

## INSTRUCTIONS AND ILLUSTRATED PARTS MANUAL



MANUAL NO. / KATALOG NR. 317\_EN FOR LABEL DISPENSER 20680AET1V / 20680AET1H

#### **SAFETY RULES**

- 1. Before putting the machines described in this manual into service, carefully read the instructions. The starting of each machine is only permitted after taking notice of the instructions and by qualified operators.
- 2. Observe the national safety rules valid for your country.
- 3. The label dispenser described in this instruction manual is prohibited from being put into service until it has been ascertained that the sewing units which these sewing machines will be built into, have conformed with the provisions of EC Machinery Directive 2006/42/EC, Annex II B.
- 4. All safety devices must be in position when the machine is ready for work or in operation. Operation of the machine without the appertaining safety devices is prohibited.
- 5. Wear safety glasses.
- 6. In case of machine conversions and changes all valid safety rules must be considered. Conversions and changes are made at your own risk.
- 7. The warning hints in the instructions are marked with one of these two symbols.





- 8. When doing the following the machine has to be disconnected from the power supply by turning off the main switch or by pulling out the main plug.
  - 8.1 When leaving the workplace and when the work place is unattended.
  - 8.2 When doing maintenance work.
- 9. Maintenance, repair and conversion work (see item 8) must be done only by trained technicians or special skilled personnel under condsideration of the instructions.
  - Only genuine spare parts approved by UNION SPECIAL have to be used for repairs.
- 10. Any work on the electrical equipment must be done by an electrician or under direction and supervision of special skilled personnel.
- 11. Work on parts and equipment under electrical power is not permitted. Permissible exceptions are described in the applicable section of standard sheet EN 50 110 / VDE 0105.
- 12. Before doing maintenance and repair work on the pneumatic equipment, the machine has to be disconnected from the compressed air supply. In case of existing residual air pressure after disconnecting from compressed air supply (e.g. pneumatic equipment with air tank), the pressure has to be removed by bleeding. Exceptions are only allowed for adjusting work and function checks done by special skilled personnel.

#### LABEL DISPENSER MODEL AET1V / AET1H FOR SEWING INDIVIDUAL PAPER LABELS TO OPEN BAGS

#### **TECHNICAL DATA:**

20680AET1V Labels sewn to front 20680AET1H Labels sewn to back

Dimensions of

labels: min. height 80 mm

max. height 160 mm min. width 80 mm max. width 180 mm

Capacity: 20 labels / min.

Capacity of

label dispenser: up to 300 pieces (depending on thickness of üpaper)

Voltage: 230 V AC

Pneumatic

operating pressure: 6 bar

Minimum

service height: 500 mm

Maximum

service height: 1700 mm

Width of dispenser: approx. 800 mm

Weight: 35 kg

#### IMPORTANT: APTITUDE TEST OF LABELS ESSENTIAL!

Electrical hosing protected by IP65 safety standard, with programmable settings, on/off switch, pilot/warning light, emergency stop button, (when used with telescopic column, emergency button is integrated in column) automatic safety switch, fuses, label vacuumstat.

#### PNEUMATIC DATA:

The machine consists of two pneumatic cylinders to effect movement: a feeder cylinder and a transport cylinder. They include flow controls, magnetic sensors and electric valves. It also consists of vacuum ejectors to pick up and control a label, and an airflow control system. An automat governs the whole system. The air intake has a series of filters with a manual safety discharge control.

Air supply pressure: 6 bar Operating pressure: 5 bar

#### **MECHANICAL DATA:**

The label dispenser consists of the following parts:

- Telescopic base, which can be adjusted for height and rotated 360°, with mechanical lock,
- Air supply system adjustable for positioning and rate of flow.
- Variable vertical and horizontal positions of label container, which is adjustable to fit different label sizes.
- Output: 35 labels/minute.

#### ASSEMBLY:

- 1. Once all the components are assembled and before fixing the machine to the floor, position it in its approximate working location, without connecting it either to the electricity mains or to the air supply.
- 2. With both cylinders in their extended position, place the suction pads in the center of the label at the feeder entry point where the label is to be taken up.
- 3. To obtain this position, three handles permit adjustment of the height and angle of the label container in relation to the base, and the angle in relation to the axis of the entrance.
- 4. Once this is done, fasten machine to the floor.
- 5. Adjust the label container to the size of the labels to be used, load with labels and place the weight on top of them.
- 6. The container is ajdusted horizontally and vertically by means of two screws in the support so that the suction pads are in the center of the label.

Subject to change without notice / Änderungen vorbehalten

- 7. The airflow vent is adjusted so that it is some 60 mm over the first label, and the airflow adjusted to appropriate strength.
- 8. The machine is connected to the mains, and the four electrodes, a,b,c,d are checked for signals at the start or end of their respective cylinders.
- 9. The machine is connected to the air pressure. Check that the discharge valve is closed and adjust the pressure on the gauge to 5 bar.
- 10. The bag at the end of the run is placed in front of the machine at an appropriate distance to facilitate collection and positioning of the ticket once it has arrived there.

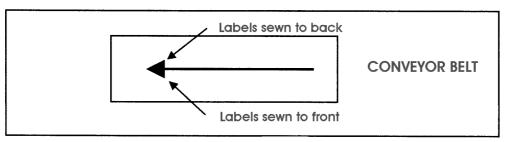


Fig. 1

#### **OPERATION:**

Once the electric current and air supply are connected, the machine is ready to operate. Load the label holder with labels and it will be ready to feed on receipt of the electrical signal (end of run) that will be activated by a product arriving from another line or machine, whether manually or automatically.

Once the signal is received, the magnetic sensors on the cylinders in the start position are activated. The automaton activates the airflow to separate the labels, the vacuum to pick up one of them and to advance the feeder cylinder to collect it. After picking up the label the feeder cylinder withdraws to its return position and the airflow is cut off. The vacuum sensor confirms that there is a label, activating the transport cylinder. When the transport cylinder is detected in the forward position, it pauses long enough for the ticket to be deposited due to the vacuum being cut off. The transport cylinder widthdraws, ending the cycle- and the machine is ready to receive another start signal.

Timing adjustments are made on the factory premises during each machine's installation test, so adjustments by the user are not necessary. However, should timing adjustments become necessary, they are to be performed by and electrician as follows:

- Open an inspection pane in the front of the automate where there are two potentio meters, Left-P0 and RIGH-P1. Using a fine Philips screwdriver reduce or increase the time desired by turning to the left (-) or right (+) respectively.
- Left-P0: time delay for releasing the label on arrival at the collection bag.
- Right-P1: Time delay for returning transport cylinder.

In case the vacuumstat does not register the label, the cycle stops, preventing the transport cylinder from advancing; the airflow separating the labels is stopped and the pilot light starts blinking. To restart the label dispenser, the label error/failure need to be rectified and the restart button pressed to reset the machine. If the pilot light blinks on switching on the current, this indicated that emergency stop button has been activated.

#### ADDITIONAL INFORMATION:

Installation Kit UNSP Part No. 29916AET is necessary for activating the label dispenser with our units 20600H..., 30600H...

#### **USE INSTRUCTIONS:**

Apply tension and air pressure to machine. Verify that air pressure controller is set to 5 bar.

Place tags in the box if it is empty.

Verify that control panel is set correctly.

The Dispenser will start automatically when a bag approaches and activates the corresponding end-race.

#### MAINTENANCE:

This is a low-maintenance machine, which requires no special care. Clean the air-intake filter before starting the label dispenser in the morning by pressing the orange button in the lower part of the transparent container and so emptying the accumulated water. At the end of each session blow air through the suction pads to clean them.

#### **GUARANTEE:**

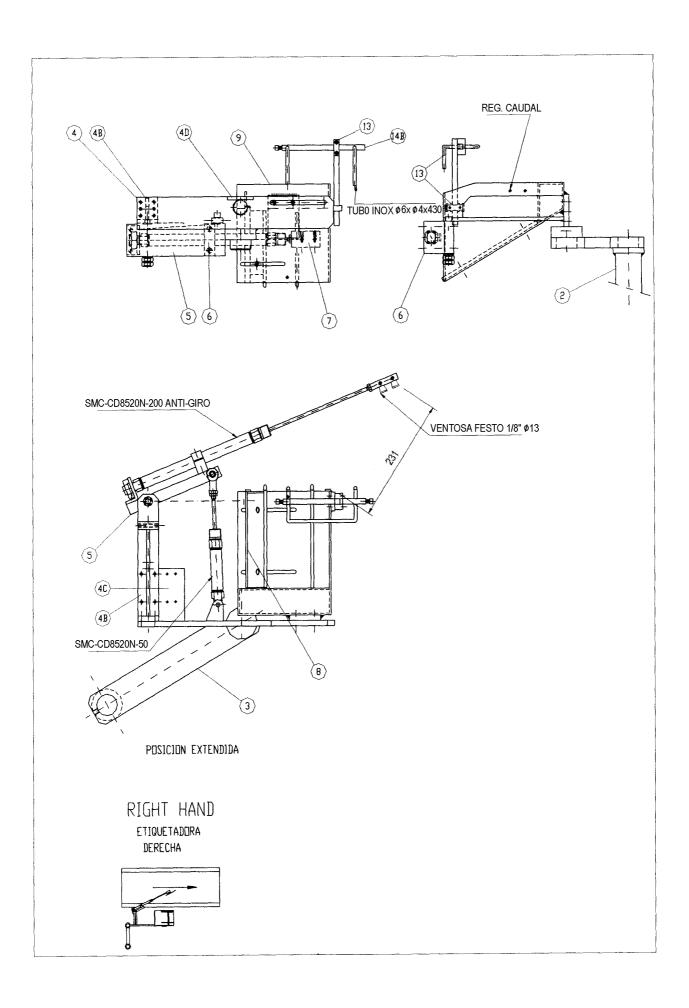
This machine is guaranteed for 6 months, operating two eight-hour shifts per day. If, during this period, the machine suffers any defect due to the materials or its construction, it could be repaired free of charge. The commercial components are unter the guarantee provided by their respective manufacturers (6 months for pneumatic components and 6 months for electrical components).

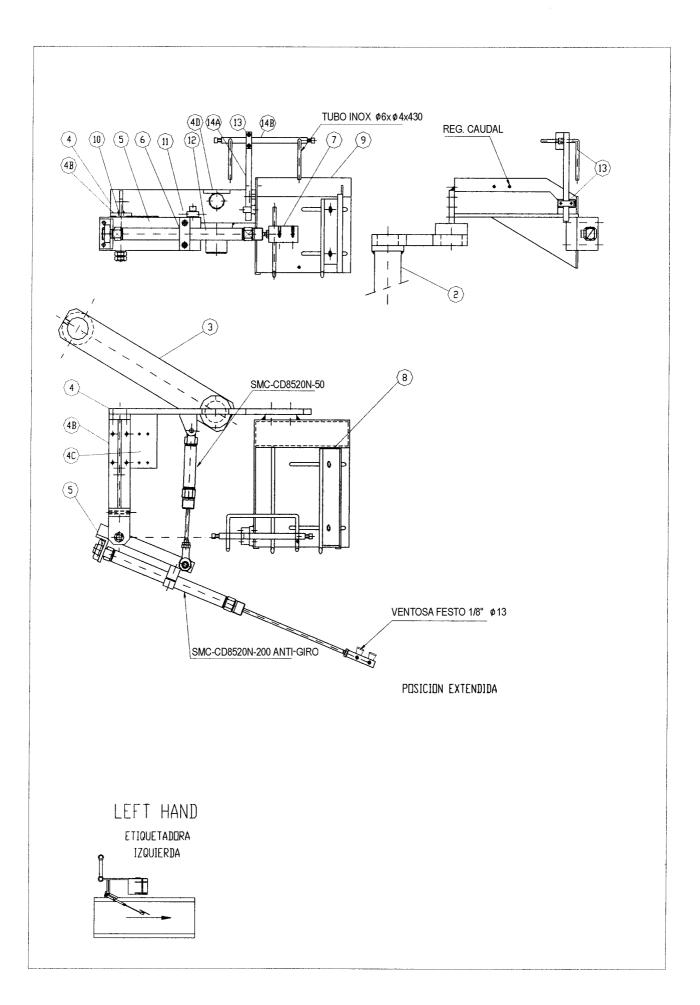
This guarantee is invalidadet in the following cases:

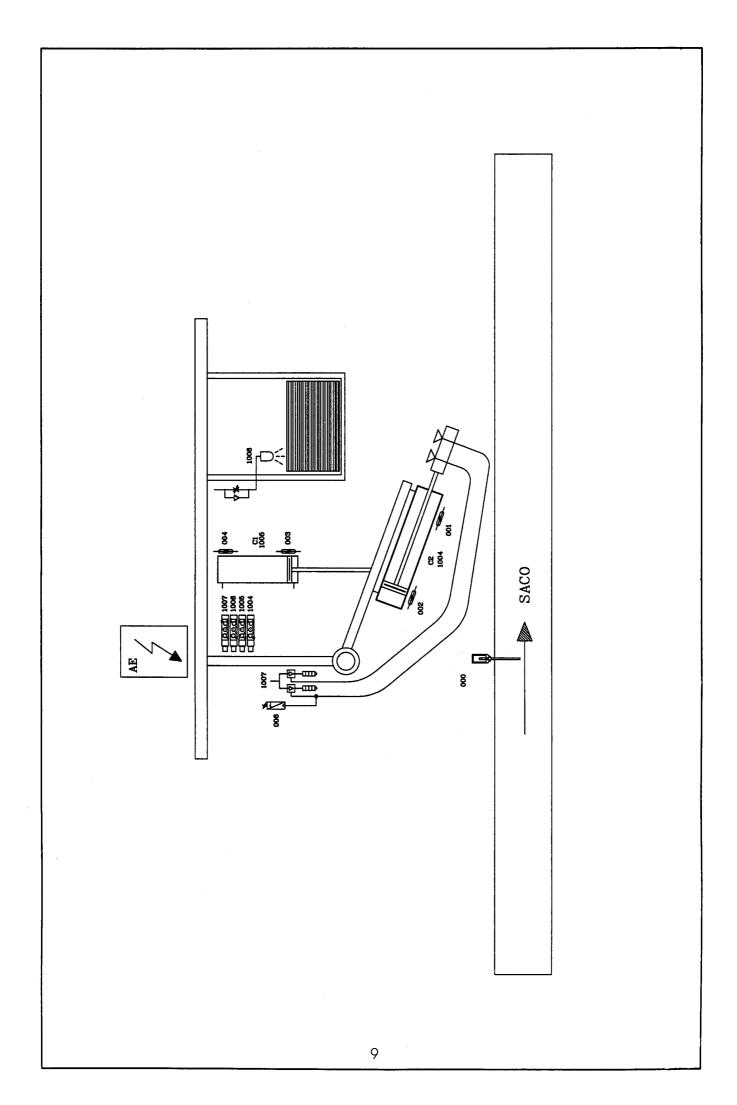
- Inappropriate use of the machine
- External impacts
- Modification of the automation program
- Air in precarious conditions of use
- Unstable or unfiltered electrical supply or with surges caused by other machines.
- Lack of maintainance.

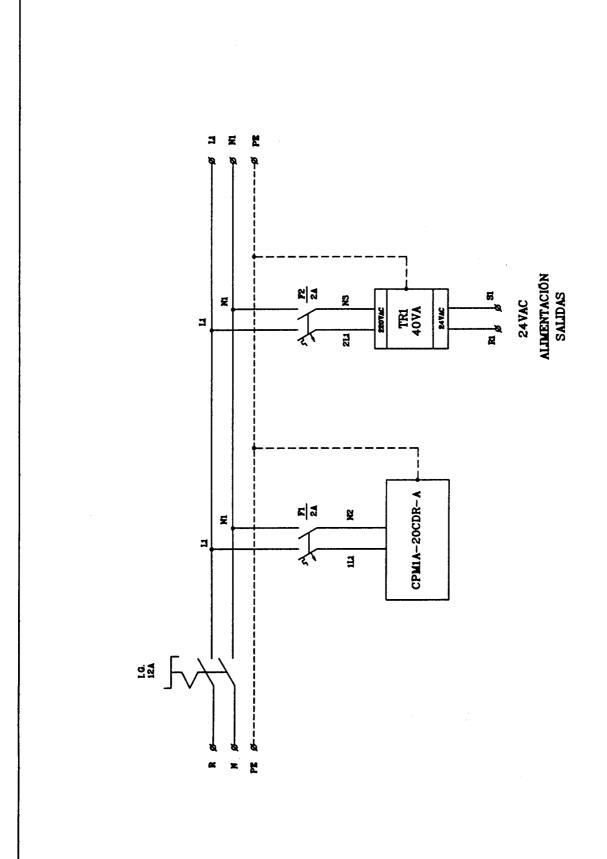
### TROUBLE SHOOTING:

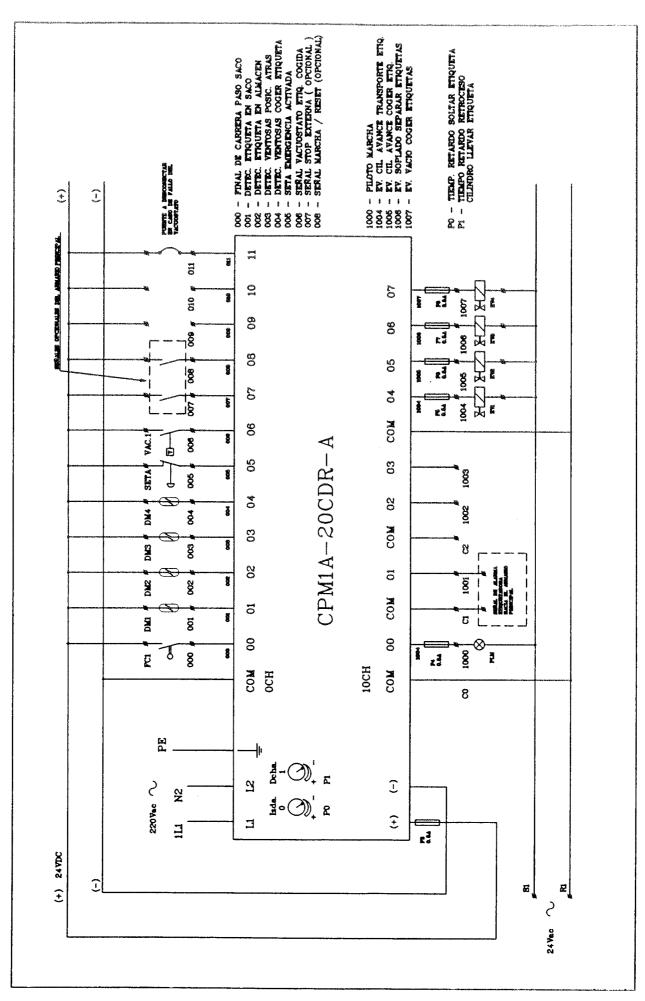
PROBLEM	CAUSE	SOLUTION	
No vacuum in suction pads Does not take up labels (blinking pilot light)	Blocked ejector Vacuum pipe badly inserted Leaking vacuum pipe Too much or little pressure in machine Faulty suction pads	Release ejector and blow out blockage Check pipe connection points Change pipe Set pressure 60 5 bar Replace suction pads or clean if blocket	
Picks up more than one label	Labels stuck together incorrect airflow	Shuffle labels on four sides Reposition air vent Regulate air flow	
Fails to start cycle	No electric supply No air pressure Incorrectly positioned micro, not activated by the bag	Position micro correctly	
Incomplete cycle	Badly positioned magnetic sensors in cylinders Faulty magnetic sensor	Reposition sensor at the end of the run so that its red LED lights up Test with a magnet	
Releases label at wrong time	Bad timing	Regulate timers	
The label arrives late	Delayed micro	Advance micro along belt	

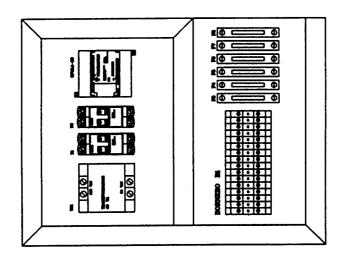


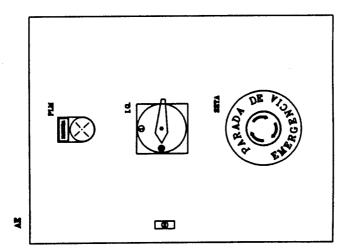


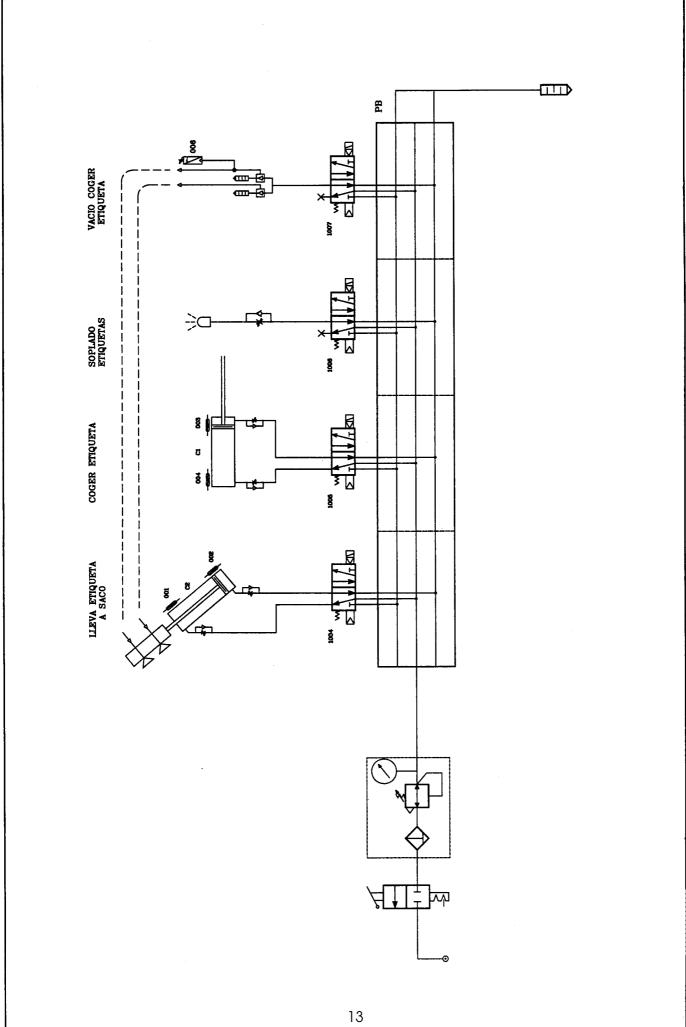












### LISTA MATERIALES ELECTRICOS PARTS LIST ELECTRICAL PARTS

No. Pieza/Plano Part/Drawing No.	Denominication	Description	Referencia Reference
	ARMARIO ELECTRICO	SWITCH BOX	CRN 43/150
	PLACE ARMARIO ELECTRICO		MM 43
IG	INTERRUPTOR GENERAL		TEL T-011 12A
	MANDO CANDADO		TEL D-704/R
F1	MAGNETERMICCO GENERAL		SIE 5SX1206-7FB C 2P 2A
GPMA-20	AUTOMATA PROGRAMABLE	CONTROL BOARD	OMR CPM1A-20CDR
F2-F3-F4-F5	BORNAS FUSIBLES		WEI ASK 1 PA
	FUSIBLES DE CRISTAL		FUSIBLE CRISTAL 1A
	PILOTO DE TENSION		TEE XB2BV6324
SETA	PULSADOR DE SETA DE EMGIENCIA	4	ZB4 BS542
	ETIQUETA DE EMEGENCIA	WARNING SIGN	ZBY8430
FC1	FINAL DE CARRERA DE VARILLA		OMR D4B-1117N

### LISTA MATERIALES NEUMATICOS PARTS LIST PNEUMATIC PARTS

No. Pieza/Plano Part/Drawing No	Denominication	Description	Referencia Reference
FRP	VALVULA DE CORREDERA RACOR RECTO 1/406 FILTRO REGULADOR DE PRESION MANOMETRO SOPORTE FILTRO REGULADOR		6060.001/4 KQ2H 06-02S EAW2000-F02-X64 K8-10-40W B20
EV1-EV2-EV3-EV4	MACHO-MACHO 1/4 PLACA BASE MULTIPLE ELECTROVALVULAS ELECTROVALVULAS CONECTOR ELECTROVALVULVA SILENCIADORES	SILENCER	2020,1/4, 1/4 \$\$5Y3-20-04-00F-Q \$Y3120-4LOZ-C6-Q \$Y3120-4LOZ-C4-Q VJ10-51-A-20
VAC-1	EYECTORES DE VACIO VENTOSAS VACUOSTATO	SILENCER	AN103-01 ZU07L VAS-15-178NBR ZSE1-01-55L-Q
C2	REGULAR DE CAUDAL EN LINEA REGULADORES DE CAUDAL DETECTOR MAGNETICO CILINDRO DOBLE EFECTO BADAS DE MONTAJE CHARNELA		EAS2000-F01 AS2201F-01-04S DC73L CD85NZ0-50-B BM2-020 C85C25
C1	ROLULA ESFERICA REGULADOR DE CAUDAL CILINDRO ANTI-GIRO DETECTOR MAGNETICO BANDAS DE MONTAJE ACCESORIO ESCUADRA		KJ8DM8 AS2201F-01-04S CD85KN20-200-B DC73L BM2-020 C85L25A

#### TAGGER ASSEMBLY TO OTHER MACHINES

If the tagger is a part integrated in a global production line, it has the possibility to communicate with other machines.

The automaton has several input and outputs without use, some of them (3E / 1S) already programmed and list for utilization.

The automaton program, designs three inputs (007, 008, 011) and a free exit potential (1001), represented on page 3 of electrical schemes. It's function are:

- Input 007: External sign for "Tagger Stop Ciclo"

When the tagger receives this sign and if the catching etiquette cycle has begun (FC1-Presence of sack E-000), the suction pads will take the tag and the cycle stops in cylinder C2 back position.

In case the above mentioned sign comes when the cylinder is going out, the cycle will move back these cylinder and the suction pads will continue sucking the tag up to receiving the order to repeat the cycle.

-Input 008: External sign for "Begin to repeat cycle".

On having this sign the tagger, which will be in position with the sucked etiquette, will prepare itself to repeat the cycle at the moment the sack presence actuates (FC1 = E 000)

### - Input 011 :

Sign always actives with electrical cable (green-yellow ó brown color) which activates in the internal program of the automaton the failure alarm on taken the etiquette during the cycle with the suction pads of the cylinder Cil-1. If the vacuostato that gives the sign of "suction etiquette" gets damaged, the machine would always give "failure alarm" on having etiquette, then as provisional solution it is possible to disconnect the above mentioned cable and the tagger will continue working, but without failure alarm on having etiquette.

Replace the vacuostato as soon as possible, in order that the tagger returns to work correctly. Also connect again the cable in the above mentioned entry.

## - Output 1001: "Tagger without alarm" sign

Sign free of potential, always activates (NC), which is sent to other machines in order to indicate that the tagger is OK, that is to say, waiting for presence of sack (FC1) to initiate a new cycle of labels or that is realizing the cycle correctly. This sign will eliminate only in next cases:

- 1.-General power switch (IG) without connecting.
- 2.-In case of the cycle of taking label, the suction pads will not be able of sucking any, the tagger will sign "failure alarm" in "taking etiquette".
  The output sign 1001will be disconnected.
- 3.-In case of the etiquettes store has emptied, the tagger will give again "failure alarm" in "taking etiquette" and it will disconnect the output 1001.

To carry out electrical connection for inputs, the wired up will be:

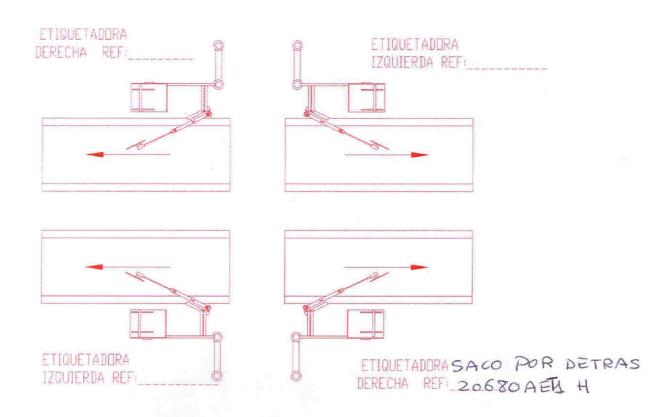
.- Normally opened contact ( NO ) free of potential ( in the machine).

.- Common = wire 
$$(+)$$
 ----> 007 wire (in tagger).  
wire  $(+)$  ----> 008 wire (in tagger).

To carry out electrical connection for Outputs, the wired up will be:

- Common output = C1 wire  $\rightarrow$  1001 wire (in tagger).

All wires can be located in the contacts (B1) of the electrical cupboard.



### **CE MARKING**

LABEL DISPENSER

MODEL: AET-1

SERIAL Nº:

MANUFACTURE YEAR:



#### **EC DECLARATION OF CONFORMITY**

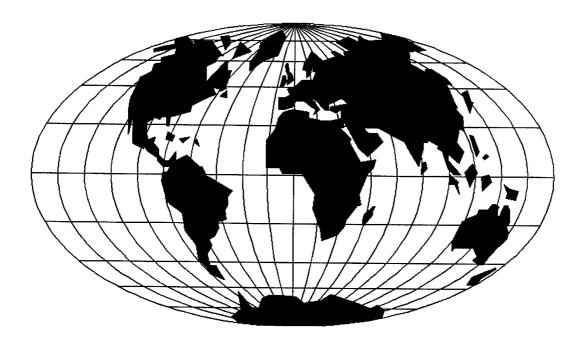
en

We hereby declare that the sewing unit described as Label Dispenser

complies with the following applicable regulations:

- EC Machinery Directive 2006/42/EC
- EC-EMC Directive 2004/108/EC
- EC Low Voltage Directive 2006/95/EC

Applied harmonized standards: EN ISO 10821, EN 28662-1, EN 55014-1, EN 55014-2, EN 60745-1 EN 61000-3-2, EN 61000-3-3



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