



COLUMN PRESS CYLINDER WITH ELECTRIC PUMP

EE25030-CE/L



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1. BEFORE USING THE EQUIPMENT.

Upon removing the protective packaging from the crane, carefully inspect it. Check for:

- 1- Oil leaks.
- 2- Signs of corrosion.
- 3- Damage to the hydraulic cylinder and hydraulic line.
- 4- Cracks or dents on the frame and the hydraulic cylinder's attachments to the frame.
- 5- Loose or damaged screws or joints.
- 6- Damaged or incorrectly assembled accessories.

If you find any damage or fault with the product, clearly label it and place it in a location where it will not be available for use until an authorized service dealer has repaired the fault.



Never use hydraulic equipment that is damaged or suspected to be in poor condition.

Familiarize yourself and your co-workers with the equipment. Before you begin using the jack, carefully read and observe all instructions and recommendations enclosed in the packaging.

Your negligence in this matter may cause personal injury or material damage.



Do not loose the instruction manual.

Do not operate hydraulic equipment near open flame, explosives, sources of intense heat or any other hazard, which could cause a fire or the damage equipment. The hydraulic equipment should not be exposed to temperatures greater than 60°C when in use or when stored.



If purchasing just a cylinder or pump for use in a press, ensure that you are using the proper combination of pump, cylinder and press frame before assembling the unit. We recommend you seek professional advise on the matter.

When choosing a place for the press, ensure that it will be located over firm, level ground such that the entire base of the press contacts the ground. If any doubt exists as to whether the ground will be able to support the press and the additional weight it will see when in use, distribute the weight over a larger area by placing rigid steel beams or planks under the base of the press.

Store the press with the cylinder's piston fully retracted.

We recommend you wrap the cylinder in a protective plastic or place it in a location free of dirt, dust, steel shavings and other foreign matter, which can enter into the cylinder and damage its components.



Do no store or leave the press where is can be accessed by the children.

2. TECHNICAL FEATURES.

CYLINDER

MODEL	D25030
• Max. Pushing Capacity (Tn.)	242,3 Tn
• Working max. pressure (Kg/cm ²)	700 Kg/cm ²
• Stroke (mm.)	300 mm.
• Effective Area	346,3 cm ²
• Oil capacity (cc)	10.390 cm ³
• Free advance speed (mm/sg)	4,5 mm/sg
• Max. Pressure advance speed	0,6 mm/sg

POWER PACK

MODEL	HAM8544B
• Tank capacity (cc)	25 Litres
• Volume in low pressure. Approaching	13 L/min.
• Volume in high pressure. Working	2,2 L/min.
• Maximum return pressure (Kg/cm ²)	400 Kg/cm ²
• Maximum working pressure (Kg/cm ²)	700 Kg/cm ²
• Distributor valve	Handle: 4ways, 3 positions
• Motor	4 kW 400V 50Hz 3 ph

WELDED-MECHANIZED FRAME

MODEL	EE25030-CE
• Working height maximum (mm.)	1300 mm
• Working height minimum (mm.)	300 mm
• Working Width (mm.)	1200 mm.
• Total weight of the machine (Kg.)	2220 Kg.
• Total height	2500 mm
• Total width	1850 mm
• Total depth	1200 mm
• Displacement of the table	250 mm

3. ESSENTIAL SAFETY REQUIREMENTS.

3.1 GENERAL CONDITIONS.

DANGEROUS AREA



Due to the *FUNCTIONAL REASONS* it is considered to be the space between the columns, the bed and the hydraulic cylinder piston.
 Due to the *MATERIAL PRESSED* it is supposed to be surrounding area to the machine in case of metal parts being ejected during pressing.

The speed of the hydraulic cylinder during its extension is less than 30 mm/second. Therefore then machine should be considered by the application of ANNEX V of the Declaration of CE Conformity.

Operators standing in the dangerous area around the machine should protect their feet, faces and hands from metal pieces being ejected during pressing.



Feet protection



Face protection



Hands protection

Used materials and components are not for the health and safety of operators. The hand pump contains LARZEP hydraulic oil ISO: HV46.



HIDRAULIC OIL IS TOXIC IF IT ENTERS THE BLOODS STREAM. NEVER PLACE A FINGER OVER ANY ORIFICE OR LEAK, WHICH COULD BE PRESSURIZED, SUCH AS THE HYDRAULIC LINE, AS THIS COULD CAUSE OIL TO BE INJECTED INTO BLOOD STREAM.

3.2 COMANDS

- ❖ The electrical motor stop and start up devices, are done by means of a green button located in the electric cabinet.
- ❖ The electrical cabinet it is provided with a general selector (1-0) in the lateral, and with an emergency red stop device, easily identifiable and operable.
- ❖ The motor starts when we push the green button of the electrical cabinet.
- ❖ The other commands are acting manually from de distributor valve located in the power pack.
- ❖ The tension, not only the start device but also the emergency stop device, is 24 V.

3.3 SAFETY PREVENTIVE ACTIONS AGAINST MECHANICAL RISKS

- ❖ The construction of machine has been calculated to bear without any breaking under conditions of foreseen utilization and for the whole life of the machine. The hydraulic components have been designed and calculated in compliance with the ANSI B30.1, and have been proved to 875Kg/cm² of pressing.
- ❖ The frame of the machine does not cause to be dangerous in that sense.
- ❖ The hydraulic pump is equipped with an internal security valve in the tank, out of operator's control and rated at 700 Kg./ cm². The hydraulic cylinder is also furnisher with a pressure relief valve, rated at 400 Kg./ cm², which prevents the retraction chamber of the cylinder from overpressures in case of obstruction of the return way.
- ❖ Also, in the pump's metal lid, there is a pressure regulation valve rated on factory at 700 Kg./ cm² and it could be rated by the operator, as we explained in the start up chapter, from 0 till 700 Kg./ cm².

3.4 MAINTENANCE

- ❖ All the maintenance operations must be performed while the machine is stopped avoiding this way any potentially dangerous situation. A poor maintenance program of the press does not increase the risk, but obviously will revert in a lower performance.
- ❖ The hydraulic pump is mounted out of the frame and access is very easy. To disassemble the pump unscrews the bolts in the tap cover. In order to disassemble the cylinder it is required first to disassemble the hoses. Support the cylinder with a crane, by means of an eye bolt, and unscrew the joints of the lid.

ISOLATION OF THE POWER SUPPLY

Release the cables of the terminal, to disconnect the electrical source, first disconnect the stud.

3.5 INDICATIONS

INFORMATION DEVICES

There are different positions of the distributor lever, it is labelled:

"A": For the cylinder advance movement.

"C": The piston does not advance, but the reached pressure is maintained.

"B": The piston returns.



The labels of protection, and the label of risk of electrical current.



and advice of reading instructions

The press, the cylinder and the pump have their corresponding serial numbers marked on them. In addition to it, you can find a sticker label showing the commercial reference, capacity, working pressure, name and address of the manufacturer.

4. TRANSPORT AND ERECTION.

The machine is delivered properly packed in a wooden ballet. For it's handling, it is recommended to use a forklift truck or a crane. In the last case, it is necessary to use the eye bolt threaded in the cylinder's head. When doing this operation, you should be cautious and prevent the flexible hoses and couplings from any damage.



The machine is stable enough to operate without fixing, but if is placed in an area commonly operated by mobile machinery (cranes, lifting equipment...) it is strongly recommended to fix it to the desired place by drilling the supporting plates.

OIL FILLING

Usually, the equipment is provided with filled tank. In case that the tank was empty, it must be filled, checking the level of the oil by means of the filling plug. Approximately 65 Litres to complete the tank.

INSTALLING THE GAUGE

- 1-Replace the threaded tap in the right column by the gauge, which is supplied separately.
- 2-Tighten the gauge cone to the gauge adaptor seat by using a flan wrench size 22.
- 3-Hold the gauge screen by hand during threading process and after reaching a comfortable reading position set the gauge screen free so that it turns the last quarter solidarily with the thread.
- 4- The hydraulic system also includes a gauge adaptor with 3/8 " BSP thread.

INSTALLING THE HOSES

- ❖ The oil return transparent hose of the security valve(4), it is connected to the hexagon nipple located in the block of the distributor valve. Use the clip to fix it.
- ❖ The short hose(6) that reaches from the gauge port, it is connected to the "A" port in the distributor valve, by means of the rapid coupler.
- ❖ Assure the perfect connection.
- ❖ The long hose(5), that reaches from the inferior side of the cylinder, it is connected to the "B" port of the distributor valve.
- ❖ Keep clean the rapid couplers in the connection moment.

ELECTRIC CONNECTION

1. Connect the cables of current tap (strip 17) to the network.
2. Connect the cables of current in the motor terminal. (220 V-Δ) and (415 V-Y).
3. Take care of the voltage indicated in the box of the terminals.
4. Check that the contactor is rated in accordance to the indications labelled in the motor information devices.
5. Assure that the distributor valve position is "C".
6. Push in the electrical cabinet the position (1), and push for a moment the green button of start.
7. Check for the turn of the motor, it must be in the same sense that is labelled with an arrow in the motor.
8. In opposite case, change the position of two cables between themselves in the terminal and try again. This operation must be done with the equipment disconnected.
9. If the pump is prime less, (the cylinder advance but do not reach pressure), release with a screwdriver, the purge screw located in the cover, let the air goes from the circuit., until the cylinder reaches pressure. Once the cylinder is purged, screwing again the screw.

CHECKING THE RIGHT OPERATION OF ALL DEVICES AND MECHANISM

1. Put the distributor valve in "C" position
2. Put the general selector in position 1.
3. Push the start button for a moment, to check that the motor starts and the sense of the rotation of it.
4. Put the distributor valve in "A" position.
5. Push the green start button in constant way, the piston of the cylinder will advance, check the speed and the stroke.
6. Guide the piston to the end of the stroke and pressure it, checking that there is not oil leaks in the connections, gauge...etc.
7. Put the distributor valve in "C" to check that the pressure it is maintained.
8. Put the distributor valve in "B" position, push the green button of the electrical cabinet, the piston of the cylinder returns.
9. Check the pressure limiter valve's function, maintaining pushed the green button with all the piston returned. (the oil must go by the transparent hose).
10. Put the distributor valve in "A" position, in order to depressurize the cylinder .
11. Put the distributor valve in "C" position, and the general selector in 0.
12. Once this test are carried out, the machine is ready for it utilisation.
13. Repeat again this sequence, as necessary as the operator is familiarized with the commands.

START UP

Follow the previous point.

Change of the height of the table.

Once the height of work is decided, and the ring gear of the chains is in the piston:

Descent of the table:

1. Guide the piston from its return position 30-50mm.
2. Assembly the two chains the most tense way it is possible.
3. Return the piston in order to release the supporting pin.
4. Put this supporting pins in the hole immediately inferior.
5. Guide the piston enough for the table to be supported in the pins.
6. Repeat the operation until reaching the wished height.

Elevation of the table:

1. Guide the piston in all its stroke.
2. Assembly the both chains the most tense possible.
3. Return the piston until free the supporting pins.
4. Continue returning the piston until the table exceed the holes immediately superiors.
5. Put the pins, and descent the table until the table is supported by means of the pins.
6. Repeat the operation until reaching the wished height.



VERY IMPORTANT! THE SYSTEM OF POSITIONING OF THE TABLE, IT IS NOT DESIGNED IN ORDER TO RESIST THE POWER THAT THE CYLINDER IS ABLE, IT IS ONLY FOR POSITION THE TABLE

REGULATION OF THE MAXIMUM WORKING PRESSURE

- ❖ The maximum pressure that the hydraulic system develops is 700 Kg/cm². An internal limiter valve shoots in the moment that the installation reaches that pressure.
- ❖ If you want to work with a maximum pressure inferior, the external valve located in the power pack must be regulated.
- ❖ For this operation, unscrew the lock nut that blocks the regulation screw, located in the block of the regulator valve. Turn left the screw to diminish the pressure, and check the results with the gauge of the press.
- ❖ Once the valve is regulated to wished pressure, block the regulation screw with the lock nut.

5. MAINTENANCE.

The hydraulic circuit of the press is closed, so in normal conditions no oil leakage should be coming up.

In case of oil leakage, after the proper repairing work, you should fill up the tank with hydraulic oil by LARZEP (Ref. **AZ8902**); the pump is equipped with an oil level indicator to control the need quantity of oil.

As far as a non-continuous use of the press is concerned (1 hour per day), oil replacement should be done once a year.



To empty the tank, you should remove the cover and take the oil out to another container. Please, bear in mind the existing rules for waste processing when handling the used oil. Keep greasy and lubricated the pin bearings, the piston and in general all the parts that might be in friction

USE ONLY LARZEP HYDRAULIC OIL

Other grades of oils or types of hydraulic fluid (such as brake fluid) may affect the performance of the equipment or cause the deterioration of the seals.



DO NO ATTEMPT TO FILL THE PUMP WITH OIL WHILE IT IS CONNECTED TO A CYLINDER WHICH IS SUSTAINING A LOAD BECAUSE IT MAY OVERPRESSURIZE THE RESERVOIR WHEN THE PISTON RETRACS AND CAUSE DAMAGE OR INJURY

Always use the original LARZEP parts to prolong the service life of your hydraulic equipment. **LARZEP S.A.** or your authorized dealer can supply you with original parts for simple maintenance work.

6. PROBLEMS, CAUSES AND SOLUTIONS.

PROBLEMS	POSSIBLE FAILURES	SOLUTION
1. The piston does not advance.	- Prime less pump.	1. Feed the pump keeping it started some minutes.
	- Dirty accumulated in the filter.	2. Extract and clean it.
	-No oil in the reservoir.	3. Check the level.
	- Cylinder pressure retainer damaged.	4. Replace the retainer.
	-Directional valve damaged.	5. Replace the valve.
	- Cylinders body damaged.	6. Repair the body of the cylinder.
	- Pneumatic problem.	7. Check the installation.
2. The cylinder does not reach pressures.	- Pressure relief valve unrated.	8. Rate the valve.
	- Cylinder pressure retainer damaged.	See Solution. 4.
	- Cylinders body damaged.	See Solution. 6.
3. The cylinder does not maintain pressure.	- Cylinder pressure retainer damaged.	See Solution. 4.
	- Directional valve damaged.	See Solution. 5.
4. The cylinder does not retract.	- Damaged return spring.	9. Replace the spring.
	- Directional valve damaged.	See Solution. 5.

The solutions marked in black must be carried out by specialized personnel, for it, go to an authorized distributor that sold you the equipment or to LARZEP, S.A., we have original spare part kits as well as the necessary personnel, do not doubt in contacting to us, we are to yours disposition.

Always use original spare parts LARZEP, you will extend the life utility of the equipment, in opposite case the company will not become person in charge of the possible failures, damages or losses that take place.

7. WARRANTY.

LARZEP, S.A. guarantees its products against all design and manufacturing defects for the durations of two years from the date of purchase. This guarantee does not include the ordinary wear of both metal and non-metal parts, abuse, using the equipment beyond its rated capacity and any wear or damage incurred as a result of using a hydraulic fluid which is not recommended by **LARZEP, S.A.**

Please note that if the equipment is disassembled or serviced by anyone other than an authorized service dealer or by **LARZEP, S.A.**, this guarantee is rendered null and void.

In the event of a warranty claim, return the equipment, to **LARZEP, S.A.** or the authorized dealer which sold you the hydraulic equipment, **LARZEP, S.A.** will repair or replace the faulty equipment, whichever is deemed most appropriate. **LARZEP, S.A.** shall not be held liable for any consequential damages or losses, which may occur as a result of faulty equipment

8. DECLARATION OF CONFORMITY.

DECLARACION DE CONFORMIDAD

LARZEP, S.A.
Dirección: Avda. Urtiaga, 6
48269 Mallabia ESPAÑA

E Declaramos bajo nuestra exclusiva responsabilidad la conformidad de los productos a los que refiere esta declaración, con las disposiciones de la directiva: 89/392/CEE, 91/368/CEE, 93/44/CEE, 93/68/CEE, 98/37/CEE

DECLARATION OF CONFORMITE

Nous, LARZEP, S.A.
Adresse: Avda. Urtiaga, 6
48269 Mallabia SPAIN

F Déclarons sous notre seule responsabilité que les produits auxquels se réfère cette déclaration sont conformes aux dispositions des Directives: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

DECLARAÇÃO DE CONFORMIDADE

Nós, LARZEP, S.A.
Endereço: Avda. Urtiaga, 6
48269 Mallabia SPAIN

P Declaramos, sob nossa única responsabilidade, que os seguintes produtos, incluídos nesta declaração estão em conformidade com o disposto na Directiva: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

ÖVERENSSTEMMELSEERKLÄRING

Vi, LARZEP, S.A.
Adresse: Avda. Urtiaga, 6
48269 Mallabia SPAIN

DK Erklærer på eget ansvar, at følgende produkter som er omfattet af denne erklæringen, er i overensstemmelse med bestemmelse i Direktiv: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

ERKLÆRING OM OVERENSSTEMMELSE

Vi, LARZEP, S.A.
Adresse: Avda. Urtiaga, 6
48269 Mallabia SPAIN

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ÜBEREINSTIMMUNGSERKLÄRUNG

Wir, LARZEP, S.A.
Anschrift: Avda. Urtiaga, 6
48269 Mallabia SPAIN

D Erklären auf eigene Verantwortung, daß folgende Produkte, auf die sich diese Erklärung bezieht, mit den Bedingungen der Direktiven 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC übereinstimmen.

Tipo, Type, Typ, Tyypki.

SM / SX / SP / SMX / SMP / SH / DH / D / SL / STX / TE / T / SMA / SHA / SS / DD / ST / KC / CT / C / CY / W / X / WA / XA / WH / WI / Z / YA / YG / YZ / A / AB / AC / AF / BL / B / F / HN / EC / EE / EG / EM / EZ / CC / CN / CK / CD / VA / VB / VC / VZ / CA / CS / DL / DP / DLG / AA / AU

Mallabia, ESPAÑA 2000 / 01 / 01

Lugar y fecha, place and date, lieu et date, plats och datum, paikka ja päivämäärä, udstedelsessted og dato, ort und datum, plaats en datum, local e data, luogo e data.

DECLARATION OF CONFORMITY

We, LARZEP, S.A.
Address: Avda. Urtiaga, 6
48269 Mallabia SPAIN

GB Declare under our sole responsibility that the following products to which this declaration relates conform with the provisions of Directives: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

DICHIARAZIONE DI CONFORMITÀ

Noi, LARZEP, S.A.
Indirizzo: Avda. Urtiaga, 6
48269 Mallabia SPAIN

I Dichiariamo sotto la nostra esclusiva responsabilità che i prodotti ai quali questa dichiarazione si riferisce sono conformi quanto previsto dalle Direttive: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

VAATIMUSTEMUKAISUUSVAKUUTUS.

Me, LARZEP, S.A.
Osoite: Avda. Urtiaga, 6
48269 Mallabia SPAIN

FIN Vakuutamme yksinomaan omalla vastuullamme, että seuraavat tuotteet, joihin tämä vakuutus liittyy, ovat seuraavien Direktiivien vaatimusten mukaisia: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

VERKLARING VAN OVEREENKOMST.

Wij, LARZEP, S.A.
Adres: Avda. Urtiaga, 6
48269 Mallabia SPAIN

NL Verklaren geheel onder eigen verantwoordelijkheid dat de volgende producten, waarop deze verklaring heeft in overeenstemming zijn met de bepalingen van Richtlijn: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

FÖRSÄKRAN OM ÖVERESSTÄMMELSE

Vi, LARZEP, S.A.
Address: Avda. Urtiaga, 6
48269 Mallabia SPAIN

S Försäkrar under eget ansvar att följande produkter som omfattas av denna försäkran är i överensstämmelse med villkoren i Direktiv: 89/392/EEC, 91/368/EEC, 93/44/EEC, 93/68/EEC, 98/37/EEC

LARZEP, S.A.

Nombre y firma, name and signature, nom et signature, namn och underskrift, nimi ja nimikirjoitus, navn og underskrift, name und underskrift, naam en handtekening, nome e assinatura, nome e firma.

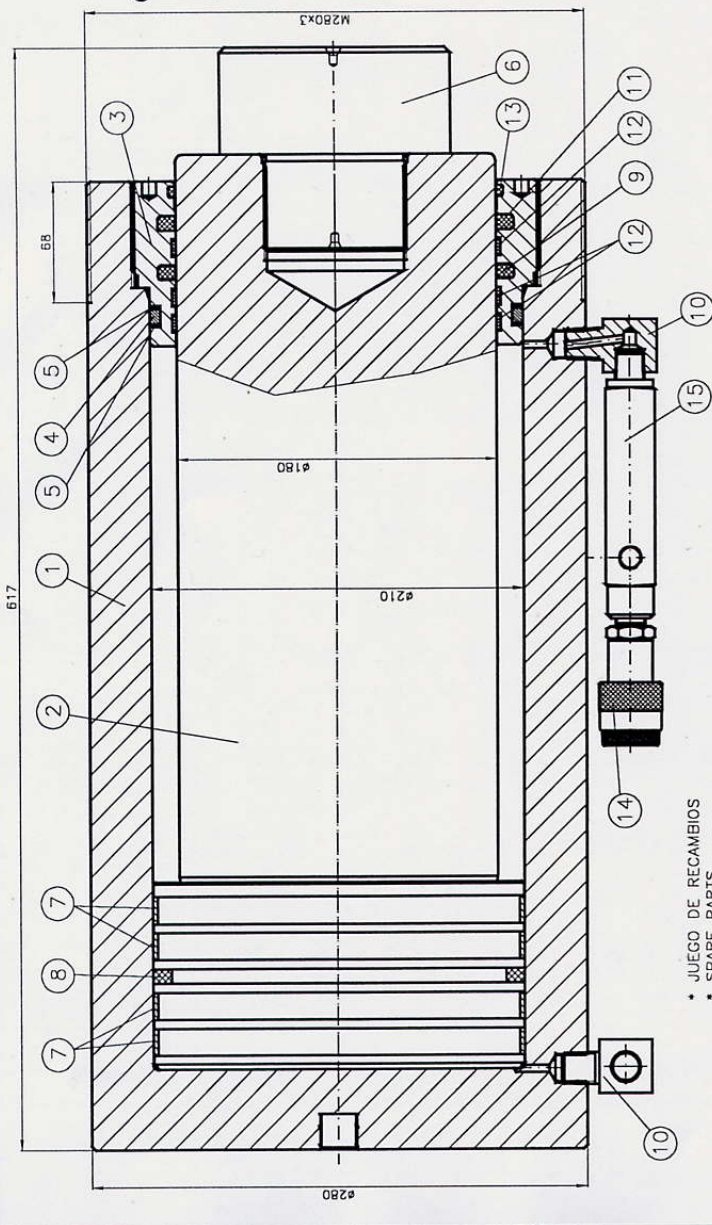
ANEXO—APPENDIX 2

CILINDRO DOBLE EFECTO PARA PRENSA EE25030

Ref. Comercial: **D25030**
 CAPACIDAD 242.3 Tm
 PRESION 700 Kg/Cm²
 ALTURA CERRADO 617 mm
 CARRERA 300 mm
 CAPACIDAD 10390.8 Cm³
 AREA 346.26 Cm²

DOUBLE ACTING CYLINDER PRESS EE25030

Commercial Ref.: **D25030**
 CAPACITY 242.3 Tm
 PRESSURE 700 Kg/Cm²
 COLLAPSED HEIGHT 617 mm
 STROKE 300 mm
 OIL VOLUME 10390.8 Cm³
 AREA 346.26 Cm²



• JUEGO DE RECAMBIOS
 • SPARE PARTS

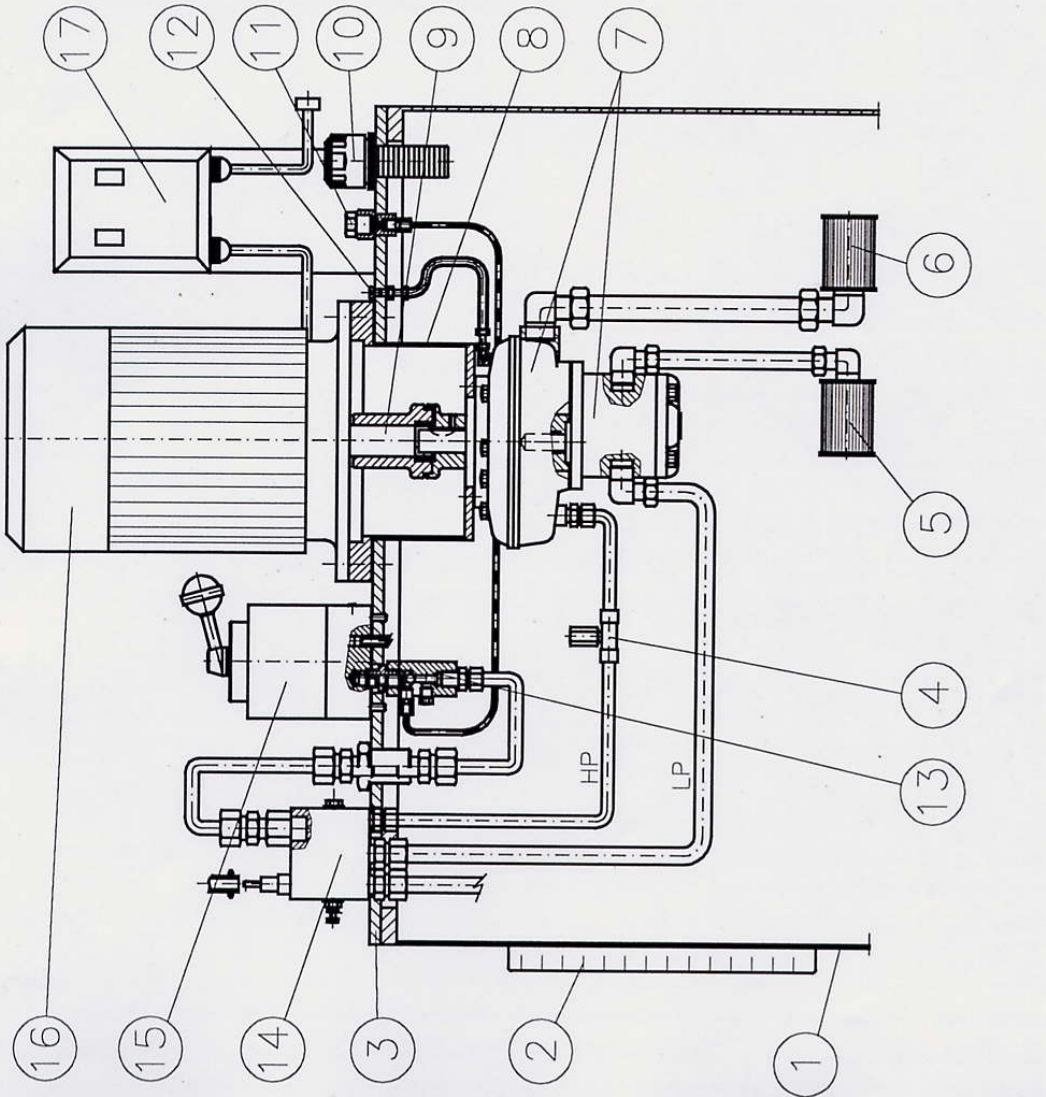
N	DENOMINACION	DENOMINATION	CODIGO CODE
1	CUERPO	BODY	52F0134
2	EMBOLO	RAM	53F0151
3	GUIA	STOP—RING	55F0061
4	TORICA	O-RING	12A0201
5	ARO DE APOYO	ANTI—EXTRUSION RING	57L0004
6	CABEZA	HEAD	56E0025
7	ARO GUIA	PISTON HEAVY—DUTY GUIDE	58F0081
8	JUNTA DE PISTON	PISTON SEAL	12B0116
9	JUNTA DE VASTAGO PRIMARIA	PRIMARY PISTON ROD SEAL	12B0122
10	CODO ADAPTADOR	ELBOW	AZ1512
11	JUNTA DE VASTAGO SECUNDARIA	SECONDARY PISTON ROD SEAL	12B0123
12	ARO GUIA	ROD HEAVY—DUTY GUIDE	58F0087
13	RASCADOR	SCRAPING ELEMENT	12H0045
14	ENCHUFE HEMBRA	COUPLER FEMALE	AZ3140
15	RACORD ALARGADOR	NIPPLE	15J0069

ANEXO-APPENDIX 3

* EN PRENSAS INCLUIDO EN ARMARIO ELECTRICO
VER ANEXO1 - 2310001
* FOR PRESSES INCLUDED IN ELECTRIC BOX
SEE APPENDIX 1 - 2310001

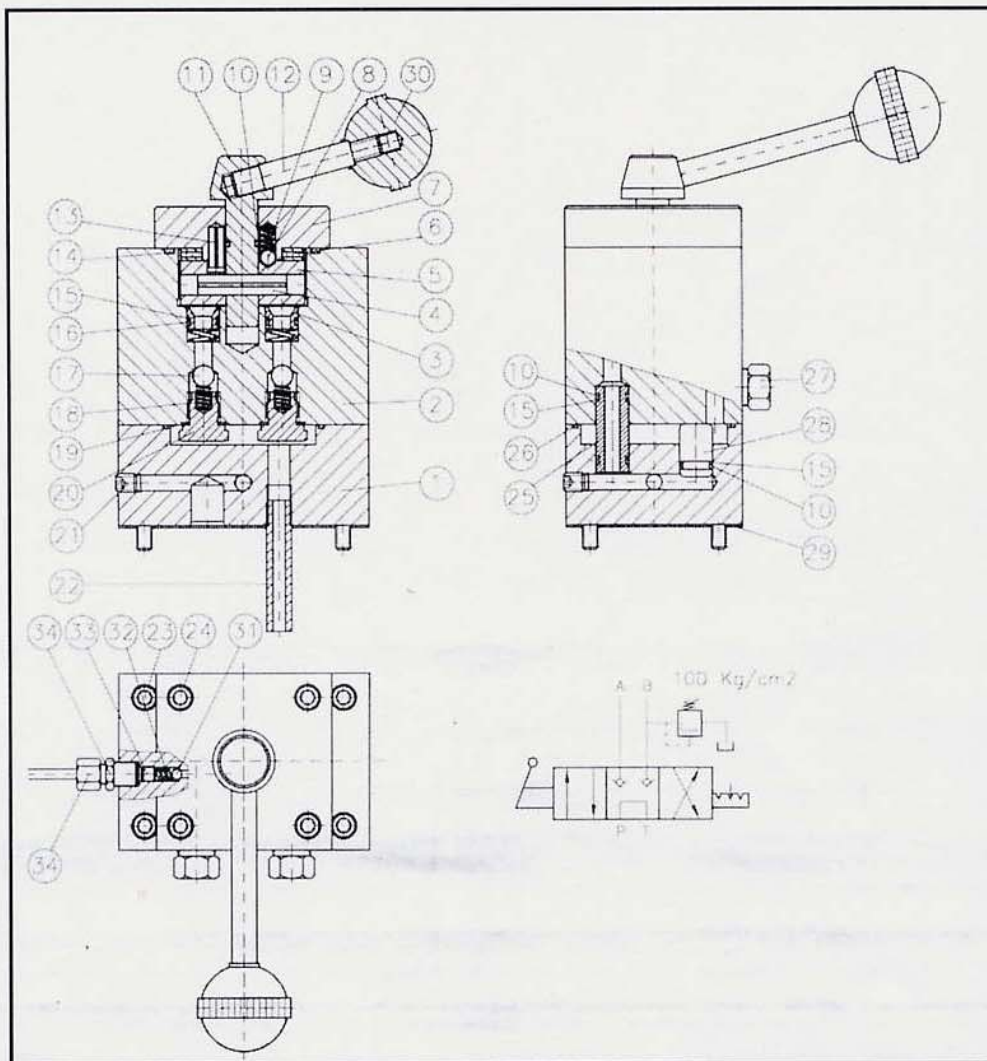
N	DENOMINACION	DENOMINATION	CODIGO CODE
1	DEPOSITO	TANK	24F0018
2	NIVEL	VISUAL LEVEL	29A0024
3	TAPA	COVER	15L0076
4	VALVULA LIMITADORA	SECURITY RELIEF VALVE	
5	FILTRO BOMBA BAJA	SUCTION STRAINER (LP)	29A0015
6	FILTRO BOMBA ALTA	SUCTION STRAINER (HP)	29A0016
7	BOMBA	PUMP	YZ8002
8	CAMPANA	BELL-HOUSING	24P0008
9	ACOPLAMIENTO	COUPLING	24O0015
10	TAPON DE LLENADO	FILLER BREATHER	15L0073
11	TOMA DE MANOMETRO	GAUGE CONNECTION	
12	TORNILLO DE PURGA	AIR PURGE BOLT	14A0209
13	DISTRIBUIDOR INTERNO	INTERNAL MANIFOLD	17B0009
14	BLOQUE VALVULAS	RELIEF VALVES BLOCK	17C0043
15	VALVULA DISTRIBUIDORA	DIRECTIONAL CONTROL VALVE	AZ7400
16	MOTOR	MOTOR	23A0014
17	DISYUNTOR	SWITCH BOX	23B0003

SITUACION REAL DE COMPONENTES
REAL COMPONENT LOCATION



LARZEP

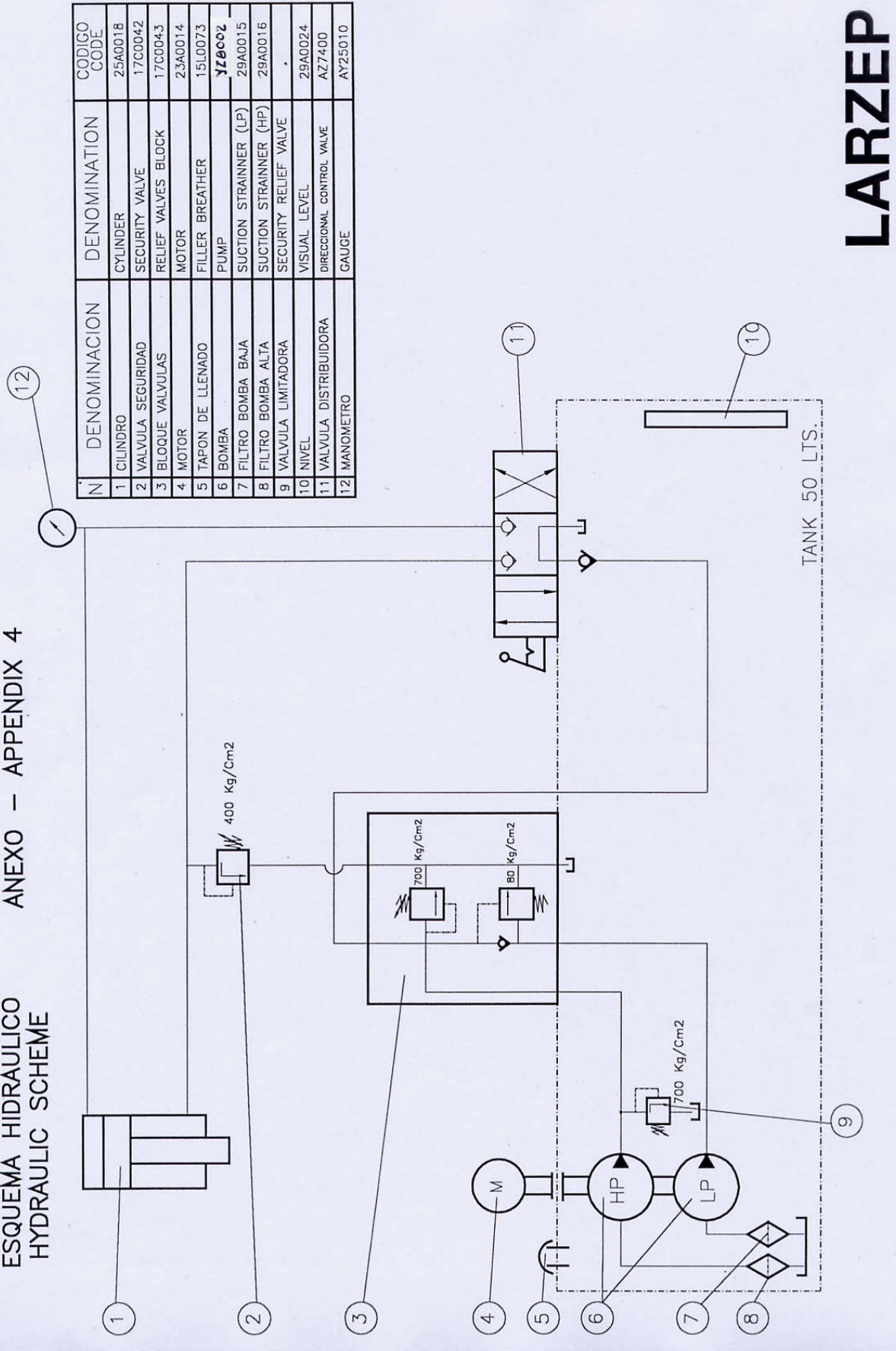
APPENDIX 3-3: Direction control valve 4/3 open center



N°	Description	Code	Q	N°	Description	Code	Q
1	Base plate	50M0002	1	19	Washer	57B0021	2
2	Body	52Y0020	1	20	Screw	15O0022	2
3	Piston	54F0002	5	21	Tap	14F0006	2
4	Elastic pin	14E0006	1	22	Release tube	18B0031	1
5	Distributor	17B0005	1	23	Screw M6x90	14A0072	4
6	Bearing	31B0005	1	24	Screw M6x20	14A0017	4
7	Cover	15L0019	1	25	Coupling	15I0107	1
8	Ball diameter 6	31A0001	1	26	Flat seal	12C0011	1
9	Spring	13D0029	1	27	Tap 3/8 NPT	AZ1182	1
10	O-ring	12A0051	9	28	Axis tap	15L0020	1
11	Axis	15I0151	1	29	Seal	12G0016	1
12	Lever	24A0024	1	30	Doorknob	24C0018	1
13	Elastic pin	14E0005	1	31	Ball diameter 4	31A0002	2
14	O-ring	12A0057	1	32	Spring	13D0039	1
15	Segment	57A0136	8	33	Stand bolt	15O0028	1
16	Spring	13D0030	5	34	Nipple	18B0032	1
17	Ball diameter 8.5	31A0005	2	35	Nipple	15J0026	1
18	Spring	13D0038	2				

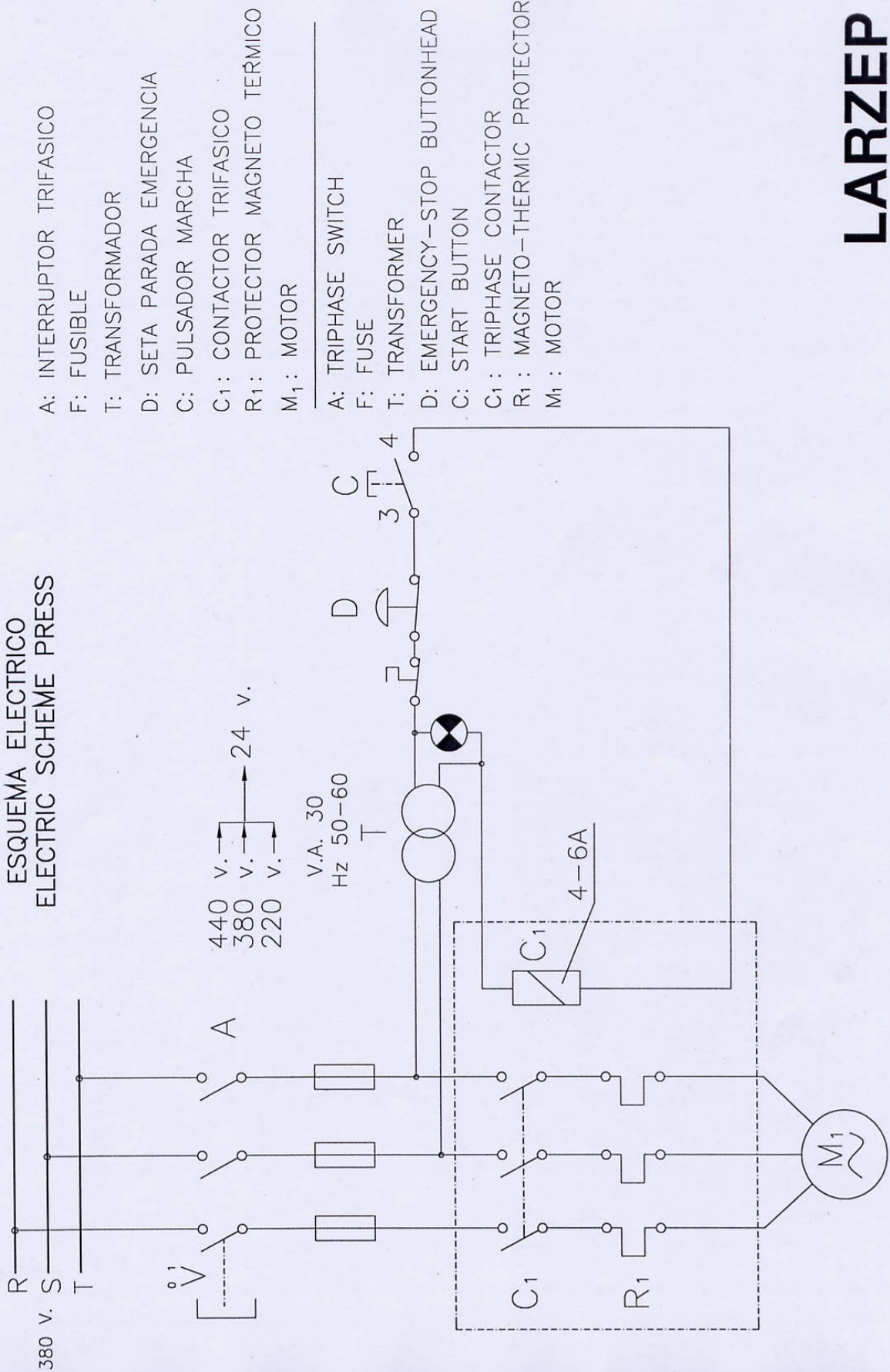
ANEXO - APPENDIX 4

ESQUEMA HIDRAULICO
HYDRAULIC SCHEME



N	DENOMINACION	DENOMINATION	CODIGO CODE
1	CILINDRO	CYLINDER	25A0018
2	VALVULA SEGURIDAD	SECURITY VALVE	17C0042
3	BLOQUE VALVULAS	RELIEF VALVES BLOCK	17C0043
4	MOTOR	MOTOR	23A0014
5	TAPON DE LLENADO	FILLER BREATHER	15L0073
6	BOMBA	PUMP	YZ002
7	FILTRO BOMBA BAJA	SUCTION STRAINER (LP)	29A0015
8	FILTRO BOMBA ALTA	SUCTION STRAINER (HP)	29A0016
9	VALVULA LIMITADORA	SECURITY RELIEF VALVE	.
10	NIVEL	VISUAL LEVEL	29A0024
11	VALVULA DISTRIBUIDORA	DIRECIONAL CONTROL VALVE	AZ7400
12	MANOMETRO	GAUGE	AY25010

ANEXO-APPENDIX 5
ESQUEMA ELECTRICO
ELECTRIC SCHEME PRESS



A: INTERRUPTOR TRIFASICO

F: FUSIBLE

T: TRANSFORMADOR

D: SETA PARADA EMERGENCIA

C: PULSADOR MARCHA

C1: CONTACTOR TRIFASICO

R1: PROTECTOR MAGNETO TERMICO

M1: MOTOR

A: TRIPHASE SWITCH

F: FUSE

T: TRANSFORMER

D: EMERGENCY-STOP BUTTONHEAD

C: START BUTTON

C1: TRIPHASE CONTACTOR

R1: MAGNETO-THERMIC PROTECTOR

M1: MOTOR