Industrial Manufacturing Supplies
A Division of IMS Company

Hydraulic Gaylord Dumper

IMS #117995

INSTRUCTION MANUAL

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Industrial Manufacturing Supplies
10373 Stafford Road
Chagrin Falls, OH 44023-5296

Telephone: (440) 543-1615
Fax: (440) 543-1069
Email: sales@imscompany.com
Website: www.imscompany.com

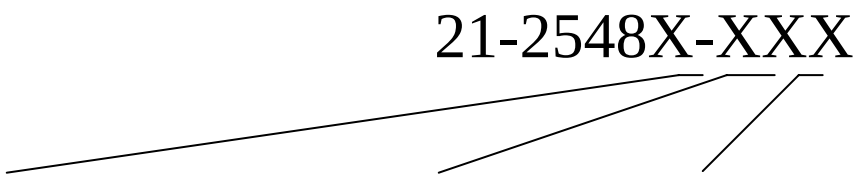
An ISO 9001:2000 Registered Quality Company

Table of Contents

1 General Description

The IMS Hydraulic Dumper is a hydraulically activated unit that can be used to empty a variety of containers into hoppers or conveyors. It can handle most dry materials from plastic pellets to small parts. The Hydraulic Dumper can lift 2500 pounds of material. Three bucket sizes are available to accommodate various container sizes. The buckets come in 50", 53" and 56" widths with 42"depth and 49.5" height. An adjustable retaining bar holds the container in place. Lifting power comes from two hydraulic cylinders with an electrically driven hydraulic pump supplying the oil pressure. Lowering a box is accomplished with the hydraulic system providing a power down, metering it down slowly. The standard control consists of a simple 3-position spring return switch, which the operator must turn for Hydraulic Dumper motion. When the switch is released, motion stops. For safety, a hydraulic fuse keeps the bucket from dropping in the event of a hydraulic failure or a hose break. The standard model operates from a 115v grounded power source, although other voltages are available. Many other options are available including clamping mechanisms, enclosed hoods, increased rotation angle, higher performance hydraulic systems, and special control systems.

1.1 Model Numbers



1 = single phase	50 = 50" wide	C = Carbon steel frame and product contact
3 = three phase	53 = 53" wide	H = Carbon steel frame and Stainless steel contact
	56 = 56" wide	S = Stainless steel frame and product contact

The machine is completed with choice of electrical package. See Section 8

2 Specifications

Capacity	2500 lbs
Bucket dimensions (model dependant)	50"-56"W x 42"D x 49.5"H
Discharge height	48-1/2"
Hydraulic pump motor	1-1/2 hp, 1725 rpm, TEFC
Voltages	115/1/60 or 460/3/60 (std.)
Other Voltages available	220/1/60, 208/3/60, 230/3/60, 380/3/50, 575/3/60
Current draw @ 115/1/60	17.2 amps
@ 220/1/60	9.8 amps
@ 230/3/60	4.6 amps
@ 460/3/60	2.3 amps
Hydraulic pump	1.9 gpm, 3000 psi max.
Hydraulic oil	3 gallons total capacity, grade AW32
Weight	1350 lbs
Paint	Metallic gray

3 For Your Safety

Caution: These accident prevention measures must always be observed when working with the Hydraulic Dumper. Please read the entire operating instructions carefully and familiarize yourself with the operation of the unit before using the equipment. Do not attempt to install, connect power to, operate, or service machine without proper instruction and until you have been thoroughly trained in its use by your employer. The unit must be checked before each operation to ensure that it is in serviceable condition. Do not abuse, overload, mistreat or misuse machine or attempt to operate it if it is in need of service, lubrication, maintenance or repair. WORK SAFELY AT ALL TIMES!

WARNING: The Hydraulic Dumper could crush you. Keep out from under Hydraulic Dumper.

WARNING: Falling boxes could cause severe injury. Always use box safety bar when you tilt the Hydraulic Dumper.

WARNING: Changes to machine could cause death and injury. Modify only with approval of machine maker.

WARNING: The Hydraulic Dumper could crush anyone or anything under it. Check under the machine before lowering it.

WARNING: Moving parts could crush you. Do not use machine without guards.

WARNING: Unexpected motion could cause death or severe injury. Lock out and tag out all forms of energy (electric, hydraulic, gravity). If the bucket is raised for service, mechanically block it to keep it from falling.

DANGER: Live electrical contacts could cause death or shock. Lock out and tag out power before doing service.

3.1 General

- Do not manually override or electrically by-pass any protective device.
- Do not connect power to or operate machinery or equipment unless all moving parts are covered and all covers, guards, grates, and maintenance panels are in place and securely fastened.
- It is the owner and employer's responsibility to adequately train the employee-operator in the proper and safe use of machinery and equipment. Written safety programs and formal instruction are essential. All new employees must be made aware of company policies and operating rules especially the established safety and health procedures. Refresher training of experienced employees in the potential hazards of the job is important. Up to date training records must be maintained at the job site.
- Special attention must be devoted to outside contractors engaged to enter and perform work on machinery or in the workplace. Special care must be exercised to insure all such personnel are fully informed of the potential hazards and follow plant rules.
- High voltage and rotating parts can cause serious or fatal injury. Only qualified, trained, and experienced personnel must perform installation, operation and maintenance of machinery.
- Make sure that the motor and the frame of each machine that has any electrical connection is effectively grounded in accordance with OSHA safety and health standards, the National Electrical Code and local codes.

3.2 Clothing and Equipment

Appropriate clothing should be worn when working with the Hydraulic Dumper. This consists of close-fitting work clothing (overalls), sturdy gloves, protective glasses and safety boots with non-slip soles. This should be considered the minimum requirements. Check with local plant safety guidelines for any additional requirements due to the materials being used or company policy.

3.3 Instructions During Operation

-  **Danger: Do not place hand or any obstruction inside the discharger.**
- The unit must be checked before each operation to ensure that it is in serviceable condition.
- Isolate power and insure all moving parts come to a complete standstill:
  - ♦ Before clearing blockages or eliminating clogging.
  - ♦ Before checking, cleaning or performing work on the Hydraulic Dumper.
- If the Hydraulic Dumper makes an unusual noise or vibrates strongly, turn it off and call for service personnel to inspect and repair.
- Do not abuse, overload, mistreat or misuse machine or attempt to operate it if it is in need of service, lubrication, maintenance or repair.
- Never place any part of your body under or near rotating members or moving parts of machinery or equipment.
- Many machines are installed and wired to start automatically or from remote control locations. Keep away from machinery at all times.
- All protective covers, guards, grates, maintenance panels, switches and warning decals must be kept in place and in good repair. Any machine with damaged, malfunctioning, defective, or missing protective devices must be taken out of service until protective device can be repaired or replaced.
- The operator is responsible for third parties in the working area of the Hydraulic Dumper. Never operate while persons, particularly children or animals are nearby. Persons under 16 years of age should not operate the Hydraulic Dumper.
- It is ultimately the operator's responsibility to implement the above listed precautions and insure proper machinery and equipment use, maintenance and lubrication. Keep these instructions and list of warnings with your machine at all times.
- WORK SAFELY AT ALL TIMES.

4 Preliminary Inspection

A preliminary inspection should be made prior to installing the equipment. Remove any plastic, cardboard and / or crating. Inspect the Hydraulic Dumper for shipping damage and report to carrier. All claims for damages or shortages resulting from shipment must be filed with the carrier before the truck leaves the unloading site. Inspect the shipment upon arrival to be sure it is complete. If there are any components or parts missing, call shipping department immediately.

5 Installation Instructions

It is recommended that a copy of this manual be attached to each machine to keep the appropriate instructional materials where they are needed. The Hydraulic Dumper frame has holes for permanent floor mounting. The center of gravity of the Hydraulic Dumper fully loaded and in the dump position is such that this floor anchoring is essential. If not bolted down, a danger of tipping the unit over exists. For this reason***, floor bolting of the Hydraulic Dumper is absolutely necessary*.**

Connect the Hydraulic Dumper to a power supply with the proper voltage and amperage rating for the unit purchased. In some cases, a simple plug connection with the appropriate rating is sufficient, in other cases a disconnect must be provided. All electrical connections must be in accordance with local codes and the National Electrical Code or appropriate international code.

5.1 Safety

- A Padlockable Protective Interlocking Electrical Control Switch will need to be installed in accordance with your local requirements, along with prominently displayed hazard warning and instruction decals to alert personnel to possible operational hazards.
- To promote safe operation moving parts must be protected by guards, covers or grates. A full system cage can be ordered from the manufacturer as an option. *If this option is not purchased or requested it is the **equipment users** responsibility to provide correct and safe protection for the equipment and personnel in accordance with all applicable agencies.*

5.2 Before Starting

Before starting the Hydraulic Dumper, perform the following:

- Carefully inspect all fasteners, bolts and nuts, on both the inside and outside of the machine to make certain that they are tight.
- Carefully check the alignment of all drive components to assure proper operation.
- Check the inside of the Hydraulic Dumper bucket and clear out any foreign material or objects.

6 Operation

1. Turn on power to the Hydraulic Dumper.
2. Before loading the Hydraulic Dumper, make sure that the bucket is all the way down.
3. Remove cover from the container and make sure the liner (if applicable) is pulled down snugly around the outside of the container.
4. Place the container into the bucket and install the safety bar so that it secures the container in place.
5. Verify that the Hydraulic Dumper is properly aligned to the discharge receiver.
6. Turn and hold the selector switch in the “UP” position until the bucket reaches its full discharge angle. To stop motion at any time, release the switch.
7. Before returning the bucket, verify that the area is clear and it is safe to proceed.
8. Turn and hold the selector switch in the “DOWN” position until the bucket reaches the down position. To stop motion at any time, release the button.

Caution: Do not “rock” the dumper by quickly alternating between “UP” and “DOWN” on the selector switch. Damage to the dumper and/or associated equipment may result.

7 Maintenance

7.1 Overview

Considerable care has been employed in the design of this equipment to reduce the required maintenance. The following is a list of required periodical maintenance.

 **Caution:** Before attempting any maintenance or adjustments perform the following:

- Disconnect all electrical power.
- Insure all moving parts come to a complete standstill and are in their home positions.
- Thoroughly read this manual before proceeding.
- Follow local and plant safety precautions.
- Do not attempt to work on, clean or service this equipment or open or remove any protective cover, guard, grate or maintenance panel until the **POWER** has been disconnected and **LOCKED OUT,** and the machine has come to a complete stop.
- Drive components must be inspected and adjusted after transportation and periodically as required by operating conditions.
- Keep components clean.
- Keep foreign objects and materials out of motor enclosures.

7.2 General Inspection

- Periodically perform the following inspections.
- Inspect all hydraulic hose and fittings for leaks or abrasion. Replace all components that are defective.
- Inspect all electrical conduit and sealtite nuts for loose fittings. Replace all components that are defective.
- Inspect all switch and power cords for abrasion and insulation defects. Replace all components that are defective.
- Inspect hydraulic system settings, cylinder pivot pins, and all other wear points for excessive wear. Replace all components that are defective.
- Inspect all set-screws, keys, bearings, shafts, and motors. Replace all components that are defective.
- Inspect complete machine for loose bolts and nuts. Tighten as required. Replace any defective fasteners with an identical size and grade fastener.
- Inspect and repair any finish defects to prevent rust and corrosion.

7.3 General Lubrication

Periodically perform the following lubrication maintenance.

- Inspect cylinder pivots for wear or galling. The upper cylinder pivots use fiberglide bushings that do not require lubrication. The lower cylinder pivots may be lubricated with a dry powder lubricant.
- Although bearings are provided with grease fittings it is not recommended by the manufacturer to re-lubricate the bearings. Unless total bearing failure has already occurred adding excessive lubricant will destroy the bearing seals and cause early failure.

7.4 Power Unit Maintenance

- Hydraulic oil—Check the oil level in the reservoir monthly. The level should be about an inch below the top of the opening. Use AW32 grade oil. Do not overfill the reservoir. The hydraulic oil should be changed after the first month of use and then approximately every six months.
- Your unit has been tested with AW32. Some oil remains in the cylinders and/or actuators. Check for oil compatibility before using different oil.
- The suction strainer should be removed and cleaned after the first week of operation. This will remove any foreign material flushed into the external plumbing.
- After the initial cleaning, it is normally not necessary to clean the strainer more than once every 6 months, but this period may vary depending on the surrounding conditions and type of operation. If at any time the oil appears dirty after the strainer is removed, the reservoir should be drained and replaced with clean oil.
- Cleanliness is the most important factor in maintaining long life for the pump and other components. The top of the power unit should be kept free from dirt. Be particularly careful during the filling operation not to introduce dirt into the reservoir.
- A pump that becomes excessively noisy during operation is usually a sign that the suction strainer should be cleaned more frequently to prevent pump cavitation.
- Pump “crackle” is often caused by air entering the pump suction. Tightening the suction fittings will usually eliminate the problem. If the pump fails to prime, vent the pump discharge to atmosphere to establish fluid flow.
- For most industrial applications, an operating temperature of 150°F is considered maximum. At higher temperatures, difficulty is often experienced in maintaining reliable and consistent hydraulic control. Component service life is reduced, hydraulic fluid deteriorates, and a potential danger to operating personnel is created at elevated temperatures.
- System pressure should be set as low as possible to prevent unnecessary fluid heating; on some applications this setting may be from 50 to 200 PSI above necessary static pressures to overcome dynamic pressure drop or to achieve proper acceleration.

8 Drawings

8.1 Hydraulic Dumper Assemblies

Drawing Number	Description
21A070-50C	Assembly IMS Tipper 50" Bucket
21A070-53C	Assembly IMS Tipper 53" Bucket
21A070-56C	Assembly IMS Tipper 56" Bucket

Note: See Section 12 – Drawings for assembly drawings of these assemblies.

8.2 Bucket Assemblies

Drawing Number	Description
21A055-50C	Assy IMS Tipper 50" Bucket CS
21A055-50H	Assy IMS Tipper 50" Bucket Hybrid SS
21A055-53C	Assy IMS Tipper 53" Bucket CS
21A055-53H	Assy IMS Tipper 53" Bucket Hybrid SS
21A055-56C	Assy IMS Tipper 56" Bucket CS
21A055-56H	Assy IMS Tipper 56" Bucket Hybrid SS

8.3 Frame Assemblies

Drawing Number	Description
21A071-50C	Assembly Tipper Frame 50" Frame
21A071-53C	Assembly Tipper Frame 53" Frame
21A071-56C	Assembly Tipper Frame 56" Frame

9 Electrical Information

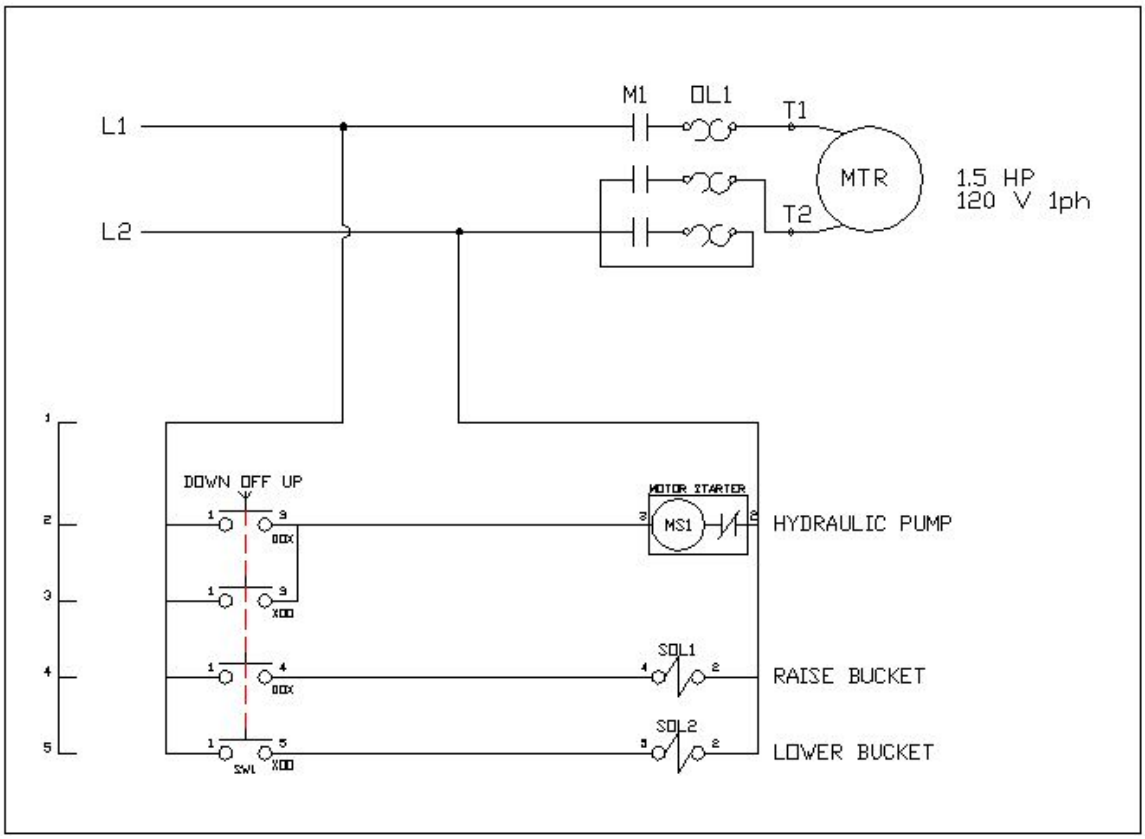
9.1 Available Configurations

044591XX
IMS
Electrical

	NEMA 12	NEMA 4	NEMA 4X
120V 1PH	04459110	04459114	04459118
220V 1PH	04459120	04459124	04459128
208V 3PH	04459130	04459134	04459138
230V 3PH	04459140	04459144	04459148
380V 3PH	04459150	04459154	04459158
460V 3PH	04459160	04459164	04459168
575V 3PH	04459170	04459174	04459178

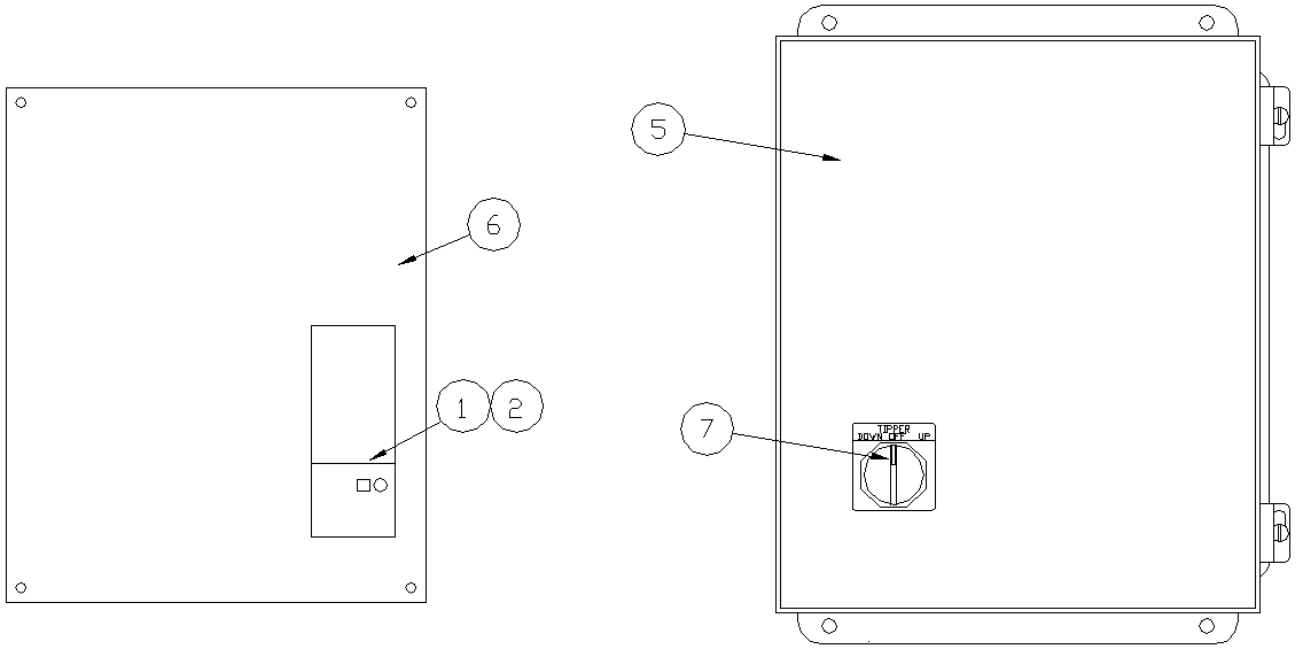
9.2 120V Single Phase Schematic

Figure 1: 120V single phase schematic.



9.3 120V Single Phase Panel Layout

Figure 2: 120V single phase panel layout.



9.4 120V Single Phase Parts Lists

Figure 3: 120V 1ph Nema 12 – 04459110

#	PART NO.	DESCRIPTION	MANUF.
1	92028210	Contactor; 100-C23D10	A/B
2	92028219	Relay, Overload; 193-EA1GB	A/B
3			
4			
5	92014125	A-1210CH Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8			
9			
10			
11			
-	92004511	Motor, G574 1.5HP 56HC 1PH	Marathon

Figure 4: 120V 1ph Nema 4 – 04459114

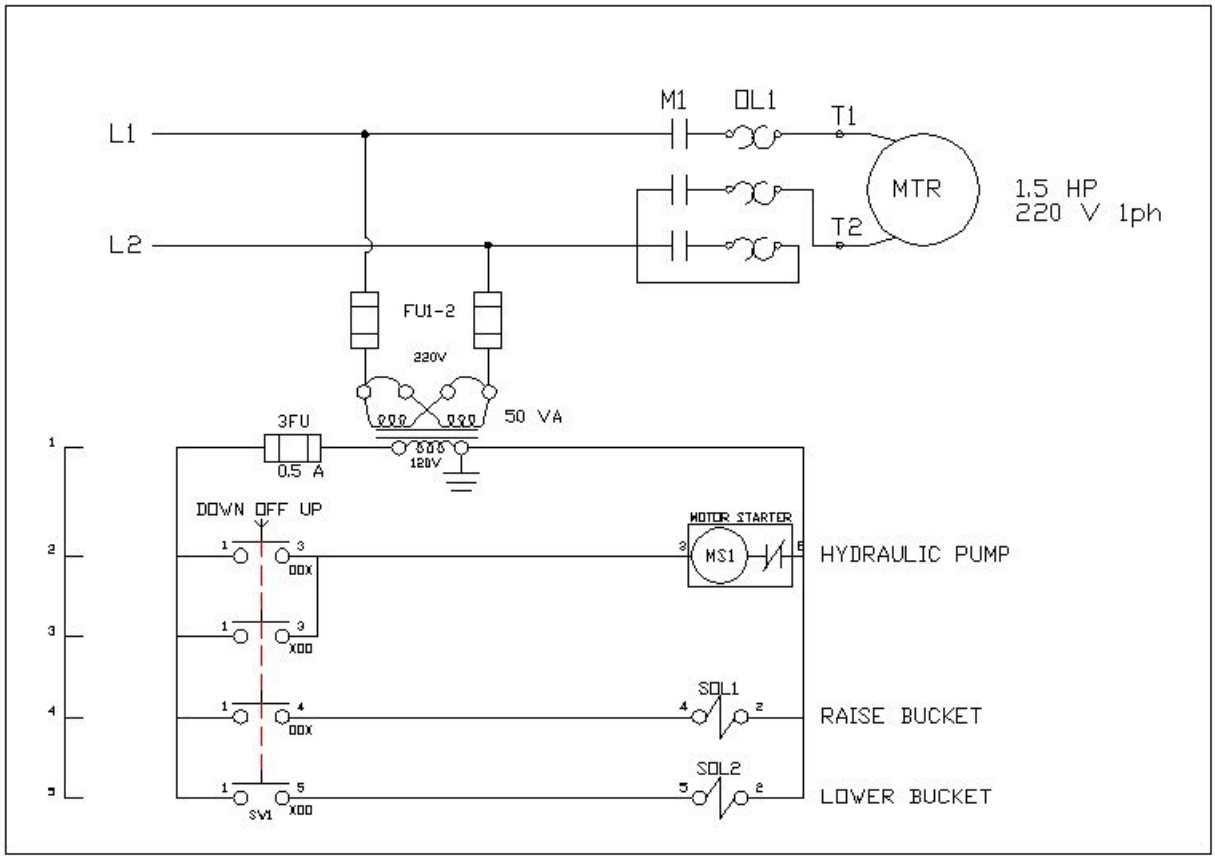
#	PART NO.	DESCRIPTION	MANUF.
1	92028210	Contactor; 100-C23D10	A/B
2	92028219	Relay, Overload; 193-EA1GB	A/B
3			
4			
5	92014416	A-1210CHNF Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8			
9			
10			
11			
-	92004511	Motor, G574 1.5HP 56HC 1PH	Marathon

Figure 5: 120V 1ph Nema 4X – 04459118

#	PART NO.	DESCRIPTION	MANUF.
1	92028210	Contactor; 100-C23D10	A/B
2	92028219	Relay, Overload; 193-EA1GB	A/B
3			
4			
5	92014344	A-1210CHNF Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92012315	800H JR91 Selector Switch	A/B
8			
9			
10			
11	92018023	800T XA Contact Block	A/B
-	92004511	Motor, G574 1.5HP 56HC 1PH	Marathon

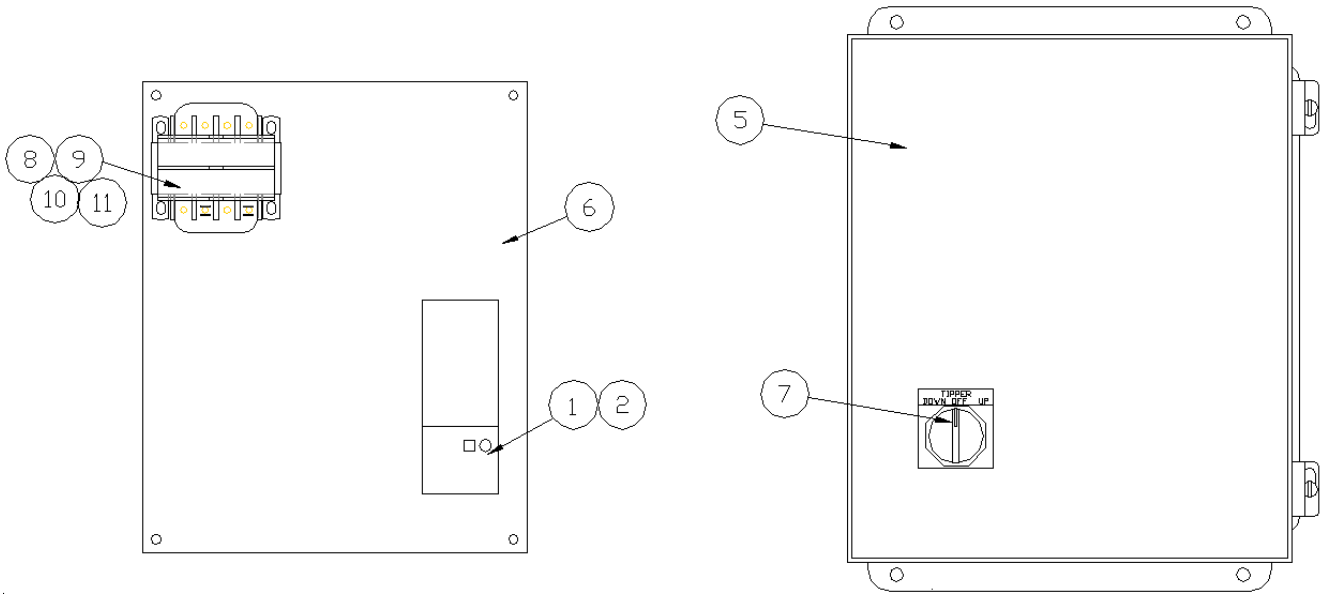
9.5 220V Single Phase Schematic

Figure 6: 220V single phase schematic.



9.6 220V Single Phase Panel Layout

Figure 7: 220V single phase panel layout



9.7 220V Single Phase Parts Lists

Figure 8: 220V 1ph Nema 12 – 04459120

#	PART NO.	DESCRIPTION	MANUF.
1	92028210	Contactor; 100-C23D10	A/B
2	92028219	Relay, Overload; 193-EA1GB	A/B
3			
4			
5	92014125	A-1210CH Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005084	C0050E2A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019118	FNQ R 1/2 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004511	Motor, G574 1.5HP 56HC 1PH	Marathon

Figure 9: 220V 1ph Nema 4 – 04459124

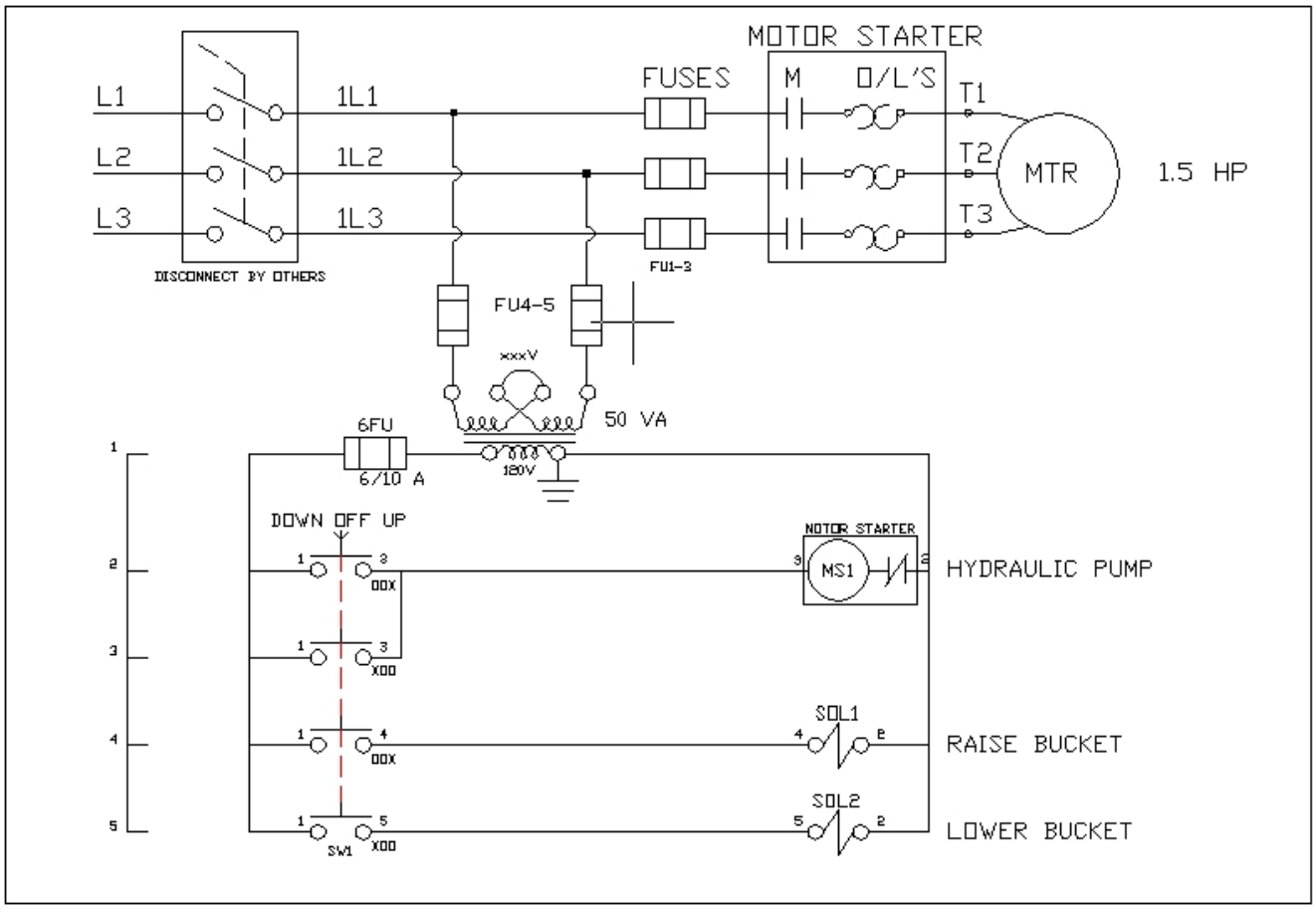
#	PART NO.	DESCRIPTION	MANUF.
1	92028210	Contactor; 100-C23D10	A/B
2	92028219	Relay, Overload; 193-EA1GB	A/B
3			
4			
5	92014416	A-1210CHNF Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005084	C0050E2A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019118	FNQ R 1/2 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004511	Motor, G574 1.5HP 56HC 1PH	Marathon

Figure 10: 220V 1ph Nema 4X – 04459128

#	PART NO.	DESCRIPTION	MANUF.
1	92028210	Contactor; 100-C23D10	A/B
2	92028219	Relay, Overload; 193-EA1GB	A/B
3			
4			
5	92014344	A-1210CHNF Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92012315	800H JR91 Selector Switch	A/B
8	92005084	C0050E2A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019118	FNQ R 1/2 Fuse	Bussmann
11	92018023	800T XA Contact Block	A/B
-	92004511	Motor, G574 1.5HP 56HC 1PH	Marathon

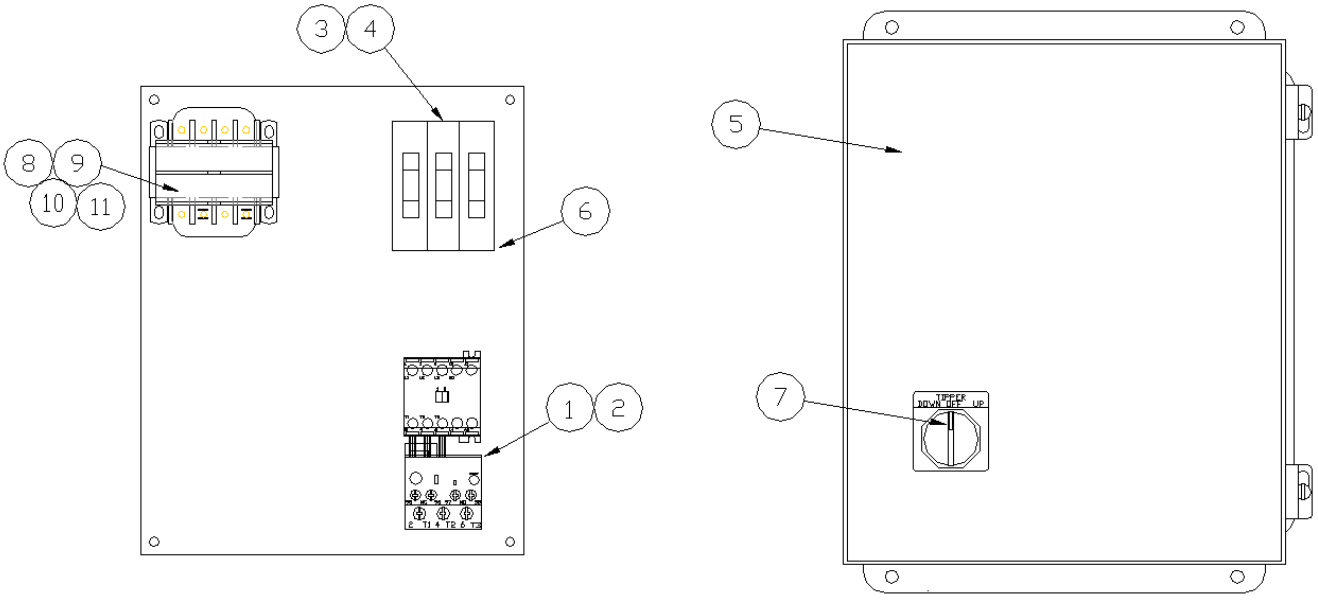
9.8 Three Phase Schematic

Figure 11: Three phase schematic.



9.9 Three Phase Panel Layout

Figure 12: Three phase panel layout.



9.10 Three Phase Parts Lists

Figure 13: 208V 3ph Nema 12 – 04459130

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028202	193-EA1FB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019156	LPCC 10 Fuse	Bussmann
5	92014125	A-1210CH Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005094	C0050E3A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019118	FNQ R 1/2 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004501	Motor; G564 1.5HP 3Ph 56C 230/460	Marathon

Figure 14: 208V 3ph Nema 4 – 04459134

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028202	193-EA1FB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019156	LPCC 10 Fuse	Bussmann
5	92014416	A-1210CHNF Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005094	C0050E3A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019118	FNQ R 1/2 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004501	Motor; G564 1.5HP 3Ph 56C 230/460	Marathon

Figure 15: 208V 3ph Nema 4X – 04459138

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028202	193-EA1FB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019156	LPCC 10 Fuse	Bussmann
5	92014344	A-121006CHNFSS Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92012315	800H JR91 Selector Switch	A/B
8	92005094	C0050E3A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019118	FNQ R 1/2 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004501	Motor; G564 1.5HP 3Ph 56C 230/460	Marathon

Figure 16: 230V 3ph Nema 12 – 04459140

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019156	LPCC 10 Fuse	Bussmann
5	92014125	A-1210CH Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005084	C0050E2A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019118	FNQ R 1/2 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004501	Motor; G564 1.5HP 3Ph 56C 230/460	Marathon

Figure 17: 230V 3ph Nema 4 – 04459144

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019156	LPCC 10 Fuse	Bussmann
5	92014416	A-1210CHNF Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005084	C0050E2A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019118	FNQ R 1/2 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004501	Motor; G564 1.5HP 3Ph 56C 230/460	Marathon

Figure 18: 230V 3ph Nema 4X – 04459148

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019156	LPCC 10 Fuse	Bussmann
5	92014344	A-121006CHNFSS Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92012315	800H JR91 Selector Switch	A/B
8	92005084	C0050E2A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019118	FNQ R 1/2 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
12	92018023	800T XA Contact Block	A/B
-	92004501	Motor; G564 1.5HP 3Ph 56C 230/460	Marathon

Figure 19: 380V 3ph Nema 12 – 04459150

ITEM	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019166	LPCC 4 Fuse	Bussmann
5	92014125	A-1210CH Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005095	C0050E4DFB Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019158	FNQ R 3/10 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004386	Motor, G585 Nameplated 1.5HP 56C 380V/3PH/50Hz	Marathon

Figure 20: 380V 3ph Nema 4 – 04459154

ITEM	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019166	LPCC 4 Fuse	Bussmann
5	92014416	A-1210CHNF Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005095	C0050E4DFB Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019158	FNQ R 3/10 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004386	Motor, G585 Nameplated 1.5HP 56C 380V/3PH/50Hz	Marathon

Figure 21: 380V 3ph Nema 4X – 04459158

ITEM	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019166	LPCC 4 Fuse	Bussmann
5	92014344	A-1210CHNFSS Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92012315	800H JR91 Selector Switch	A/B
8	92005095	C0050E4DFB Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019158	FNQ R 3/10 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
12	92018023	800T XA Contact Block	A/B
-	92004386	Motor, G585 Nameplated 1.5HP 56C 380V/3PH/50Hz	Marathon

Figure 22: 480V 3ph Nema 12 – 04459160

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019166	LPCC 4 Fuse	Bussmann
5	92014125	A-1210CH Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005084	C0050E2A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019151	FNQ R 1/4 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004501	Motor; G564 1.5HP 3Ph 56C 230/460	Marathon

Figure 23: 480V 3ph Nema 4 – 04459164

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019166	LPCC 4 Fuse	Bussmann
5	92014416	A-1210CHNF Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7			
8	92005084	C0050E2A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019151	FNQ R 1/4 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004501	Motor; G564 1.5HP 3Ph 56C 230/460	Marathon

Figure 24: 480V 3ph Nema 4X – 04459168

ITEM	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019166	LPCC 4 Fuse	Bussmann
5	92014344	A-1210CHNFSS Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92012315	800H JR91 Selector Switch	A/B
8	92005084	C0050E2A Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019151	FNQ R 1/4 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
12	92018023	800T XA Contact Block	A/B
-	92004501	Motor; G564 1.5HP 3Ph 56C 230/460	Marathon

Figure 25: 575V 3ph Nema 12 – 04459170

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019061	FNQ 4 Fuse	Bussmann
5	92014125	A-1210CH Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005077	C0050E4C Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019151	FNQ R 1/4 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004399	Motor, K722 1.5HP 56C 3PH	Marathon

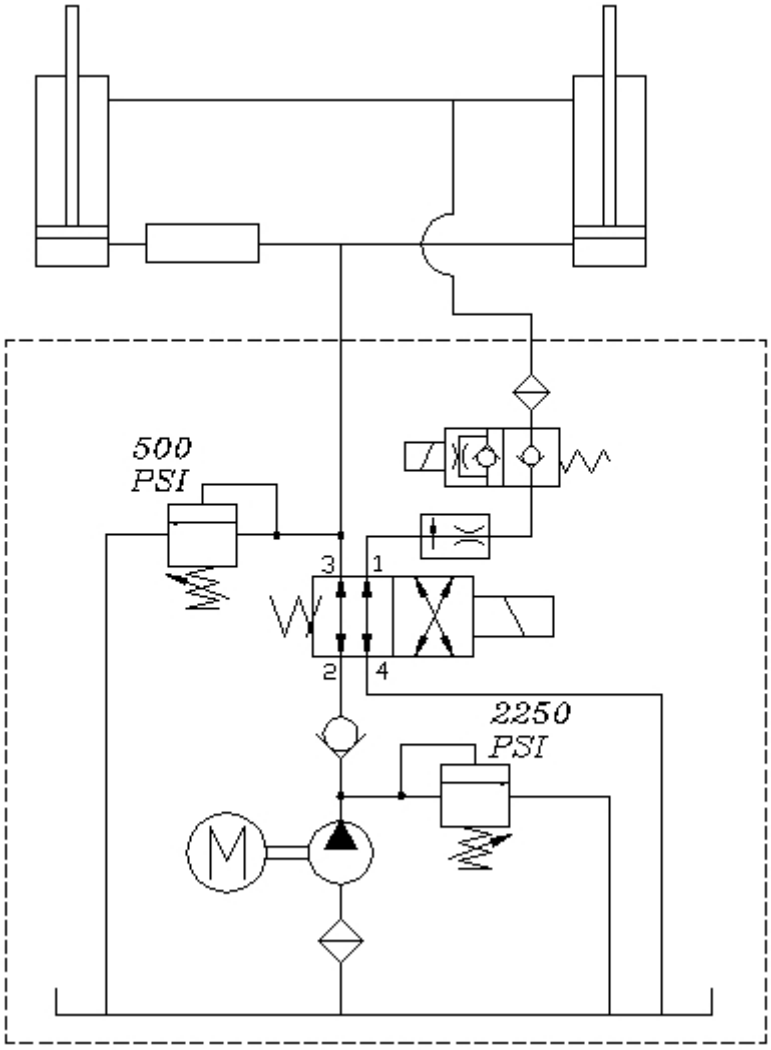
Figure 26: 575V 3ph Nema 4 – 04459174

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019061	FNQ 4 Fuse	Bussmann
5	92014416	A-1210CHNF Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92001182	800T J20B Selector Switch	A/B
8	92005077	C0050E4C Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019151	FNQ R 1/4 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
-	92004399	Motor, K722 1.5HP 56C 3PH	Marathon

Figure 27: 575V 3ph Nema 4X – 04459178

#	PART NO.	DESCRIPTION	MANUF.
1	92028248	100-M09ND3 Contactor	A/B
2	92028204	193-EA1EB Overload Relay	A/B
3	92010053	BM6033PQ Fuse Block	Bussmann
4	92019061	FNQ 4 Fuse	Bussmann
5	92014344	A-121006CHNFSS Enclosure	Hoffman
6	92014417	A-12P10 Back Panel	Hoffman
7	92012315	800H JR91 Selector Switch	A/B
8	92005077	C0050E4C Transformer	C-H
9	92019145	FNM 6/10 Fuse	Bussmann
10	92019151	FNQ R 1/4 Fuse	Bussmann
11	92010061	PFK1 Fuse Block	Bussmann
12	92018023	800T XA Contact Block	A/B
-	92004399	Motor, K722 1.5HP 56C 3PH	Marathon

10 Hydraulic Schematic



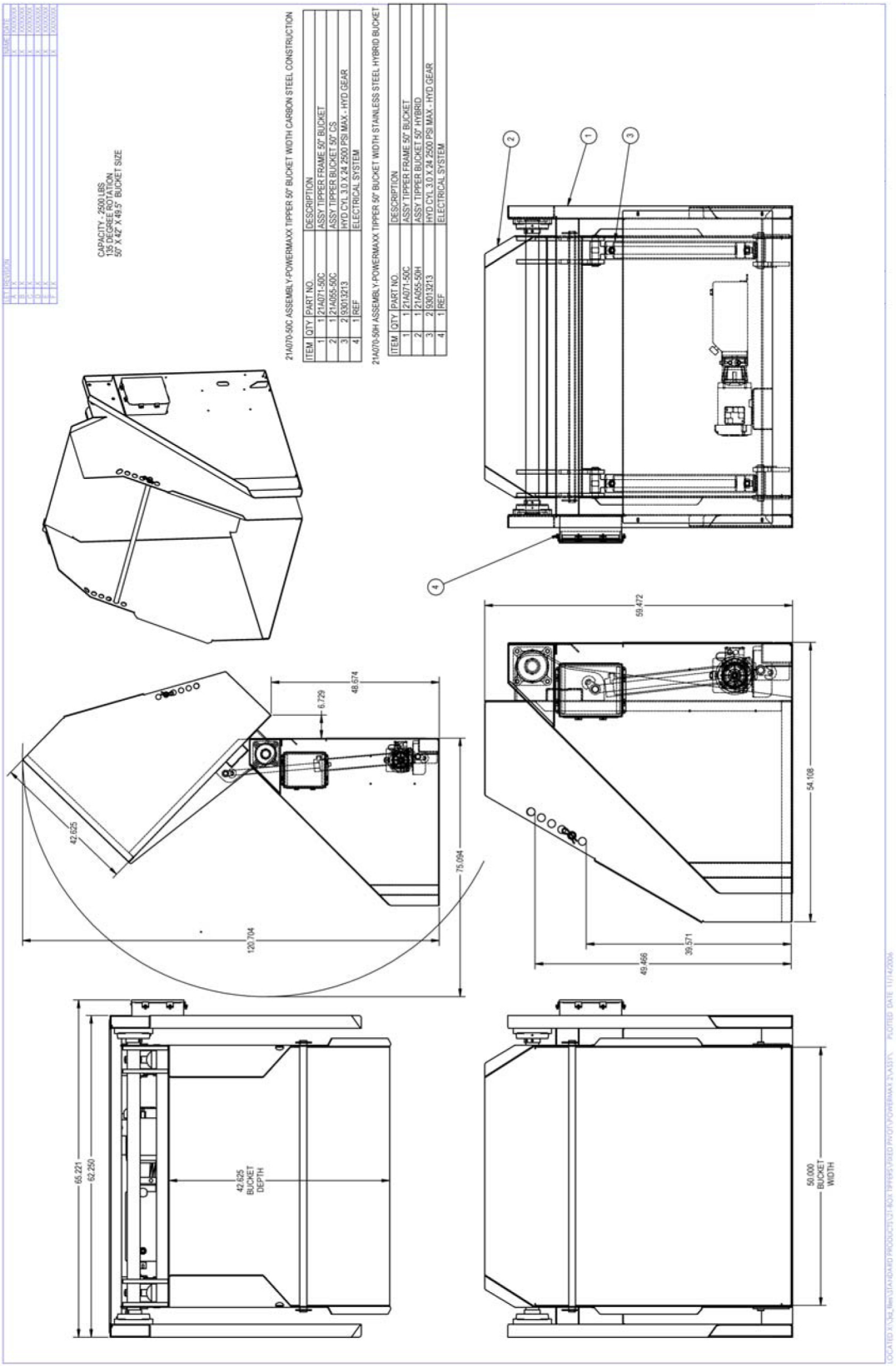
ITEM	QTY.	PART No.	DESCRIPTION
1	1	REF.	Motor
2	1	93022184	Hydraulic Unit; AC/2/2.5 Stone
3	2	93013351	HydraulicCylinder; 3.0" Bore x 24 Parallel
4	1	93009009	Fuse, Hydraulic; 10 GPM.

11 Mechanical Part List

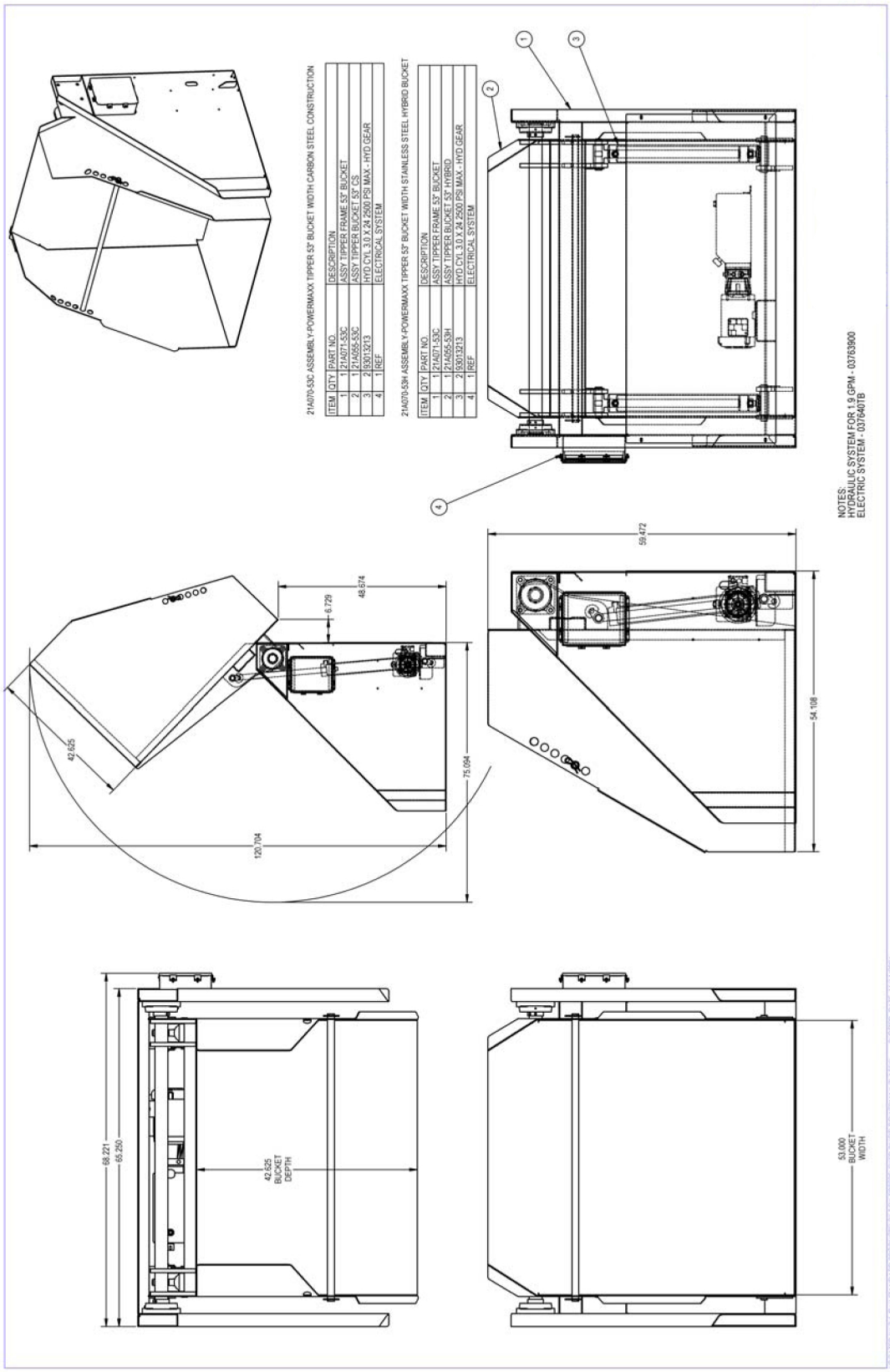
QTY	PART #	DESCRIPTION	NOTES
2	USW021-52C	Banjo Pin 1.25 X 6.5	Used On –C And –H Models
2	USW021-52S	Banjo Pin 1.25 X 6.5 SS	Used On –S Models
2	USW021-44C	Banjo Pin 1.25 X 5.5	Used On –C And –H Models
2	USW021-44S	Banjo Pin 1.25 X 5.5 SS	Used On –S Models
2	93013351	Hydraulic Cylinder 3 X 24	
2	91001380	Bearing CJS2020	
2	91001488	Flange Bearing 2.5”	
1	93022184	Hydraulic Unit; AC/2/2.5	Stone
1	93009009	Hydraulic Fuse; 28901-103-10	
1	21P065-204C	Retainer Bar	Used On –C 50” Wide Models
1	21P065-216C	Retainer Bar	Used On –C 53” Wide Models
1	21P065-232C	Retainer Bar	Used On –C 56” Wide Models
1	21P065-204S	Retainer Bar SS	Used On –H & –S 50” Wide
1	21P065-216S	Retainer Bar SS	Used On –H & –S 53” Wide
1	21P065-232S	Retainer Bar SS	Used On –H & –S 56” Wide
1	21P065-204C1	Retainer Bar Galv.	Optional For 50” Wide
1	21P065-216C1	Retainer Bar Galv.	Optional For 53” Wide
1	21P065-232C1	Retainer Bar Galv.	Optional For 56” Wide

12 Drawings

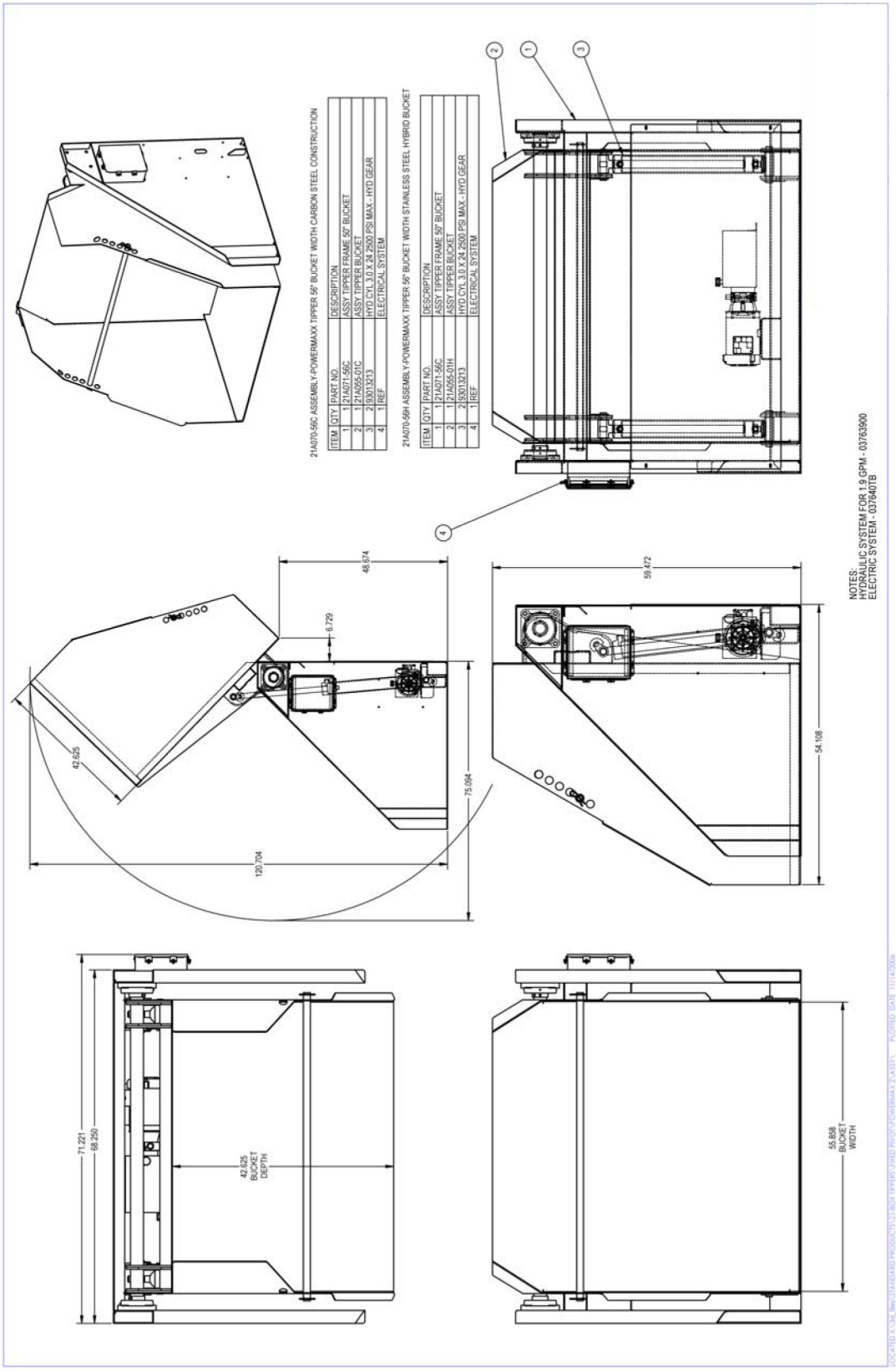
12.1 21A070-50



12.2 21A070-53



12.3 21A070-56



21A070-56C ASSEMBLY-POWERMAXX TIPPER 56" BUCKET WIDTH CARBON STEEL CONSTRUCTION

ITEM	QTY	PART NO.	DESCRIPTION
1	1	21A071-56C	ASSY TIPPER FRAME 56" BUCKET
2	1	21A055-01C	ASSY TIPPER BUCKET
3	2	93013213	HYD CYL 3.0 X 24 2500 PSI MAX - HYD GEAR
4	1	REF	ELECTRICAL SYSTEM

21A070-56H ASSEMBLY-POWERMAXX TIPPER 56" BUCKET WIDTH STAINLESS STEEL HYBRID BUCKET

ITEM	QTY	PART NO.	DESCRIPTION
1	1	21A071-56C	ASSY TIPPER FRAME 56" BUCKET
2	1	21A095-01H	ASSY TIPPER BUCKET
3	2	93013213	HYD CYL 3.0 X 24 2500 PSI MAX - HYD GEAR
4	1	REF	ELECTRICAL SYSTEM

NOTES:
HYDRAULIC SYSTEM FOR 1.9 GPM - 03763900
ELECTRIC SYSTEM - 03764078