the task may be safely accomplished.
- Owners of conveyor should ensure proper safety labels are affixed to the conveyor warning of particular hazards involved in operation of their conveyors.

CAUTION!

Because of the many moving parts on the conveyor, all personnel in the area of the conveyor need to be warned that the conveyor is about to be started.

2.3 MAINTENANCE / SAFETY LABELS

All maintenance, including lubrication and adjustments, shall be performed only by qualified and trained personnel.

It is important that a maintenance program be established to ensure that all conveyor components are maintained in a condition which does not constitute a hazard to personnel.

When a conveyor is stopped for maintenance purposes, starting devices or powered accessories shall be locked or tagged out in accordance with a formalized procedure designed to protect all persons or groups involved with the conveyor against an unexpected start.

Replace all safety devices and guards before starting equipment for normal operation.

Whenever practical, DO NOT lubricate conveyors while they are in motion.

Only trained personnel who are aware of the hazard of the conveyor in motion shall be allowed to lubricate.

Safety Guards
Maintain all guards and safety devices IN POSITION and IN SAFE REPAIR.

Safety Labels
In an effort to reduce the possibility of injury to personnel working around HYTROL conveying equipment, safety labels are placed at various points on the equipment to alert them of potential hazards.

Please check equipment and note all safety labels. Make certain your personnel are alerted to and obey these warnings. See Safety Manual for examples of warning labels.

REMEMBER

Do not remove, reuse, or modify material handling equipment for any purpose other than it's original intended use.

CAUTION!

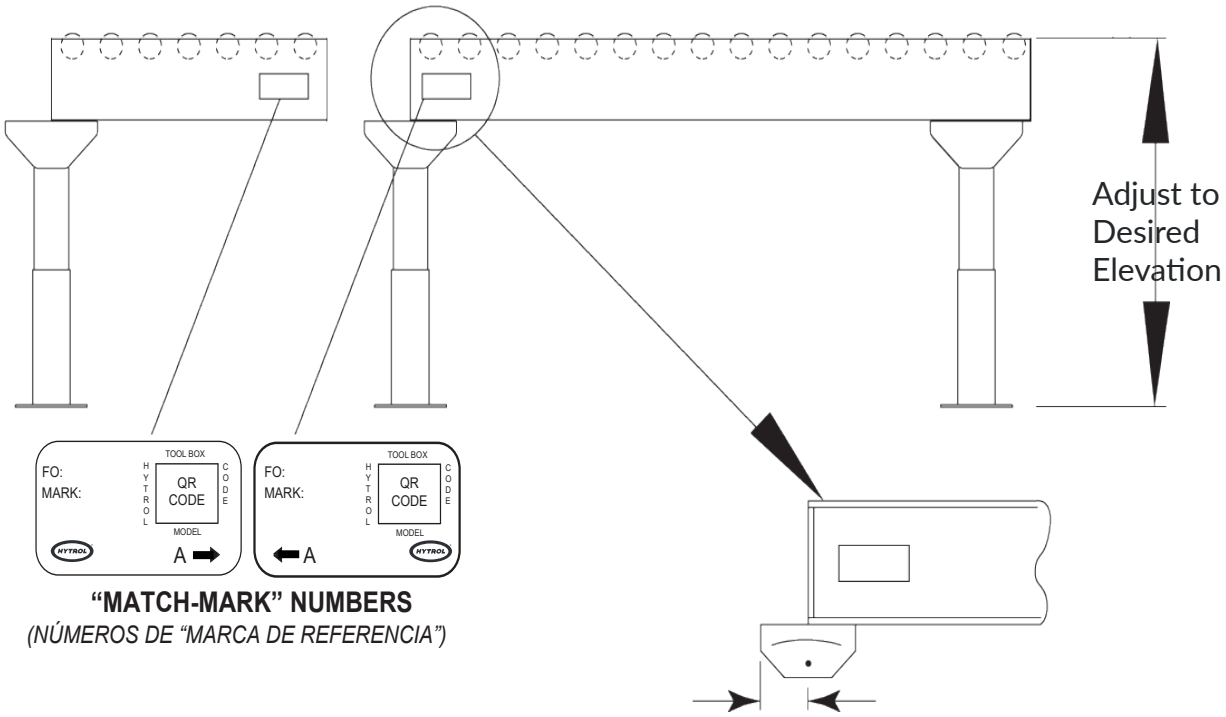
Only trained personnel should track a conveyor belt which must be done while conveyor is in operation. DO NOT attempt to track belt if conveyor is loaded.

3 INSTALLATION

3.1 SUPPORT INSTALLATION

1. Determine primary direction of product flow. Figure 1 indicates the preferred flow as related to the drive.
2. Refer to “Match-Mark” numbers on ends of conveyor sections. (Figure 1). Position them in this sequence near the area of installation.
3. Attach supports to both ends of drive section and to one end of intermediate or tail sections (Figure 1 & Figure 3). Hand tighten bolts only at this time.
4. Adjust elevation to required height.

FIGURE 1



“MATCH-MARK” NUMBERS

(NÚMEROS DE “MARCA DE REFERENCIA”)

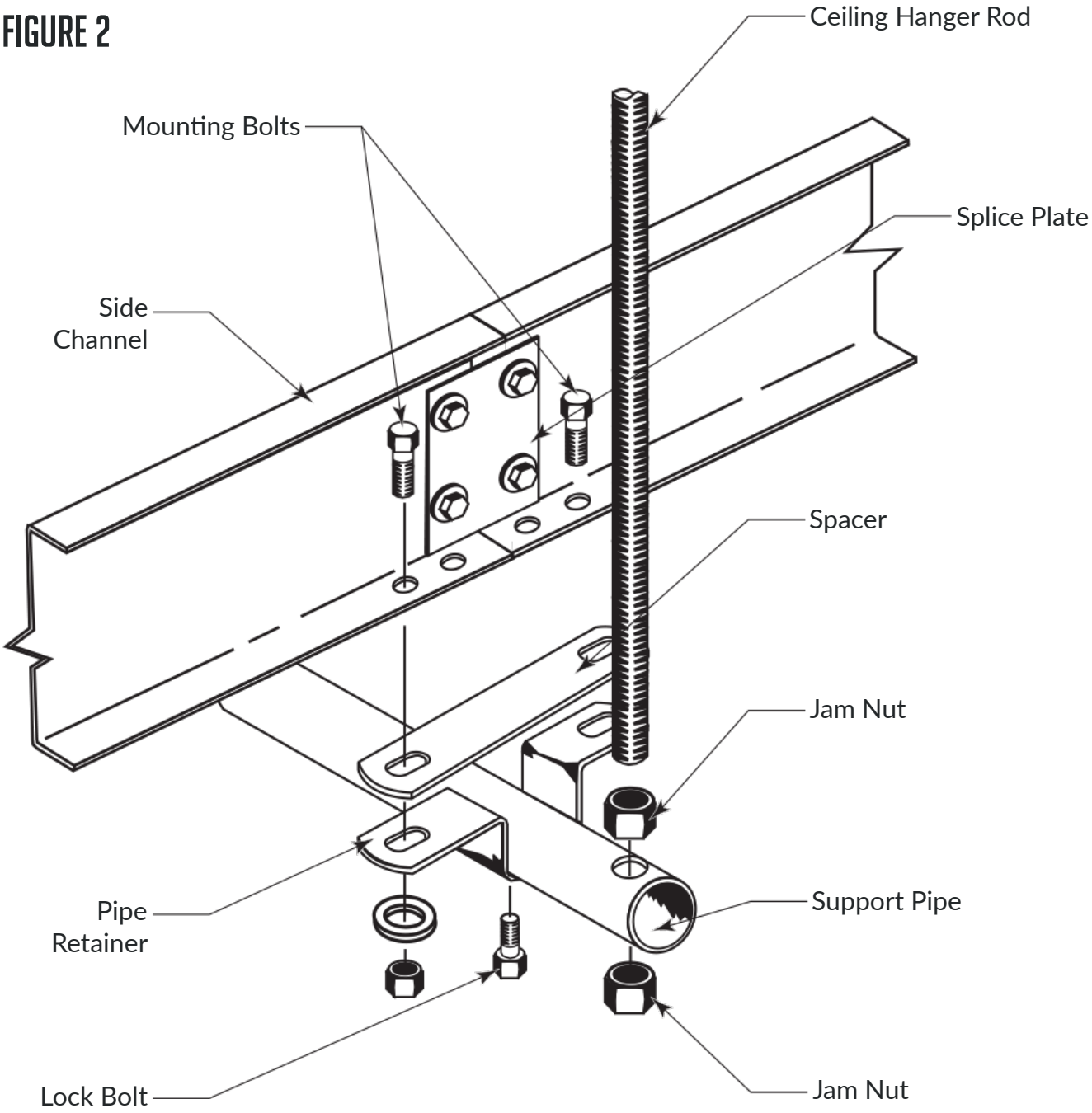
3.2 CEILING HANGER INSTALLATION

If conveyors are to be used in an overhead application, ceiling hangers may have been supplied in place of floor supports.

Figure 2 shows how a ceiling hanger mounts to a conveyor section. Ceiling hangers should be mounted at section joints.

For safety information concerning conveyors mounted overhead, refer to Section 2.1 Installation on page 5.

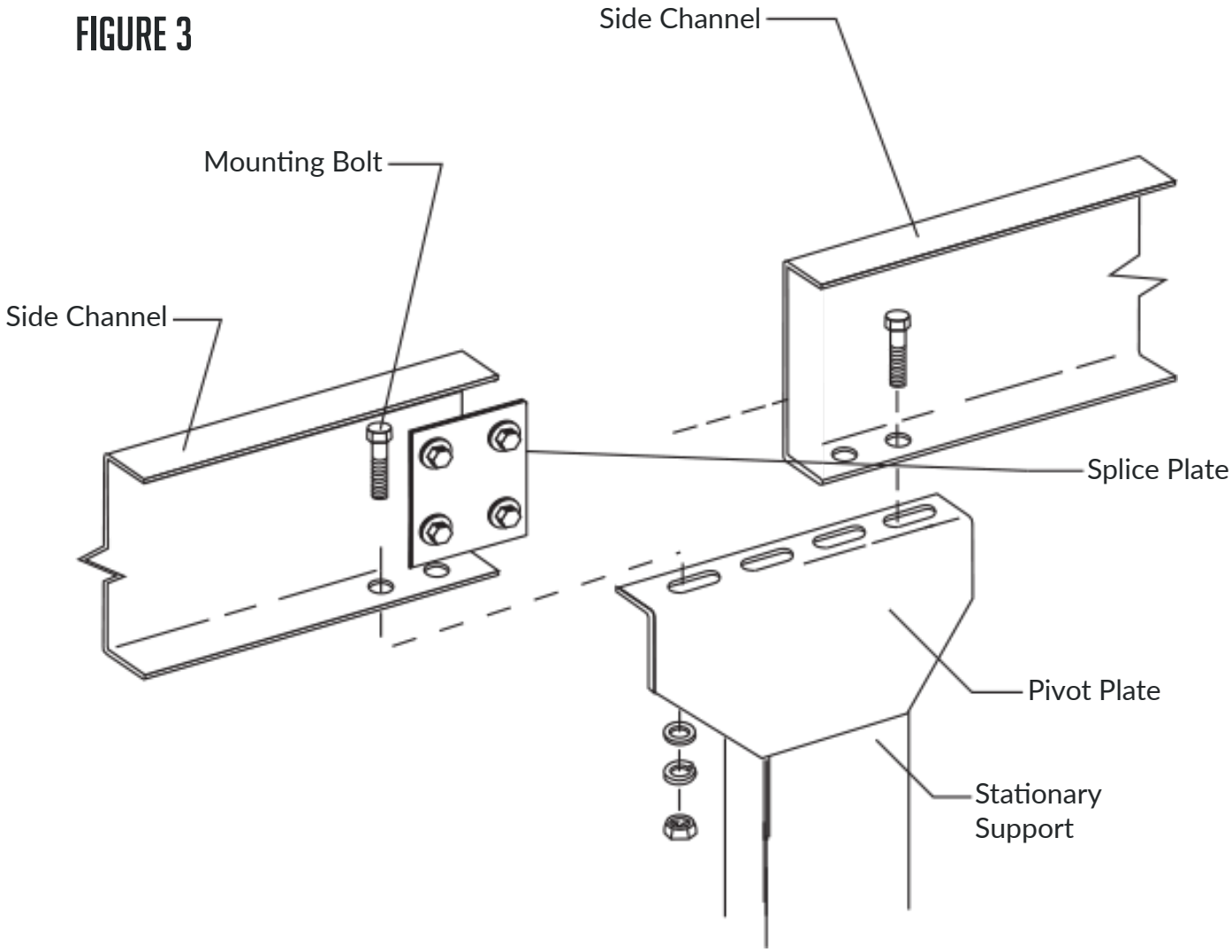
FIGURE 2



NOTE:

When installing ceiling hanger rods in an existing building, all methods of attachment must comply with local building codes.

FIGURE 3


Side Channel
Mounting Bolt
Side Channel
Splice Plate
Pivot Plate
Stationary
Support

3.3 CONVEYOR SET-UP

1. Mark a chalk line on the floor to locate the center of the conveyor.
2. Place the infeed section in position.
3. Place the remaining sections on the extended support of the previous section (Figure 1).
4. Fasten the sections together with splice plates and pivot plates (Figure 3). Hand tighten the bolts only at this time.
5. Ensure that all bed sections are square. Refer to Section 3.5 Racked Sections on page 13 for instructions on how to square the beds.
6. Tighten all splice plate and support mounting bolts and lag the conveyor to the floor.
7. Connect the power wires and the EZLogic® zone controller cordsets (where applicable) at the sections joints.
8. Mount the power supply (for the motor) and IOP (for the EZLogic® System - where applicable) to the conveyor, near the center. Connect AC power to both. Connect E24™ wiring harness to the power supply, and from the IOP to the EZLogic® System (where applicable).
    - **NOTE:** See the EZLogic® GEN3 Component Manual for more information about the IOP power connections and for more information about EZLogic® components.
9. Install and wire any auxiliary cables or I/O modules.

3.4 ELECTRICAL EQUIPMENT

CONTROLS

Electrical Code: All motor controls and wiring shall conform to the National Electrical Code (Article 670 or other applicable articles) as published by the National Fire Protection Association and as approved by the American Standards Institute, Inc.

CONTROL STATIONS

A. Control stations should be so arranged and located that the operation of the equipment is visible from them, and shall be clearly marked or labeled to indicate the function controlled.

B. A conveyor which would cause injury when started shall not be started until employees in the area are alerted by a signal or by a designated person that the conveyor is about to start.
   - When a conveyor would cause injury when started and is automatically controlled or must be controlled from a remote location, an audible device shall be provided which can be clearly heard at all points along the conveyor where personnel may be present. The warning device shall be actuated by the controller device starting the conveyor and shall continue for a required period of time before the conveyor starts. A flashing light or similar visual warning may be used in conjunction with or in place of the audible device if more effective in particular circumstances.
   - Where system function would be seriously hindered or adversely affected by the required time delay or where the intent of the warning may be misinterpreted (i.e., a work area with many different conveyors and allied devices), clear, concise, and legible warning shall be provided. The warning shall indicate that conveyors and allied equipment may be started at any time, that danger exists, and that personnel must keep clear. The warnings shall be provided along the conveyor at areas not guarded by position or location.

C. Remotely and automatically controlled conveyors, and conveyors where operator stations are not manned or are beyond voice and visual contact from drive areas, loading areas, transfer points, and other potentially hazardous locations on the conveyor path not guarded by location, position, or guards, shall be furnished with emergency stop buttons, pull cords, limit switches, or similar emergency stop devices.
   - All such emergency stop devices shall be easily identifiable in the immediate vicinity of such locations unless guarded by location, position, or guards. Where the design, function, and operation of such conveyor clearly is not hazardous to personnel, an emergency stop device is not required.
   - The emergency stop device shall act directly on the control of the conveyor concerned and shall not depend on the stopping of any other equipment. The emergency stop devices shall be installed so that they cannot be overridden from other locations.

D. Inactive and unused actuators, controllers, and wiring should be removed from control stations and panel boards, together with obsolete diagrams, indicators, control labels, and other material which serve to confuse the operator.

E. Control stations for “MC” models power “line of sight” conveyor. Units can Start/Stop from any push button powered from that control station. Control stations can be linked together to provide 38 motors of power and controls tied together.

3.5 RACKED SECTIONS

It is important that each bed section be checked for an out-of-square condition. If conveyor is not square, tracking problems will result. Figure 4 indicates a racked section.

TO CORRECT AN OUT-OF-SQUARE SECTION

1. Locate points on corners of section and measure distance “A” & “B”. If the dimensions are not equal, the section will need to be squared. (Figure 5).
2. Use crossbracing supplied on underside of conveyor to square each section. Adjust turnbuckle until Dimensions “A” & “B” are equal.
3. After all bed sections have been checked and corrected for “racked condition”, tighten all butt couplings and pivot plate bolts.
4. Make final check to see that all conveyor sections are level across width and length. If entire conveyor is level, supports can be lagged to floor.
    - “Racked” conveyor sections will cause package to travel toward side of conveyor.

FIGURE 4

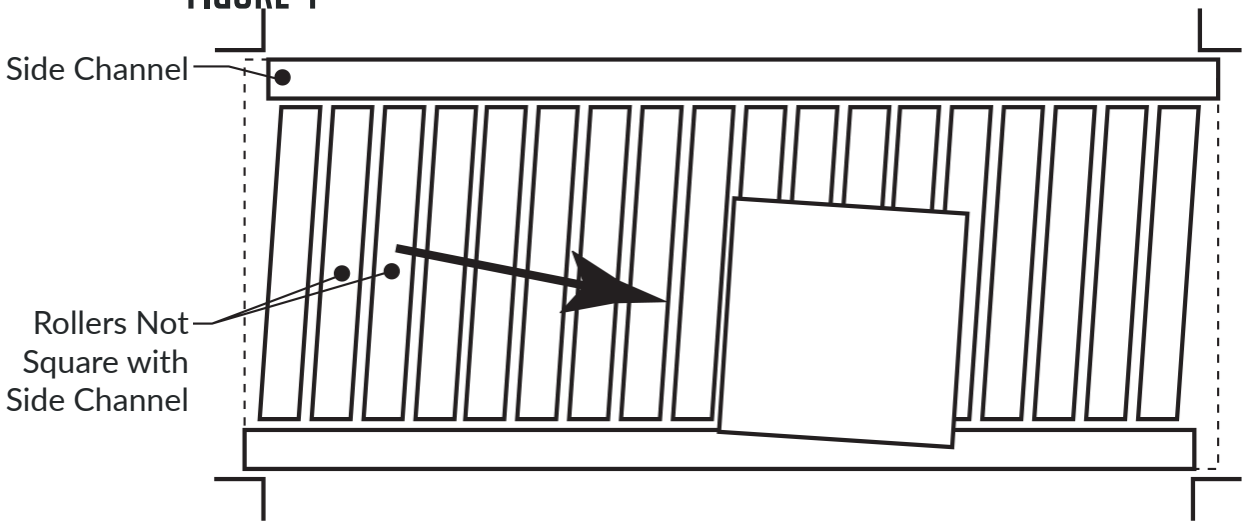
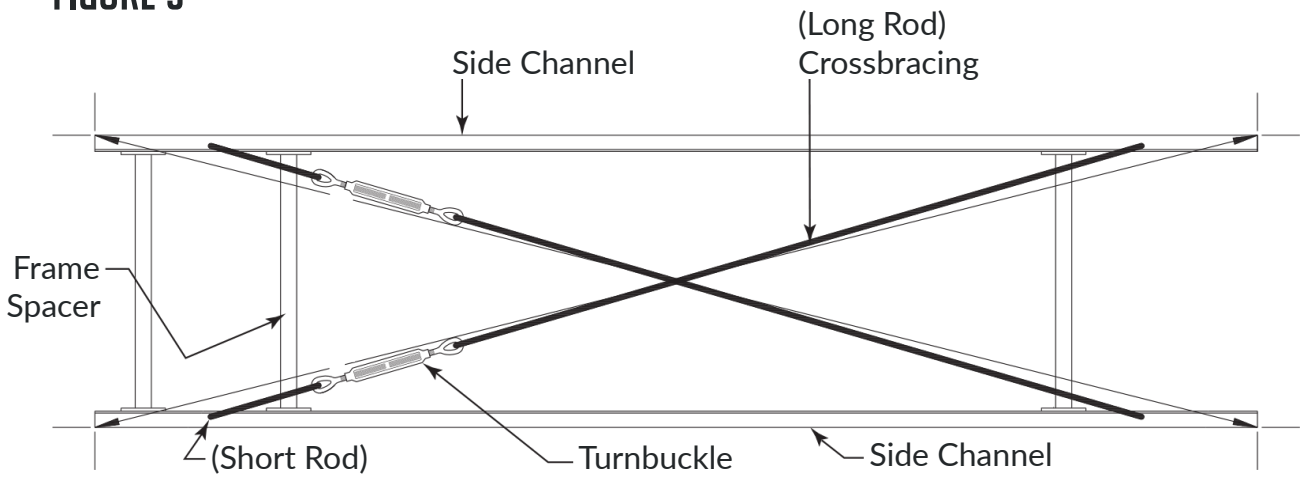


FIGURE 5



IMPORTANT!

Being out of level across this width of conveyor can cause package drift on long conveyor lines.

4 OPERATION

4.1 CONVEYOR START-UP

Before conveyor is turned on, check for foreign objects that may have been left inside conveyor during installation. These objects could cause serious damage during start-up.

After conveyor has been turned on and is operating, check all moving parts to make sure they are working freely.

CAUTION!

Because of the many moving parts on the conveyor, all personnel in the area of the conveyor need to be warned that the conveyor is about to be started.

4.2 LUBRICATION

BEARINGS

STANDARD: Supplied sealed and pre-lubricated. No lubrication required.

5 SPECIFICATIONS

5.1 INTEGRATED NETWORK MOTOR/NETWORK ZONE CONTROLLER

POWER REQUIREMENTS

Power In

- 24.0 VDC nominal @ 1.5 A maximum
  - Normal operation from 22.0 – 28.0 VDC
  - Will allow operation above 28.0 VDC but control will get hotter. Absolute maximum at 30.0 VDC
  - Will allow operation below 22.0 VDC but full speed will be unattainable. Absolute minimum at 18.0 VDC
- 28.0 + 0.2 VDC over-voltage detection (unit will cease normal operation)
- 22.0 + 0.2 VDC under-voltage detection (unit will cease normal operation)
- All of the components (NZCs, INMs, and GWMs) have bilateral polarity protection, which prevents reverse application of power. This ensures the power supply's positive signal does not go out on the various grounds (photoeye sensors, smart I/O's, etc.) and prevents any potential problems with other controls on the same power grid.
- Non-replaceable 5 Amp fuse located under the cover.
- Power Input Connector:
  - Pin 1: 24 VDC Motor Power
  - Pin 2: Ground
  - Pin 3: 24 VDC Control Power

Photoeye Sensor

- 24 VDC PNP where the output is 24 VDC when a package is detected
- Maximum load current: <150 mA
- 6 Position RJ11 Connector:
  - Pin 1: No Contact
  - Pin 2: 24 VDC
  - Pin 3: No Contact
  - Pin 4: Ground
  - Pin 5: Sensor Input
  - Pin 6: No Contact

PNP Inputs

- PNP Input Signal Levels
  - Digital Inputs
  - Active when pulled up above 18.0 VDC
  - Need to be able to source 3 mA

Analog Speed Input

- Allow the speed to be controlled from a single point
- Voltage range: 0-10 VDC
- Minimum loading is 10kΩ

PNP Output

- PNP Output Signal Levels
  - Digital Outputs
  - Sources current when active.
  - Maxiumum current for this uprotected output is 300mA.
  - A 150Ω series resistor helps the PNP output limit current draw for most situations; voltage out is thus lower as current draw increases.
  - Voltage depends on input power and current draw.

ENVIRONMENTAL REQUIREMENTS

Temperature

- The unit shall operate within specified limits over the range of -20 to 50°C (-4 to 122 °F).
- The unit can be stored in the range of -40 to 85 °C (-40 to 176 °F).

Humidity

- The unit shall operate within specified limits in relative humidity in the range of 10% to 90% (non-condensing).
- The unit can be stored in the range of 5% to 95% (non-condensing).

SAFETY - UNINTENDED USE CONSIDERATIONS

Installer

- This product is intended for installation by qualified personnel only. Although of relatively low voltage, there are dangerous levels of current controlled on the board that are not protected from misplaced fingers. Note that the cover makes it difficult to touch any power.

User

- Product shall be located away from the user such that touching of the control is not possible.

5.2 EZLOGIC® NET SYSTEM

This model is equipped with the EZLogic® NET Accumulation System. The following basic information may be used as a guide during the installation and initial setup of the conveyor. For detailed information about EZLogic® NET system components, options, functions, and programming, please refer to the EZLogic® NET Component Guide.

5.3 EZLOGIC® NET CONNECTIONS

ZONE CONNECTIONS
Each zone has a CAT 6, unshielded cable terminated with an RJ45 connector on each end. This cable establishes communication between controllers and is referred to as the communication cable.

All controllers are mounted and connected at the factory within each conveyor section. Connections between sections are made during installation. The communication cable is always connected to the zone on the upstream side of it, starting at the Gateway. The communication cable on the discharge end of the conveyor is simply bundled and tied in the accumulation channel and is not connected. Upon installation, this cable can be untied from the discharge end and connected to the infeed zone of the next section or the branch's Gateway.

EZLogic® NET CONNECTIONS (See Figure 6**)**

INTEGRATED NETWORK MOTOR (INM) CONNECTIONS (See Figure 7**)**
For transport, connections 1, 2, and 5 will need to be used.
For accumulation control, connections 1, 2, 4, and 5 will need to be used.
For accumulation control with a reversing application, connections 1, 2, 4, 5, and 7 will need to be used.
Connections to 3 and 6 are optional and based on end user need and discretion.

FIGURE 6 - EZLOGIC® NET CONNECTIONS

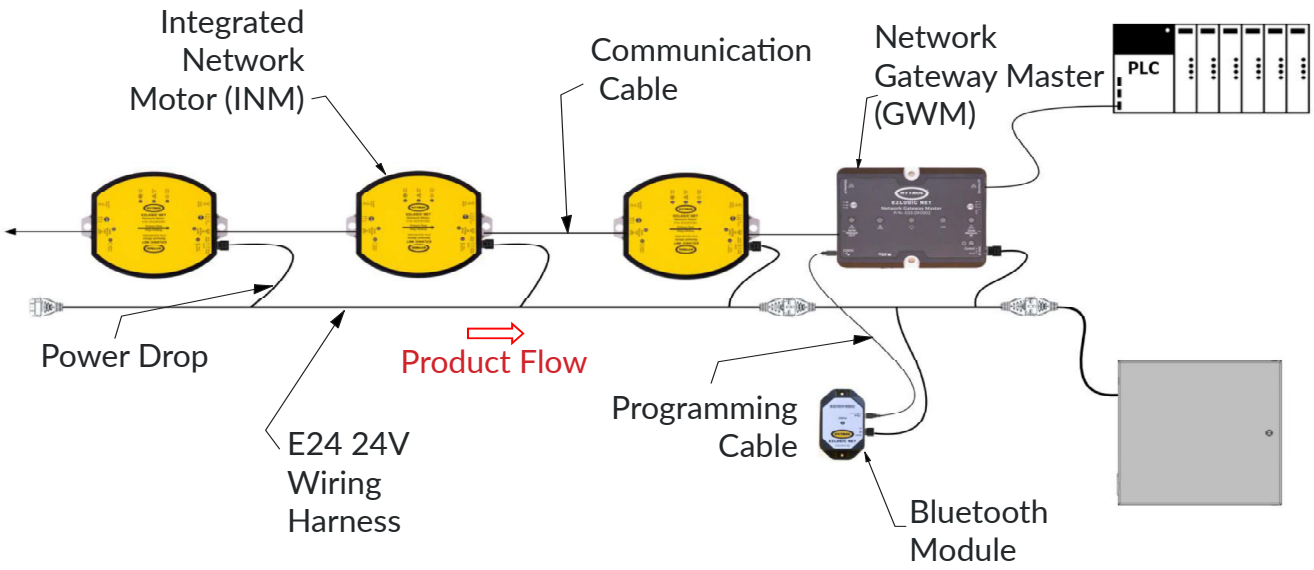
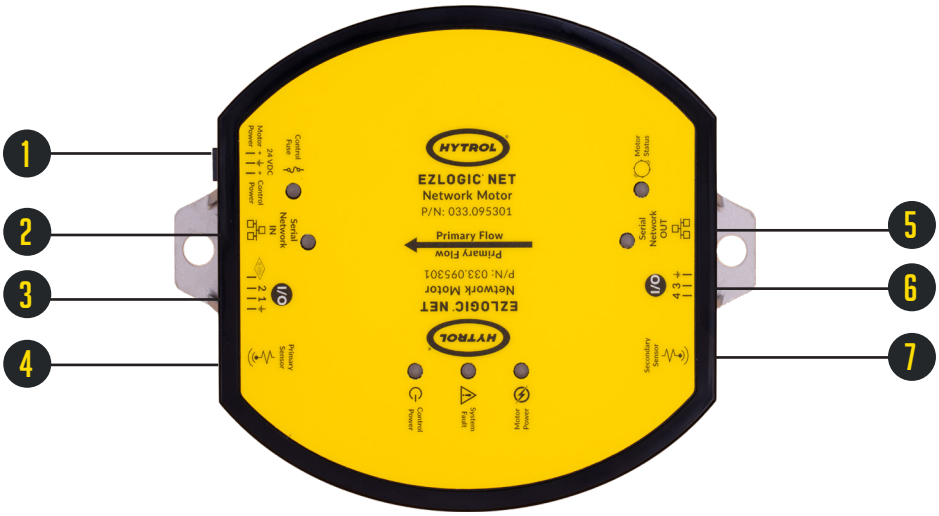


FIGURE 7 - INTEGRATED NETWORK MOTOR (INM) CONNECTIONS



Ref No.	Description
1	Power Input (Motor Power and Control Power)
2	Serial Network In: Downstream Zone Communications
3	Smart I/O Channels 1,2, Ground, and Analog Speed Control
4	Primary Sensor
5	Serial Network Out: Upstream Zone Communications
6	Smart I/O Channels 3,4, and Ground
7	Secondary Sensor

NETWORK ZONE CONTROLLER (NZC) CONNECTIONS (See Figure 8)
For transport, connections 1, 2, 5, and 6 will need to be used.
For accumulation control, connections 1, 2, 4, 5, and 6 will need to be used.
For accumulation control with a reversing application, connections 1, 2, 4, 5, 6, and 8 will need to be used.
Connections to 3 and 7 are optional and based on end user need and discretion.

SERIAL NETWORK IN/OUT TERMINALS
These terminals provide a serial communication connection to send and receive data between devices. The connector designed to mate with these terminals is a RJ45 8P8C with CAT6 cable.

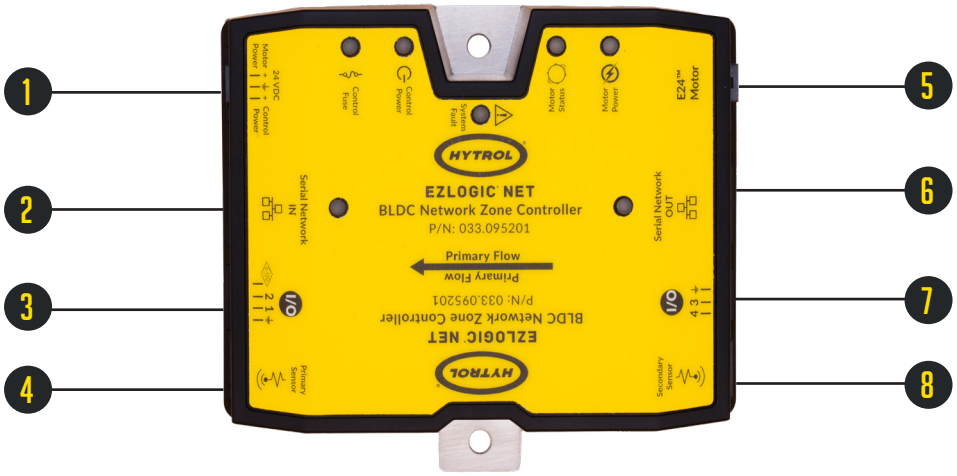
E24 MOTOR TERMINAL
This terminal is for connecting an E24 motor to the Network Zone Controller (NZC). This terminal cannot be found on the Integrated Network Motor (INM) as the controller is built onto the motor, so it does not require additional wiring for connection.

PRIMARY/SECONDARY SENSOR TERMINALS
These terminals allow for connection of a package detecting transducer. For normal package flow, the status of the primary sensor will be used in logic flow. In reversing applications, the status of the secondary sensor will be used in logic flow. The connector designed to mate with these terminals is an RJ11, 6P4C, industry standard connector.

+24 VDC INPUT, DC (-) TERMINALS
This terminal is to provide power to the unit. Motor and control input power are combined in one wiring harness that connects to this port, allowing for input power to both the motor circuit and controls circuit.

SMART I/O CHANNEL TERMINALS
The Smart I/O terminals house 4 I/O channels that are each independently configurable as well as a 0-10V analog speed control input and 2 ground connections. The analog speed control input may be used to override the speed set by the PLC or EZLogic® OS.

FIGURE 8 - NETWORK ZONE CONTROLLER (NZC) CONNECTIONS



Ref No.	Description
1	Power Input (Motor Power and Control Power)
2	Serial Network In: Downstream Zone Communications
3	Smart I/O Channels 1,2, Ground, and Analog Speed Control
4	Primary Sensor
5	E24 Motor Cable
6	Serial Network Out: Upstream Zone Communications
7	Smart I/O Channels 3,4, and Ground
8	Secondary Sensor

5.4 GATEWAY MASTER

All EZLogic® NET models, indicated by an “N” in the model names, are equipped with a Gateway Master. The Gateway Master acts as the system’s “brain”.

The Gateway Master is the one connection point for system configuration and control. To use EZLogic® OS or the Bluetooth Module, a programming cable will need to be plugged into the Gateway Master.

The Gateway Master connects to the system by way of a communication cable that is connected to the Serial Network Out terminal of the Gateway Master to the Serial Network In terminal of the first zone in the branch.

Note: See EZLogic® NET Component Guide for more information.

5.5 POWER SUPPLY

The E24™ family of conveyors is equipped with a 24-volt DC power supply unit for providing power to the motor and control logic. Each power supply provided is a high efficiency DC power supply in a sealed industrial enclosure.
The various wiring connections, adjustments and settings, and electrical specifications of the power supply unit are described in this section.

ELECTRICAL CONNECTIONS
Input power connections are made inside the enclosure. Wiring harness power connections are made to connector on the outside of the enclosure.

AC INPUT
AC power for the power supply unit is connected directly to the disconnect switch, and the ground wire is connected to the grounding terminal block. The dual voltage single phase input powered units will automatically adjust to the 115 VAC or the 230 VAC input power.

DC OUTPUT
Connect the wiring harness to a connector on the side of the enclosure.
NOTE: Based on standard O-rings used, no more than 20 Zone Controllers (Integrated or Non-Integrated) can be connected to one side of a power supply unit. When more than 20 amps is required, you must use a 40 amp power supply unit and make sure that no more than 20 amps is required from each side of the power supply unit.

Mount the power supply unit near the center of the conveyors and connect the wiring harnesses to each side of the power supply. A gender changer cable is supplied for one side of the power supply.

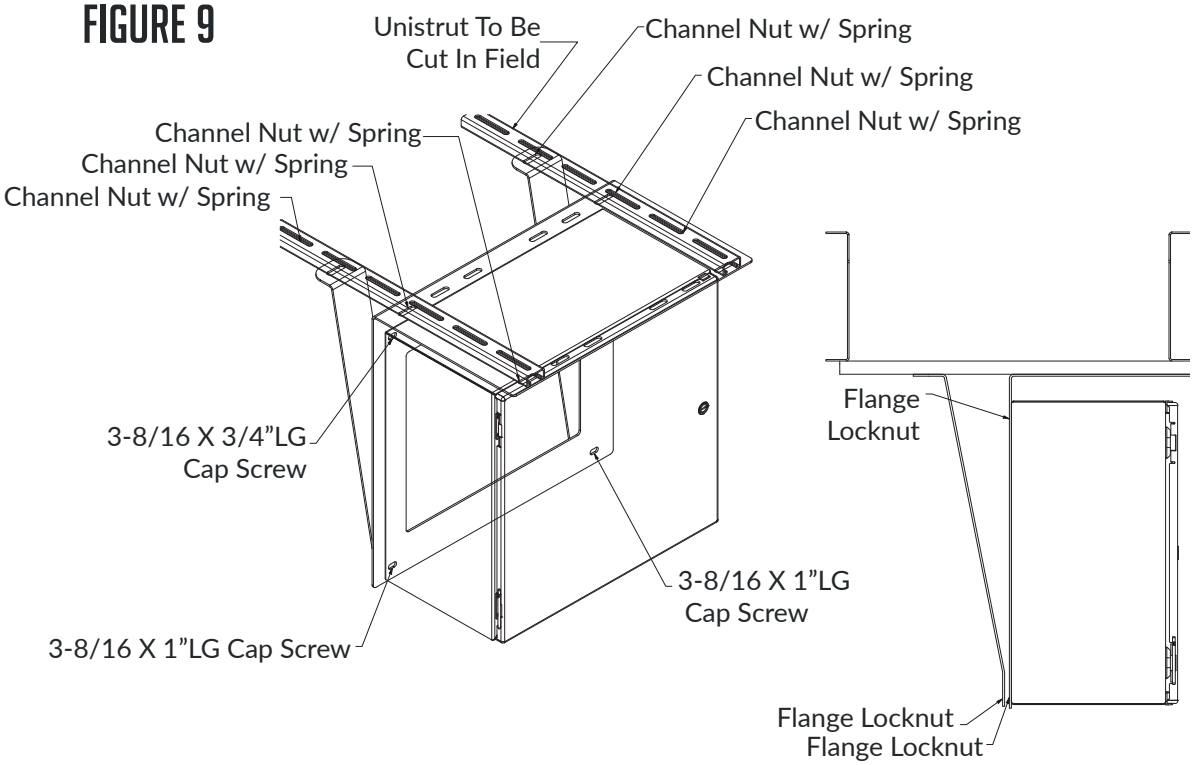
MAIN POWER DISCONNECT SWITCH

The main power disconnect switch handle is located on the front door. The switch can be used to turn the conveyor on and off to perform maintenance. It may be "locked out" in the off position if desired/required.

STANDARD MOUNTING KIT

Standard mounting kit can be used in applications where TOR is 32" or larger.

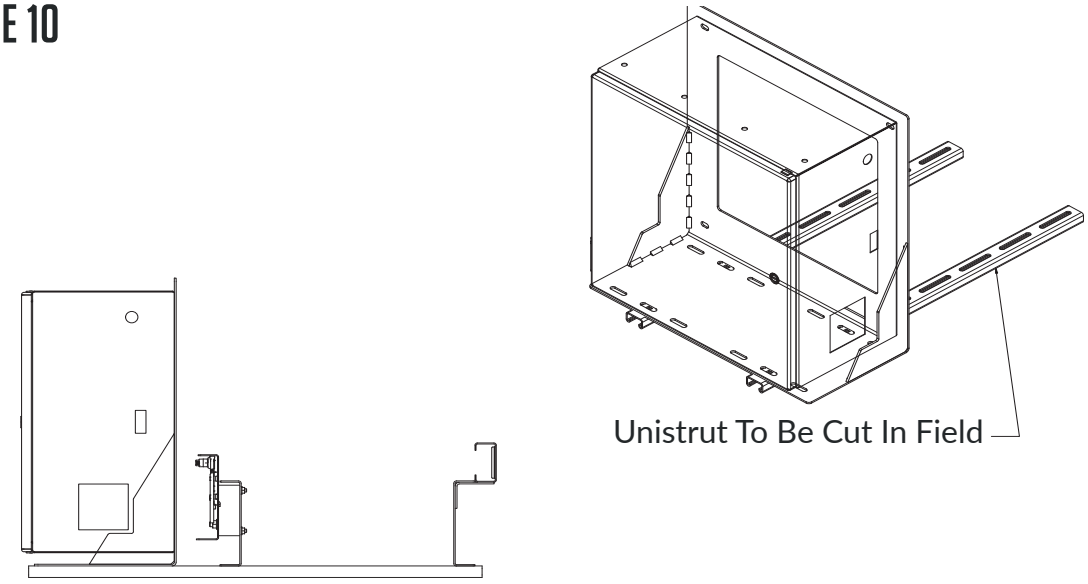
FIGURE 9



LOW ELEVATION MOUNTING KIT

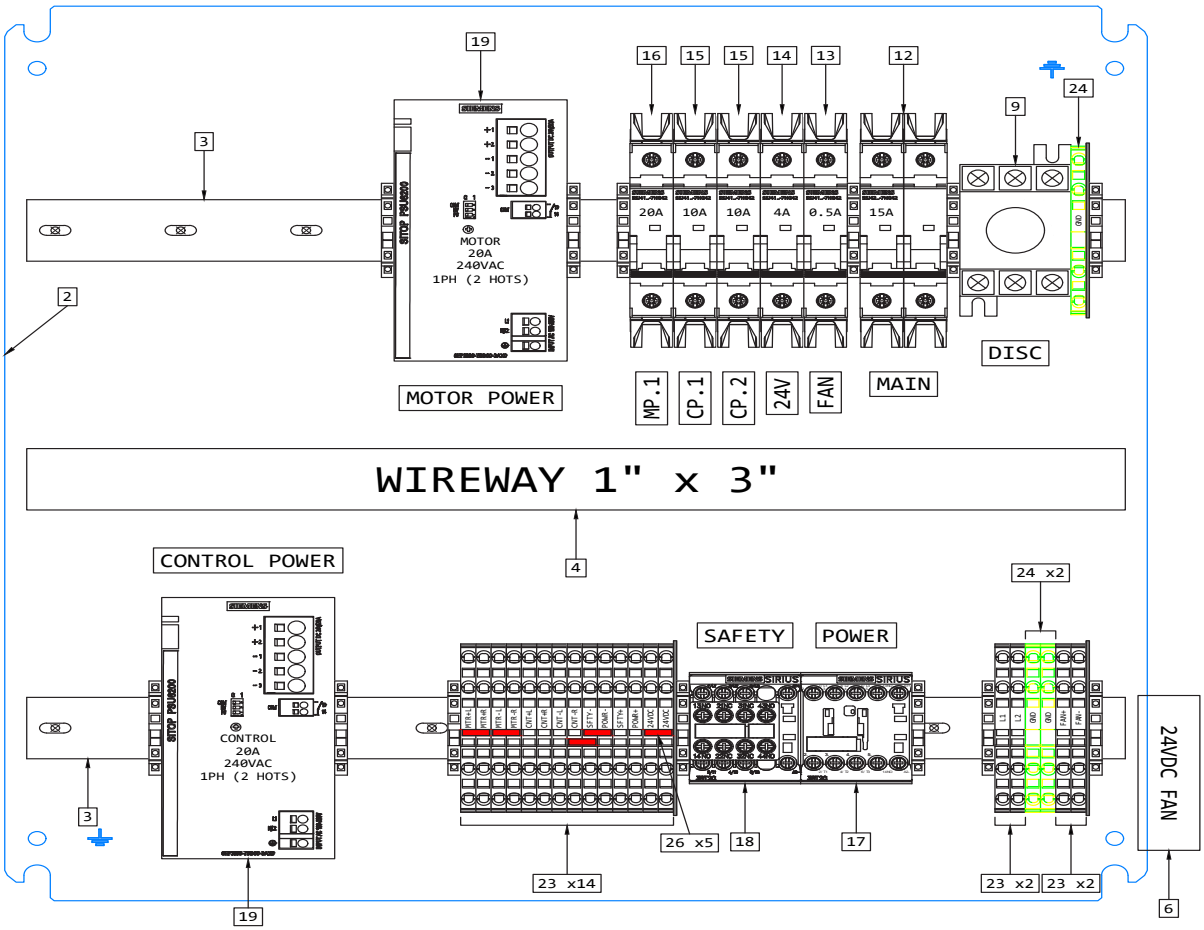
Low elevation mounting kit can be used in applications where TOR is less than 32".

FIGURE 10



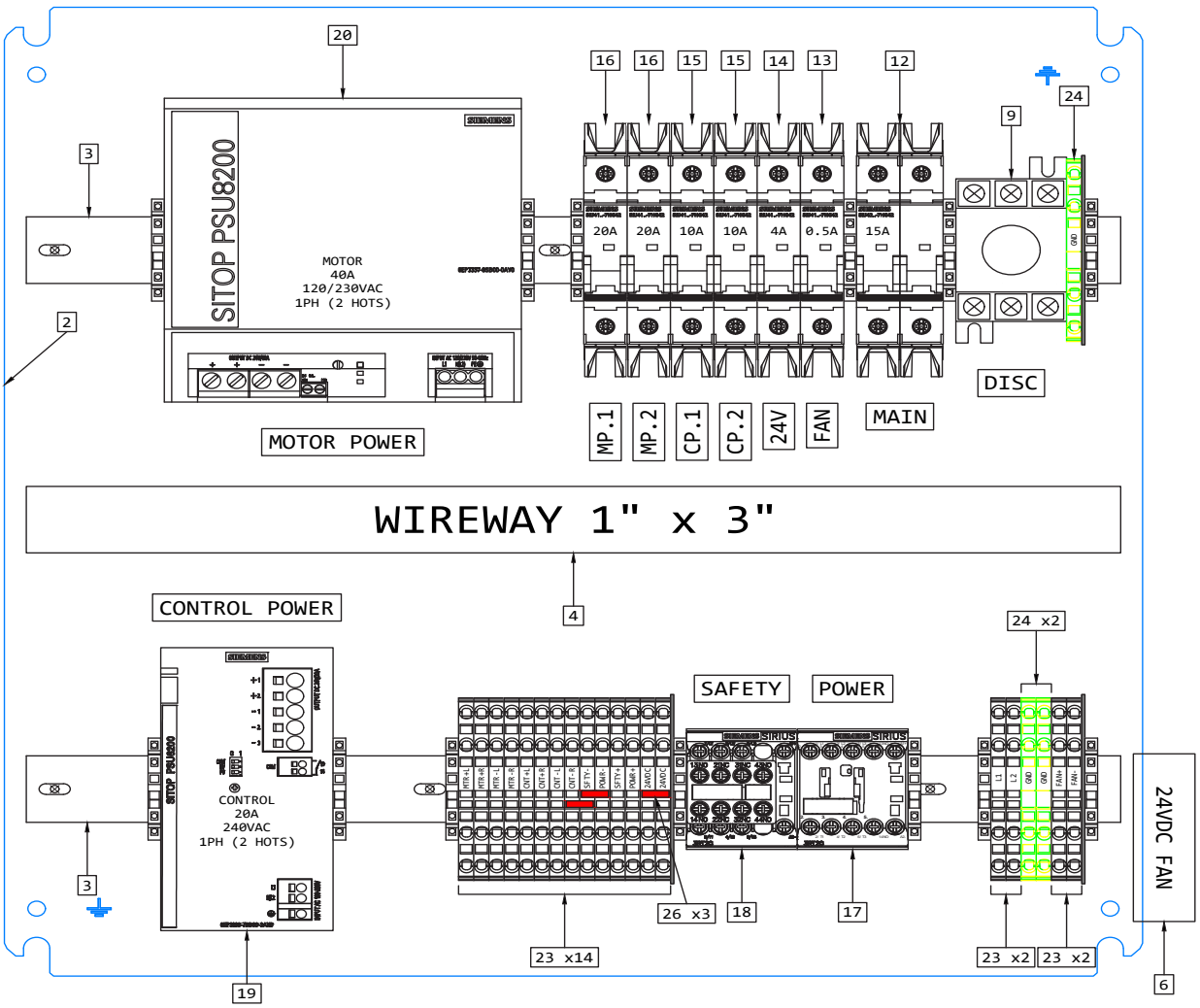
6 PART DRAWINGS

6.1 EZLOGIC® NET POWER SUPPLY - 20A,240V (2 HOT), 1PH



Ref No.	Description	Ref No.	Description
1	ENCLOSURE - 20” X 20” X 10”, CUSTOMIZED	14	BREAKER - 4 AMP, 1 POLE, C CURVE
2	PANEL - 20” X 20”	15	BREAKER - 10 AMP, 1 POLE, C CURVE
3	DIN RAIL - 3.28’LG	16	BREAKER - 20 AMP, 1 POLE, C CURVE
4	WIRE DUCT - LIGHT GRAY 1” X 3” X 6’	17	CONTACTOR - 16 AMP, 24VDC COIL
5	WIRE DUCT COVER - LIGHT GRAY, 1” X 6’	18	SAFETY CONTACTOR - 16 AMP, 24VDC COIL
6	AXIAL FAN - 80MM 24VDC 200MA	19	POWER SUPPLY - 20 AMP, 120VAC
7	FAN FILTER ASSY - 80MM	20	-
8	.&.EZNET WIRING HARNESS - 19”LEADS	21	TERMINAL BLOCK END RETAINER - SLIM
9	DISCONNECT SWITCH - 30 AMP, NON-FUSED	22	TERMINAL NAME PLATE - UTC-TM6
10	DISCONNECT SHAFT - 12”	23	4 POLE TERMINAL BLOCK - SIZE 4
11	HANDLE FOR R5 DISCONNECT SWITCH	24	4 POLE GROUND TERMINAL BLOCK - SIZE 4
12	BREAKER - 15 AMP, 1 POLE, C CURVE	25	4 POLE TERMINAL BLOCK ENDCOVER - SIZE 4
13	BREAKER - .5 AMP, 1 POLE, C CURVE	26	TERMINAL BLOCK 2-POLE JUMPER - ST 4

6.2 EZLOGIC® NET POWER SUPPLY - 40A,230V (2 HOT),1PH



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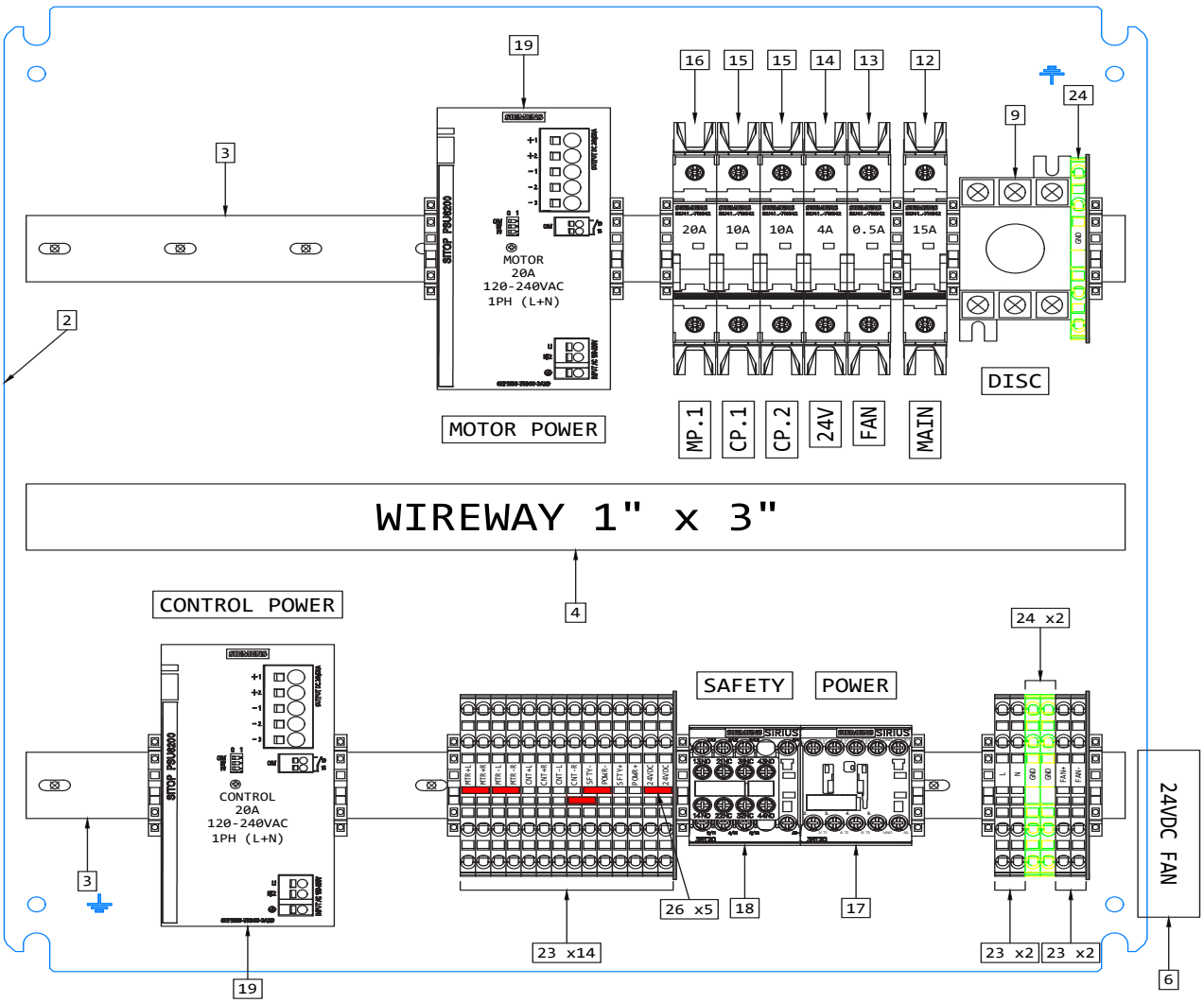
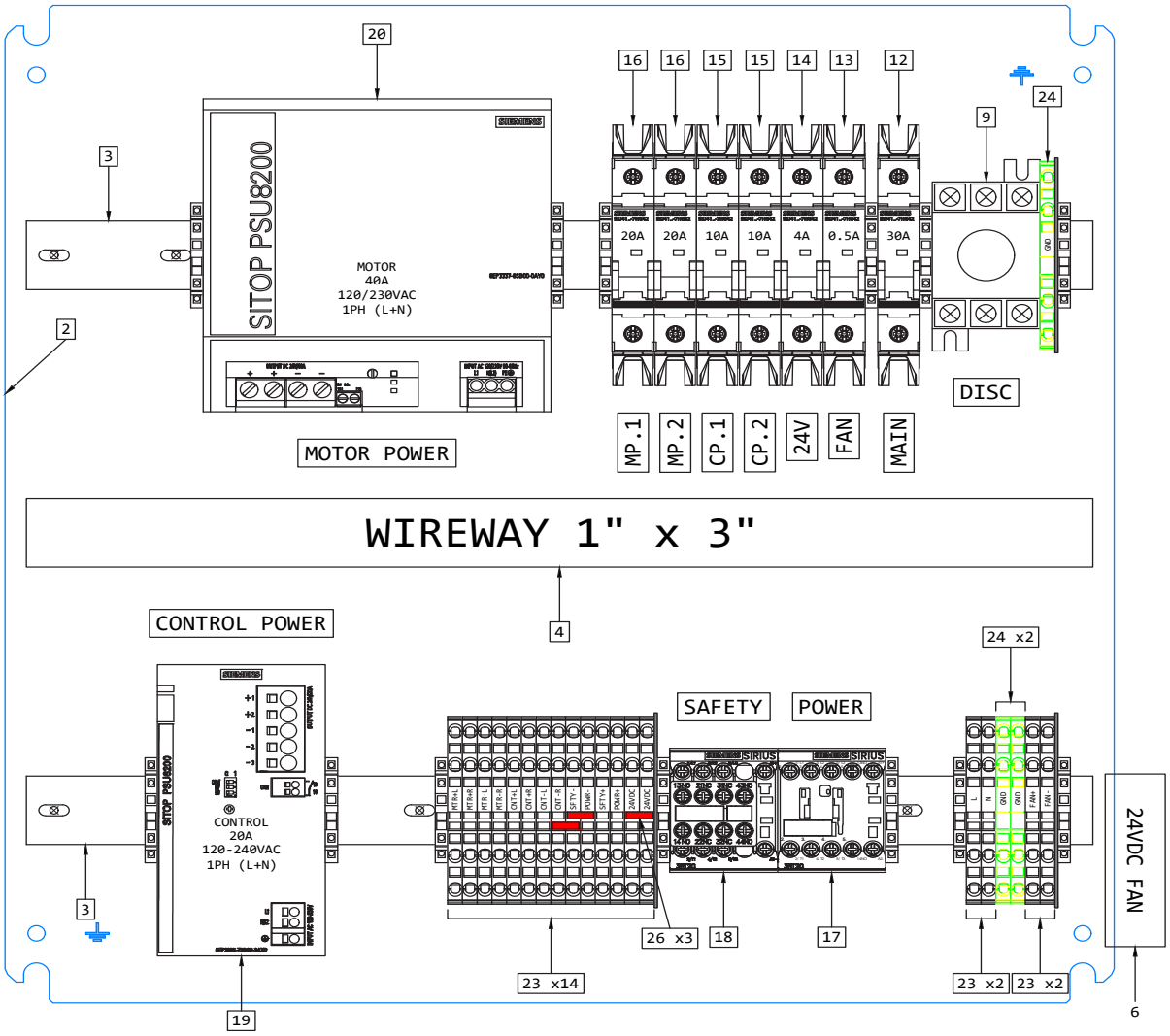
4	WIRE DUCT - LIGHT GRAY 1” X 3” X 6’	17	CONTACTOR - 16 AMP, 24VDC COIL
5	WIRE DUCT COVER - LIGHT GRAY, 1” X 6’	18	SAFETY CONTACTOR - 16 AMP, 24VDC COIL
6	AXIAL FAN - 80MM 24VDC 200MA	19	POWER SUPPLY - 20 AMP, 120VAC
7	FAN FILTER ASSY - 80MM	20	POWER SUPPLY - 40 AMP, 120VAC
8	.&.EZNET WIRING HARNESS - 19”LEADS	21	TERMINAL BLOCK END RETAINER - SLIM
9	DISCONNECT SWITCH - 30 AMP, NON-FUSED	22	TERMINAL NAME PLATE - UTC-TM6
10	DISCONNECT SHAFT - 12”	23	4 POLE TERMINAL BLOCK - SIZE 4
11	HANDLE FOR R5 DISCONNECT SWITCH	24	4 POLE GROUND TERMINAL BLOCK - SIZE 4
12	BREAKER - 15 AMP, 1 POLE, C CURVE	25	4 POLE TERMINAL BLOCK ENDCOVER - SIZE 4
13	BREAKER - .5 AMP, 1 POLE, C CURVE	26	TERMINAL BLOCK 2-POLE JUMPER - ST 4

6.3 EZLOGIC® NET POWER SUPPLY - 20A,120-240V+N,1PH



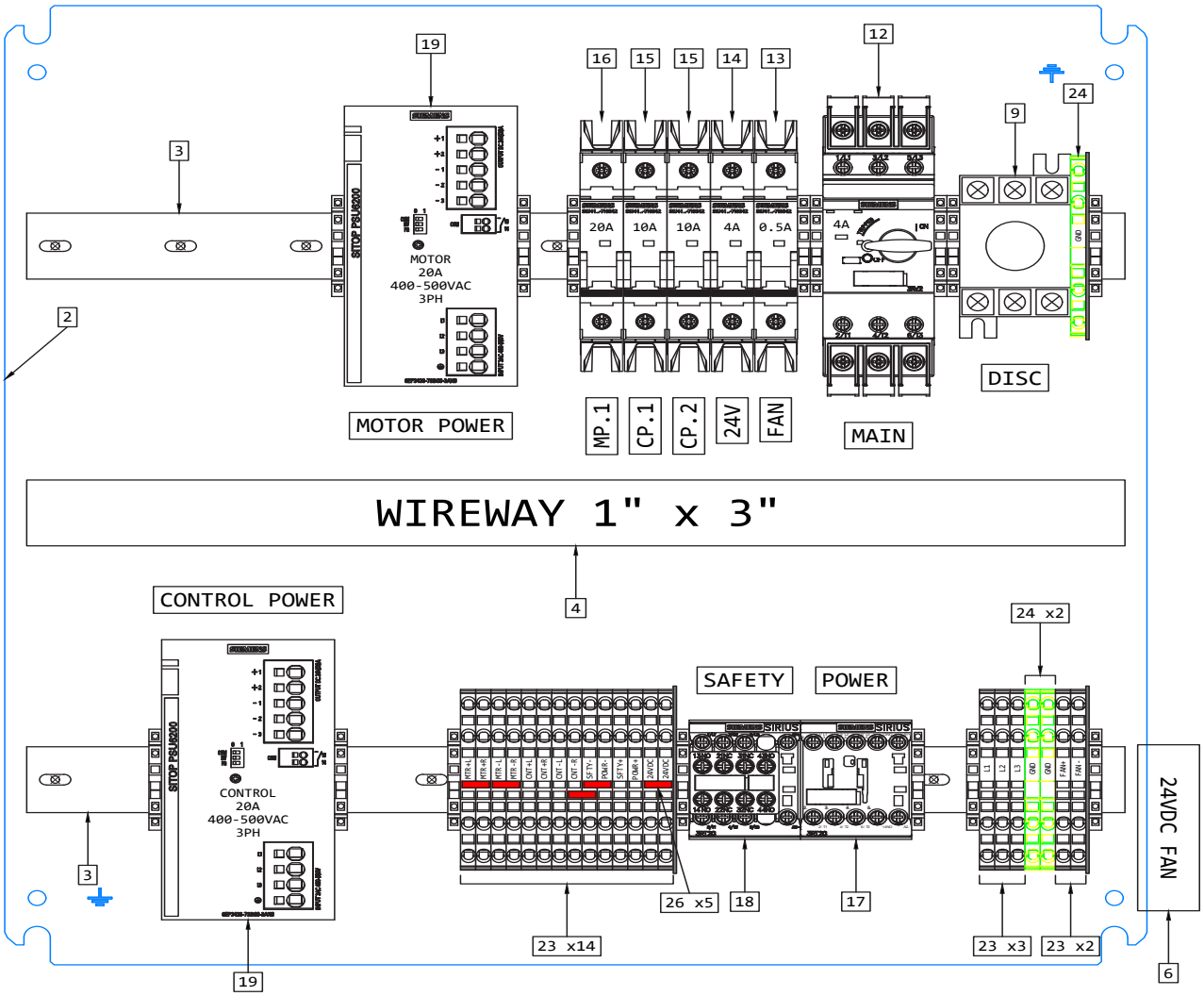
Ref No.	Description	Ref No.	Description
1	ENCLOSURE - 20” X 20” X 10”, CUSTOMIZED	14	BREAKER - 4 AMP, 1 POLE, C CURVE
2	PANEL - 20” X 20”	15	BREAKER - 10 AMP, 1 POLE, C CURVE
3	DIN RAIL - 3.28’LG	16	BREAKER - 20 AMP, 1 POLE, C CURVE
4	WIRE DUCT - LIGHT GRAY 1” X 3” X 6’	17	CONTACTOR - 16 AMP, 24VDC COIL
5	WIRE DUCT COVER - LIGHT GRAY, 1” X 6’	18	SAFETY CONTACTOR - 16 AMP, 24VDC COIL
6	AXIAL FAN - 80MM 24VDC 200MA	19	POWER SUPPLY - 20 AMP, 120VAC
7	FAN FILTER ASSY - 80MM	20	-
8	.&.EZNET WIRING HARNESS - 19”LEADS	21	TERMINAL BLOCK END RETAINER - SLIM
9	DISCONNECT SWITCH - 30 AMP, NON-FUSED	22	TERMINAL NAME PLATE - UTC-TM6
10	DISCONNECT SHAFT - 12”	23	4 POLE TERMINAL BLOCK - SIZE 4
11	HANDLE FOR R5 DISCONNECT SWITCH	24	4 POLE GROUND TERMINAL BLOCK - SIZE 4
12	BREAKER - 15 AMP, 1 POLE, C CURVE	25	4 POLE TERMINAL BLOCK ENDCOVER - SIZE 4
13	BREAKER - .5 AMP, 1 POLE, C CURVE	26	TERMINAL BLOCK 2-POLE JUMPER - ST 4

6.4 EZLOGIC® NET POWER SUPPLY - 40A,120/230V+N,1PH



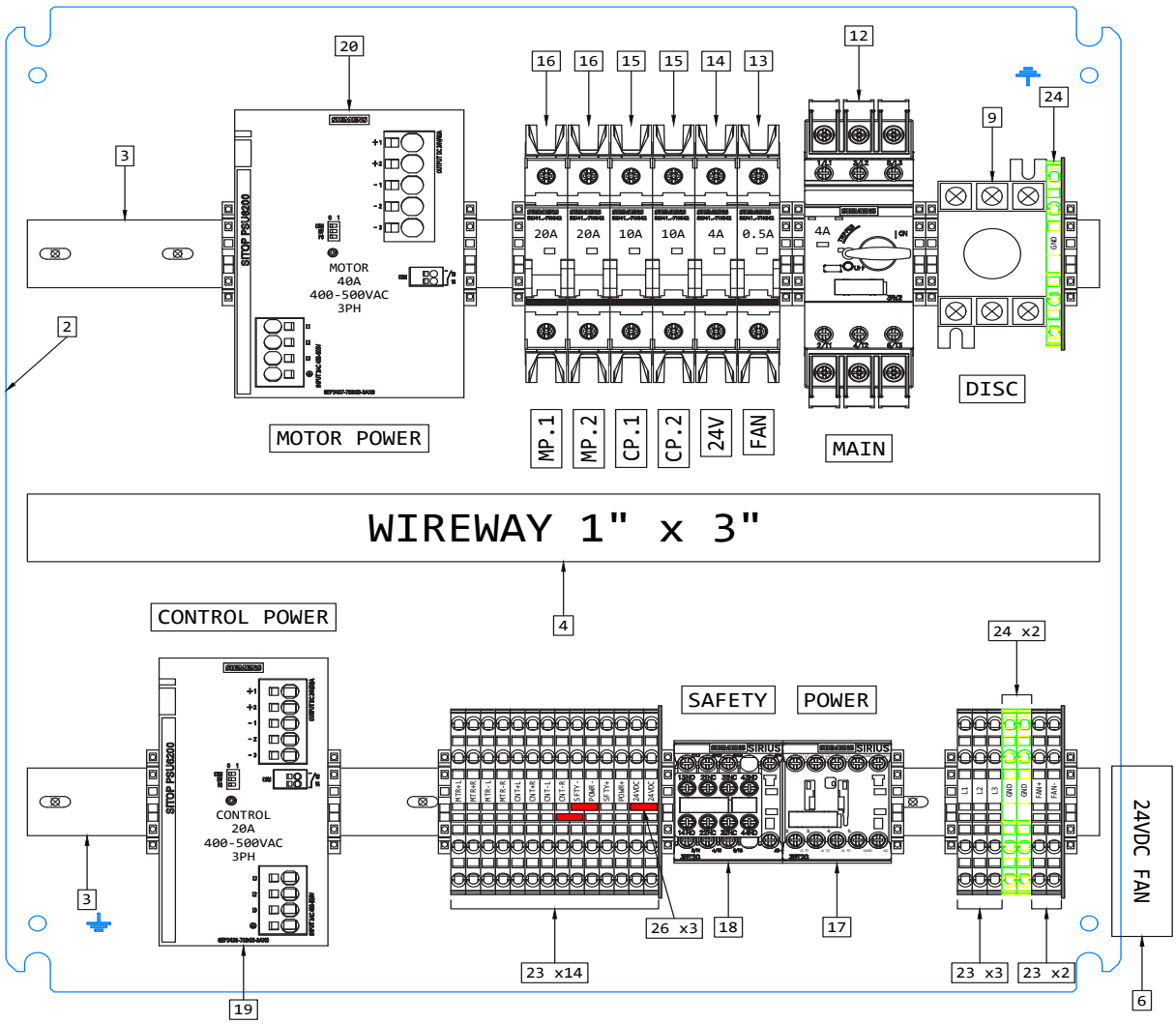
Ref No.	Description	Ref No.	Description
1	ENCLOSURE - 20” X 20” X 10”, CUSTOMIZED	14	BREAKER - 4 AMP, 1 POLE, C CURVE
2	PANEL - 20” X 20”	15	BREAKER - 10 AMP, 1 POLE, C CURVE
3	DIN RAIL - 3.28’LG	16	BREAKER - 20 AMP, 1 POLE, C CURVE
4	WIRE DUCT - LIGHT GRAY 1” X 3” X 6’	17	CONTACTOR - 16 AMP, 24VDC COIL
5	WIRE DUCT COVER - LIGHT GRAY, 1” X 6’	18	SAFETY CONTACTOR - 16 AMP, 24VDC COIL
6	AXIAL FAN - 80MM 24VDC 200MA	19	POWER SUPPLY - 20 AMP, 120VAC
7	FAN FILTER ASSY - 80MM	20	POWER SUPPLY - 40 AMP, 120VAC
8	.&.EZNET WIRING HARNESS - 19”LEADS	21	TERMINAL BLOCK END RETAINER - SLIM
9	DISCONNECT SWITCH - 30 AMP, NON-FUSED	22	TERMINAL NAME PLATE - UTC-TM6
10	DISCONNECT SHAFT - 12”	23	4 POLE TERMINAL BLOCK - SIZE 4
11	HANDLE FOR R5 DISCONNECT SWITCH	24	4 POLE GROUND TERMINAL BLOCK - SIZE 4
12	BREAKER - 15 AMP, 1 POLE, C CURVE	25	4 POLE TERMINAL BLOCK ENDCOVER - SIZE 4
13	BREAKER - .5 AMP, 1 POLE, C CURVE	26	TERMINAL BLOCK 2-POLE JUMPER - ST 4

6.5 EZLOGIC® NET POWER SUPPLY - 20A,400-500V,3PH



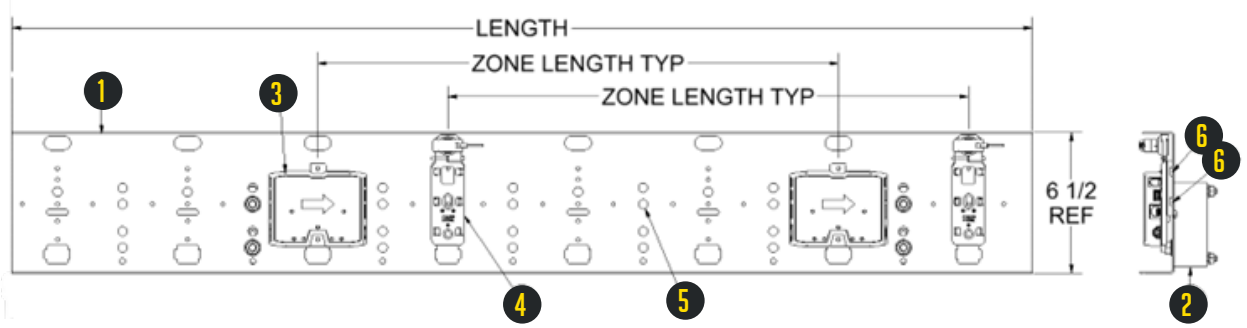
Ref No.	Description	Ref No.	Description
1	ENCLOSURE - 20” X 20” X 10”, CUSTOMIZED	14	BREAKER - 4 AMP, 1 POLE, C CURVE
2	PANEL - 20” X 20”	15	BREAKER - 10 AMP, 1 POLE, C CURVE
3	DIN RAIL - 3.28’LG	16	BREAKER - 20 AMP, 1 POLE, C CURVE
4	WIRE DUCT - LIGHT GRAY 1” X 3” X 6’	17	CONTACTOR - 16 AMP, 24VDC COIL
5	WIRE DUCT COVER - LIGHT GRAY, 1” X 6’	18	SAFETY CONTACTOR - 16 AMP, 24VDC COIL
6	AXIAL FAN - 80MM 24VDC 200MA	19	POWER SUPPLY - 20 AMP, 460VAC, 3PH
7	FAN FILTER ASSY - 80MM	20	-
8	.&.EZNET WIRING HARNESS - 19”LEADS	21	TERMINAL BLOCK END RETAINER - SLIM
9	DISCONNECT SWITCH - 30 AMP, NON-FUSED	22	TERMINAL NAME PLATE - UTC-TM6
10	DISCONNECT SHAFT - 12”	23	4 POLE TERMINAL BLOCK - SIZE 4
11	HANDLE FOR R5 DISCONNECT SWITCH	24	4 POLE GROUND TERMINAL BLOCK - SIZE 4
12	BREAKER - 15 AMP, 1 POLE, C CURVE	25	4 POLE TERMINAL BLOCK ENDCOVER - SIZE 4
13	BREAKER - .5 AMP, 1 POLE, C CURVE	26	TERMINAL BLOCK 2-POLE JUMPER - ST 4

6.6 EZLOGIC® NET POWER SUPPLY - 40A,400-500V,3PH



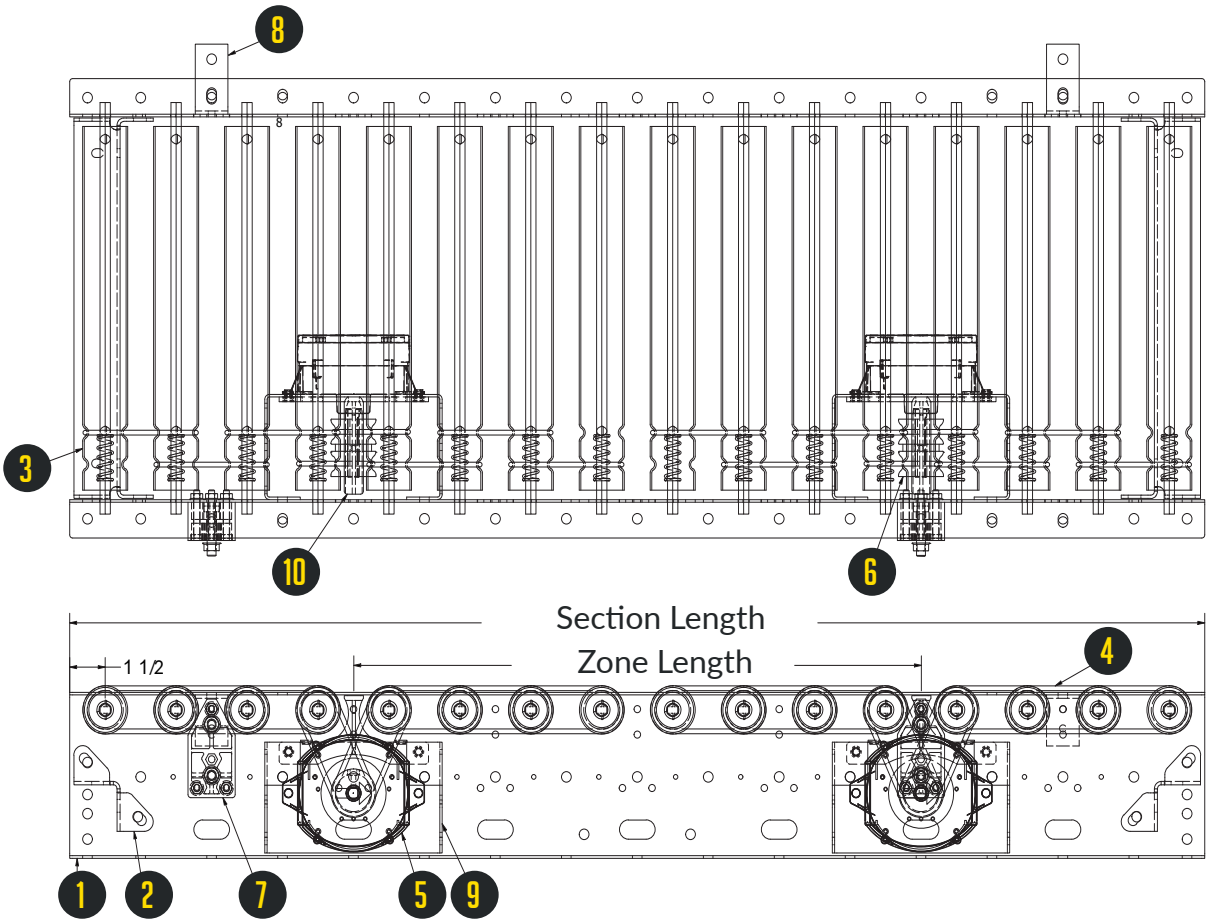
Ref No.	Description	Ref No.	Description
1	ENCLOSURE - 20” X 20” X 10”, CUSTOMIZED	14	BREAKER - 4 AMP, 1 POLE, C CURVE
2	PANEL - 20” X 20”	15	BREAKER - 10 AMP, 1 POLE, C CURVE
3	DIN RAIL - 3.28’LG	16	BREAKER - 20 AMP, 1 POLE, C CURVE
4	WIRE DUCT - LIGHT GRAY 1” X 3” X 6’	17	CONTACTOR - 16 AMP, 24VDC COIL
5	WIRE DUCT COVER - LIGHT GRAY, 1” X 6’	18	SAFETY CONTACTOR - 16 AMP, 24VDC COIL
6	AXIAL FAN - 80MM 24VDC 200MA	19	POWER SUPPLY - 20 AMP, 460VAC, 3PH
7	FAN FILTER ASSY - 80MM	20	POWER SUPPLY - 40 AMP, 460VAC, 3PH
8	.&.EZNET WIRING HARNESS - 19”LEADS	21	TERMINAL BLOCK END RETAINER - SLIM
9	DISCONNECT SWITCH - 30 AMP, NON-FUSED	22	TERMINAL NAME PLATE - UTC-TM6
10	DISCONNECT SHAFT - 12”	23	4 POLE TERMINAL BLOCK - SIZE 4
11	HANDLE FOR R5 DISCONNECT SWITCH	24	4 POLE GROUND TERMINAL BLOCK - SIZE 4
12	BREAKER - 15 AMP, 1 POLE, C CURVE	25	4 POLE TERMINAL BLOCK ENDCOVER - SIZE 4
13	BREAKER - .5 AMP, 1 POLE, C CURVE	26	TERMINAL BLOCK 2-POLE JUMPER - ST 4

6.7 EZLOGIC® NET ACCUMULATION KIT & PARTS LIST



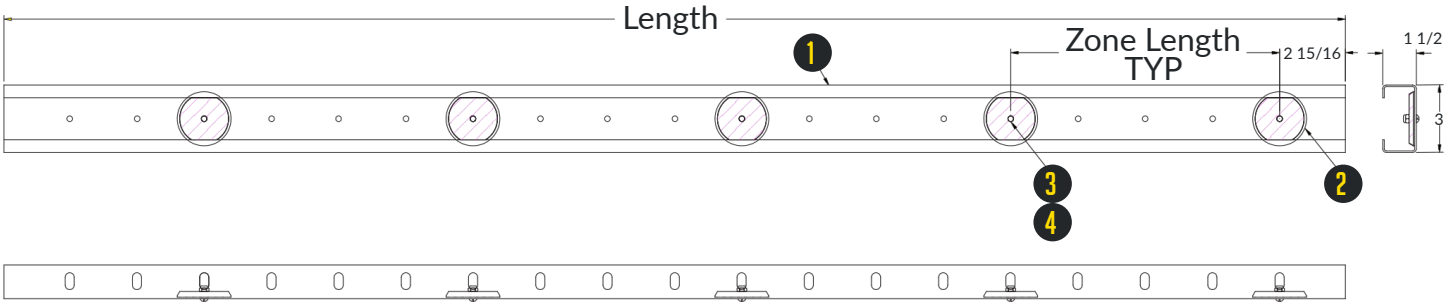
Ref No.	Description
1	Accumulation Channel
2	Accumulation Channel Mounting Block
3	Network Zone Controller
4	Photoeye Kit — Retroreflective, SetHigh 18” Lead 48” Lead M8 Lead
5	EZ Twist Lock for 13/32” Hole
6	Alum. Pop Rivet - 5/32 Dia.
7	Cordset (Communication Cable) 12” Long 18” Long 24” Long 30” Long 36” Long 48” Long 60” Long 72” Long
8	Wiring Harness 10 ft. Long, 10 Drops 10 ft. Long, 5 Drops 10 ft. Long, 4 Drops 10 ft. Long, 3 Drops 9 ft. Long, 6 Drops 5 ft. Long, 2 Drops 4 ft. Long, 1 Drop 2 ft. Long, 1 Drop

6.8 EZLOGIC® NET SECTION ASSEMBLY



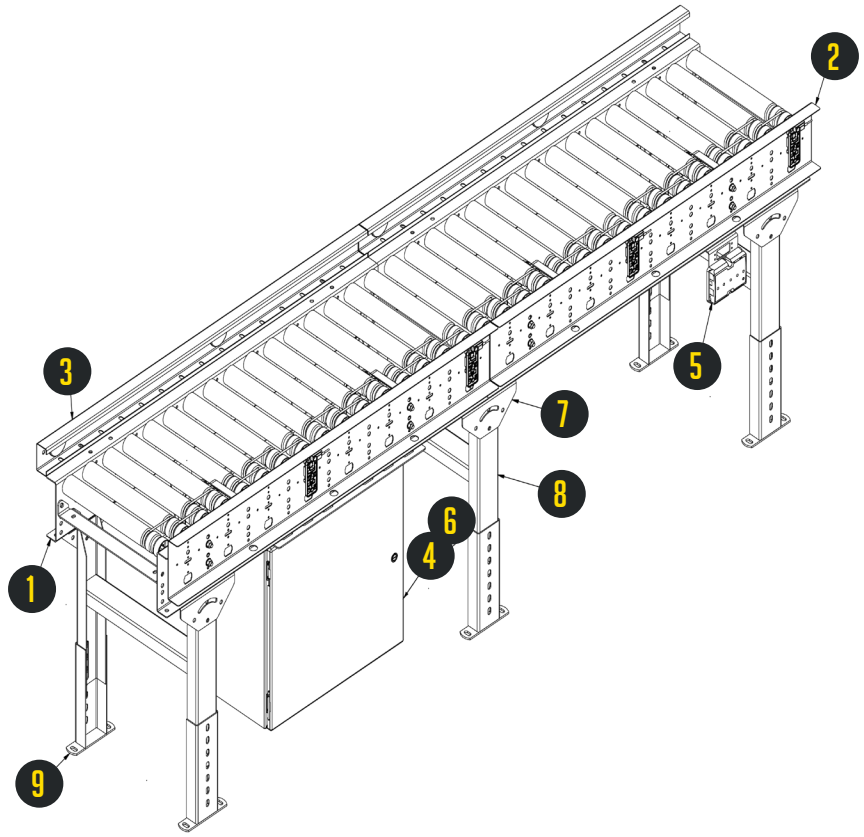
Ref No.	Description
1	Side Channel (Specify Length)
2	Bed Spacer (Specify BR)
3	1.9 Dia. Double Groove Roller (Specify BR)
4	O-Ring - .177 in. Thick
5	EZLogic® NET Integrated Network Motor (INM)
-	E24 Unidrive Motor (If using EZLogic® NET Networked Zone Controllers (NZC))
6	Drive Spool - Double Groove, 1.9 in. OD
7	Accumulation Channel Mounting Block Kit
8	Mounting Angle - Reflector Channel
9	UniDrive Motor Mounting Bracket
10	Nip Point Guard

6.9 EZLOGIC® NET REFLECTOR KIT



Ref No.	Description
1	Reflector Channel (Specify Length)
2	Reflector - 2.18 in. Dia.
3	#10-24 NC2B Hex Locknut, Nylon Insert, ZP
4	#10-24 x 5/8 in. Rd. Hd. Mach. Screw, ZP

6.10 EZLOGIC® NET FINAL ASSEMBLY



Ref No.	Description
1	Section Assembly
2	Accumulation Kit
3	Reflector Kit
4	Power Supply 20 Amp 115/230 VAC 40 Amp 115/230 VAC 20 Amp 240/480 VAC 40 Amp 240/480 VAC
5	Gateway Master
6	Wiring Harness, 1 ft. Long Gender Changer
7	MS Pivot Plate - 1-1/2 in. Flange 3-11/16 in. High 1-9/16 in. High

Ref No.	Description
8	Floor Support Frame 6 in. High (Specify OAW) 7 in. High (Specify OAW) 8 in. High (Specify OAW) 9 in. High (Specify OAW) 11-1/2 in. High (Specify OAW) 14-1/2 in. High (Specify OAW) 18-1/2 in. High (Specify OAW) 22-1/2 in. High (Specify OAW) 32-1/2 in. High (Specify OAW) 44-1/2 in. High (Specify OAW) 56-1/2 in. High (Specify OAW) 68-1/2 in. High (Specify OAW) 78-1/2 in. High (Specify OAW) 90-1/2 in. High (Specify OAW)
9	Adjustable Foot Assembly

7 TROUBLESHOOTING

7.1 TROUBLESHOOTING - EZLOGIC NET LEDS GATEWAY MASTER (GWM)

NOTE: A complete list of the LED Patterns for the Gateway Master (GWM) can be found in the EZLogic® NET Components Manual. Below are brief explanations of each LED found on GWMs.

POWER LED
This LED will always be illuminated green if input power is connected to the Gateway with a live current and the proper polarity. Should there be no voltage detected or if the voltage falls under or above the accepted threshold, the LED pattern will change.

CONTROL FUSE LED
This LED will be illuminated Red if the 5.0 amp internal fuse is blown. If the blown fuse LED is illuminated red, return the motor to your Integration Partner or supplier for analysis or repair. The 5.0 amp fuse is not user-accessible.

SERIAL NETWORK IN/OUT LED
This LED will be green if communications are established. As data is sent and received, the LED may flash green. The LED color will change from green to red only when there is a communications timeout.

SYSTEM FAULT LED
This LED is indicative of various parameters such as a Box Jam, Motor Fault, Motor Stall, Control Bus Undervoltage, Control Bus Overvoltage, Motor Bus Undervoltage, Motor Bus Overvoltage, No Motor Power, Motor Overspeed, Motor Current Limit, Comms Timeout, Board Overtemperature, Bad Board Temperature Sensor, Zone Run Fault, Smart I/O 1-4 Faults, Motor Overtemperature, or O-Ring Slip.

SYSTEM UPDATE LED
This LED is indicative of any firmware updates occurring in the system and of any successful SD Card uploads.

7.2 TROUBLESHOOTING INTEGRATED NETWORK MOTOR (INM)/ NETWORK ZONE CONTROLLER (NZC)

NOTE: A complete list of the LED Patterns for Network Zone Controllers (NZC) and Integrated Network Motors (INM) can be found in the EZLogic® NET Components Manual. Below are brief explanations of each LED found on NZCs and INMs

CONTROL POWER LED
This LED will always be illuminated green if input power is connected to the controller with a live current and the proper polarity. Should there be no voltage detected or if the voltage falls under or above the accepted threshold, the LED pattern will change.

CONTROL FUSE LED
This LED will be illuminated if the 5.0 amp internal fuse is blown and power is applied with the proper polarity. If the blown fuse LED is illuminated, return the motor to your Integration Partner or supplier for analysis or repair. The 5.0 amp fuse is not user-accessible.

MOTOR STATUS LED
This LED will indicate any potential issues with the motor that may cause its performance to deviate from the expected behavior.

MOTOR POWER LED
This LED will always be illuminated green if input power is connected to the controller with a live current and the proper polarity. Should there be no voltage detected or if the voltage falls under or above the accepted threshold, the LED pattern will change.

SERIAL NETWORK IN/OUT LED
This LED will be green if communications are established. As data is sent and received, the LED may flash green. The LED color will change from green to red only when there is a communications timeout.

SYSTEM FAULT LED
This LED is indicative of various parameters such as a Box Jam, Motor Fault, Motor Stall, Control Bus Undervoltage, Control Bus Overvoltage, Motor Bus Undervoltage, Motor Bus Overvoltage, No Motor Power, Motor Overspeed, Motor Current Limit, Comms Timeout, Board Overtemperature, Bad Board Temperature Sensor, Zone Run Fault, Smart I/O 1-4 Faults, Motor Overtemperature, or O-Ring Slip.

7.3 TROUBLESHOOTING MODEL EZLOGIC® NET

Trouble	Cause	Solution
No zones on the conveyor will run.	1. No AC power to the power supply unit. 2. Main power disconnect on the power supply unit is “off.” 3. Main fuses blown. 4. No power to EZLogic® Zone Controller	1. Check AC power. 2. Set disconnect to “on.” 3. Replace fuses. 4. Check output power of power supply, EZLogic® NET connections, and Gateway connections.
Individual zone will not run.	1. Power is not being applied to zone 2. EZLogic® zone controller output cable not connected to motor/ control board. 3. Motor connector not connected to Zone controller. (Network Zone Controller and E24 motor only; not applicable with Integrated Network Motor use) 4. Photoeye is misaligned. 5. Reflector missing or damaged. 6. Defective EZLogic® NET Zone Controller (Integrated or Non-Integrated). 7. Blown fuse indicator “ON”. 8. Defective control board. 9. Defective E24 motor.	1. Check the wiring harness connection at the connection point to the Zone Controller (Integrated or Non-Integrated. 2. Connect cables. 3. Connect motor power connector to motor control board. 4. Adjust photoeye to ensure proper alignment. 5. Replace reflector. 6. Replace EZLogic® Zone controller (Integrated (INM) or Non-Integrated (NZC)). 7. Replace fuse. 8. Replace control board. 9. Replace motor.
Zone will not restart after accumulation.	1. Zone controller lens is dirty. 2. O-ring band(s) stretched or worn.	1. Clean lens. 2. Replace o-ring(s).
Zone will not “sleep.”	1. Sleep feature disabled. 2. Upstream zone is blocked.	1. Enable sleep feature. 2. Unblock upstream zone.
Infeed zone will not accept product or run.	1. Both handshaking signals needed for a zone to run are not active.	1. Using EZLogic® OS or the Bluetooth Module and EZLogic® NET app, configure a Smart I/O channel of the infeed zone to be a FWD Request/Reverse Permission Input Active Low.

NOTES

Need Assistance?
Contact Us

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