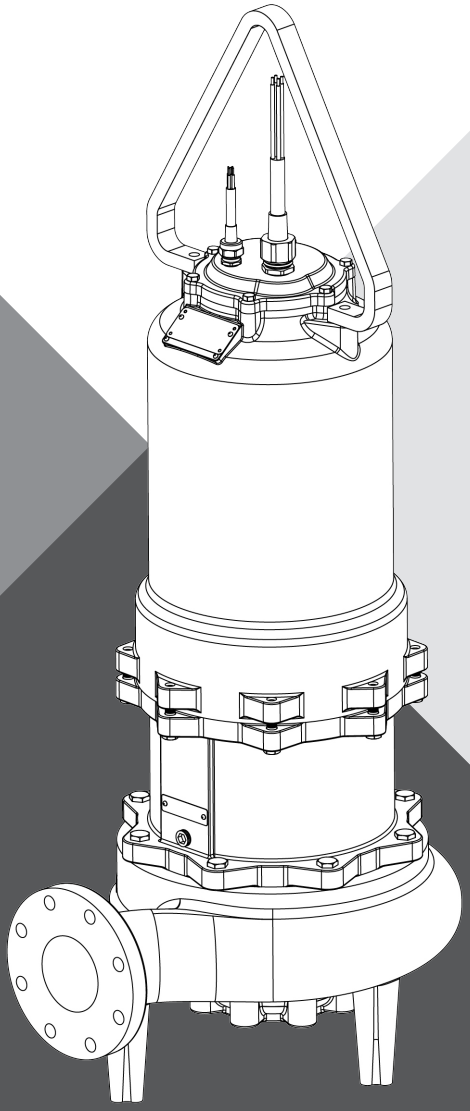
PENTAIR HYDROMATIC

E-03-559 / 0562555591 (02-01-23)

SUBMERSIBLE SOLIDS HANDLING PUMP

S4T(X*)P, S8L(X*)P, S8LA(X*)P AND S12L(X*)P

* (CLASS I, DIVISION 1, GROUPS C & D): FM



(*Hazardous Location Motor End)

OWNER'S MANUAL

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SAFETY SYMBOLS

⚠ This is the safety alert symbol. When you see this symbol on your pump or in this manual, look for one of the following signal words and be alert to the potential for personal injury:

⚠ DANGER warns about hazards that will cause serious personal injury, death or major property damage if ignored.

⚠ WARNING warns about hazards that can cause serious personal injury, death or major property damage if ignored.

⚠ CAUTION warns about hazards that will or can cause minor personal injury or property damage if ignored.

The word ***NOTICE:*** indicates special instructions that are important but not related to hazards.

CALIFORNIA PROPOSITION 65 WARNING

⚠ WARNING This product and related accessories contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

GENERAL SAFETY

- **⚠ CAUTION** Do not touch an operating motor. Modern motors can operate at high temperatures. To avoid burns when servicing pump, allow it to cool for 30 minutes after shutdown before handling.
- Follow all applicable local and state codes and regulations.
- Submersible pumps are not approved for and should not be used in swimming pools, recreational water installations, decorative fountains or any installation where human contact with the pump fluid is common. Pump is designed for municipal and commercial wastewater applications.
- Keep safety labels in good condition, replacing any missing or damaged labels.
- **DO NOT** run the pump dry. Dry running can overheat the pump, (causing burns to anyone handling it) and will void the warranty.
- The pump is permanently lubricated. No oiling or greasing is required in normal operation.
- Periodically inspect pump and system components.
- Wear safety glasses at all times when working on pumps.
- Keep work area clean, uncluttered and properly lighted. Store all unused tools and equipment.
- **DO NOT** use to pump flammable liquids.
- **⚠ DANGER RISK OF FIRE OR EXPLOSION**. Can cause severe personal injury, property damage or death. Do not smoke or use open flames in or around this system.
- **⚠ DANGER RISK OF ASPHYXIATION**. Installer(s) and/or service personnel must use proper Personal Protective Equipment and follow OSHA 29 CFR 1910.146 or OSHA 29 CFR 1926. Pump may be installed in a location classified as a confined space.
- **⚠ DANGER BIOHAZARD RISK**. Once wastewater source has been connected to system, Biohazard Risk exists. Installer(s) and/or service personnel must use proper personal Protective Equipment and follow handling procedures per OSHA 29 CFR 1910.1030 when handling equipment after wastewater source has been connected to system.
- ***NOTICE:*** FM rated models are only to be used in 60hz applications.

ELECTRICAL SAFETY

⚠ DANGER HAZARDOUS VOLTAGE. CAN SHOCK, BURN, OR KILL. When installing, operating, or servicing this pump, follow the safety instructions listed below.

- **⚠ DANGER ELECTROCUTION HAZARD:** Must be installed by a qualified professional. Disconnect all electrical power before attempting service.
- **DO NOT** modify the cord. When wiring to a system control, connect ground lead to the system ground.
- **DO NOT** splice the electrical power cord.
- **DO NOT** allow the power leads on the end of the electrical cords to be submerged.
- **DO NOT** handle or service the pump while it is connected tothe power supply.

⚠ WARNING A water test must be taken before installation of any water treatment equipment. The water quality can significantly influence the life of your system. You should test for corrosive elements, acidity, total solids and other relevant contaminants, including chlorine and treat your water appropriately to ensure satisfactory performance and prevent premature failure.

GENERAL INFORMATION

This manual contains important safety information regarding the use of this product. This product should only be installed and serviced by a qualified professional. Carefully read and follow all safety instructions in this manual and on the unit itself before installing or operating pump. Keep this manual for future reference.

Reasonable care and safe methods should be practiced. Check local codes and requirements before installation.

UNPACKING PUMP

⚠ WARNING **LIFTING HAZARD.** Unassisted lifting of pump can cause injury. Mechanical assistance required.

DO NOT lift pump by power cord.

When unpacking unit, check for damage. Claims for damage must be made at the receiving end through the delivery carrier. Damage cannot be processed from the factory.

⚠ DANGER **RISK OF FIRE OR EXPLOSION**. Before handling these pumps and controls, always disconnect the power first. Do not smoke or use sparkable electrical devices or flames in a septic (gaseous) or possible septic sump. Do not pump flammable liquids with this pump.

PUMPS IN STORAGE OR NOT OPERATING

Pumps with silicon/carbide seals must have impellers manually rotated (6 revolutions) after setting non-operational for 3 months or longer and prior to electrical start-up.

Pumps with tungsten carbide seals must have impellers manually rotated (6 revolutions) after setting non-operational for 3 weeks or longer and prior to electrical start-up.

SEAL FAILURE PROBES

HAZARDOUS DUTY RATED PUMPS:
All submersible pumps have two factory installed moisture detectors (seal failure probes). They should have a resistance of around 330K ohms for the series circuit in the seal chamber. Under normal operating conditions, the circuit remains around 330K ohms. If the circuit shows open, the circuit is not complete indicating a broken wire, corroded wire, or loose connection. If the lower seal leaks and moisture enters this chamber, the moisture will settle to the bottom of the chamber and will complete (significantly less than 330K ohms) the circuit between the moisture detectors.

NON-HAZARDOUS DUTY RATED PUMPS:
For all non-hazardous duty rated pumps the resistance(ohm) readings between the seal probe wires should be open in normal operating conditions. A lower resistance indicates water intrusion. This circuit must be connected to a sensing unit and signaling device. This is supplied in a manufacturer built control panel. Failure to install such a device negates all warranties.

HEAT SENSORS

All motors in this family have heat sensors on or embedded in the motor winding to detect excessive heat. This prevents damage to the motor. If sensor trips due to excessive winding temperature, the starter in the panel interrupts power to the pump. **The sensors are set to trip at 150°C.**

Failure to install such circuitry would negate FM approvals and all warranties.

POWER CORDS

The power cord and heat sensor seal failure cord are potted into the cord cap. The cords must not be spliced.

Each cable has a green lead. This is the ground wire and must be grounded properly per NEC and/or local codes. Cords should be inspected for abnormal wear and replaced accordingly.

OVERLOAD HEATERS

If the electrical panel is not used, starters with 3 leg overload relay must be supplied on 3 phase pumps. Each leg is to have an identical heater sized in accordance with the nameplate amps on the motor housing. The amp draw on these submersible motors is slightly higher than a corresponding horsepower surface motor, so heaters must be sized by the nameplate rating.

INSTALLING SUMP LEVEL CONTROLS FLOAT CONTROLS

In all systems, the lower or turn-off control is to be set to maintain a minimum level in the sump. This level shall be no more than 3-1/4" from the top of the motor housing down to the surface of the sewage.

The second or turn-on control is set above the lower turn-off control. The exact distance between the two floats must be a compromise between a frequent pumping cycle (15 starts per hour max.) to control septicity, solids and a slower cycle for energy economy. This distance should be determined by the engineer or consulting engineer, depending on the conditions of the application.

INSTALLING PUMP IN SUMP

Before installing the pump in the sump, lay it on its side and rotate impeller. Impeller may be slightly stuck due to factory test water. The impeller should turn freely. **DO NOT** connect the power until after this test.

Clean all debris from sump and connect pump to piping. A check valve must be installed on each pump and a gate or plug valve in each pump discharge is highly recommended. This valve should be installed on the discharge side of the check valve so if it becomes necessary to service the check valve, the line pressure can be cut off. Single pump systems are sometimes installed without a check valve where it is desirable to self-drain the discharge line to prevent freezing. This can be done only with short discharge lines; otherwise water will return to the sump and cause short cycling of the pump.

INSTALLATION

MAKING ELECTRICAL CONNECTIONS

All electrical wiring must be in accordance with local codes, and only competent electricians should make the installations. Complete wiring diagrams are glued to the inside cover of the panel. It is VERY IMPORTANT to check all wires for grounds with an ohmmeter or Megger meter after the connections are made **as one grounded wire can cause considerable trouble**.

NOTICE If equipment is not properly wired and protected as recommended, the warranty is void.

⚠ CAUTION The 230 volt 3 phase pump has a dual marked nameplate. For ordinary location pumps, voltage may be rewired by qualified personnel. For hazardous location pumps, voltage may be rewired by the manufacturer or a Class I, Div I equipment qualified electrician. Once the voltage is changed, the factory cord tag indicating 230 volt 3 phase must be removed.

For record keeping purposes, we suggest the pump be marked externally with the new voltage and qualified personnel that performed the change. Pumps shipped from the factory as 460 volt 3 phase cannot be rewired to any other voltage.

TO RE-WIRE THE PUMP FROM 230V TO 460V 3 PHASE

Only a 230V pump from the factory is considered dual voltage, a cord label clearly states the factory wound voltage.

1. Remove all six (#7) cap screws then raise the cord cap assembly enough to slip a prying instrument on opposite sides between the cord cap casting and the motor housing. Take care to not damage the o-ring or the machined surfaces of the castings. Doing so could void FM agency certifications.
2. While prying evenly on both sides; separate the cord cap casting from the motor housing, the assembly is airtight and will have a vacuum effect when disassembling.
3. Once separated, the cord cap can be inverted and rotated to the outside of the pump assembly, and a bolt can be re-used to secure the upside down cord cap to the motor housing for ease of rewiring.

Refer to the wiring diagram within this manual for wiring details. Once all electrical connections are finished and secure (a crimped electrical connector is best to prevent issues due to vibration if required), the cord cap should be re-attached reversing the steps above. Ensure the o-ring is in place and perform a hi-pot test for safety once everything is complete.

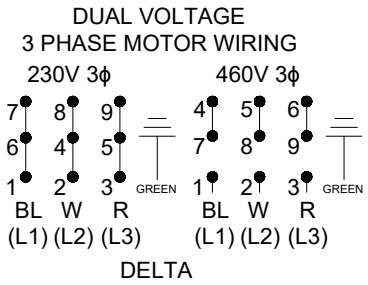
HEAT SENSORS AND SEAL FAILURE CONNECTIONS

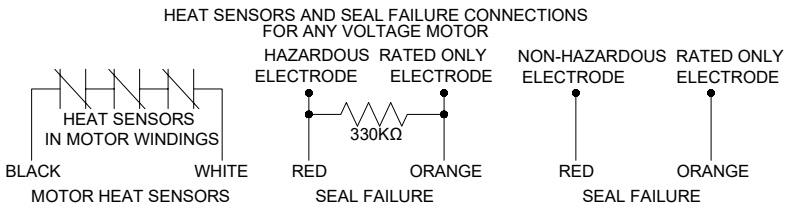
Be sure heat sensor wires are connected in series with the starter coil. Connections are provided on the terminal strip.

NUMBER OF CONDUCTORS REQUIRED BETWEEN CONTROL PANEL AND NEMA 4 JUNCTION BOX

Power lines and control wires can be carried in conduit or can be underground buried cable

SYSTEM TYPE	NUMBER OF CONTROL WIRE	NUMBER OF POWER LINE	NUMBER OF GROUND WIRES #8	HEAT SENSOR & SEAL FAILURE	
				NUMBER OF SENSOR WIRES	NUMBER OF GROUND WIRES
Simplex	4	3	1	3	1
Simplex with Alarm	6	3	1	3	1
Duplex	6	6	2	6	2
Duplex with Alarm	8	6	2	6	2





PUMP OPERATIONS STARTING SYSTEM

1. Double check all wire connections.
2. Turn pumps to Off position on H-O-A switches.
3. Turn on breakers.
4. Connect amprobe to pump power cord and turn pump on. The pump will show high amp draw momentarily, then as pump comes off start wirings, amps will drop to normal nameplate amps.
5. When using three phase pumps (208/230/460/575), turn the H-O-A switch to Hand position on one pump and notice operation. If pump is noisy and vibrates, rotation is wrong. To change rotation, interchange any two line leads to pump. Do not interchange main incoming lines. Check rotation of all pumps in this same manner.
6. Now set both H-O-A switches to Auto position and allow water to rise in sump until one pump starts. Allow pump to operate until the level drops to turn-off point.
7. Allow sump level to rise to start other pump(s). Notice run lights in panel. Pumps should alternate on each successive cycle of operation.
8. Turn both H-O-A switches to Off position and allow sump to fill to the override control level(s).
9. Turn switches to Auto position, and pumps should start and operate together until level drops to turn-off point.
10. Repeat this operation and cycle several times before leaving the job.
11. Check voltage when pumps are operating and check the amp draw of each pump. Check amps on each pump conductor as sometimes a high leg will exist. For excessive voltage on one leg, the electric utility company should be consulted.

PUMP MAINTENANCE

As the motors are oil filled, no lubrication or other maintenance is required.

If the heat sensor and seal failure are hooked up properly, no attention is necessary as long as the seal failure indicator light does not come on. To ensure continuity of the seal sensor leads, a test light is provided on intrinsically safe panels as standard equipment.

⚠ WARNING Before handling these pumps and controls,always disconnect the power first. Do not smoke, use flames or devices that can produce electrical discharge or sparks in a septic (gaseous) or possible septic sump.

FIELD SERVICE ON ORDINARY LOCATION PUMPS

Ordinary location submersible motors that are out of warranty can be serviced in the field by any reliable motor service shop.

Any pump that is in warranty must be returned to the factory for service or repaired at an authorized service center. Charges will not be allowed if (in warranty) pump is not taken to an authorized service center. When field service is performed on a pump, these instructions should be carefully followed.

FIELD SERVICE ON HAZARDOUS LOCATION PUMPS

Hazardous location pumps must be returned to the factory for electrical and motor service. Any repair not at an authorized service center will void the Factory Mutual (FM) listing. This will ensure the integrity of the hazardous location rating of the pump and comply with our warranty requirements.

The upper seal, lower seal, volute and impeller components may be repaired or replaced by an authorized service facility without compromising the hazardous location rating to the pump.

For any repairs in which the oil is drained, the pump must be re-filled with an approved oil. The motor chamber cannot be disassembled, during repairs as this will result in loss of agency rating.

Any time a seal is disturbed, it must be replaced.

Check the pump for proper rotation before returning to service.

PUMP TROUBLESHOOTING

Below is a list of common problems and the probable causes.

PUMP WILL NOT START

1. No power to the motor. Check for blown fuse or open circuit breaker.
2. Selector switch may be in the Off position.
3. Control circuit transformer fuse may be blown.
4. Overload heater on starter may be tripped. Push to reset.

PUMP WILL NOT START AND OVERLOAD HEATERS TRIP

1. Turn off power and check motor leads with Megger or ohmmeter for possible ground.
2. Check resistance of motor windings. All 3 phases should exhibit the same reading.
3. If no grounds exist and the motor windings check OK, remove pump from sump and check for clogged or blocked impeller.

PUMP OPERATES WITH SELECTOR SWITCH IN HAND POSITION BUT WILL NOT OPERATE IN AUTO POSITION

1. This indicates trouble in the float level control or the alternator relay.
2. Check control panel for trouble.

PUMP RUNS BUT WILL NOT SHUT OFF

1. Pump may be air locked. Turn pump off and let set for several minutes, then restart.
2. Lower float control may be hung-up in the closed position. Check in sump to be sure control is free.
3. Selector switch may be in the Hand position.

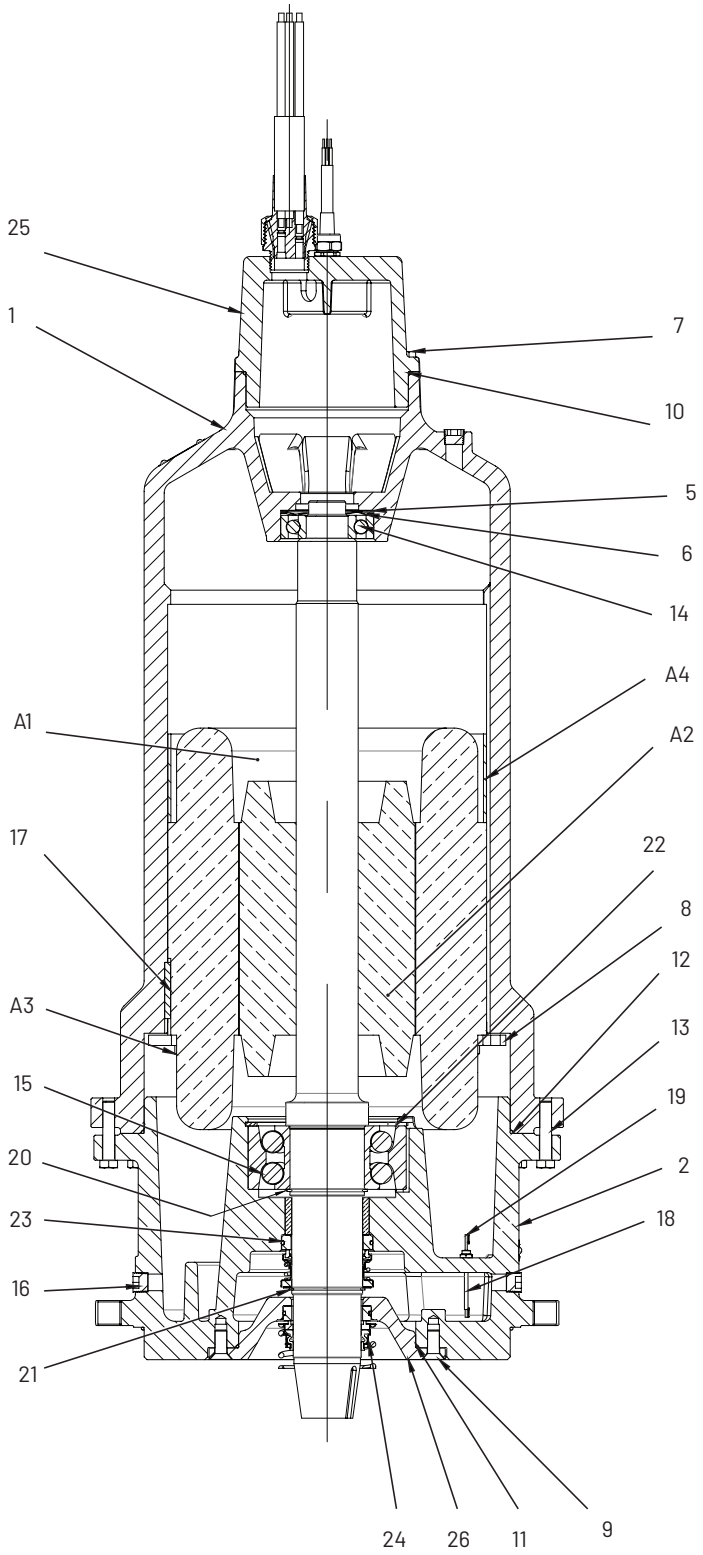
PUMP DOES NOT DELIVER PROPER CAPACITY

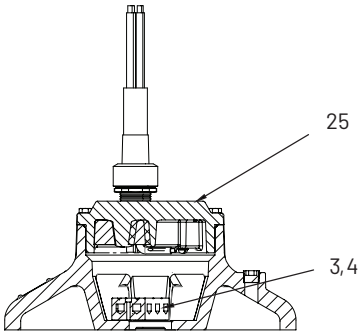
1. Discharge gate valve may be partially closed or partially clogged.
2. Check valve may be partially clogged. Raise level up and down to clear.
3. Pump may be running in wrong direction. Low speed pumps can operate in reverse direction without much noise or vibration.
4. Discharge head may be too high. Check total head with gauge when pump is operating. Total head is discharge gauge pressure converted to feet plus vertical height from water level in sump to center line of pressure gauge in discharge line. Gauge should be installed on pump side of all valves. Multiply gauge pressure in pounds by 2.31 to get head in feet.
5. If pump has been in service for some time and capacity falls off, remove pump and check for wear or clogged impeller.

MOTOR STOPS AND THEN RESTARTS AFTER SHORT PERIOD BUT OVERLOAD HEATERS IN STARTER DO NOT TRIP

1. This indicates heat sensors in the motor are tripping due to excessive heat. Impeller may be partially clogged giving a sustained overload but not high enough to trip overload heater switch.
2. Motor may be operating out of liquid due to a failed level control.
3. Pump may be operating on a short cycle due to sump being too small or from water returning to sump due to a leaking check valve.

PARTS INDEX MODELS S4T(X)P, S8LA(X)P, S8L(X)P, S12L(X)P





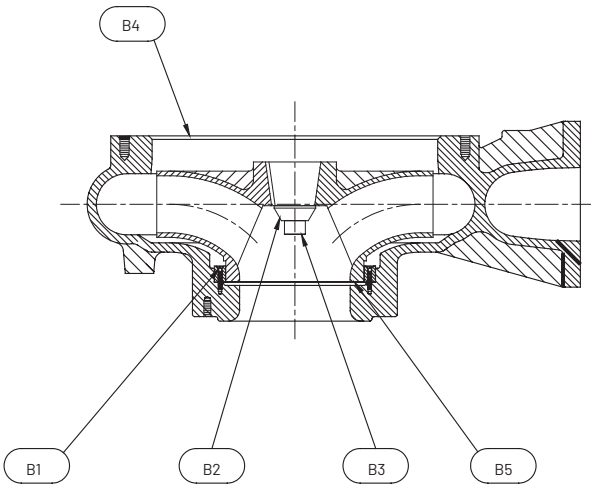
10-4, 8-4, 6-4
& 4-4 CORD CAP

PARTS INDEX

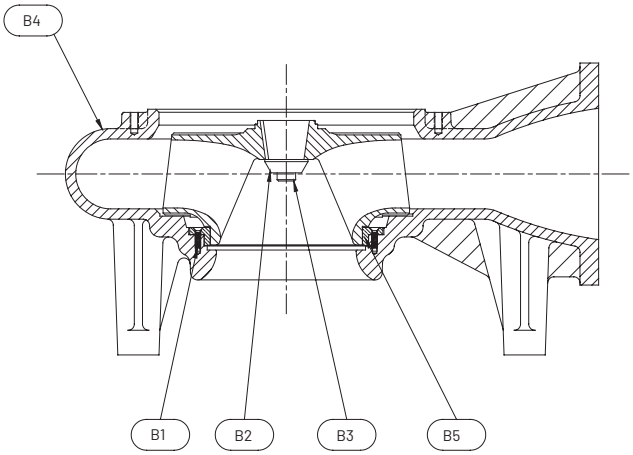
320 FRAME PUMPS			QTY	360 FRAME PUMPS	
ITEM	ENG. NO.	DESCRIPTION		ENG. NO.	DESCRIPTION
1	28013D000	Housing – Motor 30 hp – 75 hp	1	28014D000	Housing – Motor 150 hp
	28013D001	Housing – Motor 20 hp – 25 hp	1	28014D001	Housing – Motor 40 hp – 125 hp
2	27977D010	Housing – Bearing	1	27990D010	Housing – Bearing
3	27882A009	Terminal Block (8 Awg and Smaller)	1	27882A009	Terminal Block (8 Awg and Smaller)
4	06106A069	Screw – Cap SKT HD Terminal Block	2	06106A069	Screw – Cap SKT HD Terminal Block
5	110650043	Screen	1	110650053	Screen
6	19331A009	Washer – Spring	1	000640111	Washer – Spring
7	19101A017	Screw – Cap	6	19101A017	Screw – Cap
8	083540003	Stator Ring	1	083543603	Stator Ring
9	029210011	Screw – Cap Flat HD Seal Plate	4	029210011	Screw – Cap Flat HD Seal Plate
10	001500191	O-Ring, Cord Cap	1	001500191	O-Ring, Cord Cap
11	001500201	O-Ring, Seal Plate	1	001500201	O-Ring, Seal Plate
12	001500381	O-Ring, Motor Housing	1	001500351	O-Ring, Motor Housing
13	19101A048	Screw – Cap	12	19105A044	Screw – Cap
14	08565A026	Ball Bearing Upper	1	000650351	Ball Bearing Upper
15	071670191	Ball Bearing Lower Double Row	1	071670201	Ball Bearing Lower Double Row
16	009240101	Plug – Pipe 1/2" Skt Hd. Brass	3	009240101	Plug-Pipe 1/2" Skt Hd. Brass
17	065790011	Stator Key	1	065790011	Stator Key
18	109010011	Probe – Seal Failure	2	109010011	Probe – Seal Failure
19	109000045	Seal – Sensor Hazardous Only, Resistor	1	109000045	Seal – Sensor Hazardous Only, Resistor
	109005115	Seal-Sensor Non-Hazardous Only	2	109005115	Seal-Sensor Non-Hazardous Only
20	009750141	Ring – Retaining External	1	009750271	Ring – Retaining External
21	009750101	Ring – Retaining External Seal	1	009750281	Ring – Retaining External Seal
22	009740151	Ring – Retaining Internal	1	009740141	Ring – Retaining Internal
23	037183001	Shaft Seal Sil Car/ Carbon – Nitrile Upper	1	27995A000	Shaft Seal Sil Car/Carbon – Nitrile Upper
24	27996A000	Shaft Seal Sil Car/ Carbon – Nitrile Lower	1	27997A000	Shaft Seal Sil Car/Carbon – Nitrile Lower
25	152880315	Cord Cap Assembly – 10-4 SOOW	1	152880325	Cord Cap Assembly 8-4 SOOW
	152880325	Cord Cap Assembly – 8-4 SOOW	1	152880335	Cord Cap Assembly 6-4 SOOW
	152880335	Cord Cap Assembly – 6-4 SOOW	1	152880345	Cord Cap Assembly 4-4 SOOW
	152880345	Cord Cap Assembly – 4-4 SOOW	1	152885355	Cord Cap Assembly 2-4 SOOW
	152885355	Cord Cap Assembly – 2-4 SOOW	1	152885365	Cord Cap Assembly 0-4 SOOW
	152885365	Cord Cap Assembly – 0-4 SOOW	1	152885375	Cord Cap Assembly 4/0-3 SOOW
26	073980312	Seal Plate	1	073980412	Seal Plate

PARTS INDEX

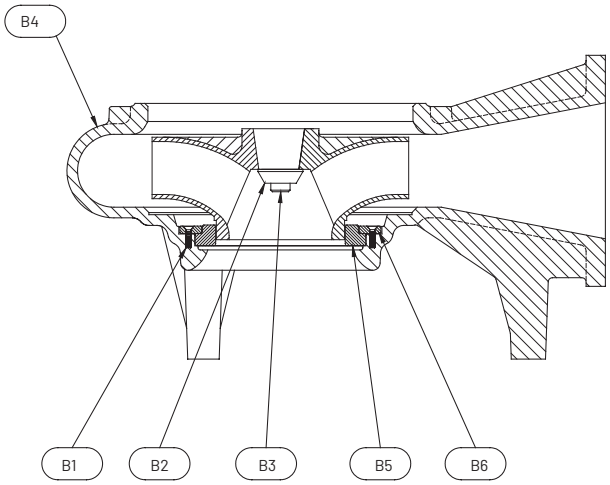
S4T(X)P



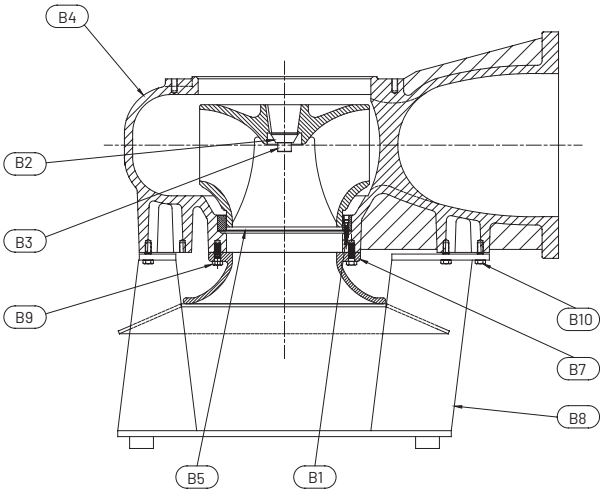
S8L(X)P



S8LA(X)P



S12L(X)P



ITEM	DESCRIPTION	S4T(X)P	S8L(X)P	S8LA(X)P	S12L(X)P
B1	SCREW - CAP, SOCKET HD.	008290091(4)	07597A021(4)	07597A021(4)	06106A045(4)
B2	WASHER–IMPELLER	019450013	019450013	019450013	019450013
B3	SCREW–CAP(HEX SOC.)3/4	038790021	038790021	038790021	038790021
B4	VOLUTE	136880002	073942002	073940002	25457F200
B5	RING–WEAR	136950003	083450002	135350003	24548D000
B6	CLAMP–WEAR RING	–	–	135360003	–
B7	BELL–SUCTION	–	–	–	105871002
B8	STAND–PUMP	–	–	–	106270005
B9	SCREW–CAP HEX SST 3/4-10	–	–	–	19106A017(8)
B10	SCREW–CAP HEX SST 1/2-13	–	–	–	19103A043(8)

320 FRAME PUMP MOTORS PARTS GROUP

ITEM	4-POLE 1750 RPM	75 HP, 460/3/60	75 HP, 575/3/60
A1	STATOR	27969D003	27969D603
A2	ROTOR/SHAFT ASSEMBLY	27969D011	27969D011
A3	BOLT-STATOR	005560181(6)	005560181(6)

ITEM	6-POLE 1150 RPM	40-50 HP, 460/3/60	40-50 HP, 575/3/60
A1	STATOR	27972D003	27972D603
A2	ROTOR/SHAFT ASSEMBLY	27972D011	27972D011
A3	BOLT-STATOR	005560181(6)	005560181(6)

ITEM	8-POLE 870 RPM	20-25 HP 208-230-460/3/60	20-25 HP 575/3/60	30-40 HP 230-460/3/60	30-40 HP 575/3/60
A1	STATOR	27975D003	27975D603	27973D003	27973D603
A2	ROTOR/SHAFT ASSEMBLY	27975D011	27975D011	27973D011	27973D011
A3	BOLT-STATOR	06106A027(6)	06106A027(6)	06106A027(6)	06106A027(6)
A4	SPACER	086620131	086620131	086620111	086620111

360 FRAME PUMP MOTORS PARTS GROUP

ITEM	4-POLE 1750 RPM	100 HP 460/3/60	100 HP 575/3/60	125 HP 460/3/60	125 HP 575/3/60	150 HP 460/3/60	150 HP 575/3/60
A1	STATOR	27980D003	27980D603	27981D003	27981D603	27982D003	27982D603
A2	ROTOR/SHAFT ASSEMBLY	27981D011	27981D011	27981D011	27981D011	27982D011	27982D011
A3	BOLT-STATOR 1/2-13	06106A068(6)	06106A068(6)	06106A068(6)	06106A068(6)	06106A068(6)	06106A068(6)

ITEM	6-POLE 1150 RPM	60-75 HP, 460/3/60	60-75 HP, 575/3/60
A1	STATOR	27984D003	27984D603
A2	ROTOR/SHAFT ASSEMBLY	27984D011	27984D011
A3	BOLT-STATOR	06106A068(6)	06106A068(6)
A4	SPACER	086625011	086625011

320 FRAME PUMP IMPELLERS PARTS LIST

S4T(X)P - 320 FRAME

CAT. NO.	ENG. NO.	HP	VOLT/PH	CORD	TRIM	IMPELLER
1750 RPM						
S4TP7500M4-4	528700007	75	460/3	2-4	13	135321092
S4TP7500M5-4	528700017	75	575/3	4-4	13	135321092
S4TXP7500M4-4	528150007	75	460/3	2-4	13	135321092
S4TXP7500M5-4	528150017	75	575/3	4-4	13	135321092

S8LA(X)P - 320 FRAME

CAT. NO.	ENG. NO.	HP	VOLT/PH	CORD	TRIM	IMPELLER
1750 RPM						
S8LAP7500M4-4	528720007	75	460/3	2-4	13	135320052
S8LAP7500M5-4	528720017	75	575/3	4-4	13	135320052
S8LAXP7500M4-4	528160007	75	460/3	2-4	13	135320052
S8LAXP7500M5-4	528160017	75	575/3	4-4	13	135320052

S8L(X)P - 320 FRAME

CAT. NO.	ENG. NO.	HP	VOLT/PH	CORD	TRIM	IMPELLER
1750 RPM						
S8LP7500M4-4	528730007	75	460/3	2-4	12.13 X 11.13	25252D559
S8LP7500M5-4	528730017	75	575/3	4-4	12.13 X 11.13	25252D559
S8LXP7500M4-4	528170007	75	460/3	2-4	12.13 X 11.13	25252D559
S8LXP7500M5-4	528170017	75	575/3	4-4	12.13 X 11.13	25252D559
1150 RPM						
S8LP4000M4-6	528730027	40	460/3	6-4	14.25 X 13.25	25252D553
S8LP4000M5-6	528730037	40	575/3	8-4	14.25 X 13.25	25252D553
S8LXP4000M4-6	528170047	40	460/3	6-4	14.25 X 13.25	25252D553
S8LXP4000M5-6	528170057	40	575/3	8-4	14.25 X 13.25	25252D553
S8LP5000M4-6	528730047	50	460/3	4-4	15 X 14	25252D551
S8LP5000M5-6	528730057	50	575/3	6-4	15 X 14	25252D551
S8LXP5000M4-6	528170067	50	460/3	4-4	15 X 14	25252D551
S8LXP5000M5-6	528170077	50	575/3	6-4	15 X 14	25252D551
870 RPM						
S8LP2000M6-8	528730067	20	208/3	4-4	14.88 X 13.88	25252D552
S8LP2000M3/4-8	528730077	20	230/460/3	6-4	14.88 X 13.88	25252D552
S8LP2000M4-8	528730087	20	460/3	8-4	14.88 X 13.88	25252D552
S8LP2000M5-8	528730097	20	575/3	8-4	14.88 X 13.88	25252D552
S8LXP2000M6-8	528170087	20	208/3	4-4	14.88 X 13.88	25252D552
S8LXP2000M3/4-8	528170097	20	230/460/3	6-4	14.88 X 13.88	25252D552
S8LXP2000M4-8	528170107	20	460/3	8-4	14.88 X 13.88	25252D552
S8LXP2000M5-8	528170117	20	575/3	8-4	14.88 X 13.88	25252D552
S8LP2500M6-8	528730107	25	208/3	4-4	15	25252D550
S8LP2500M3/4-8	528730117	25	230/460/3	4-4	15	25252D550
S8LP2500M4-8	528730127	25	460/3	8-4	15	25252D550
S8LP2500M5-8	528730137	25	575/3	8-4	15	25252D550
S8LXP2500M6-8	528170127	25	208/3	4-4	15	25252D550
S8LXP2500M3/4-8	528170137	25	230/460/3	4-4	15	25252D550
S8LXP2500M4-8	528170147	25	460/3	8-4	15	25252D550
S8LXP2500M5-8	528170157	25	575/3	8-4	15	25252D550

S12L(X)P - 320 FRAME

CAT. NO.	ENG. NO.	HP	VOLT/PH	CORD	TRIM	IMPELLER
1750 RPM						
S12LP7500M4-4	528750007	75	460/3	2-4	11 X 10	25456E562
S12LP7500M5-4	528750017	75	575/3	4-4	11 X 10	25456E562
S12LXP7500M4-4	528180007	75	460/3	2-4	11 X 10	25456E562
S12LXP7500M5-4	528180017	75	575/3	4-4	11 X 10	25456E562
1150 RPM						
S12LP4000M4-6	528750027	40	460/3	6-4	12.38	25456E559
S12LP4000M5-6	528750037	40	575/3	8-4	12.38	25456E559
S12LXP4000M4-6	528180047	40	460/3	6-4	12.38	25456E559
S12LXP4000M5-6	528180057	40	575/3	8-4	12.38	25456E559
S12LP5000M4-6	528750047	50	460/3	4-4	13	25456E556
S12LP5000M5-6	528750057	50	575/3	6-4	13	25456E556
S12LXP5000M4-6	528180067	50	460/3	4-4	13	25456E556
S12LXP5000M5-6	528180077	50	575/3	6-4	13	25456E556
870 RPM						
S12LP2000M6-8	528750067	20	208/3	4-4	13	25456E556
S12LP2000M3/4-8	528750077	20	230/460/3	6-4	13	25456E556
S12LP2000M4-8	528750087	20	460/3	8-4	13	25456E556
S12LP2000M5-8	528750097	20	575/3	8-4	13	25456E556
S12LXP2000M6-8	528180087	20	208/3	4-4	13	25456E556
S12LXP2000M3/4-8	528180097	20	230/460/3	6-4	13	25456E556
S12LXP2000M4-8	528180107	20	460/3	8-4	13	25456E556
S12LXP2000M5-8	528180117	20	575/3	8-4	13	25456E556
S12LP2500M6-8	528750107	25	208/3	4-4	13.5	25456E554
S12LP2500M3/4-8	528750117	25	230/460/3	4-4	13.5	25456E554
S12LP2500M4-8	528750127	25	460/3	8-4	13.5	25456E554
S12LP2500M5-8	528750137	25	575/3	8-4	13.5	25456E554
S12LXP2500M6-8	528180127	25	208/3	4-4	13.5	25456E554
S12LXP2500M3/4-8	528180137	25	230/460/3	4-4	13.5	25456E554
S12LXP2500M4-8	528180147	25	460/3	8-4	13.5	25456E554
S12LXP2500M5-8	528180157	25	575/3	8-4	13.5	25456E554
S12LP3000M3/4-8	528750147	30	230/460/3	2-4	14	25456E552
S12LP3000M4-8	528750157	30	460/3	6-4	14	25456E552
S12LP3000M5-8	528750167	30	575/3	8-4	14	25456E552
S12LXP3000M3/4-8	528180167	30	230/460/3	2-4	14	25456E552
S12LXP3000M4-8	528180177	30	460/3	6-4	14	25456E552
S12LXP3000M5-8	528180187	30	575/3	8-4	14	25456E552
S12LP4000M4-8	528750177	40	460/3	6-4	14.25	25456E568
S12LP4000M5-8	528750187	40	575/3	8-4	14.25	25456E568
S12LXP4000M4-8	528180197	40	460/3	6-4	14.25	25456E568
S12LXP4000M5-8	528180207	40	575/3	8-4	14.25	25456E568

360 FRAME PUMP IMPELLERS PARTS LIST

S4T(X)P - 360 FRAME

CAT. NO.	ENG. NO.	HP	VOLT/PH	CORD	TRIM	IMPELLER
1750 RPM						
S4TP10000M4-4	528705007	100	460/3	0-4	14	135321052
S4TP10000M5-4	528705017	100	575/3	2-4	14	135321052
S4TXP10000M4-4	528155067	100	460/3	0-4	14	135321052
S4TXP10000M5-4	528155077	100	575/3	2-4	14	135321052
S4TP12500M4-4	528705027	125	460/3	0-4	14.5	135321032
S4TP12500M5-4	528705037	125	575/3	0-4	14.5	135321032
S4TXP12500M4-4	528155007	125	460/3	0-4	14.5	135321032
S4TXP12500M5-4	528155017	125	575/3	0-4	14.5	135321032
S4TP15000M4-4	528705047	150	460/3	4/0-3	15.13	135321262
S4TP15000M5-4	528705057	150	575/3	0-4	15.13	135321262
S4TXP15000M4-4	528155027	150	460/3	4/0-3	15.13	135321262
S4TXP15000M5-4	528155037	150	575/3	0-4	15.13	135321262

S8LA(X)P - 360 FRAME

CAT. NO.	ENG. NO.	HP	VOLT/PH	CORD	TRIM	IMPELLER
1750 RPM						
S8LAP1000M4-4	528725007	100	460/3	0-4	14	135320012
S8LAP10000M5-4	528725017	100	575/3	2-4	14	135320012
S8LAXP10000M4-4	528165067	100	460/3	0-4	14	135320012
S8LAXP10000M5-4	528165077	100	575/3	2-4	14	135320012
S8LAP12500M4-4	528725027	125	460/3	0-4	14.75	135320132
S8LAP12500M5-4	528725037	125	575/3	0-4	14.75	135320132
S8LAXP12500M4-4	528165007	125	460/3	0-4	14.75	135320132
S8LAXP12500M5-4	528165017	125	575/3	0-4	14.75	135320132
S8LAP15000M4-4	528725047	150	460/3	4/0-3	15.13	135320162
S8LAP15000M5-4	528725057	150	575/3	0-4	15.13	135320162
S8LAXP15000M4-4	528165027	150	460/3	4/0-3	15.13	135320162
S8LAXP15000M5-4	528165037	150	575/3	0-4	15.13	135320162

PARTS INDEX

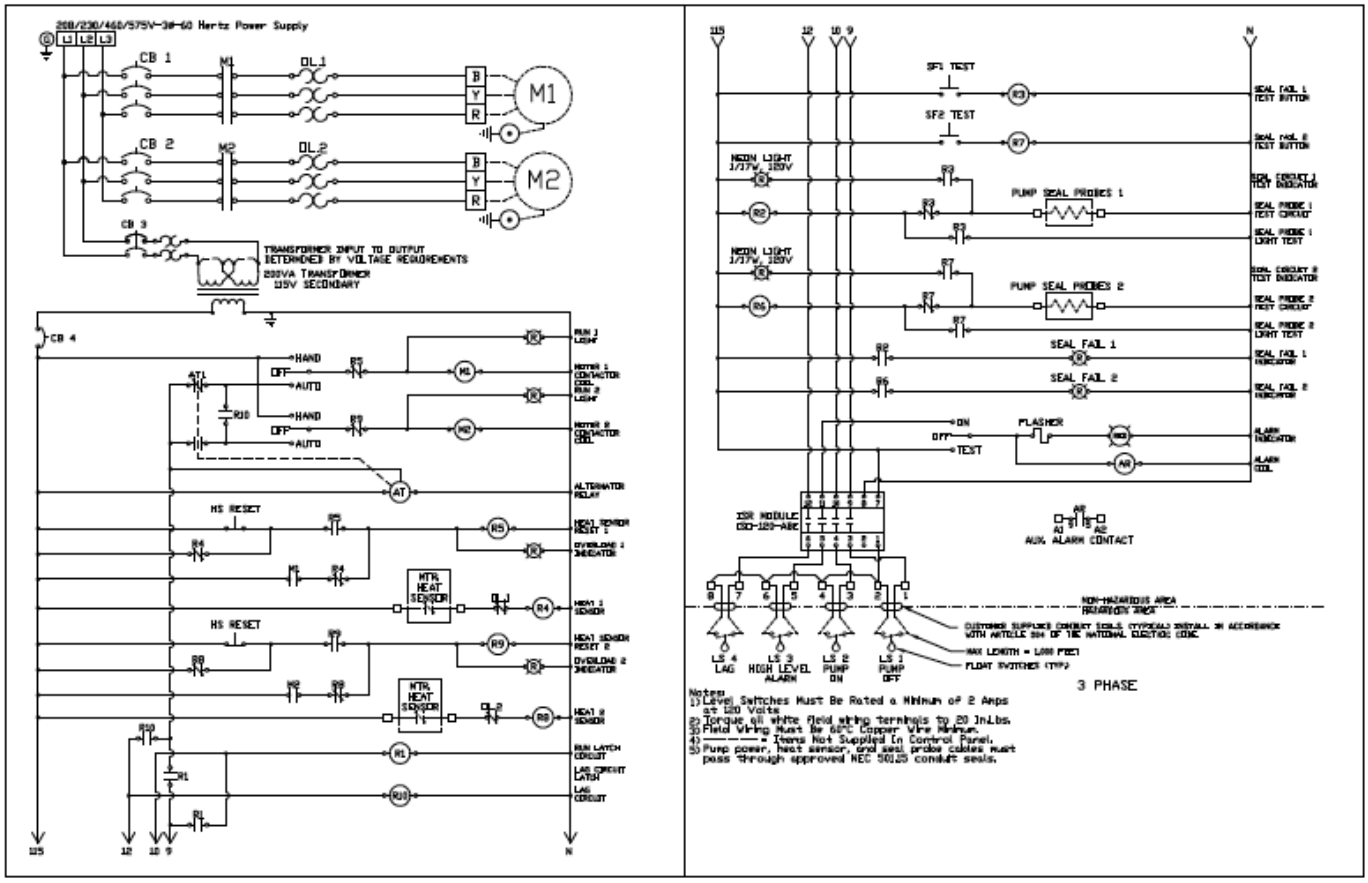
S8L(X)P - 360 FRAME

CAT. NO.	ENG. NO.	HP	VOLT/PH	CORD	TRIM	IMPELLER
1750 RPM						
S8LP10000M4-4	528735007	100	460/3	0-4	13 X 12	25252D558
S8LP10000M5-4	528735017	100	575/3	2-4	13 X 12	25252D558
S8LXP10000M4-4	528175087	100	460/3	0-4	13 X 12	25252D558
S8LXP10000M5-4	528175097	100	575/3	2-4	13 X 12	25252D558
S8LP12500M4-4	528735027	125	460/3	0-4	13.75 x 12.3/4	25252D556
S8LP12500M5-4	528735037	125	575/3	0-4	13.75 x 12.3/4	25252D556
S8LXP12500M4-4	528175007	125	460/3	0-4	13.75 x 12.3/4	25252D556
S8LXP12500M5-4	528175017	125	575/3	0-4	13.75 x 12.3/4	25252D556
S8LP15000M4-4	528735047	150	460/3	4/0-3	15 x 14	25252D551
S8LP15000M5-4	528735057	150	575/3	0-4	15 x 14	25252D551
S8LXP15000M4-4	528175027	150	460/3	4/0-3	15 x 14	25252D551
S8LXP15000M5-4	528175037	150	575/3	0-4	15 x 14	25252D551
1150 RPM						
S8LP6000M4-6	528735067	60	460/3	4-4	15	25252D550
S8LP6000M5-6	528735077	60	575/3	6-4	15	25252D550
S8LXP6000M4-6	528175067	60	460/3	4-4	15	25252D550
S8LXP6000M5-6	528175077	60	575/3	6-4	15	25252D550

S12L(X)P - 360 FRAME

CAT. NO.	ENG. NO.	HP	VOLT/PH	CORD	TRIM	IMPELLER
1750 RPM						
S12LP10000M4-4	528755007	100	460/3	0-4	11.5 X11	25456E563
S12LP10000M5-4	528755017	100	575/3	2-4	11.5 X11	25456E563
S12LXP10000M4-4	528185127	100	460/3	0-4	11.5 X11	25456E563
S12LXP10000M5-4	528185137	100	575/3	2-4	11.5 X11	25456E563
S12LP12500M4-4	528755027	125	460/3	0-4	12.5 x 11.	25456E564
S12LP12500M5-4	528755037	125	575/3	0-4	12.5 x 11.	25456E564
S12LXP12500M4-4	528185007	125	460/3	0-4	12.5 x 11.	25456E564
S12LXP12500M5-4	528185017	125	575/3	0-4	12.5 x 11.	25456E564
S12LP15000M4-4	528755047	150	460/3	4/0-3	13 x11	25456E565
S12LP15000M5-4	528755057	150	575/3	0-4	13 x11	25456E565
S12LXP15000M4-4	528185027	150	460/3	4/0-3	13 x11	25456E565
S12LXP15000M5-4	528185037	150	575/3	0-4	13 x11	25456E565
1150 RPM						
S12LP6000M4-6	528755067	60	460/3	4-4	13.63	25456E553
S12LP6000M5-6	528755077	60	575/3	6-4	13.63	25456E553
S12LXP6000M4-6	528185067	60	460/3	4-4	13.63	25456E553
S12LXP6000M5-6	528185077	60	575/3	6-4	13.63	25456E553
S12LP7500M4-6	528755087	75	460/3	2-4	14	25456E552
S12LP7500M5-6	528755097	75	575/3	4-4	14	25456E552
S12LXP7500M4-6	528185087	75	460/3	2-4	14	25456E552
S12LXP7500M5-6	528185097	75	575/3	4-4	14	25456E552

WIRING DIAGRAM

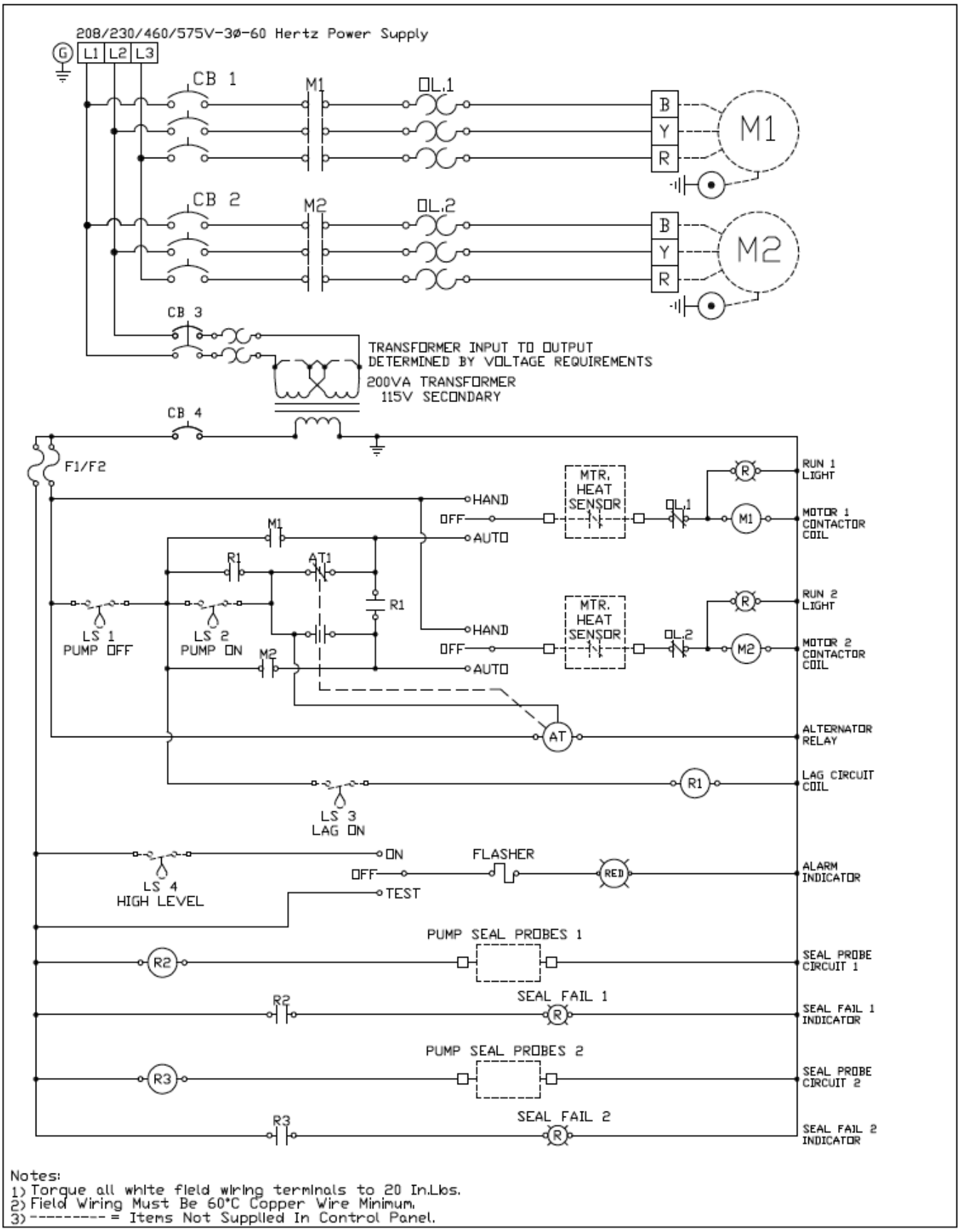


3 PHASE

Notes:

1. Level Switches Must be Rated a Minimum of 2 Amps at 120 Volts.
2. Torque all field wiring terminals to 20 in. Lbs.
3. Field Wiring Must be 60˚C Copper Wire Minimum.
4. ———— = Items Not Supplied In Control Panel.
5. Pump power, heat sensor, and seal probe cables must pass through approved NEC 501.15 conduit seals.

WIRING DIAGRAM



Notes:
1) Torque all white field wiring terminals to 20 In.Lbs.
2) Field Wiring Must Be 60°C Copper Wire Minimum.
3) --------- = Items Not Supplied In Control Panel.

STANDARD LIMITED WARRANTY

Pentair Hydromatic® warrants its products against defects in material and workmanship for a period of 12 months from the date of shipment from Pentair Hydromatic or 18 months from the manufacturing date, whichever occurs first – provided that such products are used in compliance with the requirements of the Pentair Hydromatic catalog and technical manuals for use in pumping raw sewage, municipal wastewater or similar, abrasive-free, noncorrosive liquids.

During the warranty period and subject to the conditions set forth, Pentair Hydromatic, at its discretion, will repair or replace to the original user, the parts that prove defective in materials and workmanship. Pentair Hydromatic reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for prior sold and/or shipped units.

Start-up reports and electrical schematics may be required to support warranty claims. Submit at the time of start up through the Pentair Hydromatic website: http://forms.pentairliterature.com/startupform/startupform.asp?type=h. Warranty is effective only if Pentair Hydromatic authorized control panels are used. All seal fail and heat sensing devices must be hooked up, functional and monitored or this warranty will be void. Pentair Hydromatic will cover only the lower seal and labor thereof for all dual seal pumps. Under no circumstance will Pentair Hydromatic be responsible for the cost of field labor, travel expenses, rented equipment, removal/reinstallation costs or freight expenses to and from the factory or an authorized Pentair Hydromatic service facility.

This limited warranty will not apply: (a) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with the printed instructions provided; (b) to failures resulting from abuse, accident or negligence; (c) to normal maintenance services and parts used in connection with such service; (d) to units that are not installed in accordance with applicable local codes, ordinances and good trade practices; (e) if the unit is moved from its original installation location; (f) if unit is used for purposes other than for what it is designed and manufactured; (g) to any unit that has been repaired or altered by anyone other than Pentair Hydromatic or an authorized Pentair Hydromatic service provider; (h) to any unit that has been repaired using non factory specified/ OEM parts.

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