

① Fitted depending on features

Designation
Connection Diagram
GV451 N/O mit FRZ, WW

LCS
EN

Document No.
5600 0000137679
Material No. 9000190408

Rev
A
Sheet-No.
1
of 1

Customer service test programme

1. Selecting the model coding:

- Turn the rotary switch (S0) to position “5”.
- Press main switch and hold down for at least 3 sec.
- The current model coding is displayed via LEDs L1 – L3 for as long as the main switch is held down.

2. Reading out the fault memory:

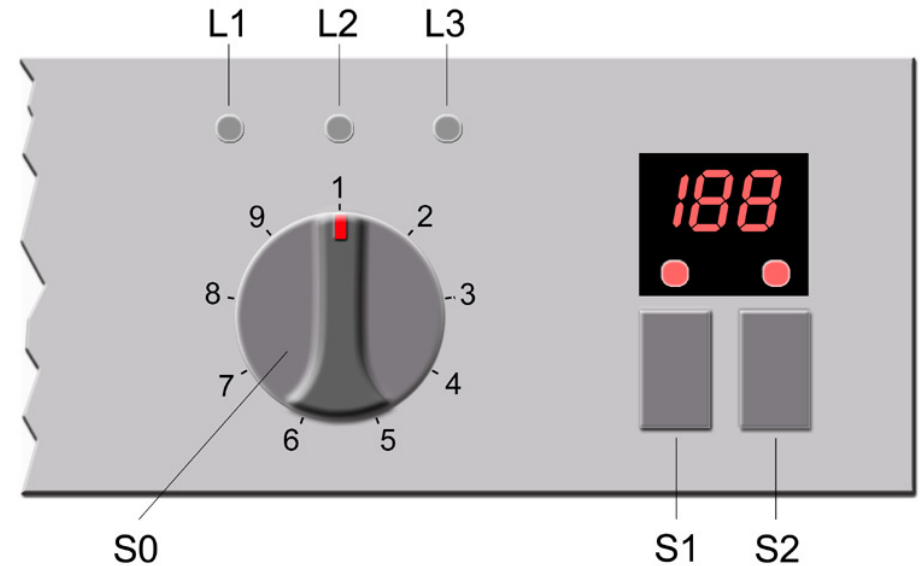
- When the main switch is released, the special programme “P0” Read out fault memory is selected.
- After 5 sec. the fault memory of the last rinse cycle is displayed via LEDs L1 – L3.
- If **no** fault occurred in the last 8 rinse cycles, LEDs L2 and L3 flash slowly (0.5 Hz)

Only control units with display:

- If **no** fault occurred in the last 8 rinse cycles, LEDs L2 and L3 flash slowly (0.5 Hz) and “E0” is displayed. **No** other fault memory can be read out.
- If a fault was detected, the fault memory of the last 8 rinse cycles can be read out by pressing and releasing one of the buttons S1 or S2. When the button is pressed, the rinse cycle is displayed and when the button is released, the associated fault (see table) is displayed.

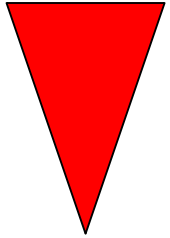
3. Starting the customer service test programme

- Read out from the fault memory position, turn the rotary switch (S0) clockwise to position “6”
- The customer service test programme starts automatically
- LED L3 flashes during the customer service test programme
- The current position in the customer service test programme is displayed (only control units with display)
- Each change in state of the position switch for the water points is indicated by all LEDs lighting up briefly (function test of the LEDs and the position switch)
- A fault which has occurred is indicated immediately via the display or the LEDs L1 – L3 (heating fault after 60 minutes)
- If several faults occur, only the fault with the highest value is displayed
- Following each repair a customer service test programme must be run to detect any other faults.



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Fault code:

| Fault code with display | Fault code without display | | | Fault type | Value |
|-------------------------|----------------------------|----|----|--|---|
| | L1 | L2 | L3 | | |
| E01 | ○ | ○ | ● | Heating fault |  |
| E02 | ○ | ● | ○ | NTC fault | |
| E03 | ○ | ● | ● | Filling fault | |
| E04 | ● | ○ | ○ | Water points cannot be positioned | |
| E05 | ● | ○ | ● | --- | |
| E06 | ● | ● | ○ | Fault at the Aquasensorsystem or equipment variant without Aquasensor (no fault) | |
| E07 | ● | ● | ● | --- | |

○ = LED off ● = LED flashes quickly (2 Hz)

Sequence of the customer service test programme:

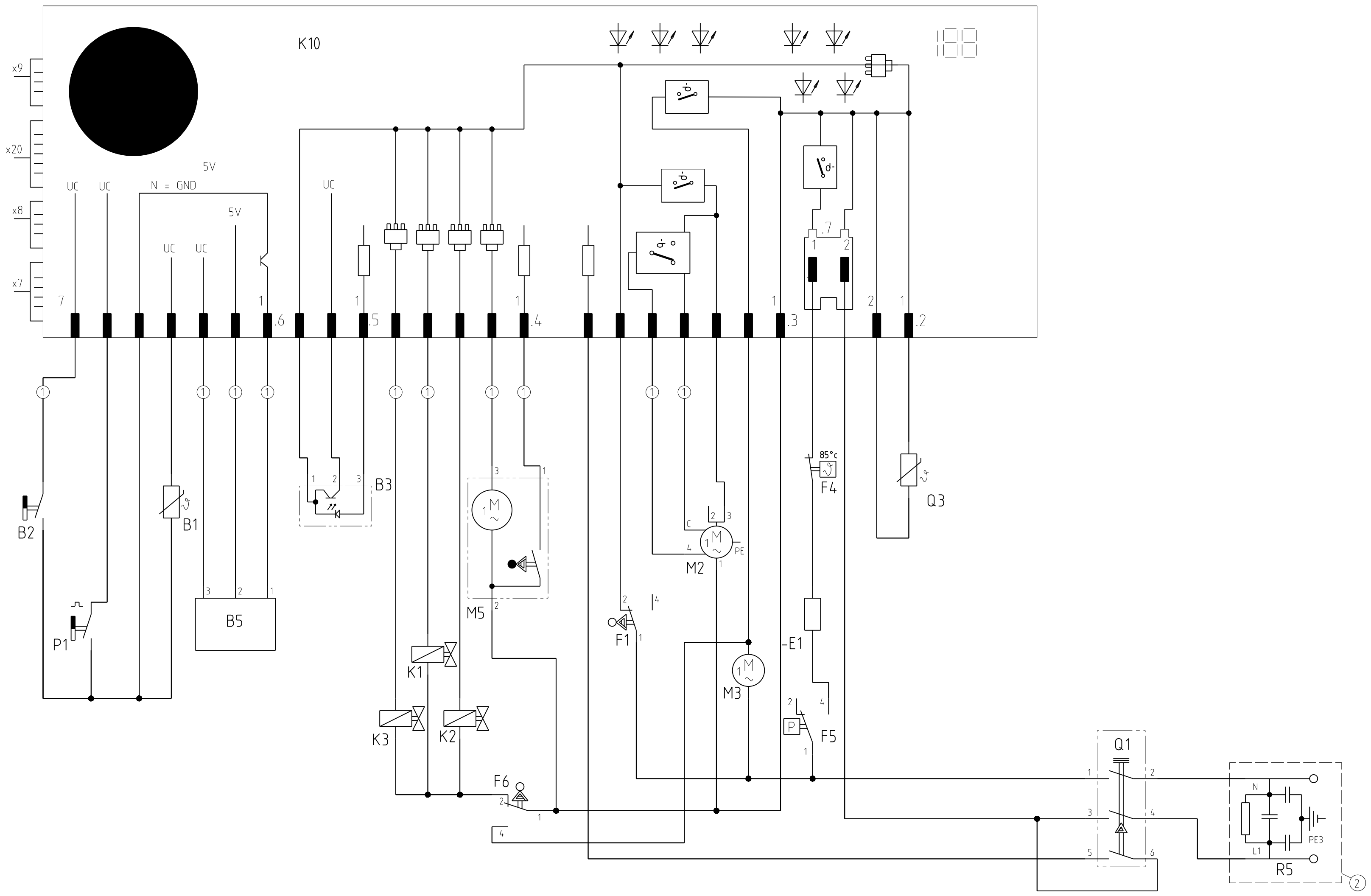
| Pos. | Function | Temperature | Capacity | Time (s) | Symbol |
|--------|--|-------------|----------|----------|--------------------------------|
| 00 | P | | | 15 | P = Pump |
| 01 | FWW | | 1,5 l | | FWW = Fill soft water |
| 02 | PA | | | 5 | U = Circulate |
| 03 | FWW + U + reversal relay/auxiliary winding (SICASYM) | | 2,4 l | X | H = Heat |
| 04 | U + H + ZR | max. 72 °C | | 120 | ZR = Dispense detergent |
| 05 | U + H | 60 °C | | | ZK = Dispense rinse aid |
| 06 | U + H + R | max. 72 °C | | 120 | R = Regeneration valve |
| 07 | U + ZK | | | 120 | AS_KAL = Calibrate Aqua sensor |
| 08 | AS_KAL_IR | | | | WP = Alternating pump |
| 09 -14 | WP | | | 30 | SP = Intermittent pump |
| 15 | P | | | 45 | X = Calculated refill time |
| 16 | FWW | | | 60 | F = Filling |
| 17-22 | SP | | | 30 | |
| 23 | P | | | 30 | |
| 0 | End | | | | |

If the rotary switch (S0) is turned clockwise during the customer service programme, it is possible to jump to the next position.

The filling positions are an exception!

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53

| REF | Components | Path | REF | Components | Path |
|-----|------------------------------|-------|-----|---|-------|
| -E1 | Heater | 33 | Q1 | Main switch | 42-44 |
| B1 | Temperature sensor NTC | 13 | Q3 | Dispenser actuator | 36 |
| B2 | Low salt sensor | 9 | R5 | Mains connection with interference suppressor | 47-49 |
| B3 | Low rinse aid sensor optical | 18-19 | | | |
| B5 | Aqua sensor 1 | 14-16 | | | |
| F1 | Door switch | 27-28 | | | |
| F4 | Safety thermostat | 33 | | | |
| F5 | Safety pressure switch | 33-34 | | | |
| F6 | Safety pressure switch | 23-25 | | | |
| K1 | Regeneration valve | 21 | | | |
| K2 | Filler valve | 22 | | | |
| K3 | Drainage valve | 20 | | | |
| K10 | Control unit | 10-36 | | | |
| M2 | Circulation pump | 29-31 | | | |
| M3 | Detergent solution pump | 31 | | | |
| M5 | Water switch | 23-25 | | | |
| P1 | Impeller meter | 11 | | | |

- ① Fitted depending on features
- ② Mains connection without interference suppressor beginning FD8612