

DISHWASHER SERIE

45/55

INSTALLATION

USE

MAINTENANCE

OVERALL DIMENSIONS

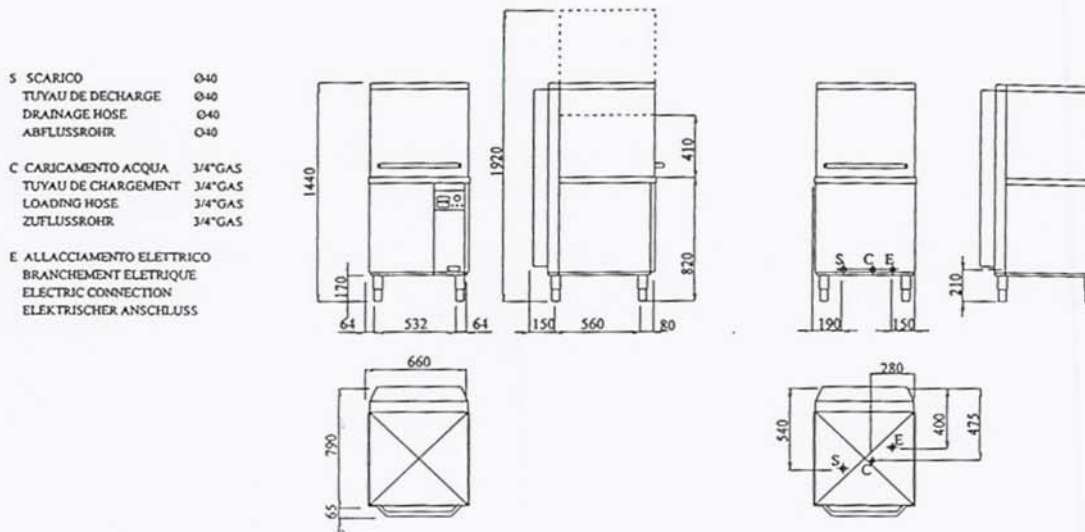


Figure 1

TECHNICAL DETAILS	45 (DP)	55(DP)
BASKETS PER HOUR	60/24	
BASKET DIMENSIONS	500 x 500 mm	
ELECTRIC FEEDING	220-1/50	220-3/50 - 380-3N/50
TOTAL POWER	7,2 kW	10,2 kW
BOILER HEATING ELEMENT	6 kW	9,0 kW
TANK HEATING ELEMENT	3 kW	
WASHING PUMP	1,1 kW	1,1 kW
WASHING PUMP DELIVERY	520 l/min	520 l/min
TANK CAPACITY	36 l	
BOILER CAPACITY	8,5 l	14,5 l
WATER PRESSURE FOR RINSING	1 + 4 bar	
WATER HARDNESS	3,5 + 14 °E	
WATER QUANTITY PER CYCLE	3,5 l	
WORKING CYCLES	60/150 +∞	
NET WEIGHT	145 Kg	152 Kg
NOISE LEVEL (according to DIN 45635)	<70 dB (A)	

Warning

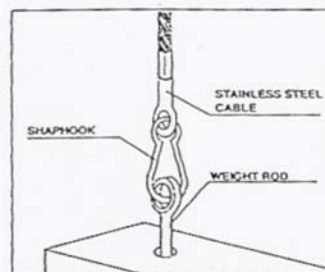
The machine is used for washing of dishes, glasses, cutlery, and trays in the kitchen.

- Before installing and using these machines, read carefully the instructions, especially the ones regarding security rules.
- Only qualified technicians following the instructions of the manufacturer should carry out installation.
- Only people trained for it should use the machine.
- In case of damage or bad working, switch it off and call an authorised technical service.
- Ask only for original spare parts.

INSTALLATION

CONNECTION OF THE WEIGHT

After removing the back-plate it is necessary to lift the hood by hand and to keep it in the highest position. Link the snaphooks of the stainless-steel cables to the eye of the weight rod. Then place the back plate again and go on with the water and electric connections.



WATER CONNECTION

The installation of the dishwasher requires the connection of the hydraulic hoses supplied with the machine, and in particular:

- 3/4" GAS threaded filling hose
- 1½" draining hose (1" for the dishwashers with drain pump)



Prior to connecting, check that the following conditions exist:

- The machine is fitted with a booster pump. Anyway, the water pressure must be at least of 1 bar. For pressure higher than 4 bar a pressure reducer must be installed.
- The water hardness must be between 3.5 ° and 14 °E (0,5-2 m moll/l); for harder water install a water softener with ionic exchange of a capacity of 16 litres of resin minimum.

ELECTRICAL CONNECTION

WARNING

- During the electric connection of equipment working with 3-phase alternating current check the right rotating direction of the pump motor!
- We recommend efficacious machine grounding.
- The manufacturer declines any responsibility if this rule is not respected. The firm also declines any responsibility for a wrong electric voltage connection.

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The machine is not supplied with a plug. It must be connected to the electrical grid only by technicians, through a plug or a main switch, in order to have the possibility to remove the machine from electrical grid during the preliminary operations or the maintenance.

The machine must be connected also to an unipotential system of compensation through a screw situated on the base of the machine and marked " $\overset{E}{\equiv}$ ".

The dishwasher's models 45 and 45 DP are conceived to work under the following specification:

- 220-240 V (3~) 50Hz

The dishwasher's models 55 and 55 DP are conceived to work under the following specifications:

- 380-415 V (3N~) 50Hz
- 220-240 V (3~) 50Hz

The factory arrangement matches the first specification; the second one can be obtained following the included electrical scheme.

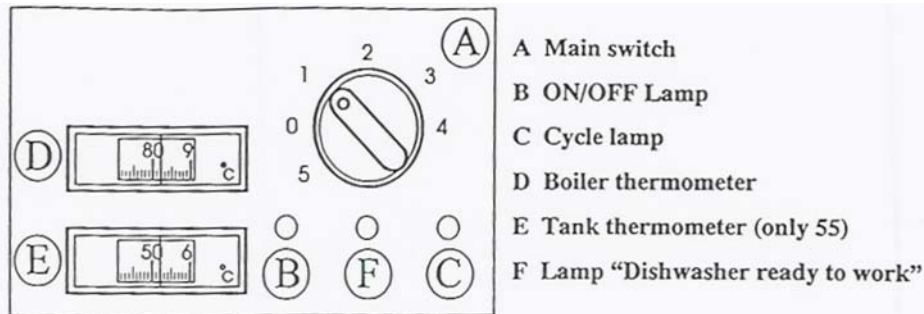
USE

PRELIMINARY OPERATIONS

Prior to switching on the dishwasher check the following conditions:

- Check that the supply and draining pipes, supplied with the machine, are connected to the main water line.
- The machine is supplied with automatic rinse aid dispenser and with an automatic detergent dispenser. The manufacturer already sets both dispensers. Be sure that the dispensers are connected to the relevant tanks filled up with liquids for industrial use with low viscosity and not foaming, otherwise it is possible to break the dispenser.
- Verify if the intake and the surface filters are in the right position.
- Verify if the overflow pipe is in the right position.
- Shut the door and, if it is present, open the external water valve.

Figure 2



WATER FILLING AND PRE-HEATING

With reference to fig.2, to switch the machine on turn clockwise the general switch (A) to position 1 shown by the lighting of the light (B).

Attention: during the installation, when the Water Air Gap is empty, switch the dishwasher on keeping the hood open in order to fill first the Water Air Gap and later the tank of the dishwasher up to the prefixed level.

Then, close the hood. Now the machine automatically switches on boiler and tank heating elements. When the prefixed temperatures are reached the lamp (F) lights on and the machine is ready to start the working cycle.

Check that the thermometer of the boiler (D) and of the tank (E) if present show the right temperature.

ATTENTION: the manufacturer at the following temperatures rates the internal thermostats:

- boiler temperature: 82°C
- tank temperature: 55°C

WORKING CYCLE

- Remove all the solid remainders from the dishes and put them inside the basket.
- Select the desired washing cycle by using the switch (A); in position 2 has the machine a short cycle, in position 3 a long one, the position 4 is for a continuous working, suitable for very dirty dishes or glasses until the operator turns the switch in position (2) or (3) in order to complete the working cycle.
- Slide the basket into the machine and close the hood; the machine automatically begins the washing and rinsing cycles, shown by the lamp (C), and automatically activates the rinse-aid dispenser. Between the washing and the rinsing there is a dripping pause. The end of the working cycle is visualised by the extinction of the lamp (C).

ATTENTION: The dishwasher is provided with the device **THERMOLOCK**, which makes the washing-cycle longer so that the water in the boiler can reach the prefixed temperature.

- To begin a new working cycle repeat the above operations.
- The detergent is added automatically at each cycle through the dispenser that has been set by the manufacturer during the testing phase. It must be adjusted following the instructions regarding the quantity given by the detergent supplier.
- Before switching the machine off, make sure that the working cycle is completely over. Then turn the general switch (A) in (0). The lamp (B) will automatically switch off.

MODELS WITH DRAIN PUMP

In the models fitted with drain pump this pump starts working in the following situations:

- When the filling valve of the W.A.G. works. This is necessary because in case of malfunction of the level probe the water can flow to the washing tank through the overflow pipe of the W.A.G.
- When the rinsing pump works. This is the normal working situation of the drain pump that drains the water from the washing tank through the overflow pipe during the filling or the rinsing cycle.

In both the situations the drain pumps start working automatically. But if you need to drain the washing tank at the end of the working day, turn the main switch (E) of the figure 2 in the position (2). Before you have to open the door and to remove the overflow pipe. During this phase you can keep the door open.

At the end do not forget to turn the main switch (A) in the position (0) after emptying the washing tank, because a long-lasting work of the drain pump without water can damage the pump itself.

SAFETY SYSTEMS

- By opening the door every function of the machine stops, except for the heating of water in the boiler and in the tank. When you close the door the interrupted function starts again.
- The level switch controls automatically the water level in the tank and allows the machine to work only if the heating elements are below the water level either in the boiler or in the tank.
- The washing pump has a thermal control, which stops it in case of thermal overload.
- An overflow pipe drains the water which has been brought in during the rinsing cycle and allows a continuous change of water in the tank. It avoids the overflowing of water in case of bad working of the level switch too.
- The W.A.G. tank is provided with an overflow pipe, which drain the exceeding water from the washing tank in case of malfunction of the level switch. It is recommended, anyway, to close the alimentation water tap when the dishwasher doesn't work.

MAINTENANCE

Before cleaning and maintenance always remove the plug.

WATER DRAINAGE AND TANK CLEANING

After switching the machine off, water must be drained out of the tank by removing the overflow pipe from its place (for the models with drain pump turn the main switch (E) to the position 2. The lamp (B) will light on.

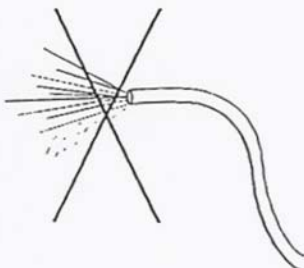
Clean the tank and remove all scraps and remainders from its bottom.

Clean accurately the filters after having removed them.

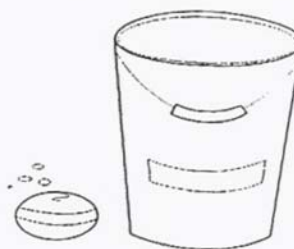
In models with drain pump clean also the filter of the pump by unscrewing the stopper on the front panel of the machine.

STAINLESS STEEL PARTS CLEANING

To clean the stainless steel parts use soaped water or usual degreasing products.



Warning: water jets sprayed directly onto the electric appliances can cause electric shocks. The use of abrasive ferrous products (like steel wool) can prime with their oxide deposits surface galvanic corrosion.



PERIODIC MAINTENANCE

Periodically check and clean both the washing and the rinsing jets-nozzles. Unscrew them and remove possible deposits.

When necessary, remove scaling and disinfect the tank using the products normally available on the market.

DRAIN PUMP

After emptying the dishwasher through the drain pump, clean the filter of the pump according the following instructions.

- Turn the switch (A) of the figure 2 in the position (1);
- Switch the electric feeding of the machine off;
- Remove the filter of the pump taking care to dry the residual water inside of the pump itself.
- Clean the filter and place it correctly in its position again.

OPERATING INSTRUCTIONS AND MAINTENANCE

PERISTALTIC DOSING PUMP WITH ON-OFF TIMER CODE NO. 5695

Peristaltic pump with quantity to be adjusted by means of a timer.

Max. Suction height: 1,5 m

Dosing time ($\pm 15\%$): between 0 and 4 sec

Off time ($\pm 15\%$): between 0 and 4 sec

Warning

IF ANY OF THE ABOVE-MENTIONED INSTRUCTIONS IS NOT RESPECTED THIS CAN DAMAGE PERSONS AND CAN CAUSE MALFUNCTIONS OR DAMAGE TO THE APPLIANCES.

When installing the dishwasher verify the following points:

- tubing material is suitable to the liquid
- the available power supply is similar to the indicated one
- suction tube is positioned in the liquid container and connected to the suction of the pump (represented on the lid with Δ)
- delivery tube is connected to the delivery of the pump (represented on the lid with ∇) and positioned on the tank injection
- the protection lid is properly positioned in its seat

IMPORTANT: Before carrying out any operation on the pump, disconnect the power supply on the dosing pump!

Regulation of the dosing time

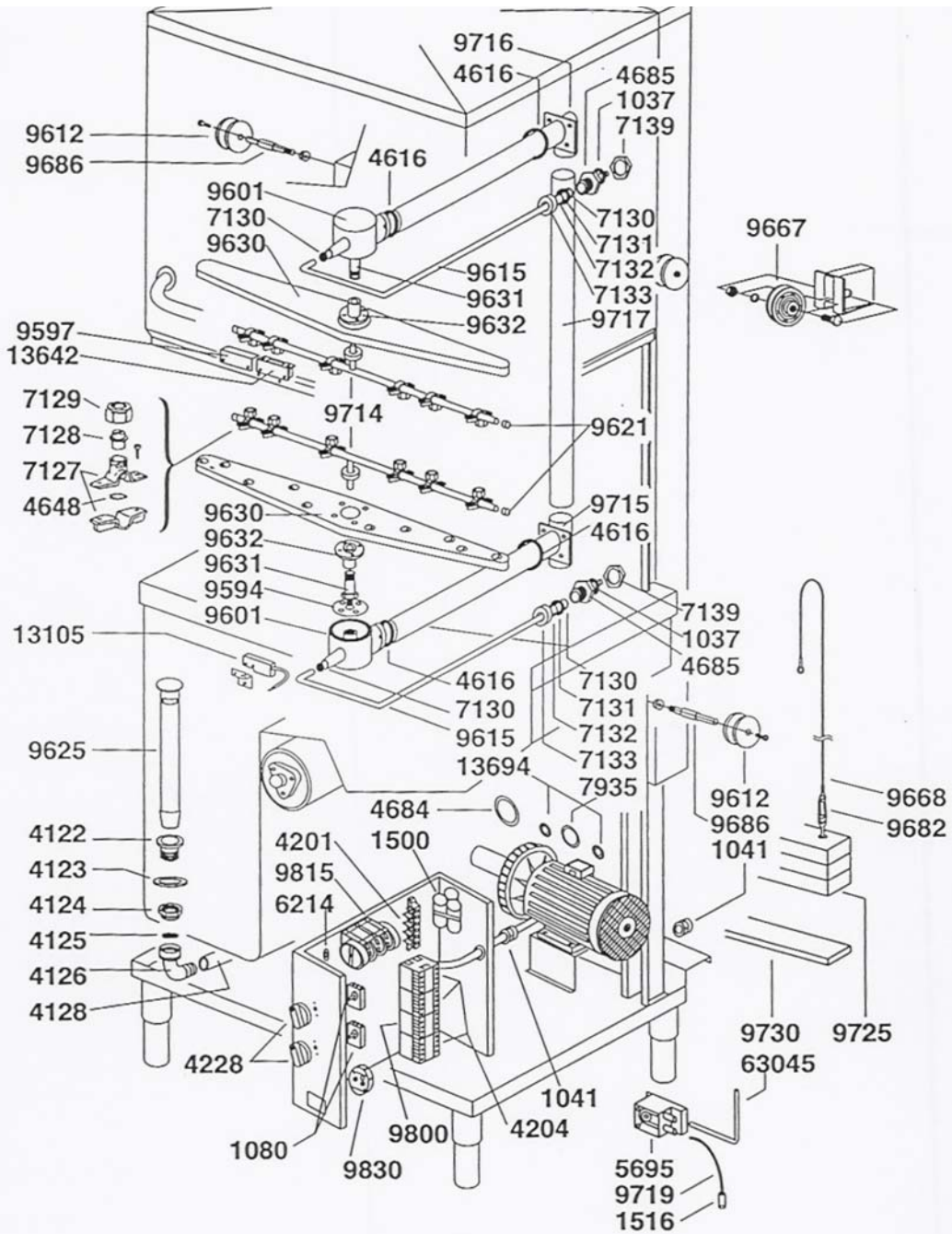
The pump works automatically if electricity is present on the supply cable and makes continuously a cycle of pause-working.

If the trimmer has rotated anticlockwise the pump is always off, if rotated clockwise the pump is always on.

In the equidistant the cycle of pause-working lasts 3 seconds.

Tubing substitution CODE NO. 5696

- Disconnect the pump from the power supply.
- Take off the transparent lid on the hydraulic group.
- In order to dismount the tube turn the roll holder so that the rollers are on a vertical line.
- Remove from its seat the connection on the left side of the pump, alternatively pull the tube out of its seat and manually rotate the roll holder clockwise until it is possible to extract the right hand side connection from its position.
- In order to mount the tube turn the roll holder so that the rollers are on a horizontal line.
- Insert the connection in its seat on the left of the pump with the curved side towards the floor.
- Alternatively push the tube into its seat and manually rotate the roll holder clockwise until it is possible to insert the right hand side connection into its seat.
- Insert the protection lid starting from the top, with the shear facing the pump and pushing slightly on the sides so to hear the click.



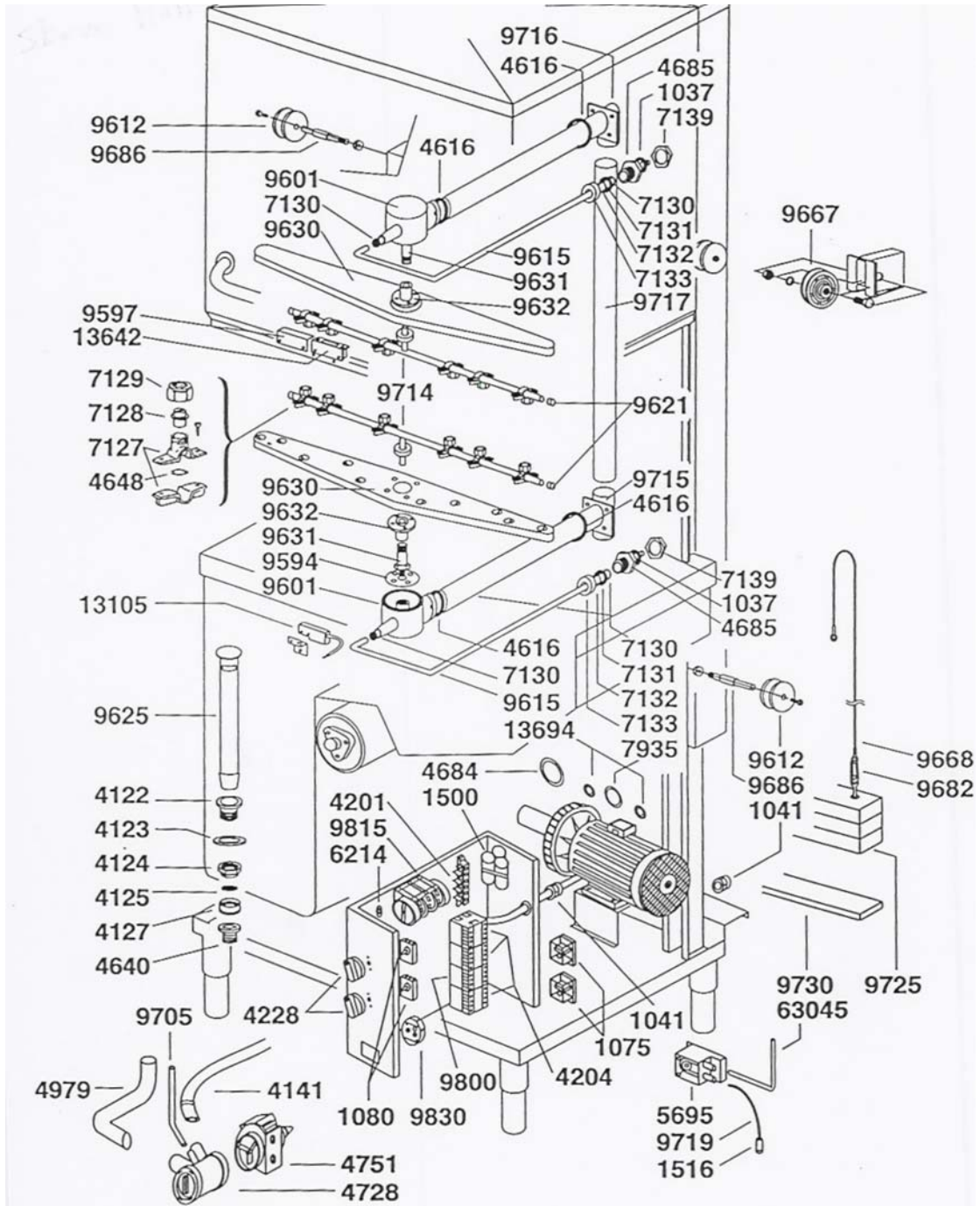
Chef Quip

Modello
Modelle
Model
Model

45 - 55

Dis. N° EE.AT.013

Data
Date
Datum
Date
17-02-99



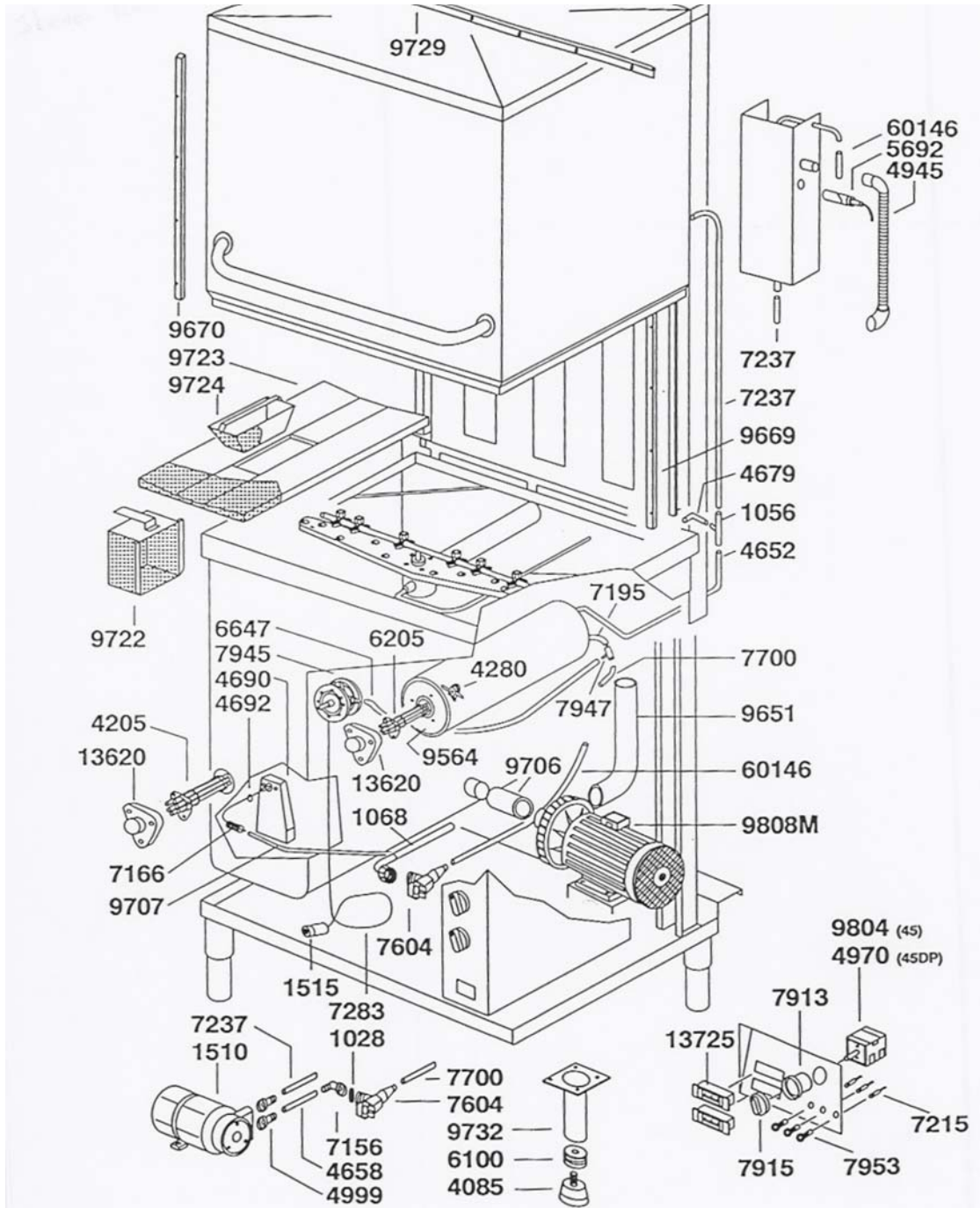
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V 45DP - 55DP

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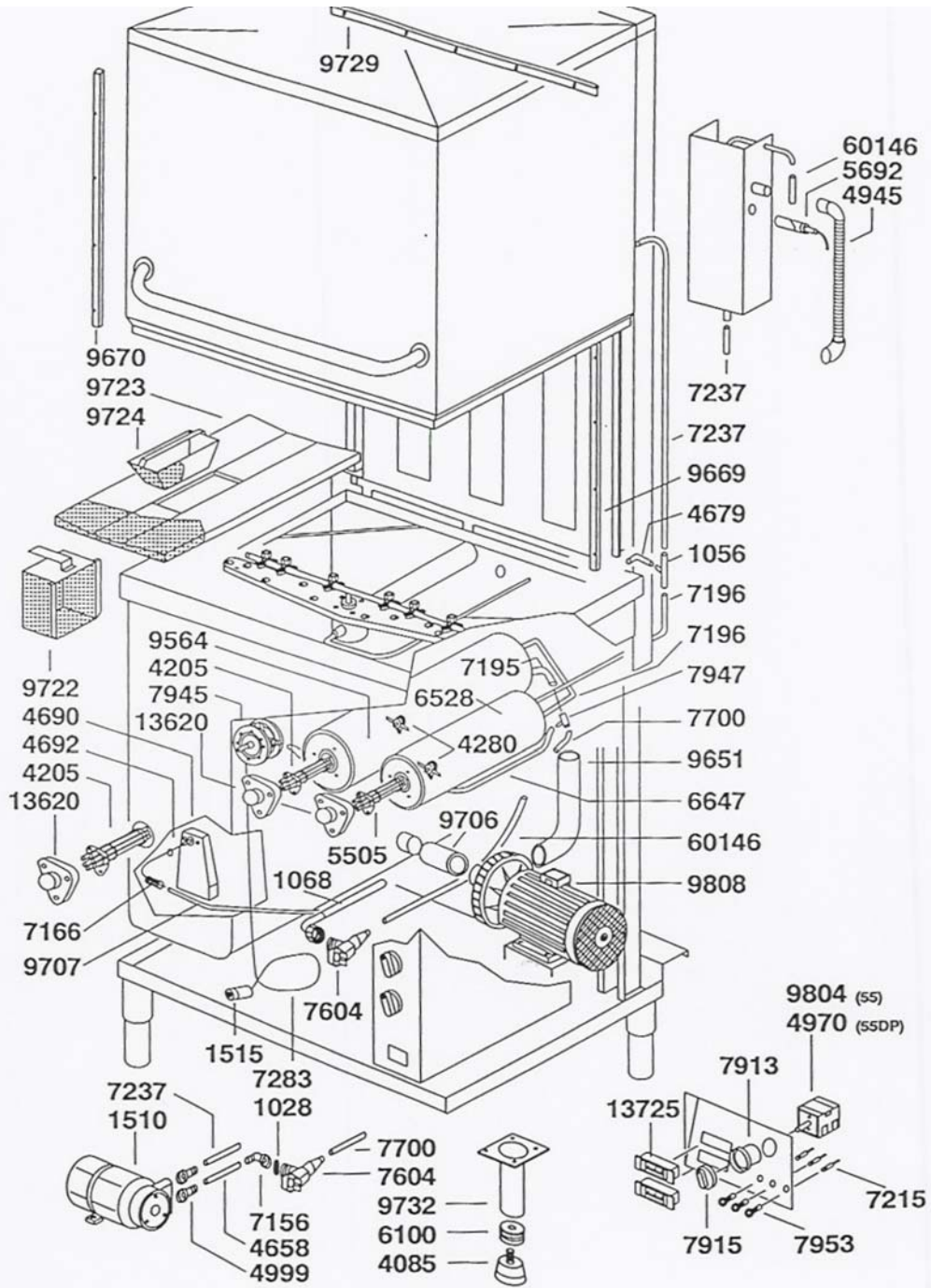
Chef Quip

Modelo
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45 - 45 DP

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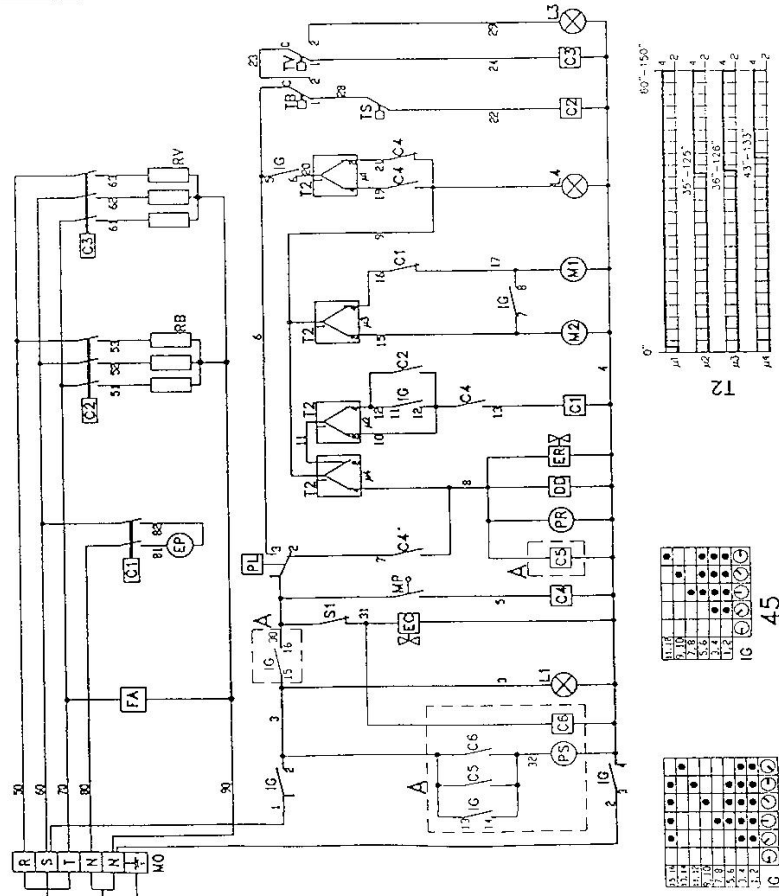
55 - 55 DP

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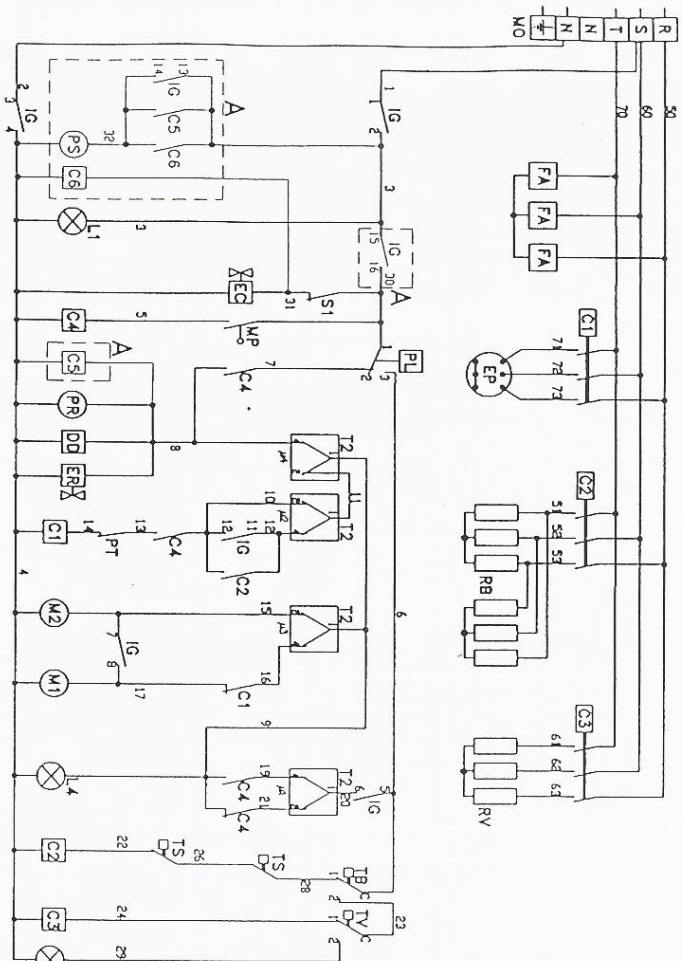
IG	INTERRUPTORE GENERALE HAUPTSCHALTER	INTERRUPTEUR GENERAL MAIN SWITCH
L1	SPINA PER LA POMPA DI SCARICO MAIN PUMP CONNECTOR	SPINA PER LA POMPA DI SCARICO MAIN PUMP CONNECTOR
RV	RESISTENZA VASCA TANK HEATER	RESISTANCE CUVE TANK HEATER
RB	RESISTENZA BOLLER BOLLERHEIZDREHER	RESISTANCE SURCHAUFFEUR BOLLER HEATER
PL	PRESSOSTATO LIVELLO NIVEAUPUCKSWITCHER	PRESSOSTAT NIVEAU LEVEL PRESSTURE SWITCH
EP	ELETTROPOMPA ELEKTROPUMPE	ELECTROPOMPE ELECTRIC PUMP
T2	TIMER CICLO SPERREZEITUNG TIMER	CYCLE TIMER SERVICE CONTACTOR
C4	CONTATTORIO DI SERVIZIO KONTAKT	CONTACTEUR DE SERVICE SERVICE CONTACTOR
TB	TERMOSTATO BOLLER BOLLER-THERMOSTAT	THERMOSTAT SURCHAUFFEUR BOLLER THERMOSTAT
TV	TERMOSTATO VASCA TANK-THERMOSTAT	THERMOSTAT CUVE TANK THERMOSTAT
M2	MICROMOTORE LENTO LANGSAMER MIKROMOTOR	MICROMOTEUR LENT SLOW MICROMOTOR
L4	SPIN CICLO KONSOLELEICHTE SPINLEITUNG	SPIN LIGHT CYCLE LAMP
FA	FILTRO ANTIURTO SCHWINGEN	VIBRATION SUPPRESSOR RADIO INTERFERENCE SUPPRESSOR
DD	POSIZIONE SENSITIVA WASCHMITTELSSENSIBEL	DOSEUR DETECTANT DETERGENT DISPENSER
TS	TERMOSTATO SICUREZZA SICHERHEITSTHERMOSTAT	THERMOSTAT DE SECURITE SAFETY THERMOSTAT
MO	MORSETTIERA NETZSCHAUSSKLEIMEN	BONNE DE CONNECTION MAIN TERMINAL BOARD
MP	MICROINTERRUPTORE PORTA TUERSCHALTER	MICROINTERRUPTEUR PORTE DOOR MICROSWITCH
C1	CONTATTORIO ELETTROPOMPA SCHLUSSELEKTROPUMPE	ELECTROPOMPE CONTACTORS ELECTROPUMP CONTACTORS
C2/3	CONTATTORIO ELETTROVALVOLA ELECTROVALVEN SCHWELZDREHER	ELECTROVALVE CONTACTORS HEATERS CONTACTORS
M1	MICROMOTORE VELOCE SCHNELLER MIKROMOTOR	MICROMOTEUR RAPIDE FAST MICROMOTOR
PT	PROTEZIONE TERMICA THERMISCHE SCHUTZ	PROTECTION THERMIQUE THERMAL PROTECTION
L3	SPIN "MACCHINA PRONTA" KONTROLLEUCHTE "BETRIEBSBEREIT"	"MACHINE PRÊTE" "MACHINE READY" WARNING LAMP
C5/6	CONTATTORIO POMPA SONDRICO LAUGENPUMPENKONTAKT	CONTACTEUR POMPE DE VIDANGE DRAIN PUMP CONTACTOR
PS	POMPA DI SCARICO ABFLUSSPUMPE	DRAIN PUMP DRAIN PUMP
ER	ELETTROVALVOLA RISCACQUO NACHSPÜLVENTIL	ELECTROVALVE DE RINÇAGE RISE VALVE
EC	ELETTROVALVOLA CARICO W.A.G. FÜLLUNGSVENTIL W.A.G.	ELECTROVALVE DE CHARGE W.A.G. W.A.G. INLET VALVE
S1	SENSORE LIVELLO MASSIMO W.A.G. NIVEAUFÜHLER W.A.G.	CAPteur NIVEAU MAXIMUM W.A.G. W.A.G. MAXIMUM LEVEL SENSOR
PR	POMPA AUMENTO PRESSIONE DRUCKSTEUERUNGSPUMPE	POMPE DE RINÇAGE BOOSTER PUMP

VERSIONE CON POMPA DI SCARICO
MODEL WITH DRAIN PUMP
A



COLA	17 - 02 - 99	MGS	45 - 45 (DP)
ORUM		MOD	
DATE		MOD	
DESCRIZIONE	EL.AT.131	MOD	
DESIGN. N.°			
DESIGN. N.°			

COLLEGARE IL CAVO DI ALIMENTAZIONE AD UN SECONDIRIORE A PARTE - RELIER LE CABLE D'ALIMENTATION A UN INTERRUPTEUR MURAL - CONNECT THE POWER-SUPPLY CABLE WITH A WALL DISCONNECTOR - BAUSSETS EST EN HAUPTSCHALTER ZU INSTALLIEREN

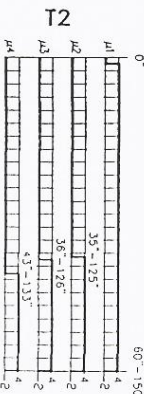


55 DP

3.14	●	●	●	●	●	●	●	●	●
3.14	●	●	●	●	●	●	●	●	●
1.18	●	●	●	●	●	●	●	●	●
3.6	●	●	●	●	●	●	●	●	●
7.8	●	●	●	●	●	●	●	●	●
1.2	●	●	●	●	●	●	●	●	●
1.2	●	●	●	●	●	●	●	●	●
1.2	●	●	●	●	●	●	●	●	●

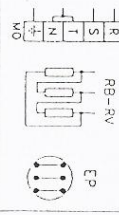
55

11.12	●	●	●	●	●	●	●	●	●
8.10	●	●	●	●	●	●	●	●	●
7.8	●	●	●	●	●	●	●	●	●
3.6	●	●	●	●	●	●	●	●	●
1.4	●	●	●	●	●	●	●	●	●
1.2	●	●	●	●	●	●	●	●	●
1.2	●	●	●	●	●	●	●	●	●



VERSIONE CON PUMP DI SCARICO
MODEL AVCC PUMP OR VANDIC
MODEL WITH DRAIN PUMP

VARIANTI DA
APPORTARE AL
COLLEGAMENTO
BASE DI 380/415V 3N
A DE TENSIONS D'ALI-
MENTATION DIFFERENTES
MODIFICAZIONI DA
APPORTARE AL
COLLEGAMENTO
BASE DI 380/415V 3N
TO A DIFFERENTI
SUPPLY VOLTAGE



LEGGERE IL CAVO DI ALIMENTAZIONE AD UN SEZIONATORE A PARTE - RADERE LE CAVI D'ALIMENTAZIONE A UN INTERRUPTORE MODEL - CONNECT THE POWER-SUPPLY
CABLE WITH A WALL DISCONNECTOR - BUSTERS IST BN HAUPTSCHALTER ZU INSTALLIEREN

IG	INTERRUTTORE GENERALE HAUPTSCHALTER	INTERRUPTEUR GENERAL MAIN SWITCH
L1	SPINA INTERRUTTORE GENERALE HAUPTSCHALTERLAMPE	VOYANT LUMINEUX G MAIN-SWITCH WARNING-LAMP
RV	RESISTENZA VASCA VANNELEKÖRPERER	RESISTANCE CUVE TANK HEATER
RB	RESISTENZA BOILER BOILERLEKÖRPERER	RESISTANCE SURCHAUFFEUR BOILER HEATER
PL	PRESSOSTATO INNEA NINZADRUCCOMMETER	PRESSOSTAT INNEAU ELECTROBOILER SWITCH
EP	ELETTROPOMPA ELEKTROPUMPE	ELECTROPUMP ELECTROPUMP
T2	TIMER CICLO SPULEVORGANG TIMER	CYCLE TIMER
C4	CONTACTORE DI SERVIZIO KONTAKTE	CONTACTEUR DE SERVICE SERVICE CONTACTOR
TB	TERMOSTATO BOILER BOILERTEMPERATUR	HERMOSTAT SURCHAUFFEUR BOILER THERMOSTAT
TV	TERMOSTATO VASCA TANKTEMPERATUR	HERMOSTAT CUVE TANK THERMOSTAT
M2	MICROMOTORE TENDI LANCIAMER MICROMOTOR	MICROMOTEUR TENDI SLOTTMOTOR
L4	SPIN CICLO KONTROLLEUCHTE SPULEVORGANG	VOYANT LUMINEUX CYCLE CYCLE LAMP
FA	FILTRO ANTIRISUBORO STOPSCHUTZLEUCHTUNG	FILTRE ANTI PERTURBATION RADIO INTERFERENCE SUPPRESSOR
DD	POSIZIONE CATERPILLER WASCHWITZ DÜSENREGBAR	DOSEUR D'ETERGENT ETERGENT DISPENSER
TS	TERMOSTATO SICUREZZA SICHERHEITSTHERMOSTAT	HERMOSTAT DE SECURITE SAFETY THERMOSTAT
MO	MORSETTIERA NETZANSCHLUSSKLEMMEN	BOITE DE CONNECTION MAIN TERMINAL BOARD
MP	MICROMOTORE PORTA TÜRSCHALTER	MICROMOTEUR PORTA DOOR MICROSWITCH
C1	CONTACTORE ELETTROPOMPA SCHALTSCHUTZ ELEKTROPUMPE	CONTACTEUR ELECTROPUMPE ELECTROPUMP CONTACTORS
C2/3	CONTACTORE RESISTENZE SCHALTSCHUTZ HEIZKÖRPERER	CONTACTEUR RESISTANCE HEATERS CONTACTORS
M1	MICROMOTORE VELOCE SCHNELLER MICROMOTOR	MICROMOTEUR RAPIDE FAST MICRO MOTOR
PT	PROTEZIONE TECNICA TECHNISCHE SCHUTZ	PROTECTION TECHNIQUE TECHNIQUE PROTECTION
L3	SPINA "MAGNETICA FRONTA" KONTROLLEUCHTE "BEIHERBEREIT"	VOYANT "MAGNETIC FRONTA" "MAGNETIC READY" MARKING LAMP
C5/6	CONTACTORE POMA SCARICO LAUNCHPUMPENKONTAKT	CONTACTEUR POMPE DE VIDANGE DRAIN PUMP CONTACTOR
PS	POMPA DI SCARICO ABFLUSSPUMPE	POMPE DE VIDANGE DRAIN PUMP
ER	ELETTROPOMPA RISCACQUO NACHSPÜLSPUMPE	ELECTROPUMPE DE RINÇAGE RINSE VALVE
EC	ELETTROPOMPA CARICO W.A.G. FÜLLUNGSPUMPE W.A.G.	ELECTROPUMPE DE CHARGE W.A.G. W.A.G. FILL VALVE
S1	SENSORE LIVELLO MASSIMO W.A.G. INNEAUFHÄLTER W.A.G.	CAPTEUR NIVEAU MAXIMUM W.A.G. W.A.G. MAXIMUM LEVEL SENSOR
PR	POMPA AUMENTO PRESSIONE DRUCKSTIEGERUNGSPUMPE	POMPE DE RINÇAGE BOOSTER PUMP

DATA 17 - 02 - 99
REVISIONE N° EL.A.T.132
DISEGNO MDO
VERIFICA MDO
MOD. 55 - 55 (DP)