XCITE SYSTEMS CORPORATION

XCITE
Owner's Manual

1201B HYDRAULIC POWER SUPPLY

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XCITE SYSTEMS CORPORATION

1201B Hydraulic Power Supply

1. Introduction

The XCITE Hydraulic Power Supplies are designed to fulfill the power requirements of exciter heads using the most energy-efficient and maintenance free components available. All units use a highly reliable, variable volume, pressure compensated, axial-piston pump to deliver only the energy demanded by the load, thus reducing power consumption.

2. Commissioning Procedure

2.1. Initial Setup of Hydraulic Power Supply is as follows:

2.1.1. Remove all packing material from inside and outside the pump cabinet.

2.1.2. Remove the main power cable from inside of cabinet.

2.1.3. Fill oil reservoir with 20 gallons of new, clean Mobile DTE-24 hydraulic fluid (or equal) (See drawing B-30251, item 3 for location of filler cap). Check oil sight gage for proper oil level.

2.1.4. Connect one of the exciter head 20 foot hoses to both the pressure out and return quick disconnects. This procedure effectively “short circuits” the output to the return and allows for all entrapped air in the pump to be removed on initial startup. Remove this connection after 5 to 10 minutes of running time.

2.1.5. Connect main power cable to main electrical service. The 1201B Hydraulic Power Supply is wired for 380V, 50Hz 3-phase mains. The 3-phase wire colors are Red, Black and White. Ground (Green Wire) must be connected or ground loops will exist in instrumentation causing 60Hz or 50Hz signal noise.

2.1.6. Connect the 1104-MOD2 pump control cable (B-11921) to the Hydraulic Power Supply and to the rear panel connector of the Master Controller.

2.1.7. Turn on the Main Power Switch (large red switch) located on the Hydraulic Power Supply.

2.1.8. Verify that the yellow *PHASE CORREC*T light is lit. If not, reverse the Red and Black wires at the main power connection. The pump will not start until the *PHASE CORRECT* lamp is illuminated.

2.2. Starting the Hydraulic Power Supply

2.2.1. Check to see that the Red *EMERGENCY STOP BUTTON* located on the Power Supply is pulled out. The unit will not start if this switch is pushed into its *STOP MODE*.

2.2.2. Push the Red *POWER* button on the Master Controller. It should light up along with the *PUMP STOP* light.

2.2.3. Push the *PUMP START* button on the Master Controller and the Power Supply should start up. The *GREEN* voltage applied light should be illuminated at this time. (Pump pressure will be *ZERO* due to the short circuit hose). After 5 to 10 minutes, shut down the pump. **See 2.1.4.**

2.2.4. Remove the hose connecting the pressure out to the return. Restart the Power Supply. Allow approximately 30 seconds for the pump to prime and come up to 3000 psi. Check the pressure on the gage located on the side of the Hydraulic Power Supply. It should read approximately 3000 psi.

2.2.5. Verify that the fan motor located in the Hydraulic Power Supply is operating.

2.2.6. The 1201B Hydraulic Power Supply is now running correctly.

2.2.7. Push the *PUMP STOP* button. The Power Supply will shut down and the *PUMP STOP* switch will stay lit.

2.2.8. Push the *POWER* switch of the Master Controller to turn it off.

2.3. Hydraulic Hookup

2.3.1. Connect the Hydraulic Power Supply pressure and return hoses to the Exciter Head pressure and *RETURN* hoses via the polarized quick disconnects supplied with the system hoses.

2.3.2. Take care to maintain cleanliness by always attaching caps to the quick disconnects when disconnected.

2.3.3. When in doubt about hose polarity, the convention is:

Supply Pressure - Coupler
Supply Return - Nipple

2.3.4. Take care that hoses will not rub against sharp objects when pulsating.

2.4. Cable Hookup

2.4.1. Connect cable C-11226 to the Master Controller rear panel connector and to the servovalve and load cell of the Exciter Head.

2.4.2. Connect cable B-11689 to the rear panel connector of the Master Controller and the displacement connector of the Exciter Head.

3. Theory of Operation

The purpose of the XCITE Hydraulic Power Supply is to supply clean hydraulic oil at a constant pressure under the varying flow demands of the force exciter head. The system was designed to do this is the most efficient manner, considering power requirements, reliability, safety, ease of maintenance, and operator convenience.

3.1. Circuit Description (Hydraulic)

An oil reservoir provides storage for all necessary supply oil and provides some oil cooling. (See Drawing B-30251 and B-30252) Mounted on the reservoir are oil level and oil temperature gauges, a temperature sensitive switch, and a reservoir fluid level detector switch for motor shut down. A 3000 psi pressure is achieved by a variable volume, pressure-compensated pump that has a factory set delivery rate.

Fluid from the pump first passes through a three-micron (absolute) filter. Should this filter become clogged, a pressure drop builds up across the sensor, causing a switch to trip. This causes the *FILTER* light to illuminate. The system should not be operated until the filter element is changed. After passing through the filter, oil flows to the pressure output disconnect.

3.2. Circuit Description (Electric)

The electrical input is 380V, 50Hz, 3 phase (See drawing B-30253). The fourth wire (green) is a ground wire and must be tied to earth ground to prevent floating grounds due to an unbalanced load.

The pump motor uses the high voltage 3-phase power, while the remaining loads derive 120 volt, single-phase from the step-down Transformer T-1 (designated 14), appropriately connected to the incoming power to provide 120 VAC on the secondary of the transformer.

Two-way protection of the three-phase power is provided. A magnetic circuit protector provides over current protection. It is also connected to the electrical box operating handle to disconnect power in the electrical box.

Pump motor overload protection is provided by thermal overload heaters in the motor starter, which were specifically designed for the pump motor. A *RESET* button is conveniently located inside the electrical box, should be thermal overload trip. The pump start relay, 1CR, (designated 5), is a latch-up design so that momentary switches may be used for pump start and pump stop operations.

A phase sequence relay 1PM (designated 1) is connected to and monitors the 3-phase incoming line to determine if the phasing is connected correctly to provide proper motor rotation. If the *START* light is off, any two legs of the incoming lines should be reversed.

If the phase is incorrect, 1PM (1) remains de-energized, thus preventing the system from being energized. If the phasing is correct, 1PM (1) energizes, allowing 120 VAC from T-1 (14) to be applied to the pump unit.

The T-1 (14) Transformer is fused by 4FU and 5FU. The system *POWER* switch connects power to the control circuits. If oil temperature is normal, relay 2CR (designated 10) is not energized. Momentarily, pressing the *START* button will energize 1CR (designated 5) if oil level, temperature, filter, and pressure selection are correct.

Relay 1CR (5) energizes the motor starter 1M. Auxiliary contact 1M closes, latching 1CR. A normally closed CR1(5) contact opens, turning off the *STOP* light.

Momentarily pressing the *STOP* button breaks the latch-up circuit and de-energize 1CR (5) and the pressure relief solenoid. After a short delay, an *OFF DELAY* contact on 1CR opens, de-energizing the motor-starter coil and causing the pump to stop.

Relay 3CR (designated 10) is normally not energized unless the oil level drops. If the *RED OIL LEVEL LOW* light illuminates, the system must be reset by pushing the *STOP BUTTON* on the Master Controller and oil must be added to the reservoir. When a low oil level is detected, the pump is turned off.

Relay 2CR (10) is normally not energized unless the oil temperature exceeds 160 degrees F. If the *RED OIL OVERTEMP* is illuminated, the system must be reset by pushing the pump *STOP BUTTON* on the Master Controller after the system cools down.

If the differential pressure drop across the filter exceeds approximately 50 psi, the *RED FILTER* restriction light will illuminate. The Power Supply will **NOT** shut off, however the filter should be changed when the filter light is illuminated.

4. Description

Included on the hydraulic power supply are an oil supply line pressure gauge and a timer which records pump running time. Mounted on the side of the reservoir is an oil level sight gauge with an integral oil temperature thermometer. A reservoir drain is also located on the reservoir. All motor controls and associated electrical equipment are located in the electrical control box. Connections for pressure and return hoses are attached with quick disconnect style connectors.

4.1. Major Components

- Oil Reservoir
- Motor
- Variable volume pressure-compensated Pump
- Three-micron Filter Assembly
- Heat Exchanger
- Motor Control Box
- Hydraulic Hoses

4.2. Control Components

4.2.1. Emergency Stop Switch

This switch de-energizes the motor-starter relay, bypassing all shutdown logic; thus causing the motor to stop. Use it only in an emergency situation.

WARNING *Some operating conditions cause the system to shutdown.*

4.3. Monitoring Devices

4.3.1. Phase Sequence Relay (PHASE Indicator)

A phase sequence relay monitors the 3-phase power applied to the unit. If the phasing of the wires is incorrect, the relay will prevent the pump from being energized, and the *PHASE CORRECT* lamp will not illuminate.

4.3.2. Filter Pressure Drop Sensor (FILTER Indicator)

This sensor sends a signal if the differential pressure across the filter element is excessive. This occurs when the differential pressure drop across the replaceable filter element exceeds 50 psi. Excessive differential pressure occurs when the filter element is clogging, fluid viscosity is too high, fluid temperature is too low, or any combination. At that time, the *FILTER* light illuminates.

Note: There may be times when the system is first started and the oil is cold that the filter light will illuminate. Allow 10 to 20 minutes of operation and if the filter light goes off, then the filter is not dirty and does not need replaced.

4.3.3. OIL OVERTEMP Indicator

The temperature sensor monitors the oil temperature of the reservoir and prevents the pump from running if the oil temperature exceeds 160 degrees F. The *OIL OVERTEMP* light illuminates, indicating that the maximum allowable oil temperature has been exceeded.

4.3.4. LOW OIL Indicator

The level sensor monitors the oil level in the oil reservoir and prevents the pump from running if the oil level is low. The pump will shut down or fail to start until additional oil is added. The red *LOW OIL* indicator lamp illuminates during this condition.

4.3.5. Voltage Applied Indicator

A green light indicating power is switched onto the pump motor. The light will <u>*ONLY*</u> illuminate after depressing the *PUMP START* button on the Master Controller.

5. Care and Maintenance

WARNING

Electrocution or severe electrical shock may occur.

When the MAIN power is plugged in, the line side of the motor starter is at line voltage.

The XCITE Hydraulic Power Supply was designed so that no periodic lubrication on mechanical parts is required. Cleanliness is very important when using sophisticated hydraulic systems, and although a clean room environment is far from necessary, general cleanliness is recommended. Routine maintenance on the overall system should include the following.

5.1. Operating Care

5.1.1. Wipe off all cables after each use.

5.1.2. Never drag cables across the floor.

5.1.3. Immediately after the hydraulic hoses are disconnected, cover all hydraulic connectors with the covers provided.

5.1.4. During operation, the oil temperature should never rise above 160 degrees F. (The oil temperature thermal relay shuts down the system at 160 degrees F.)

5.1.5. Before each test, check the oil pressure to make sure it is at 3000 psi. A flow screw adjustment is located on the top of the pump compensator assembly. This control is preset at the factory and should not be adjusted (slotted screw with locknut).

5.1.6. Before each test, check to make sure that the air heat exchanger blower is operational, that pump maintenance warning lights are not illuminated, and that the phase sequence indicator show proper motor phasing.

If for some reason the system has overloaded, the pump motor started thermal overload will trip. Reset it by opening the access door, and pushing the reset button located on the motor starter.

5.2. Maintenance

5.2.1. To keep the system operating within the specified limits, it is necessary to periodically check the oil level by observing the oil level gauge. Fluid should fill the gauge.

5.2.2. Oil should be changed after every 1000 hours of pump operation.

5.2.3. The condition of the filter is displayed by the light on the electrical control box inside the cabinet. The filter requires replacement only when the *FILTER* light is illuminated.

WARNING

All oil should be completely drained from the reservoir during transportation. (See drawing B-30251, item 31 for location of reservoir drain hose)

6. Troubleshooting

Listed below are some of the common problems which may be experienced with a Power Supply.

6.1. Unit Overheats

Overheating may be caused by a clogged heat exchanger, restricted air flow, malfunction of the check valves, or failure of the heat exchanger fan.

The efficiency of an oil/ air heat exchanger decreases as the ambient temperature increases. The maximum ambient temperature at which the heat exchange can effectively maintain the oil temperature below 160 degrees F is approximately 100 degrees F. If continuous operation in ambient temperature above 100 degrees F is desired, it is recommended that an oil/ water heat exchanger be added externally to cool the return line oil before it is returned to the oil reservoir.

6.2. Pump de-energizes

The pump de-energizing for no apparent reason can be caused by a noisy 3-phase power line where the 3-phase voltage drops below the rated voltage for more than 10 milliseconds. This results in the phase monitor relay 1PM momentarily de-energizing, shutting off the system.

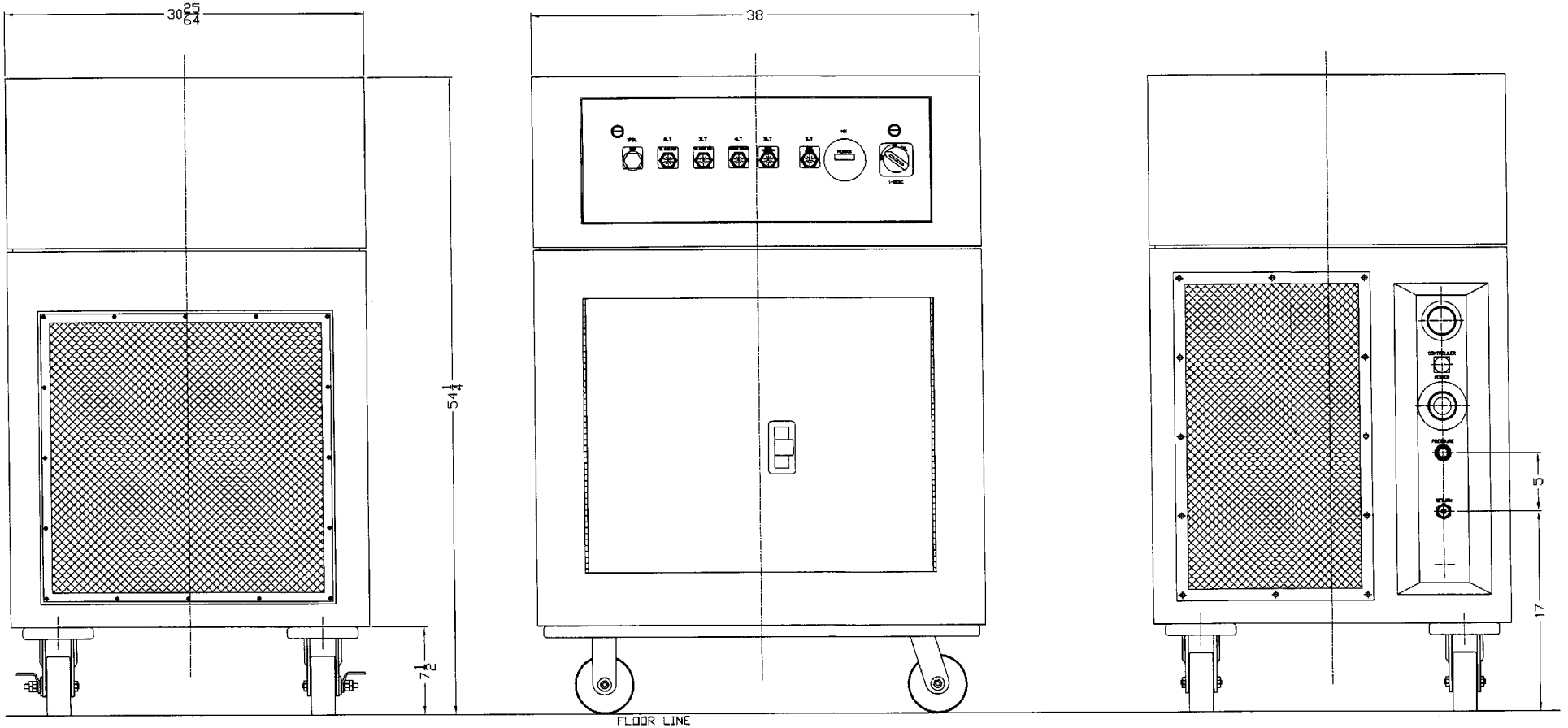
7. Specifications

Item	Specifications
Dimensions	
Height	54.25”
Width	38.00”
Depth	30.13”
Weight	863 lb (without oil)
Hydraulic Oil	20 gallons of Mobil DTE-24
Pump Pressure-compensated variable flow axial piston	5 GPM @ 2800 psi
Motor, 380V, 50Hz	10 HP
Reservoir	20 gallon
Cooling	Air (Maximum ambient room temperature 100 degrees F)

8. Drawings

Model 1201B

ITEM	QTY.	MFG.	MODEL NUMBER	DESCRIPTION



ITEM ID #ESD-120-00134-06-09

DWG# D-12492-R00-S01

NO.	DATE	BY	ZONE	CHANGE DESCRIPTION

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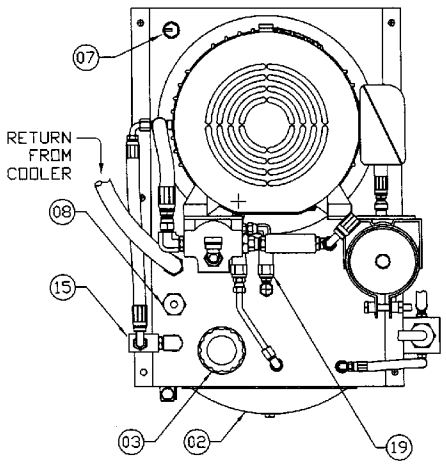
THIS DRAWING IS TO BE INTERPRETED USING THE LATEST REVISION OF ANSI/ASME Y14 DRAFTING STANDARDS.

TOLERANCES UNLESS OTHERWISE SPECIFIED	JOB NO.	DRAWN BY
DECIMAL 0.XX ± .01 0.XXX ± .005 0.XXXX ± .0005 FRACTIONS ± 1/32 ANGULAR ± 1° BREAK SHARP CORNERS	1002741	JAS
	REF. NO.	APPD. BY
	QUOTE NO. ESD093065-1	DATE 07-20-09
	REF. DWG	
AutoCAD LT 2000	SERIAL NO.	SCALE 1/4

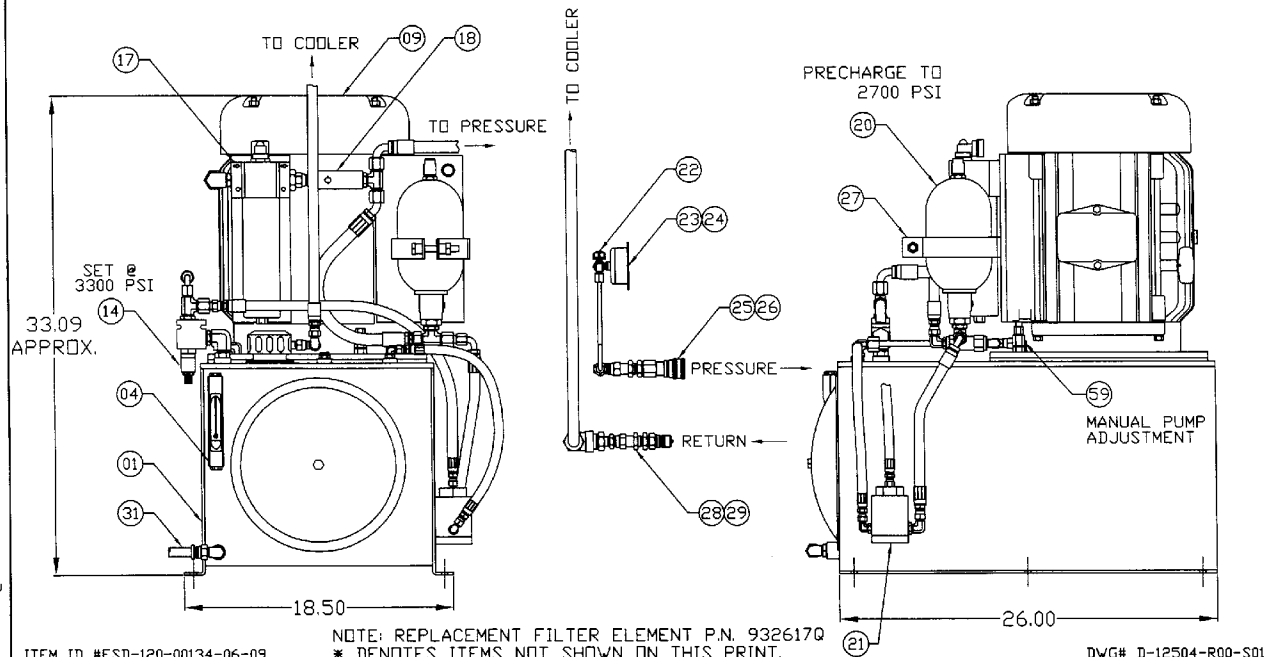
XCITE SYSTEMS CORPORATION

DRAWING NAME	120IB HYDRAULIC POWER SUPPLY-CABINET
CUSTOMER	XCITE
SHEET 1 OF 1	DRAWING NO. B-30250



SYSTEM REQUIREMENTS	
RESERVOIR CAPACITY:	20 GALLONS
FLUID TYPE:	DTE25
SYSTEM OPERATING TEMPERATURE:	130 °F
PUMP FLOW RATE:	5 GPM
SYSTEM OPERATING PRESSURE:	3000 PSI
PUMP COMPENSATING PRESSURE:	3000 PSI
RELIEF VALVE PRESSURE:	3300 PSI
PRESSURE SWITCH SETTING:	NA PSI
ELECTRIC MOTOR:	10 HP @ 1470 RPM
PAINT SPECIFICATION:	SEE ABOVE

NOTE: NOT ALL COMPONENTS ARE SHOWN FOR CLARITY



NOTE: REPLACEMENT FILTER ELEMENT P.N. 932617Q
* DENOTES ITEMS NOT SHOWN ON THIS PRINT.

ITEM ID #ESD-120-00134-06-09

DWG# D-12504-R00-S01

ITEM	QTY.	MFG.	MODEL NUMBER	DESCRIPTION
01	1	TFP	D-5594-A-01	RESERVOIR, 20 GALLON
02	1	HYDRO-CRAFT	HC-EC-12	COVER, RESERVOIR END
03	1	HYDRO-CRAFT	HC-120	BREATHER, FILLER
04	1	LUBE DEVICES	G1615-05-A-1	GAUGE, SIGHT LEVEL/TEMPERATURE
* 05	1	HYDRO-CRAFT	HA-FS-5	STRAINER, SUCTION
* 06	1	ALLEN BRADLEY	837-A4A	SWITCH, TEMPERATURE
07	1	ALLEN BRADLEY	837-N6	BULBWELL
08	1	GEMS	01701	SWITCH, LEVEL
09	1	LEESON	G150102.60	MOTOR, ELECTRIC 15/10 HP@1765/1470 RPM
				254 FRAME,TEFC W/BASE
* 10	1	MAGNALOY	M370H6	INSERT, COUPLING
* 11	1	BSF	1102-320-X-6.75	ADAPTOR, MOTOR/PUMP
* 12	1	PARKER	PVP16302R2	PUMP, PISTON (1 CU. IN./REV.)
* 13	1	TRIAD	12495-R00-S01	SET, 1201B TAG
14	1	PARKER	RD102S30	VALVE, CARTRIDGE RELIEF
15	1	PARKER	B10-2-8T	BODY, CARTRIDGE VALVE
16				
17	1	PARKER	15P2050BE2KS121	FILTER, PRESSURE
18	1	PARKER	C820S	VALVE, CHECK
19	2	LHA	CV03S-5	VALVE, CHECK
20	1	PARKER	BA002B3T01A1	ACCUMULATOR, 1 QUART BLADDER
21	1	BOSCH	AD-P1-51F-10	VALVE, ACCUMULATOR DISCHARGE
22	1	SUN	NSAB-KXV-HH	SNUBBER, GAUGE
23	1	NOSHOK	25.3 CFF	FLANGE, CHROME GAUGE
24	1	NOSHOK	25-310-SST-5000-PSI/BAR	GAUGE, PRESSURE W/ORIFICE
25	1	PARKER	H3-62-T8	COUPLER, QUICK DISCONNECT
26	1	PARKER	H3-65	PLUG, COUPLER DUST
27	1	PARKER	1466230000	BRACKET, ACCUMULATOR
28	1	PARKER	H3-63-T8	NIPPLE
29	1	PARKER	H3-66	CAP, NIPPLE DUST
* 30	1	THERMAL TRANSFER	MR-25-S-30	COOLER, AIR/OIL HEAT EXCHANGER
31	1	TFP	D-10394-R00-S01	HOSE, DRAIN
* 32	1	TFP	D-5590-A-01 THRU 17	CABINET, POWER UNIT
* 33	1	McMASTER CARR	13835A85	LATCH, NON-LOCKING
* 34	2	HOFFMAN	A-L31	LATCH, SLOTTED INSERT
* 35	2	McMASTER CARR	2408T142	CASTER, SWIVEL
* 36	2	McMASTER CARR	2408T139	CASTER, RIGID
* 37	2	McMASTER CARR	2422T99	BRAKE, CASTER
* 38	1	TRIAD		PACKAGE, ELECTRICAL
* 39	1	GRAINGER	4C230	BLADE, ALUMINUM FAN
* 40	1	REGAL BELOIT	3994	MOTOR, ELECTRIC, 1/3 HP @ 1625 RPM
* 41	1	GRAINGER	4C434	GUARD, AIR CIRCULATION
* 42	8	TECH PRODUCTS	51123	MOUNT, ISOLATION
* 43	1	McMASTER-CARR	93625K22	STRIP, RUBBER, 1/8" THK. X 5/8" WIDE
44				
45				
* 46	4	McMASTER CARR	3896T2	SLEEVE, ALUM. OVAL FOR 3/32" DIA.
				WIRE ROPE
* 47	2 FT	McMASTER CARR	8923T321	ROPE, 7X7 STRAND CORE GALV. STL.
* 48	1	GRAINGER	2GE80	CAPACITOR, 370 V RUN
* 49	1	GRAINGER	3M533	KIT, CAPACITOR MOUNTING
* 50	1	MAGNALOY	M30012012	HUB, MOTOR COUPLING (1 5/8 X3/8)
* 51	1	MAGNALOY	M30002406	HUB, PUMP COUPLING (3/4 X 3/16)
* 52	1	ANCHOR	W43-12-12U	FLANGE, 3/4" NPT CODE 61 4-BOLT
* 53	1	ANCHOR	W46-12-12U	FLANGE, 3/4" STR. THD. CODE 61 4-BOLT
* 54	1	TRIAD	11208-R00-S01	PLATE, MOTOR MOUNTING
* 55	1	PARKER	932617Q	ELEMENT, FILTER (SHIP LOOSE)
* 56	1	HIRSCHMANN	931 298-004	CONNECTOR, 2 PIN + GRD., NPT TO DIN
* 57	1	TURCK	VAS22-A653-5M	CONNECTOR, 0-250VAC/VDC 2 PIN+D GRD.
* 58	1	TURCK	VAS3-A580-2M	CONNECTOR, 0-250VAC/VDC 3 PIN+H12 GRD.
59	1	TRIAD	10265-R00-S01	COMPENSATOR, MANUAL ADJ. PKG.
* 59A	1	McMASTER-CARR	5543A76	SOCKET, 7/16" 6 PT. DEEP, 1/4" DRIVE
* 59B	1	McMASTER-CARR	5521A29	JOINT, UNIVERSAL 1/4" DRIVE
* 59C	1	McMASTER-CARR	5543A54	SOCKET, 3/8" 12 PT. UNIVERSAL
* 59D	1	McMASTER-CARR	98830A200	BAR STOCK, 1/4" SQUARE KEY
* 60	1	McMASTER-CARR	8694K12	STRIP, ADHESIVE BACKED FOAM, 1/4"X1/2"

NO.	DATE	BY	ZONE	CHANGE DESCRIPTION

NO.	DATE	BY	ZONE	CHANGE DESCRIPTION

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TOLERANCES UNLESS OTHERWISE SPECIFIED
DECIMAL 0.XX ± .01
0.XXX ± .005
0.XXXX ± .0005
FRACTIONS ± 1/32
ANGULAR ± 1°
BREAK SHARP CORNERS

AutoCAD LT 2000

JOB NO. 1002741 | DRAWN BY JAS
REF. NO. | APPD. BY
QUOTE NO. ESD093065-1 | DATE 07-16-09
REF. DWG
SERIAL NO. | SCALE 1/4

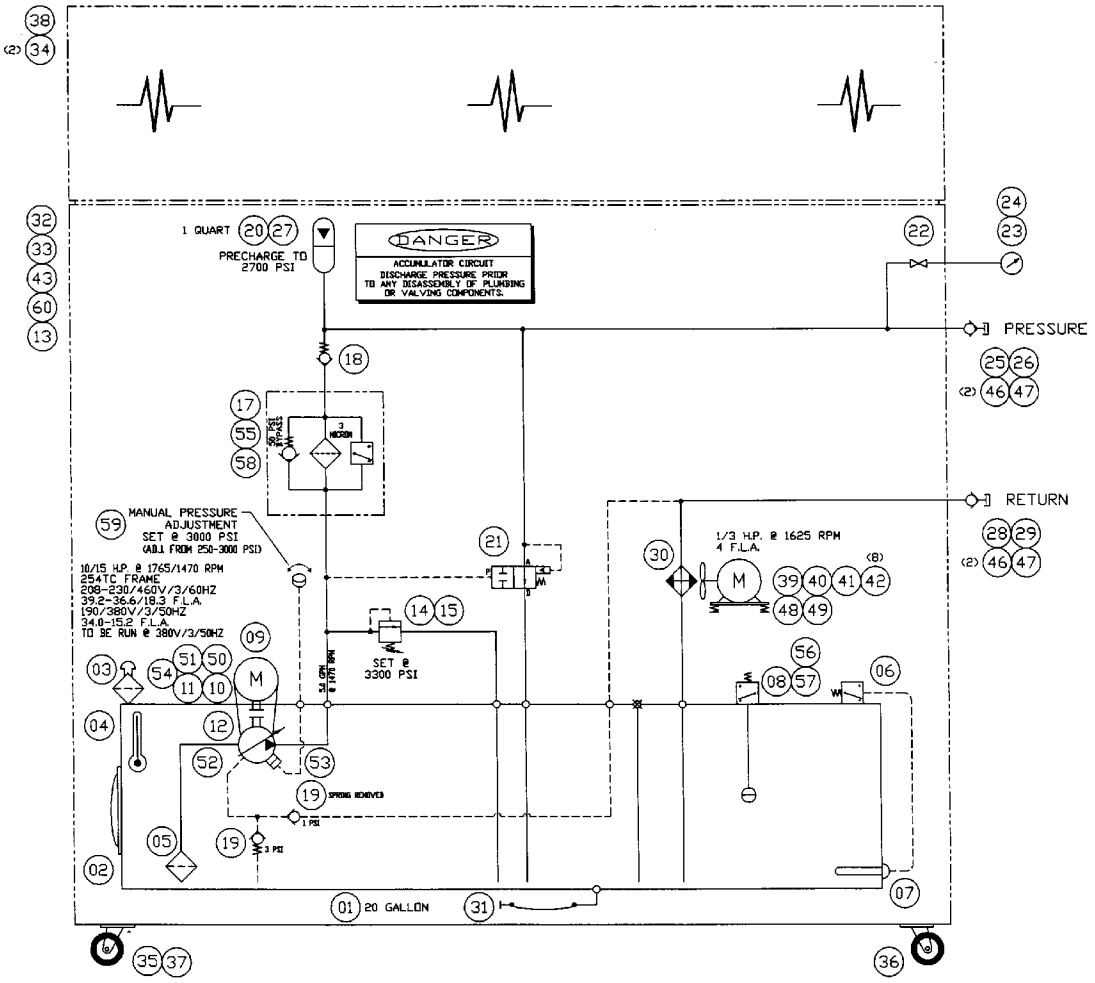
XCITE SYSTEMS CORPORATION

DRAWING NAME 1201B HYDRAULIC POWER SUPPLY-PUMP/RESERVOIR
CUSTOMER XCITE
SHEET 1 OF 1 | DRAWING NO. B-30251

PAINT SPECIFICATION:
(ORDER ALL 3 PARTS)

COMPONENT A : PPG AUE 360-33019 LOW GLOSS POLYURETHANE ENAMEL
COMPONENT B : PPG AUE-3501 CATALYST (MIX RATIO A TO B = 4 : 1
REDUCER : GRD.4540

SYSTEM REQUIREMENTS	
RESERVOIR CAPACITY:	20 GALLONS
FLUID TYPE:	DTE25
SYSTEM OPERATING TEMPERATURE:	130°F
PUMP FLOW RATE:	5 GPM
SYSTEM OPERATING PRESSURE:	3000 PSI
PUMP COMPENSATING PRESSURE:	3000 PSI
RELIEF VALVE PRESSURE:	3300 PSI
PRESSURE SWITCH SETTING:	NA PSI
ELECTRIC MOTOR:	10 HP @ 1470 RPM
PAINT SPECIFICATION:	SEE ABOVE



ITEM	QTY.	MFG.	MODEL NUMBER	DESCRIPTION
01	1	TFP	D-5594-A-01	RESERVOIR, 20 GALLON
02	1	HYDRO-CRAFT	HC-EC-12	COVER, RESERVOIR END
03	1	HYDRO-CRAFT	HC-120	BREATHER, FILLER
04	1	LUBE DEVICES	G1615-05-A-1	GAUGE, SIGHT LEVEL/TEMPERATURE
05	1	HYDRO-CRAFT	HA-FS-5	STRAINER, SUCTION
06	1	ALLEN BRADLEY	837-A4A	SWITCH, TEMPERATURE
07	1	ALLEN BRADLEY	837-N6	BULBWELL
08	1	GEMS	01701	SWITCH, LEVEL
09	1	LEESON	G150102.60	MOTOR, ELECTRIC 15/10 HP@1765/1470 RPM
				254 FRAME,TEFC W/BASE
10	1	MAGNALOY	M370H6	INSERT, COUPLING
11	1	BSF	1102-320-X-6.75	ADAPTOR, MOTOR/PUMP
12	1	PARKER	PVP16302R2	PUMP, PISTON (1 CU. IN./REV.)
13	1	TRIAD	12495-R00-S01	SET, 1201B TAG
14	1	PARKER	RD102S30	VALVE, CARTRIDGE RELIEF
15	1	PARKER	B10-2-8T	BODY, CARTRIDGE VALVE
16				
17	1	PARKER	15P2050BE2KS121	FILTER, PRESSURE
18	1	PARKER	C820S	VALVE, CHECK
19	2	LHA	CV03S-5	VALVE, CHECK
20	1	PARKER	BA002B3T01A1	ACCUMULATOR, 1 QUART BLADDER
21	1	BOSCH	AD-P1-51F-10	VALVE, ACCUMULATOR DISCHARGE
22	1	SUN	NSAB-KXV-HH	SNUBBER, GAUGE
23	1	NOSHOK	25.3 CFF	FLANGE, CHROME GAUGE
24	1	NOSHOK	25-310-SST-5000-PSI/BAR	GAUGE, PRESSURE W/ORIFICE
25	1	PARKER	H3-62-T8	COUPLER, QUICK DISCONNECT
26	1	PARKER	H3-65	PLUG, COUPLER DUST
27	1	PARKER	1466230000	BRACKET, ACCUMULATOR
28	1	PARKER	H3-63-T8	NIPPLE
29	1	PARKER	H3-66	CAP, NIPPLE DUST
30	1	THERMAL TRANSFER	MR-25-S-30	COOLER, AIR/OIL HEAT EXCHANGER
31	1	TFP	D-10394-R00-S01	HOSE, DRAIN
32	1	TFP	D-5590-A-01 THRU 17	CABINET, POWER UNIT
33	1	McMASTER CARR	13835A85	LATCH, NON-LOCKING
34	2	HOFFMAN	A-L31	LATCH, SLOTTED INSERT
35	2	McMASTER CARR	2408T142	CASTER, SWIVEL
36	2	McMASTER CARR	2408T139	CASTER, RIGID
37	2	McMASTER CARR	2422T99	BRAKE, CASTER
38	1	TRIAD		PACKAGE, ELECTRICAL
39	1	GRAINGER	4C230	BLADE, ALUMINUM FAN
40	1	REGAL BELOIT	3994	MOTOR, ELECTRIC, 1/3 HP @ 1625 RPM
41	1	GRAINGER	4C434	GUARD, AIR CIRCULATION
42	8	TECH PRODUCTS	51123	MOUNT, ISOLATION
43	1	McMASTER-CARR	93625K22	STRIP, RUBBER, 1/8" THK. X 5/8" WIDE
44				
45				
46	4	McMASTER CARR	3896T2	SLEEVE, ALUM. OVAL FOR 3/32" DIA.
				WIRE ROPE
47	2 FT	McMASTER CARR	8923T321	ROPE, 7X7 STRAND CORE GALV. STL.
48	1	GRAINGER	2GE80	CAPACITOR, 370 V RUN
49	1	GRAINGER	3M533	KIT, CAPACITOR MOUNTING
50	1	MAGNALOY	M30012012	HUB, MOTOR COUPLING (1 5/8 X3/8)
51	1	MAGNALOY	M30002406	HUB, PUMP COUPLING (3/4 X 3/16)
52	1	ANCHOR	W43-12-12U	FLANGE, 3/4" NPT CODE 61 4-BOLT
53	1	ANCHOR	W46-12-12U	FLANGE, 3/4" STR. THD. CODE 61 4-BOLT
54	1	TRIAD	11208-R00-S01	PLATE, MOTOR MOUNTING
55	1	PARKER	932617Q	ELEMENT, FILTER (SHIP LOOSE)
56	1	HIRSCHMANN	931 298-004	CONNECTOR, 2 PIN + GRD., NPT TO DIN
57	1	TURCK	VAS22-A653-5M	CONNECTOR, 0-250VAC/VDC 2 PIN+D GRD.
58	1	TURCK	VAS3-A580-2M	CONNECTOR, 0-250VAC/VDC 3 PIN+H12 GRD.
59	1	TRIAD	10265-R00-S01	COMPENSATOR, MANUAL ADJ. PKG.
59A	1	McMASTER-CARR	5543A76	SOCKET, 7/16" 6 PT. DEEP, 1/4" DRIVE
59B	1	McMASTER-CARR	5521A29	JOINT, UNIVERSAL 1/4" DRIVE
59C	1	McMASTER-CARR	5543A54	SOCKET, 3/8" 12 PT. UNIVERSAL
59D	1	McMASTER-CARR	98830A200	BAR STOCK, 1/4" SQUARE KEY
60	1	McMASTER-CARR	8694K12	STRIP, ADHESIVE BACKED FOAM, 1/4"X1/2"

ITEM I.D. # ESD-120-00134-06-09

DWG# D-12491-R00-S01

NO.	DATE	BY	ZONE	CHANGE DESCRIPTION	NO.	DATE	BY	ZONE	CHANGE DESCRIPTION

THIS DRAWING IS TO BE INTERPRETED USING THE LATEST REVISION OF ANSI/ASME Y14 DRAFTING STANDARDS.

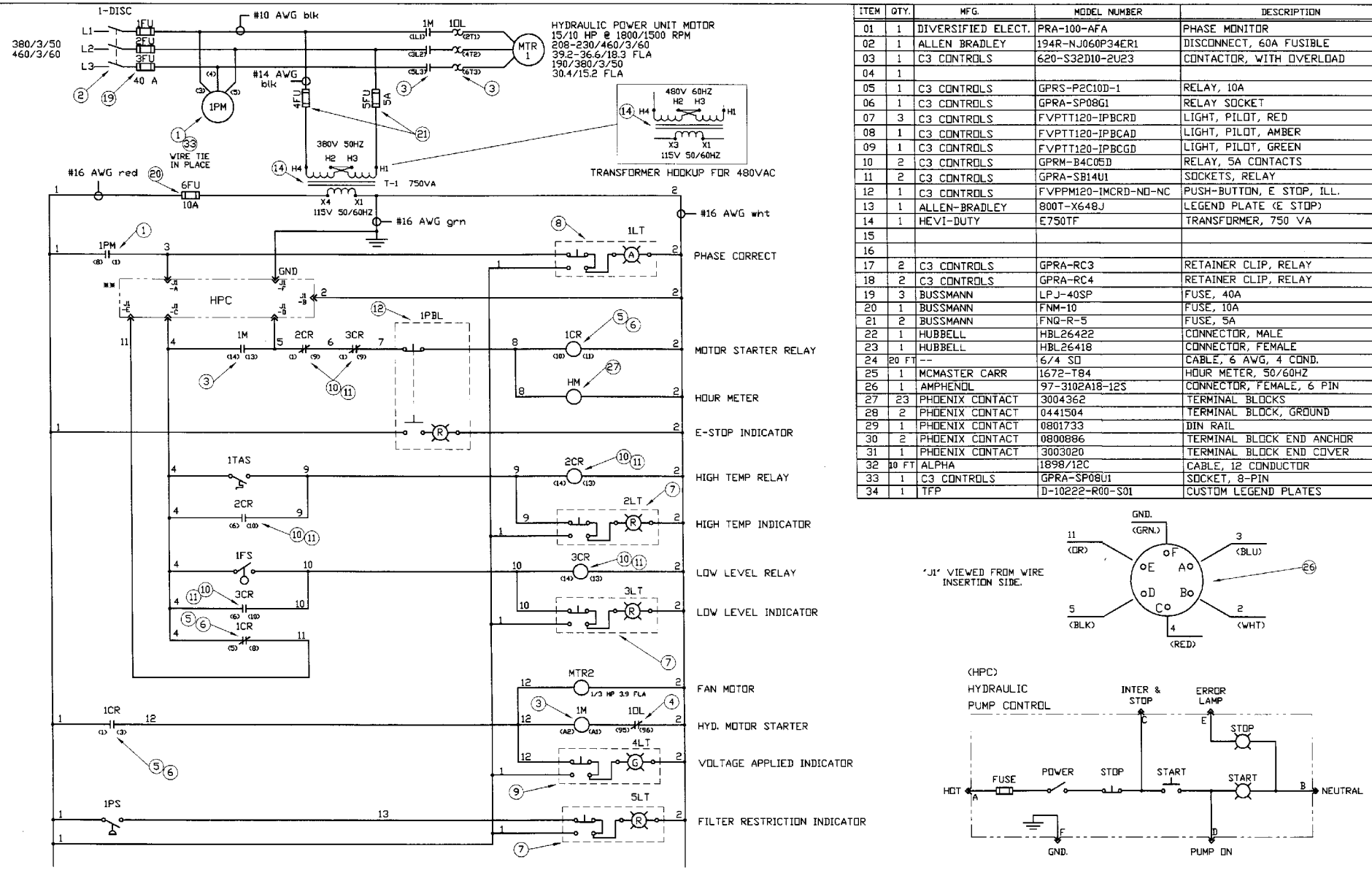
TOLERANCES UNLESS OTHERWISE SPECIFIED
DECIMAL .XXX ± .01
.XXX ± .005
.XXXX ± .0005
FRACTIONS ± 1/32
ANGULAR ± 1°
BREAK SHARP CORNERS

AutoCAD LT 2000

JOB NO. 1002741 | DRAWN BY JAS
REF. NO. J4389A | APPD. BY
QUOTE NO. ESD093065-1 | DATE 06-15-09
REF. DWG D-10390-R00-S01
SERIAL NO. | SCALE NONE

XCITE SYSTEMS CORPORATION

120IB C200/3/50 HYDRAULIC POWER SUPPLY
DRAWING NAME HYDRAULIC SCHEMATIC
CUSTOMER XCITE SYSTEMS
SHEET 1 OF 1 | DRAWING NO. B-30252



ITEM	QTY.	MFG.	MODEL NUMBER	DESCRIPTION
01	1	DIVERSIFIED ELECT.	PRA-100-AFA	PHASE MONITOR
02	1	ALLEN BRADLEY	194R-NJ060P34ER1	DISCONNECT, 60A FUSIBLE
03	1	C3 CONTROLS	620-S32D10-2U23	CONTACTOR, WITH OVERLOAD
04	1			
05	1	C3 CONTROLS	GPRS-P2C10D-1	RELAY, 10A
06	1	C3 CONTROLS	GPRA-SP08G1	RELAY SOCKET
07	3	C3 CONTROLS	FVPTT120-IPBCRD	LIGHT, PILOT, RED
08	1	C3 CONTROLS	FVPTT120-IPBCAD	LIGHT, PILOT, AMBER
09	1	C3 CONTROLS	FVPTT120-IPBCGD	LIGHT, PILOT, GREEN
10	2	C3 CONTROLS	GPRM-B4C05D	RELAY, 5A CONTACTS
11	2	C3 CONTROLS	GPRA-SB14U1	SOCKETS, RELAY
12	1	C3 CONTROLS	FVPPM120-IMCRD-NO-NC	PUSH-BUTTON, E STOP, ILL.
13	1	ALLEN-BRADLEY	800T-X648J	LEGEND PLATE (E STOP)
14	1	HEVI-DUTY	E750TF	TRANSFORMER, 750 VA
15				
16				
17	2	C3 CONTROLS	GPRA-RC3	RETAINER CLIP, RELAY
18	2	C3 CONTROLS	GPRA-RC4	RETAINER CLIP, RELAY
19	3	BUSSMANN	LPJ-40SP	FUSE, 40A
20	1	BUSSMANN	FNM-10	FUSE, 10A
21	2	BUSSMANN	FNQ-R-5	FUSE, 5A
22	1	HUBBELL	HBL26422	CONNECTOR, MALE
23	1	HUBBELL	HBL26418	CONNECTOR, FEMALE
24	20 FT	--	6/4 SO	CABLE, 6 AWG, 4 COND.
25	1	MCMASTER CARR	1672-T84	HOUR METER, 50/60HZ
26	1	AMPHENOL	97-3102A18-12S	CONNECTOR, FEMALE, 6 PIN
27	23	PHOENIX CONTACT	3004362	TERMINAL BLOCKS
28	2	PHOENIX CONTACT	0441504	TERMINAL BLOCK, GROUND
29	1	PHOENIX CONTACT	0801733	DIN RAIL
30	2	PHOENIX CONTACT	0800886	TERMINAL BLOCK END ANCHOR
31	1	PHOENIX CONTACT	3003020	TERMINAL BLOCK END COVER
32	10 FT	ALPHA	1898/12C	CABLE, 12 CONDUCTOR
33	1	C3 CONTROLS	GPRA-SP08U1	SOCKET, 8-PIN
34	1	TFP	D-10222-R00-S01	CUSTOM LEGEND PLATES

DWG# D-12493-R00-S01

NO.	DATE	BY	ZONE	CHANGE DESCRIPTION
△				
NO.	DATE	BY	ZONE	CHANGE DESCRIPTION

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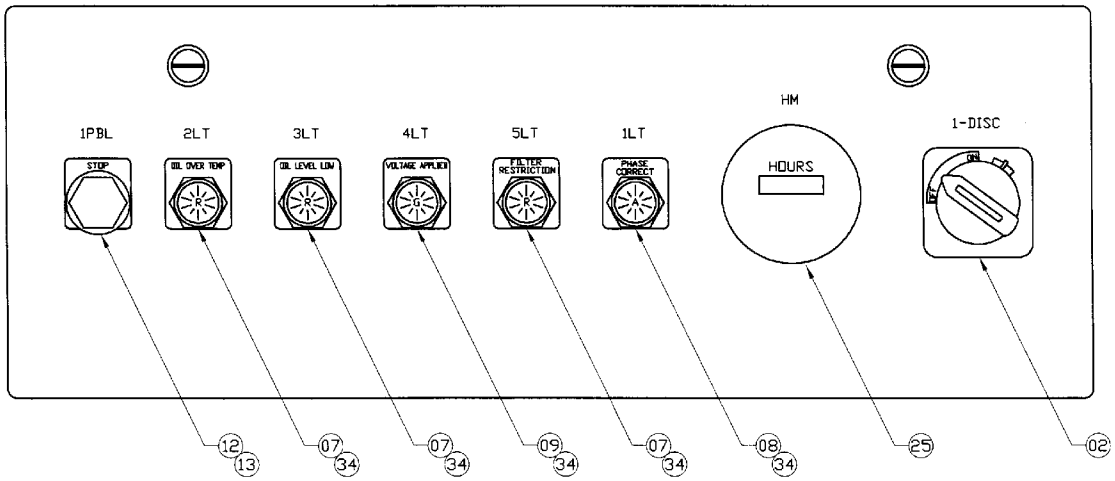
TOLERANCES UNLESS OTHERWISE SPECIFIED
DECIMAL 0.XX ± .01
0.XXX ± .005
0.XXXX ± .0005
FRACTIONS ± 1/32
ANGULAR ± 1°
BREAK SHARP CORNERS
AutoCAD LT 2006

JOB NO. 1002741 | DRAWN BY JAS
REF. NO. 1000544 | APPD. BY
QUOTE NO. ESD093065-1 | DATE 07-20-09
REF. DWG 11764-R00-S01
SERIAL NO. | SCALE NONE

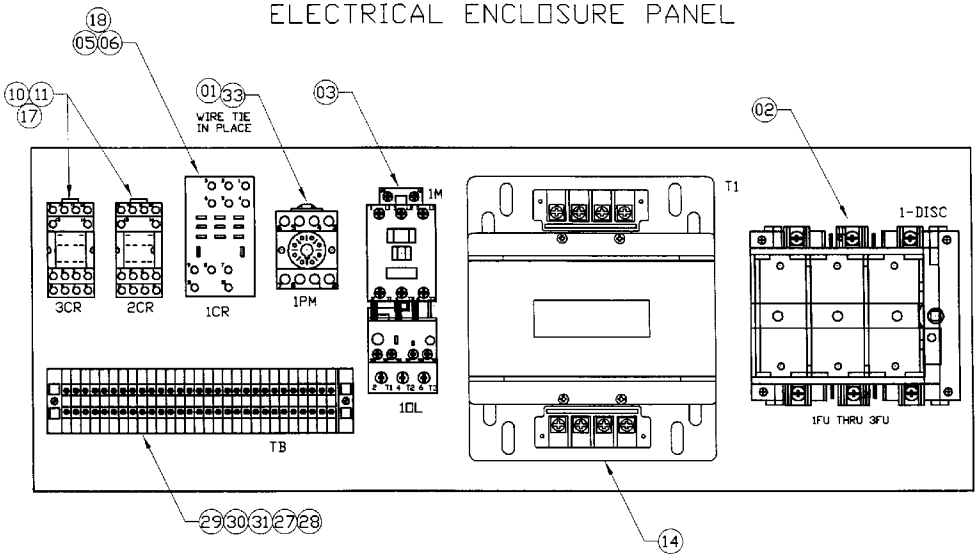
XCITE SYSTEMS CORPORATION

DRAWING NAME 120LB (380/3/50) HYDRAULIC POWER SUPPLY-ELECTRICAL SCHEMATIC
CUSTOMER XCITE SYSTEMS
SHEET 1 OF 2 | DRAWING NO. B-30253

ELECTRICAL ENCLOSURE DOOR



ELECTRICAL ENCLOSURE PANEL



DWG# D-12493-R00-S02

NO.	DATE	BY	ZONE	CHANGE DESCRIPTION	NO.	DATE	BY	ZONE	CHANGE DESCRIPTION
					△				

THIS DRAWING IS TO BE INTERPRETED USING THE LATEST REVISION OF ANSI/ASME Y14 DRAFTING STANDARDS.

TOLERANCES UNLESS OTHERWISE SPECIFIED
DECIMAL 0.XX ± .01
0.XXX ± .005
0.XXXX ± .0005
FRACTIONS ± 1/32
ANGULAR ± 1°
BREAK SHARP CORNERS
AutoCAD LT 2006

JOB NO. L002741 | DRAWN BY JAS
REF. NO. L000544 | APPD. BY
QUOTE NO. E.SD093065-1 | DATE 07-20-09
REF. DWG 11764-R00-S02
SERIAL NO. | SCALE NONE
SHEET 1 OF 1 | DRAWING NO. B-30254

XCITE SYSTEMS CORPORATION

12KW (380/3/50) HYDRAULIC POWER SUPPLY-ELECTRICAL BOX LAYOUT
DRAWING NAME
CUSTOMER XCITE SYSTEMS