Service Manual

This manual is to be used by qualified appliance technicians only. Viking does not assume any responsibility for property damage or personal injury for improper service procedures done by an unqualified person.

Viking Dishwasher

VIKING RANGE, LLC

This Base Manual covers general and specific information including, but not limited to the following models:

Model #
FDW103
FDW103WS
FDW302
FDW302WS
RVDW103
RVDW103WS
VDW302
VDW302WS

SMK-0012
OCT 2016

SAVE THESE INSTRUCTIONS

REVIEW ALL SERVICE INFORMATION IN THE APPROPRIATE SERVICE MANUAL AND TECHNICAL SHEETS BEFORE BEGINNING REPAIRS.

Pride and workmanship go into every product to provide our customers with quality products. It is possible, however, that during its lifetime, a product may require service. Products should be serviced only by a qualified service technician that is familiar with the safety procedures required in the repair and who is equipped with the proper tools, parts, testing instruments, and the appropriate service manual.

Safety Information
We have provided many important safety messages in this manual and on the appliance. Always read and obey all safety messages. This is the safety alert symbol.

This symbol alerts you to hazards that can kill or hurt you and others. All safety messages will be preceded by the safety alert symbol and the word “DANGER”, “WARNING”, or “CAUTION”. These words mean:

DANGER

IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.

WARNING

Hazards or unsafe practices which COULD result in severe personal injury or death.

CAUTION

Hazards or unsafe practices which COULD result in minor personal injury or product or property damage.

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

WARNING

To avoid risk of serious injury or death, repairs should not be attempted by unauthorized personnel.

CAUTION

VIKING will not be responsible for any injury or property damage from improper service procedures. If performing service on your own product, you must assume responsibility for any personal injury or property damage which may result.

Technical support for authorized servicers:

1-800-914-4799

Address your written correspondence to:

Viking Preferred Service
1803 HWY 82 West
Greenwood, MS 38930

Warnings

Read and follow all instructions before using this appliance to prevent the potential risk of fire, electric shock, personal injury, or damage to the appliance as a result of improper usage of the appliance. Use appliance only for its intended purpose as described in this manual.

To ensure proper and safe operation: appliance must be properly installed and grounded by a qualified technician. DO NOT attempt to adjust, repair, service, or replace any part of your appliance unless it is specifically recommended in this manual. All other servicing should be referred to a qualified servicer.

Make sure that incoming voltage is the same as unit rating. An electric rating plate specifying voltage, frequency, wattage, amperage, and phase is attached to the product.

Electrical Requirements

Assure that the electrical installation is adequate and in conformance with the National Electrical Code, ANSI/NFPA 70-latest edition or Canadian Electrical Code C22.1-1998 and C22.2 No. 0-M91 (or latest edition), and all local codes and ordinances. A 115 volt, 60-Hz, 15 amp, fused, electrical supply is required. It is required that
a separate circuit serving only this appliance be provided. This appliance is equipped with a power supply cord having a 3-prong grounding plug.
To minimize possible shock hazard, the cord must be plugged into a mating 3-prong, grounding-type wall receptacle. DO NOT use an extension cord.

Tip Over Hazard

Most of the unit's weight is at the top. Extra care is needed when moving the unit to prevent tipping. Keep doors closed until appliance is completely installed and secured per installation instructions. Use two or more people to move and install appliance. Failure to do so can result in death or serious injury.

WARNING

TIP OVER HAZARD

Appliance is top heavy and tips easily when not completely installed. Keep doors closed until appliance is completely installed and secured per installation instructions. Use two or more people to move and install appliance. Failure to do so can result in death or serious injury.

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power or turn power disconnect switch to "OFF" position before removing top grille. Failure to do so can result in death or electrical shock.

WARNING

ELECTRICAL SHOCK HAZARD

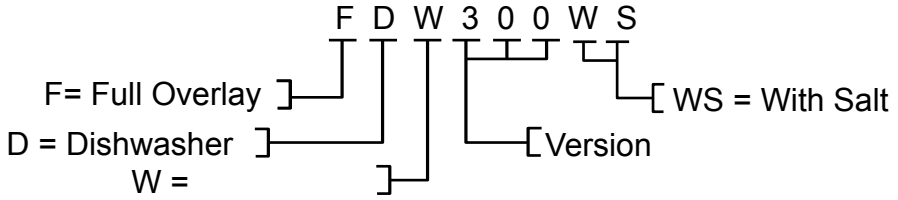
Plug into a grounded 3-prong outlet. If a 2-prong wall receptacle is encountered, contact a qualified electrician.
DO NOT remove ground prong. Unit must be grounded at all times. DO NOT use an adapter.
DO NOT use an extension cord.
Failure to follow these instructions can result in death, fire, or electrical shock.

WARNING

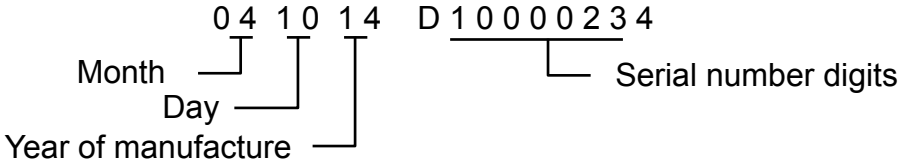
BURN HAZARD

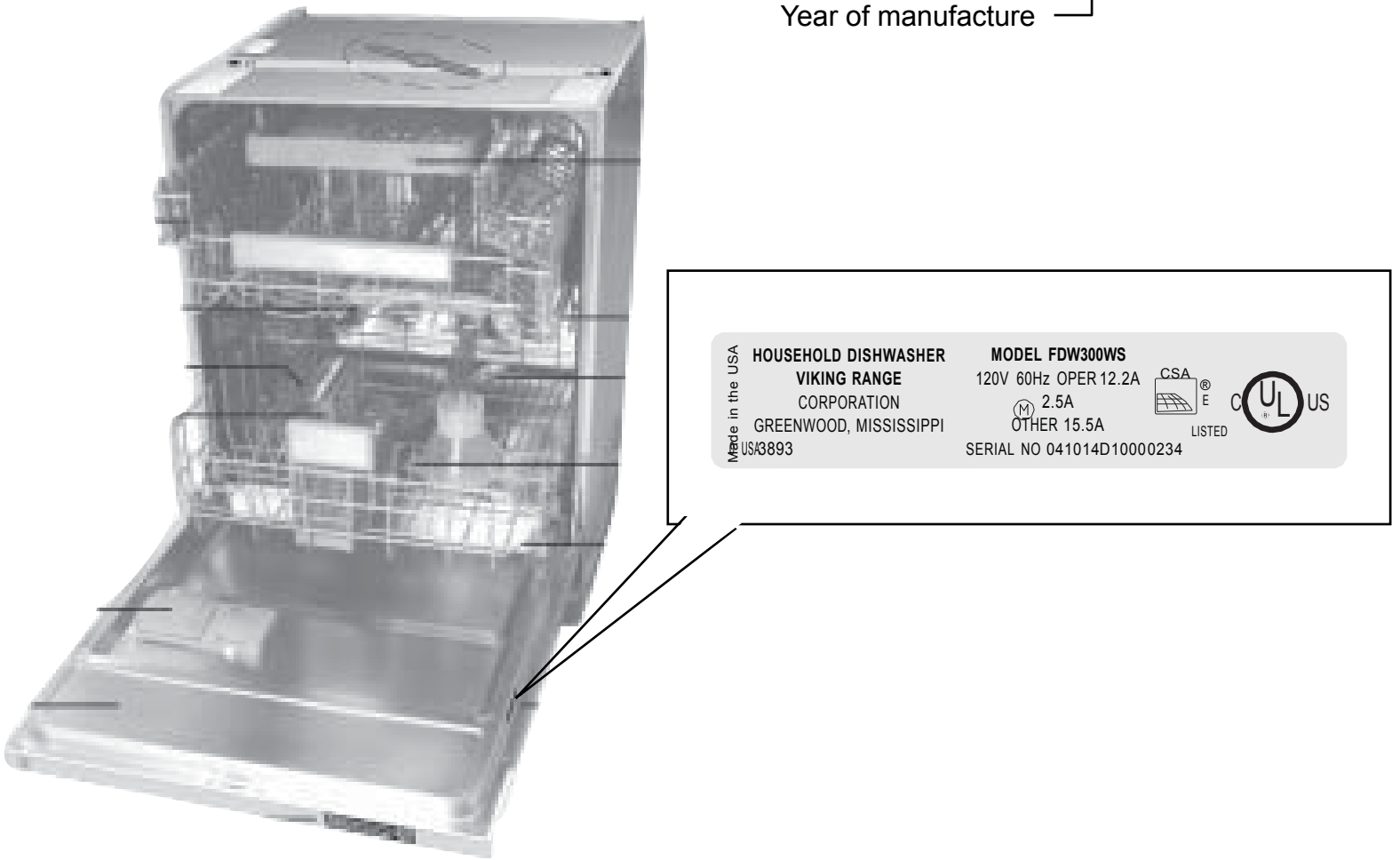
DO NOT touch condenser coils near defrost pan. Doing so can result in burns.

Model Numbers



Serial Numbers





E5
Service Mode

E5 Control Unit

1 : On/Off key
2 : Programme Selection P
3 : F1 & F2 (Function Key 1/2)
4 : F1 Function Led
5 : F2 Function Led
6 : Programme Number
7 : Salt Indicator
8 : Rinse Aid Indicator
9 : Auto Door Opening Indicator
10 : Tablet Detergent Indicator
11 : Play Icon
12 : End of Programme Icon
13 : Remaining Time / Prog. Duration
14 : F3 Function Led
15 : Time Delay Icon
16 : F4 Function Led
17 : F3 & F4 (Function Key 3/4)
18 : Time Delay Key

E5 Key Combinations

2 & 18 : Settings Menu (Available in ON mode)
1 & 2: Service Menu (Available in OFF mode)

Settings Menu

As desribed in user manual this menu is designed for customer preferences setings:

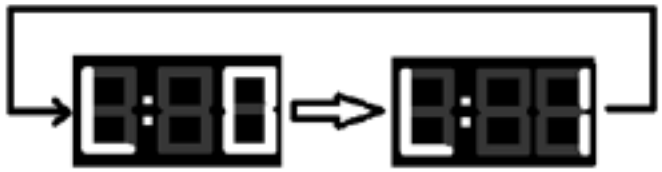
•When the dishwasher is in program selection mode; Press **[P]** and **[Delay]** keys about 3sec to enter the settings menu.

•Press [P] key to navigate in service menu and display current settings.

•Press [Delay] key to change settings

•Press [On/Off] key to exit from the menu.

Settings Menu - Internal Light (if available)

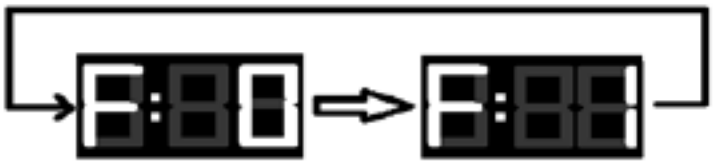


Will be available in settings menu if the dishwasher has inner light feature;

L:0 internal light always off.

L:1 internal light will be on for 2min. after openning the door.

Settings Menu - Microfilter Cleaning(if available)

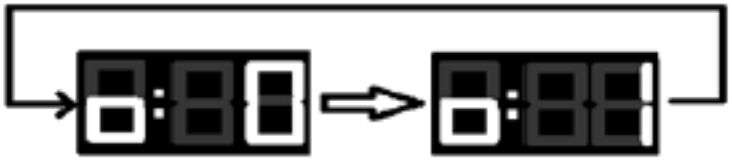


Will be available in settings menu if the dishwasher has filter cleaning feature;

F:0 filter cleaning function will not work.

F:1 filter will get cleaned after each washing programme automaticaly to have a better washing performance.

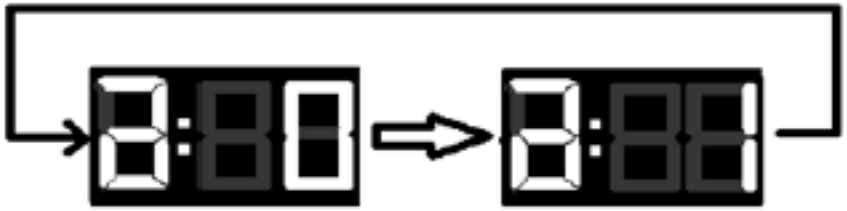
Settings Menu - Auto Door Opening (if available)



Will be available in settings menu if the dishwasher has auto door opening feature;

- o:0 auto door opening feature will be closed.
- o:1 the door will be opened at the end of each program to have a better drying performance.

Settings Menu - Auto Tablet Detection (if available)



Will be available in settings menu if the dishwasher has auto tablet detection feature;

- a:0 auto tablet detection feature is disabled
- a:1 auto tablet feature is enabled to make automatic tablet detergent detection during the washing cycle.

Settings Menu - Regeneration Level

As discribed in user manual regeneration level need to be set according to the water hardness.

- Press [Delay] key to change regeneration setting
- Press [On/Off] key to exit from the menu.

SERVICE MENU

This menu is designed for service professional's which include diagnostic programs:

•When the dishwasher is in OFF mode; Press [P] and [On/Off] keys about 3sec to enter the settings menu.

•Press [P] key to navigate in service menu

•Press [Delay] key to start selected programme

•Press [On/Off] key to exit from the menu.

SERVICE MODE- Eeprom RESET

Eeprom Reset programme is used to set the dishwasher to the factory defaults;

•Press [Delay] key to reset.

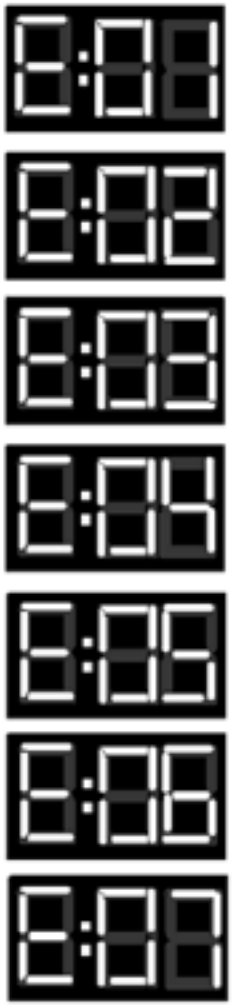
•In 1 sec Reset will be done and end of program icon will be displayed.

SERVICE MODE - SFT

Service Functional Test is the diagnostics tool used by service professionals;

- Presss [Delay] key to start SFT programme.
- Previous errors will be deleted before the program beginning.
- During the Service Functional Test (SFT) you need to press [Delay] key to continue the test when it stops and waits for the internal controls.
- End of program will blink at the end of the test.

ERROR CODES



Errors diagnosed during the dishwasher usage will be displayed on screen;

- [E:01] and [E:02] will be displayed also in normal use.
- Other error codes will be displayed only in service mode.

Error Type	Error Code
Overflow	Er:1
No Water Fault	Er:2
heaterFault	Er:3
TurbidityFault	Er:4
3WV - Diverter Valve Pos.	Er:5
NTC Fault	Er:6
Water Inlet Valve Fault	Er:7

	SFT Mese & Cinar Service Test					
No	DW Features	OUTPUTS	CONDITION	DIVERTER VALVE POSITION	MOTOR RPM	Screen Indicator
1	MultiWayValve Reservoir	Drain_Valve	50 sec	Reservoir		D
2	MultiWayValve Reservoir	Pause	80 sec	Reservoir		D
3	MultiWayValve Reservoir	0	Press Start/Stop button	-	0	
4	STANDARD	Water Inlet Valve + Regeneration Valve + Fan + Mixing_Valve	1,4 lt	-	0	r
5	STANDARD	Drain_Pump	60 sec	-	0	F
6	STANDARD	Water Inlet Valve + Fan + Fan_Flap	4,6 lt	-	0	F
6	STANDARD	Water Inlet Valve + Fan	4,6 lt	-	0	F
7	STANDARD	Circulation_Pump	10 sec	Up	2800	
8	STANDARD	Circulation_Pump + Heater + Detergent	120 sec	45 sec Down 45 sec Up	3400	d
9	STANDARD	Circulation_Pump + Heater	40C	Down	3400	
9	ZONE	Circulation_Pump + Heater	40C	ZONE	3400	Z
10	AUTO DOOR OPENING	Door_Opening_Mechanism	70 sec			A
11	AUTO DOOR OPENING	Fan	80 sec			A
12	STANDARD	Pause	Press Start/Stop button	Down	0	P
13	STANDARD	Circulation_Pump + Regeneration Valve	30 sec	Up	3400	
14	MultiWayValve Reservoir	Circulation_Pump + Drain_Valve	35 sec	Reservoir	2800	D
15	MultiWayValve Reservoir	Circulation_Pump	80 sec	Reservoir	2800	D
16	MultiWayValve Reservoir	Pause	Press Start/Stop button	Reservoir		D
17	MultiWayValve Reservoir	Drain_Valve	50 sec	Reservoir		D
18	MultiWayValve Reservoir	Pause	80 sec	Reservoir		D
15	3WayValve Reservoir	Reservoir_Pump	90 sec			D
16	3WayValve Reservoir	Pause	Press Start/Stop button	Reservoir		D
17	MultiWayValve Reservoir	Drain_Valve	50 sec	Reservoir		D
18	MultiWayValve Reservoir	Pause	80 sec	Reservoir		D
19	STANDARD	Regeneration Valve + Drain_Pump	30 sec	Run	0	
19	ZONE	Regeneration Valve + Drain_Pump	30 sec	Run	0	Z

ASSEMBLY AND DISASSEMBLY METHODS FOR KEY COMPONENTS

1) DRAIN HOSE

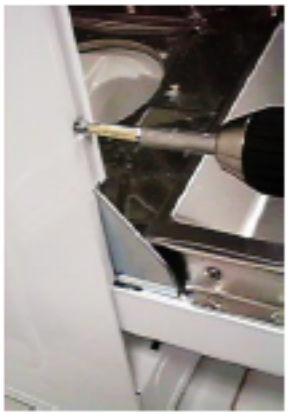
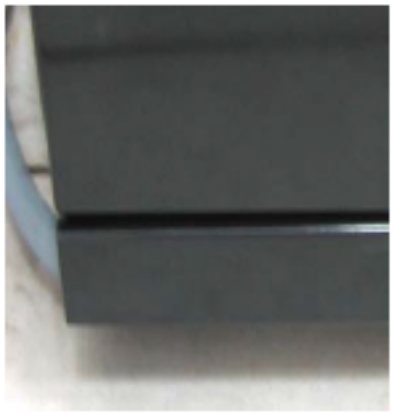
The position of the drain hose during the assembly of the product.

Position of the Drain and Water Supply hoses before disassembling.

For the purpose of avoiding any siphonage in the drain hose, the hose is kept at a certain sufficient level by means of 1 hose clamp. This clamp should never be removed while assembling the machine in the desired position.

When the hose is to be replaced, the unit, which is seen at the right back top corner of the machine is required to be removed after being cut.
3 wire clamps and 2 plastic hose clamps are removed for dismantling the drain hose.

2) SIDE WALLS

A total of 10 screws, as 4 in the front, 2 at the back, 2 on top and 2 on the kick plate are loosened to take out one side wall.

3) BOTTOM TRAY

While providing service to the components located beneath the machine, at first the machine is moved to a free place other than the place of installation.
For dismantling the tray, the machine is inclined backwards with an angle of approximately 40˚.

2 screws holding the base (located on the front side) are removed and the components beneath the machine are accessed. Thus, it is possible to work on all the components except for the Water Inlet Valve, Clip Holder and the Drain Hose.

4) OVERFLOW GAUGE

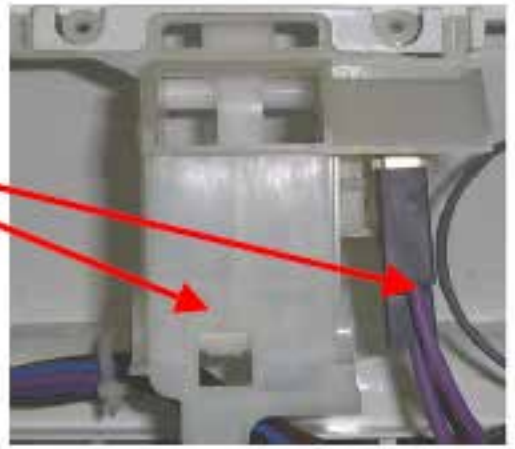
The mechanism attaching the overflow gauge to the base is pulled to the front direction, by pressing the latches and then is taken out.

5) OUTER DOOR

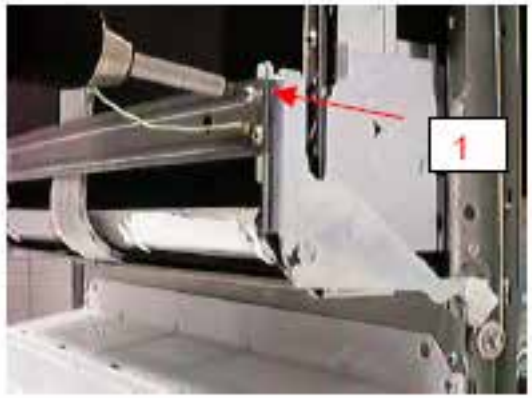
By loosening 6 screws the outer door can be taken out.

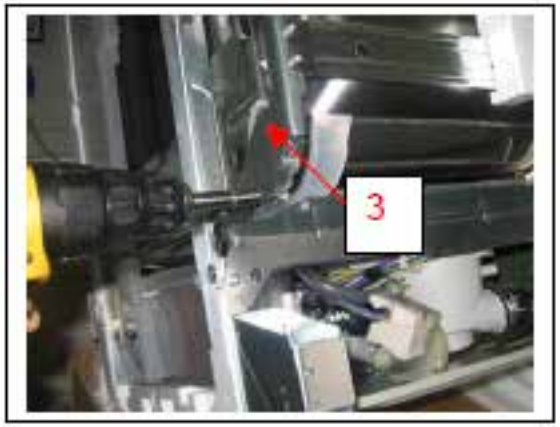
6) LOCKER GROUP

Locker Gr. is fixed to panel
by 2 snaps.



7) HINGE PLATES , INNER DOOR ,FRONT LOWER SUPPORT and CONNECTION SHEET OF HINGE ARM





4 Screws are loosened from the connection sheet of the hinge arm.(1). To seperate iner door from hinge arm 2 screws at each side are loosened.(2) Lower support is taken out by loosening 6 screws.(3)

8) SPRING, ROLLER AND HINGE ROPE



Spring is can be taken out by disassembling from the rope, then roller and washer are removed from the pin. Important point is mounting the bulge side of washer outside.

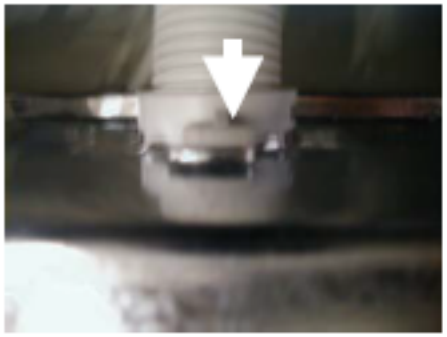
9) DETERGENT CONTAINER

The inner door plate, held by 8 notches, is taken out by releasing the lobes.

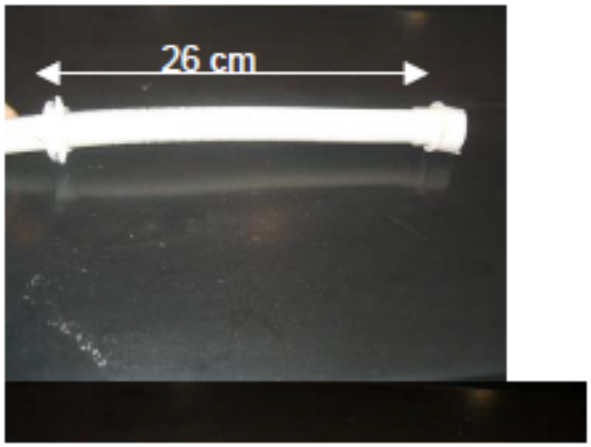
10) CABLE CASE

To change cable, connection sheet for hinge arm is taken out by loosening 4 screws.

11) DRAIN HOSE AND WATER INLET VALVE



To render services to these components, the operators should work on the backside of the machine. The concrete sheet should be removed.
The hose holder is taken out by turning as it is seen in the picture.



The drain hose holder is made up two symmetric parts, which fit together by the help of the snaps, and should be located approximately 30 cm from the hose end.

12) CONCRETE SHEET

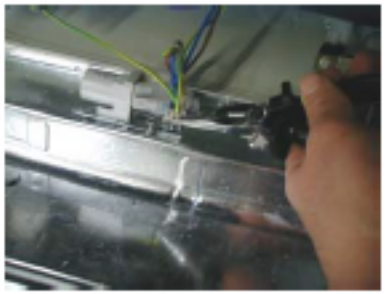
Both of the sidewalls are dismantled. A total of 4 screws connecting the concrete sheet to the frames from both sides are unscrewed. 2 screws that connect the base to the concrete sheet are unscrewed. Water inlet hose is taken out. Base is dismantled. The connection made to prevent the occurrence of siphonage in the drain hose is removed by cutting the hose clamp. The concrete is taken out and the sheet is freed from its connections.

13) WATER INLET VALVE

For disassembling the water inlet valve, the screw of the water inlet valve located on the kick plate is unscrewed.

Water inlet valve is taken out by being rotated in the clockwise direction.

14) INTERFERENCE FILTER



To dismantle the interference filter and main power plug, sockets should be taken out first. Then filter can be dismantled by loosening the 2 screws.

15) REGENERATION CONTAINER

The cover of the regeneration container is taken out by being rotated in the counter clockwise direction at 5-10°

The clamp is disassembled and hose is removed. Then the clicks on the frame are released.

16) WATER SOFTENER GROUP

Nut is taken out by rotating counterclockwise. Softener is dismantled from the iner body.
There are 2 o-rings between softener and regeneration container.

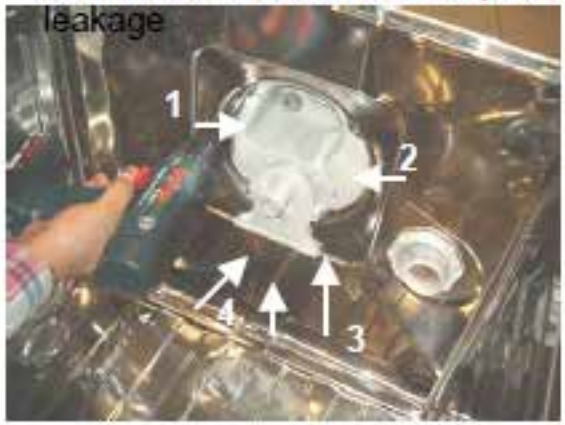
17) COUNTER

The counter is connected to the hoses coming from the regeneration unit and water inlet valve by 2 hose clamps. Remove the connector coming from the cable harness The counter is fixed to the frame by two snaps.

18) PUMP SUMP

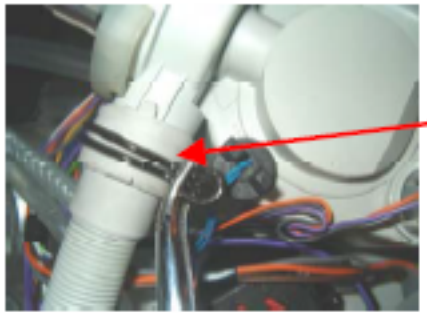
Sump
Gasket

Sump o-ring is placed between the sump and the inner tub in order to prevent leakage



Filter support part is fixed to the sump and inner tub by the screws numbered as 3, 4 and 5.

The sump is fixed to the inner tub by the help of 5 PT type screws as shown in the picture left.



The drain hose is assembled to the drain exit of the sump by using a hose clamp

Drain pump group should be fixed to the sump by the help of snap fits.




3W valve should be fixed to the sump by PT screws, for the DW models that have 3 way valve.
The flow diverter is assembled to the sump by hot plate, for the DW models that have flow diverter. This is default for factory outlet, and no serviceability for the flow diverter alone.



19) TURBIDITY SENSOR

By releasing 3 clicks turbidity sensor holder is taken out from the sump. Sensor is taken out from the holder by pulling out. There is an o-ring on the holder, it should be used while mounting again.

20) NTC

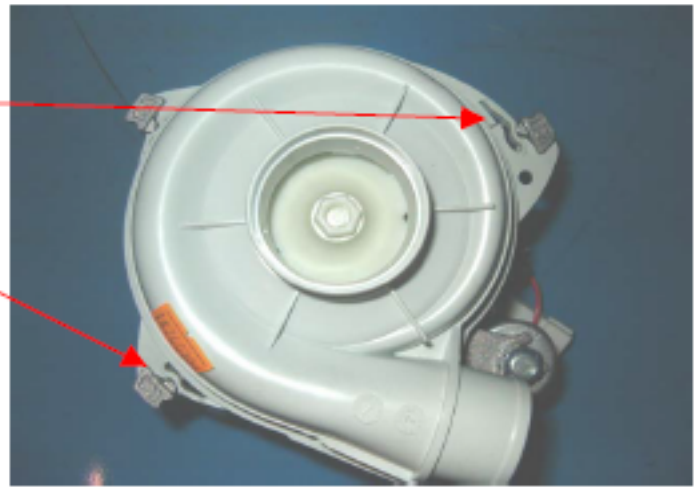
NTC is taken out by rotating 30°.

21) HEATER

Heater is taken out by unscrewing the clamps.

22) CIRCULATION PUMP

Pump is attached to
motor group by snaps

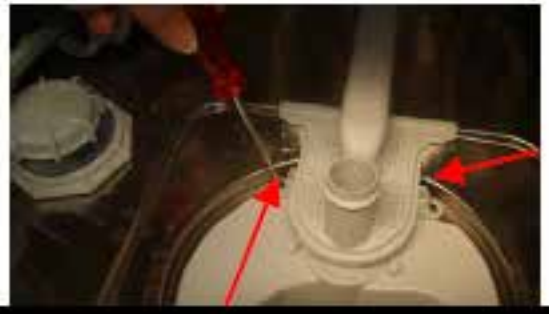


After the clamps and cable connections of the circulation pump are removed, the screws of the motor holding plate connected to the body frame are unscrewed. So as to detach the circulation pump from the motor holding plate, the connection is cut off by breaking the white coloured auricle shown in the photo, and a new auricle is installed during the assembly.

23) FEEDING PIPE OF THE UPPER SPRAY ARM AND FILTER SUPPORT

Pic –1

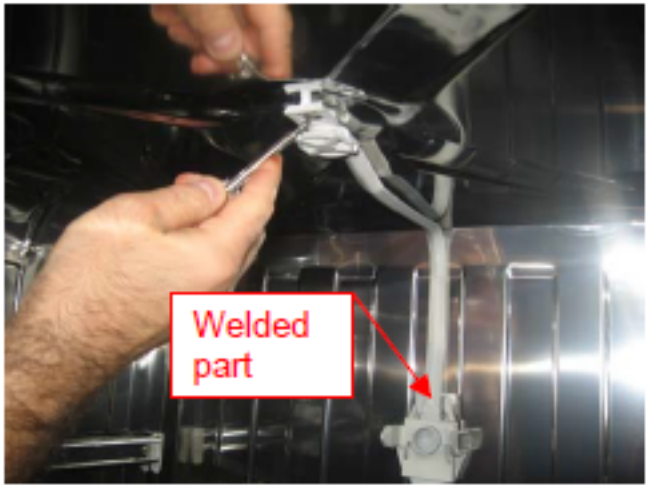
Pic 2



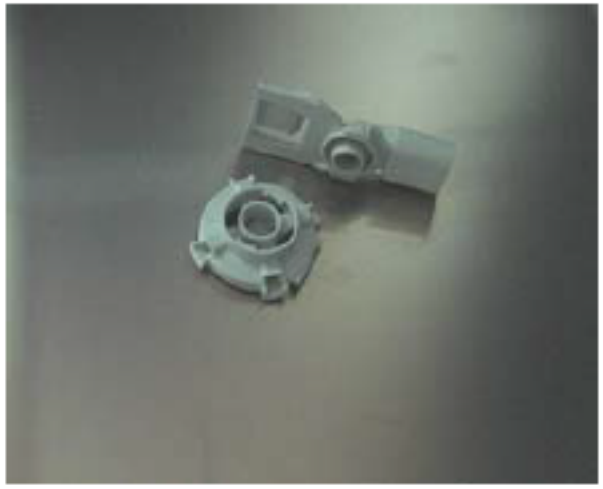
pic –3

Pic -4

Pic – 5



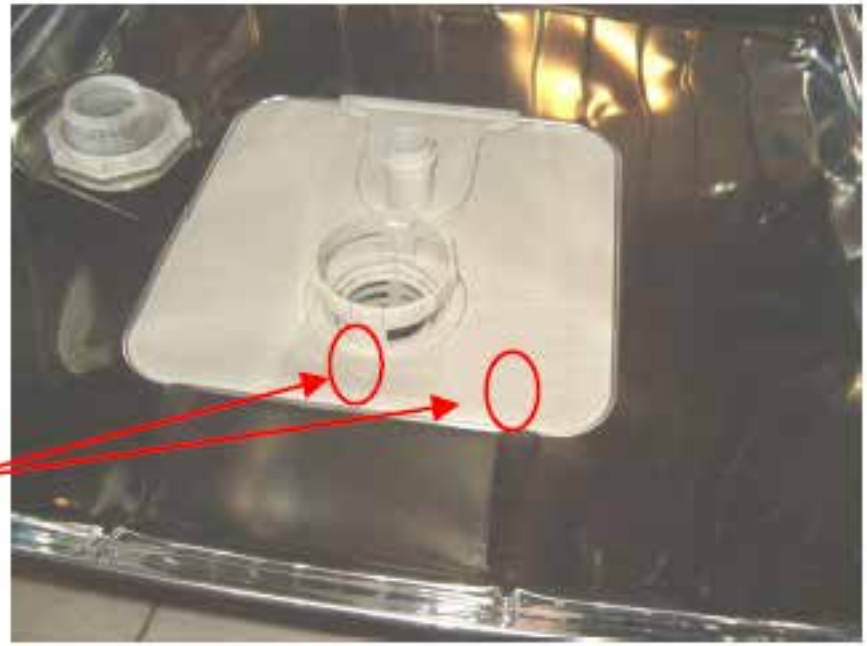
Pic -6



Filter support is freed after the related screws are loosened.(Pic-2) After the notch of the feeding pipe of the upper spray arm is released, both of the parts are taken out.(Pic-3) after the notch located on the filter support is extended, it is removed from the upper feeding pipe.(pic-4)

24) FILTER

For the models having metal filter, metal filter o-ring is used. The assembly of the part is shown on the pictures



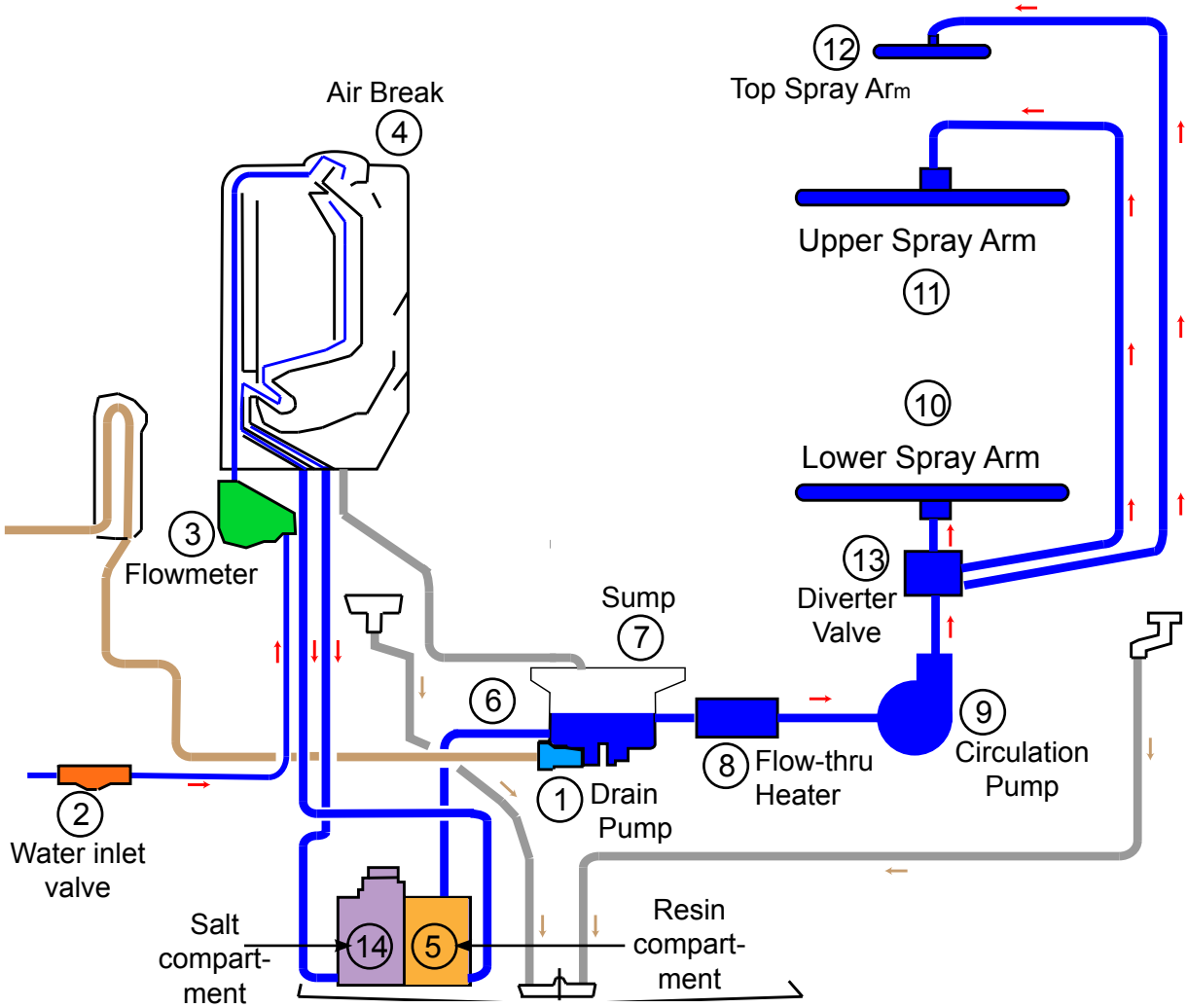
The filtering system will be effective if the assembly of the filters are done in the right manner. For both the metal and plastic filter, the filter ends should be positioned under the related region of the flow diverter.

Snap in the middle is pressed

General Operation of Dishwasher

(3 way diverter valve with water softener)

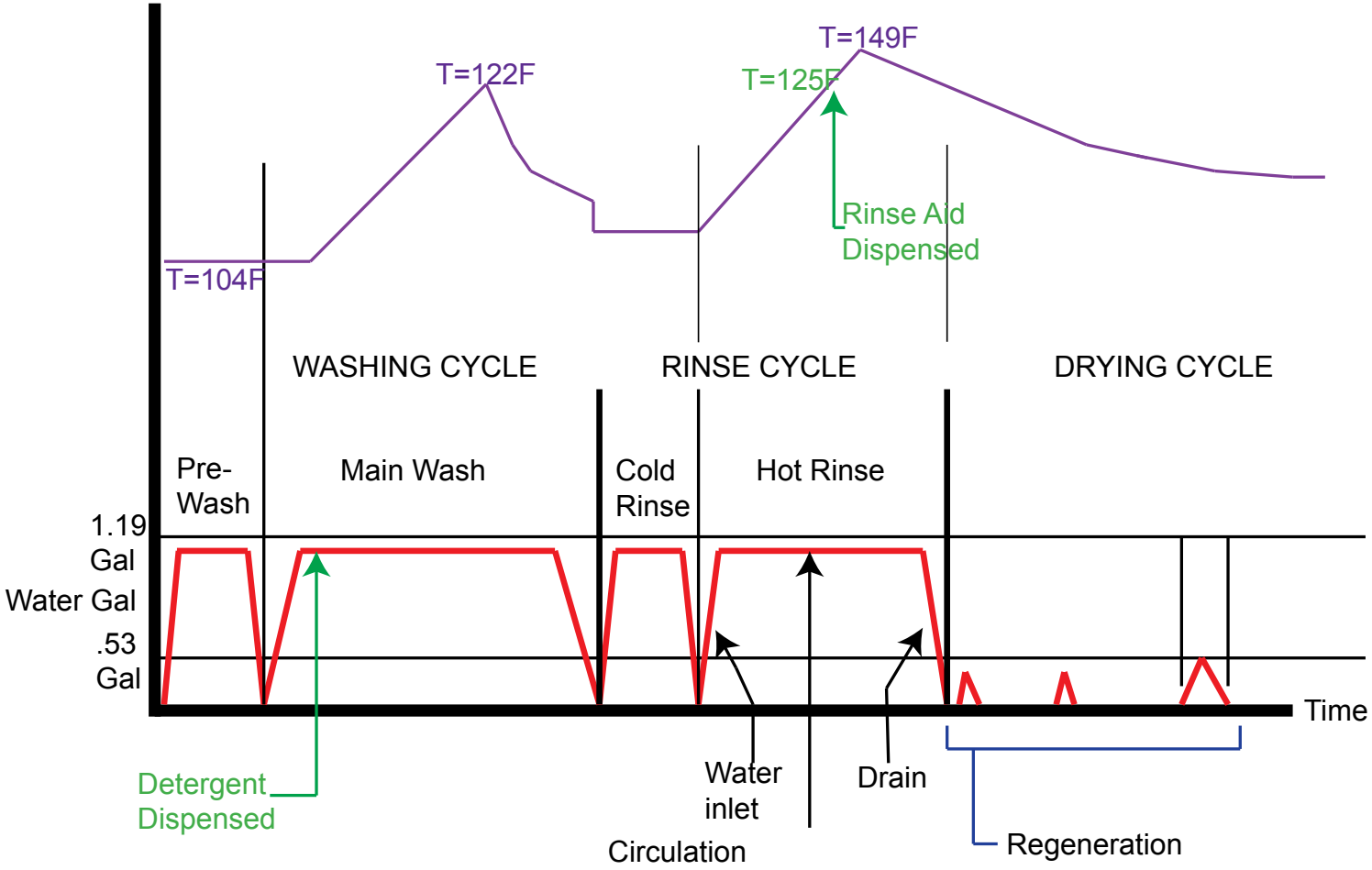
- A standard dishwasher cycle begins with the draining (1) step. Then, the electronic control system opens the water inlet valve (2)
- The water fills with counter (3) and Air break (4)
- The water flows through air break and flowmeter, then on to the , "Water Softener" (5)
- Water flows through the Water Softening resin section unit (5), and into the sump by connecting hose (6).
- After the water intake period , the circulation motor (9), pumps the water from sump (7) to top (12), upper (11) and lower spray arms (10). If the machines has a diverter valve (13), the water is carried out to top, upper and lower spray arms separately. The diverter valve rotates a shutter that turns in order to send water to these spray arms. The upper and lower spraying timing vary depending on the program step.
- Depending on the washing step, if hot water is necessary, the heater (8) is turned on, placed between circulation motor and sump, to heat up the water to required temperature. The working time of heater is adjusted by NTC placed in the sump.
- After a certain period of washing, the circulation motor is stopped. The water is drained from the machine. At least one step during a wash cycle is run with detergent and hot water. During the last rinsing cycle, the rinse aid is used with hot water.


12
Top Spray Arm
Air Break
4
Upper Spray Arm
11
10
Lower Spray Arm
3
Flowmeter
13
Diverter
Valve
Sump
7
6
9
Circulation
Pump
8
Flow-thru
Heater
1
Drain
Pump
2
Water inlet
valve
Salt
compart-
ment
14
5
Resin
compart-
ment

Theory of Operation

- A standard program consists of 4 washing steps. Pre-wash step is done to clean the coarse particles from the dishes. Main-wash is the washing step where the water is heated and detergent is released into dishwasher. In main wash step the aim is to totally clean the dishes. Cold rinsing step is done to clean the detergent and soil remains from the dishwasher. Hot rinse step is done to totally remove all of the remains from the dishes and to enhance the drying performance by heating the water and adding rinse aid. Rinse aid enhances the drying performance by preventing the water from holding on to the surfaces. In addition it provides the shining of the dishes.
- Drying period includes regeneration and resin cleaning steps.
- Directly taking the water from the water inlet with its ions like (Ca, Mg, .. etc.) inside can harm the steel interior of the dishwasher, in addition it cause rainbow effect, scale formation, corrosion on the washed dishes so that these metals should not taken into the washing chamber. For this purpose washing water is passed from the resin (5) of water softener to leave its heavy metals. Resin must be regenerated before fully saturated with these ions. For this reason in the beginning of drying step regeneration valve is opened for 30 seconds to allow regeneration water flow inside the salt unit. The salty solution than forwarded to resin unit. Also 0,2 liters of tap water is directed to the salt compartment of the water softener (14). At the same time solenoid valve between the salt and resin compartments is opened, this provides the entrance of the additional salty water to resin compartment for ion exchange. Salty water entered to the resin compartment is held for 10 minutes. This procedure is repeated with entrance of 0,2 liters of water and waiting for 10 minutes. During the ion exchange resin is cleaned from hardness ions Ca++ and Mg++, and become rich for Sodium (Na). Afterwards resin is cleaned with the 2,8 liters of water from water inlet and washing cycle continues with drying step.
- Regeneration cycle is performed according to the regeneration adjustment which is done during installation. It depends on the tap water hardness level.
- Dishwashers installed with BLDC (Brushless Direct Current) can use different circulation speeds during wash and rinse cycles. The speed, and water pressure can be arrange to make better cleaning. So that one can use the advantages of high pressurized water to clean heavy soils in shortest time and use the advantages of low pressure for light soils together with low water consumption and reduced noise levels. Dishwashers having Standard circulation motors have constant motor speed and water pressure for washing. The wash programmes are developed accordingly.

Program Flow Chart



(Temperature and water quantities are just for illustration purposes, they will change according to program definitions.)

Program steps

POTS&PANS BOOST - UPP2S020	
Function	Condition
DRAIN PUMP	15sec
WATER INLET VANASI	4,4lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION	5min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	4,2lt
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	70C
CIRCULATION	20min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	4lt
CIRCULATION	5min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	4lt
CIRCULATION / HEATER	50C
CIRCULATION	5min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	75C
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	10min
FAN / KLAPE	5min
DRAIN PUMP	35sec

POTS&PANS - UPO2S020	
Function	Condition
DRAIN PUMP	15sec
WATER INLET VANASI	4,4lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION	8min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	4,2lt
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	70C
CIRCULATION	10min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	4lt
CIRCULATION	5min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	70C
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	10min
FAN / KLAPE	5min
DRAIN PUMP	35sec

REGULAR WASH - U052S020A	
Function	Condition
DRAIN PUMP	15sec
WATER INLET VANASI	4,2lt
CIRCULATION	6min
CIRCULATION / HEATER	38C
CIRCULATION / TURBIDITY	90sec
CIRCULATION	3min
CIRCULATION / TURBIDITY	90sec
CIRCULATION	3min
CIRCULATION / TURBIDITY	90sec
CIRCULATION	10sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	50C
CIRCULATION	10min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	60sec
WATER INLET VANASI	3,8lt
CIRCULATION	4min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	61C
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	10min
FAN / KLAPE	16min
DRAIN PUMP	35sec

DAILY - UDL2S020	
Function	Condition
DRAIN PUMP	15sec
WATER INLET VANASI	4,2lt
CIRCULATION	8min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,8lt
CIRCULATION	10sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	60C
CIRCULATION	8min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	60sec
WATER INLET VANASI	3,8lt
CIRCULATION	4min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION	4min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	70C
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	10min
FAN / KLAPE	22min
DRAIN PUMP	35sec

QUICK WASH - UQW2S020	
Function	Condition
DRAIN PUMP	15sec
WATER INLET VANASI	4,2lt
CIRCULATION	10sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	45C
CIRCULATION	4min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,8lt
CIRCULATION	3min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	55C
DRAIN PUMP	45sec
REJENERASYON	5sec
DRAIN PUMP	35sec

RINSE&HOLD - URH2S020	
Function	Condition
DRAIN PUMP	15sec
WATER INLET VANASI	4,4lt
CIRCULATION	7min
CIRCULATION	1min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec

FDW103-103WS, RVDW103-103WS

Program steps

POTS&PANS+/BOOST - UPP2F320	
Function	Condition
DRAIN PUMP	35sec
WATER INLET VANASI	4,4lt
IDLE	10sec
CIRCULATION / HEATER	50C
CIRCULATION	5min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	60sec
WATER INLET VANASI	4,2lt
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	70C
CIRCULATION	20min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	4lt
CIRCULATION	5min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	4lt
CIRCULATION / HEATER	50C
CIRCULATION	5min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	75C
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	10min
FAN / KLAPE	5min
DRAIN PUMP	35sec

POTS&PANS - UPO2F320	
Function	Condition
DRAIN PUMP	35sec
WATER INLET VANASI	4,4lt
IDLE	10sec
CIRCULATION / HEATER	50C
CIRCULATION	8min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	4,2lt
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	70C
CIRCULATION	10min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	4lt
CIRCULATION	5min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION / HEATER	10sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	70C
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	10min
FAN / KLAPE	5min
DRAIN PUMP	35sec

AUTO - UAT2F320	
Function	Condition
DRAIN PUMP	35sec
WATER INLET VANASI	4,2lt
CIRCULATION	6min
CIRCULATION / HEATER	38C
CIRCULATION / TURBIDITY	90sec
CIRCULATION	3min
CIRCULATION / TURBIDITY	90sec
CIRCULATION	3min
CIRCULATION / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	50C
CIRCULATION	13min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	1,6lt
IDLE	45sec
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,2lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	61C
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	10min
FAN / KLAPE	16min
DRAIN PUMP	35sec

MIXWASH - UMX2F320	
Function	Condition
DRAIN PUMP	35sec
WATER INLET VANASI	4,4lt
CIRCULATION	1min
CIRCULATION / HEATER	42C
CIRCULATION	6min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,8lt
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	45C
CIRCULATION	5min
CIRCULATION / HEATER	55C
CIRCULATION	36min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION	4min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,2lt
CIRCULATION	1min
CIRCULATION / HEATER	40C
CIRCULATION	3min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,8lt
CIRCULATION	30sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	66C
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	10min
FAN	60min
DRAIN PUMP	35sec

REGULAR WASH - U082F320A	
Function	Condition
DRAIN PUMP	35sec
WATER INLET VANASI	4,2lt
CIRCULATION	6min
CIRCULATION / HEATER	38C
CIRCULATION / TURBIDITY	90sec
CIRCULATION	3min
CIRCULATION / TURBIDITY	90sec
CIRCULATION	3min
CIRCULATION / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	50C
CIRCULATION	13min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	1,6lt
IDLE	45sec
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,2lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	61C
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	10min
FAN / KLAPE	16min
DRAIN PUMP	35sec

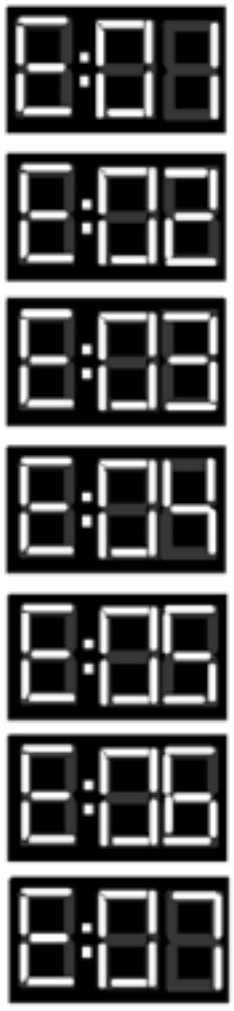
CHINA GENTLE - UCG2F320	
Function	Condition
DRAIN PUMP	35sec
WATER INLET VANASI	4,4lt
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	48C
CIRCULATION	15min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	30sec
WATER INLET VANASI	3,8lt
CIRCULATION	6min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,8lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	65C
CIRCULATION	5sec
DRAIN PUMP	45sec
REJENERASYON	5sec
IDLE	5min
DRAIN PUMP	35sec

QUICK WASH - UQW2F320	
Function	Condition
DRAIN PUMP	35sec
WATER INLET VANASI	4,4lt
CIRCULATION	10sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER	45C
CIRCULATION	4min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,8lt
CIRCULATION	3min
CIRCULATION / DRAIN PUMP	15sec
DRAIN PUMP	45sec
WATER INLET VANASI	3,6lt
CIRCULATION	10sec
CIRCULATION / HEATER	50C
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER / DETERGENT	90sec
CIRCULATION / HEATER / TURBIDITY	90sec
CIRCULATION / HEATER	55C
DRAIN PUMP	45sec
REJENERASYON	5sec
DRAIN PUMP	35sec

RINSE&HOLD - URH2F320	
Function	Condition
DRAIN PUMP	35sec
WATER INLET VANASI	4,4lt
CIRCULATION	8min
CIRCULATION / HEATER / DETERGENT	15sec
CIRCULATION / DRAIN PUMP	45sec

FDW302-302WS, VDW302-302WS

ERROR CODES



Errors diagnosed during the dishwasher usage will be displayed on screen;

- [E:01] and [E:02] will be displayed also in normal use.
- Other error codes will be displayed only in service mode.

Error Type	Error Code
Overflow	Er:1
No Water Fault	Er:2
heaterFault	Er:3
TurbidityFault	Er:4
3WV - Diverter Valve Pos.	Er:5
NTC Fault	Er:6
Water Inlet Valve Fault	Er:7

TROUBLESHOOTING- General

D1 Dishwashers are electronically controlled and some faulty conditions can be detected by the electronics. These errors are detected not only in the functional test program but also during the washing cycles. The previously detected errors are kept in memory and shown in display.

When the test programs are started, error data in memory will be cleared which enables to understand if the same fault occurs during the functional test again. At the end of the test diagnossed errors date will also be cleared.

TROUBLESHOOTING- OverFlow [Er:1]

If the control system senses an overflow signal, this error will occurs.
Control unit drains the water inside and checks the signal;

- If there is no overflow signal, dishwasher will continue to work normally.

- If the overflowsignal remains, the system stops responding to any user input except the ON/OFF button and waits for the service.

Possible reasons:

- Broken components or torned hoses
- Malfunction of drain pump
- Malfunction of flowmeter
- Malfunction of water inlet valve
- Cable harness errors
- Faulty electronics

TROUBLESHOOTING- No Water[Er:2]

Incoming water to the machine is monitored via a water counter (flow meter) system. During the “Water Inlet” step if no pulses could be sensed by the electronics, No Water condition occurs.

At this condition the dishwasher will wait **until water signal is detected**. If necessary water signal is detected the machine will continue its normal operation.

Possible reasons:

a.Malfunction of water inlet valve
b.No water
c.Insufficient water pressure
d.Cable harness errors
e.Faulty electronics

TROUBLESHOOTING- Heater Fault[Er:3]

The water temperature in the machine is measured by an NTC (negative temperature coefficient). At heating steps, if the temperature rise is less than 1 °C within 3 minutes heating fault occurs.

When the fault detected software skips the heating step and continues the program with the next step.

Possible reasons:

a. Malfunction of heater
b. Malfunction of NTC (constant NTC resistance)
c. Cable harness errors
e. Faulty electronics

Note: During the first 3 minutes of a heating step the water temperature is not controlled. The control system waits so that the temperature inside the machine reaches balance.

TROUBLESHOOTING- Turbidity Fault [Er:4]

Turbidity sensor is the component that measures the amount of dirt in the water. The machine uses this data for the steps of Auto Program (if applicable). If the proper data from the turbidity sensor cannot be received, Turbidity Sensor Error occurs.

When the error occurs, the software continues the program as heavy dirt level.

Possible reasons:

a.Malfunction of Turbidity Sensor
b.Cable harness errors
c.Faulty electronics

TROUBLESHOOTING
Diverter Valve Pos. Fault [Er:5]

Diverter Valve is the component that diverts the water flow between the upper and lower trays. Position of the valve is checked by the main board. Diverter Valve Position Error occurs if the proper position signal could not be received from the valve.

When the error occurs, the electronics drives the valve until proper position signal is achieved.

Possible reasons:

a.Malfunction of diverter way valve
b.Cable harness errors
c.Faulty electronics

TROUBLESHOOTING- NTC Fault [Er:6]

At the Heating step, if NTC resistance is measured beyond the specified resistance values or if the NTC resistance is measured as open/short circuit NTC fault occurs.

When the fault is detected software skips the heating step and continues the program with the next step.

Possible reasons:

a.Malfunction of NTC
b.Cable harness errors
c.Faulty electronics

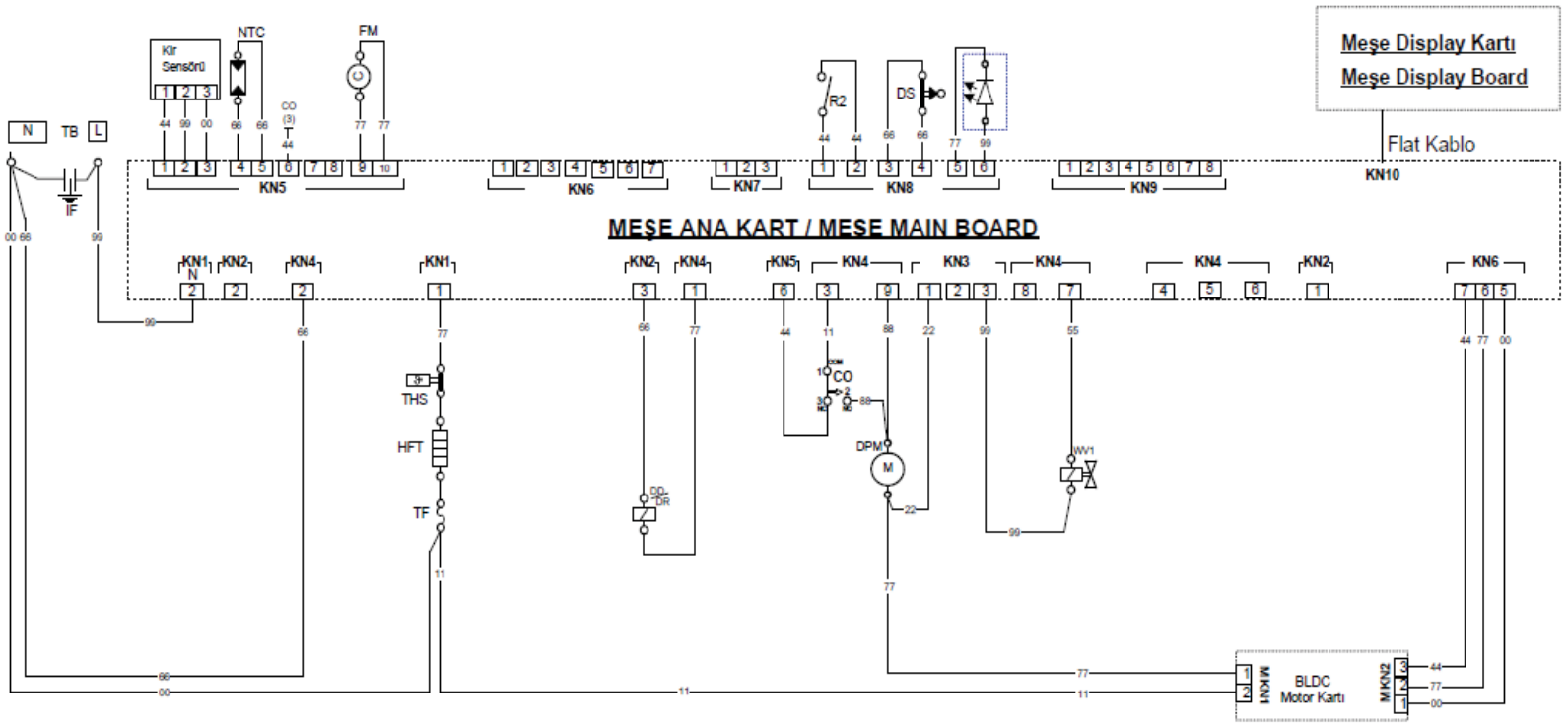
TROUBLESHOOTING- Water Inlet Valve Fault [Er:7]

Main board monitors water counter pulses at every step of the washing program.
If pulses are received from the counter at any step other than Water-Inlet;
Water Inlet Error occurs.

When the fault is detected software drains the water inside the dishwasher.

Possible reasons:

a.Malfunction of water inlet valve (stuck as open)
b.Faulty electronics

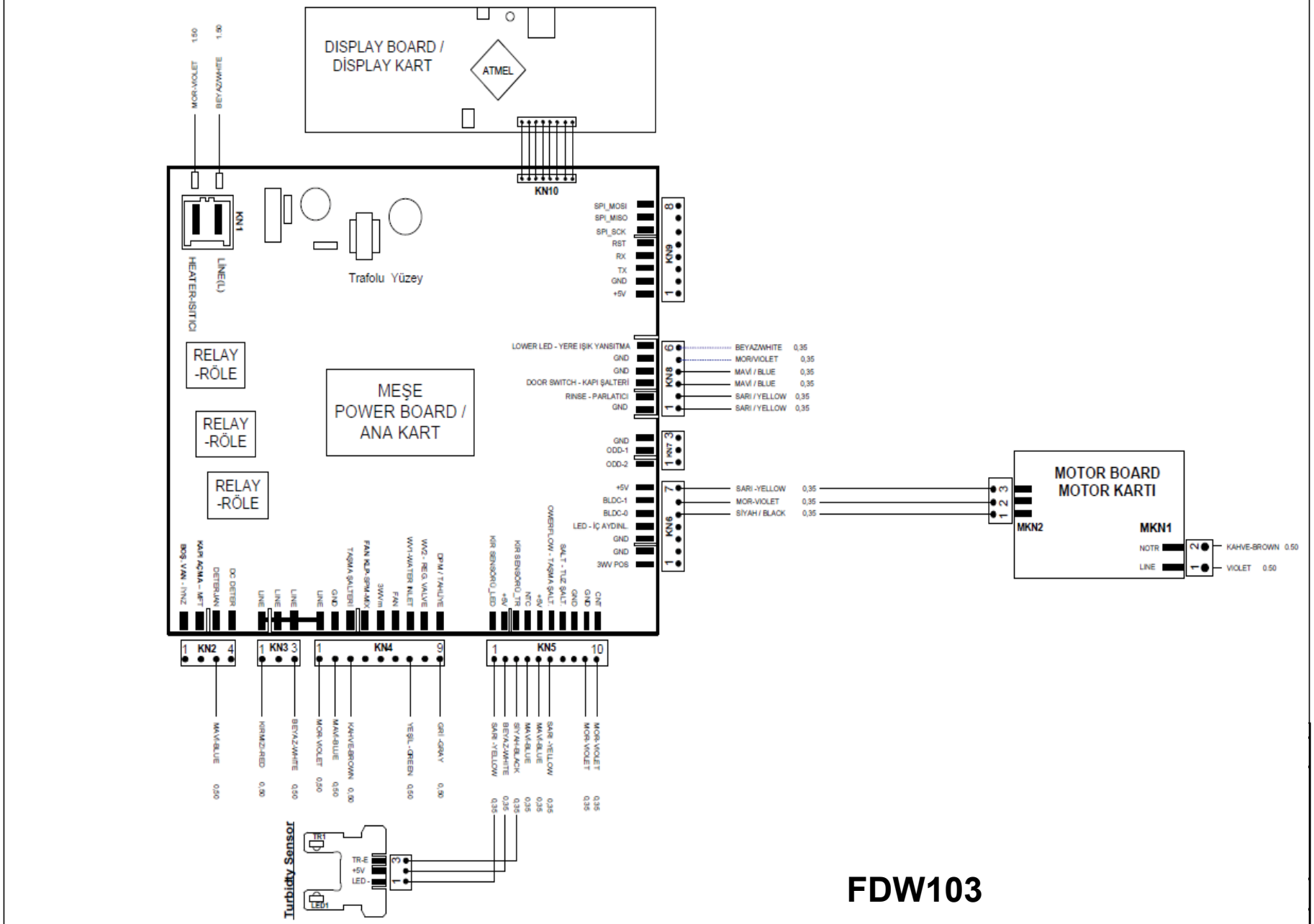


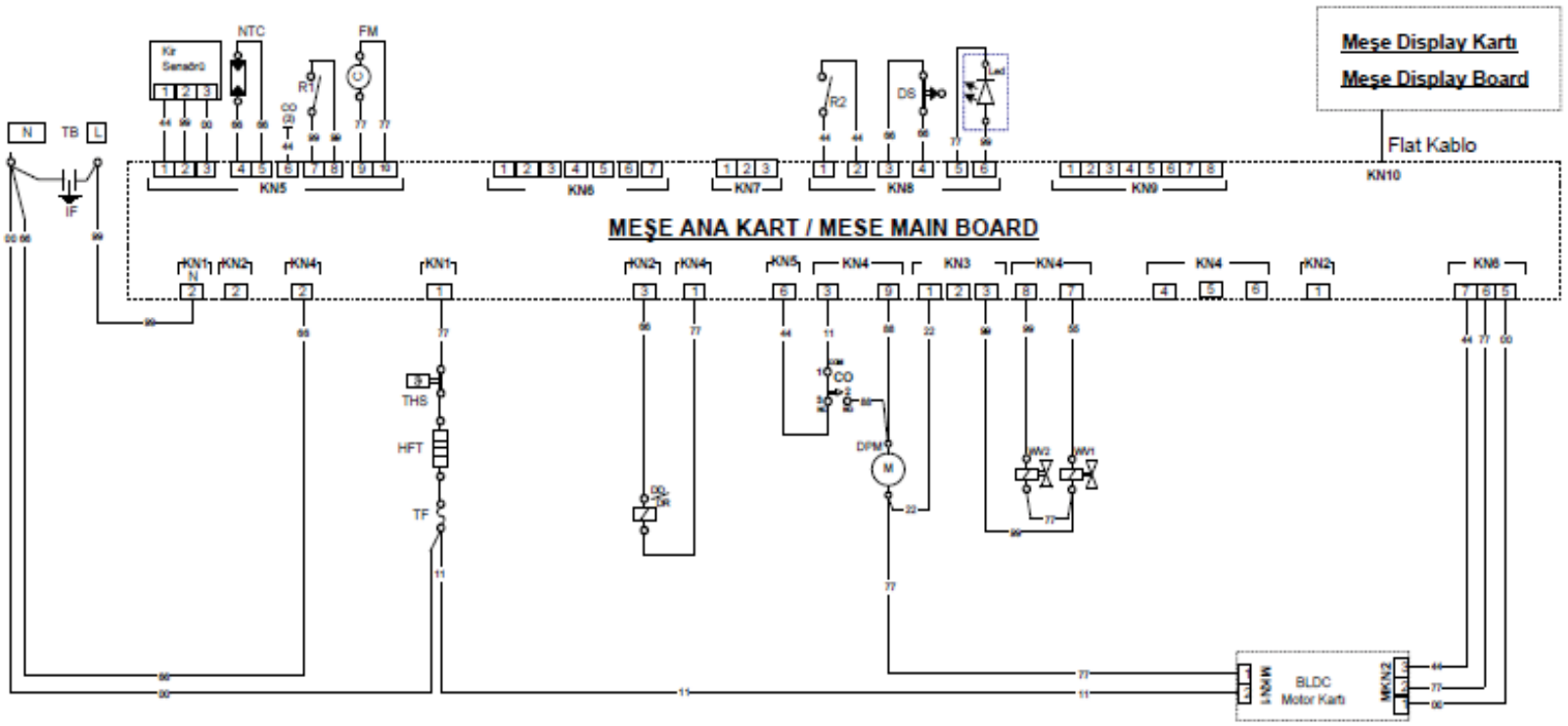
TB	Klemens Kutusu	Terminal Block
DS	Kapı anahtarı	Door Switch
R1	Tuz uyarı şalteri	Salt Reed Relay
R2	Parlatıcı uyarı şalteri	Rinse-Aid Reed Relay
HFT	Boru tip ısıtıcı	Flow Through Heater
THS	Isıtıcı Koruma Termostatı	Heater Thermostat
TF	Isıtıcı Koruma Sigortası	Heaters Fuse
DPM	Tahliye pompası	Drain Pump Motor
CO	Taşma şamandıra şalteri	Over Flow Micro Switch
BLDC	Sirkülasyon Motoru	Circulation Mot.
WV2	Rejenerasyon vanası	Regeneration Valve
DD/DR	Deterjan kutusu	Thermoactuator Dispenser Unit
NTC	NTC	NTC
FM	Su sayacı (counter)	Flow meter
FAN	FAN	FAN
3WVm	3 yollu vana motor	3 Way Valve Motor
3WVs	3 yollu vana siviç	3 Way Valve Switch
PRS	Su basınç şalteri	Pressure Switch
WV3	Boşaltma Vanası	Drain Valve
K / A	Kapı Açma Mekanizması	Door Open
KPM	Depo Pomp / MFT (Filtre Temizleme)	Tank Pump / Filter Cleaner
I/A	İç Aydınlatma	Interior Lighting
MXV	Karışım Vanası	Mixing Valve
WV1	Su Giriş Vanası	Water valve 1

Renk Kod	
0	Siyah
1	Kahve
2	Kırmızı
3	Turuncu
4	Sarı
5	Yeşil
6	Mavi
7	Mor
8	Gri
9	Beyaz
P	Pembe

Colour Code	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Grey
9	White
P	Pink

FDW103

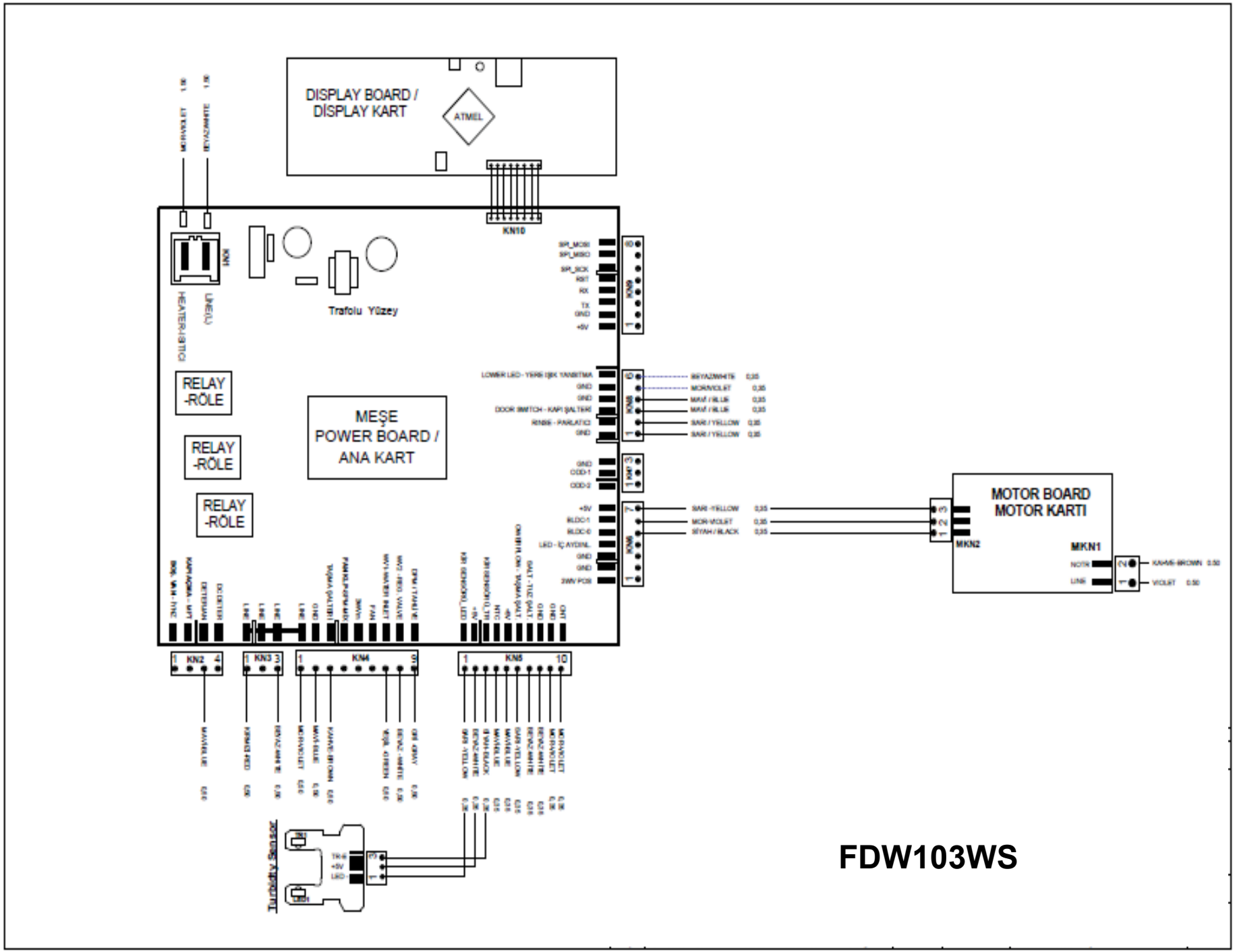

DISPLAY BOARD / DİSPLAY KART
ATMEL
KN10
MOR-VIOLET 1.50
BEYAZ-WHITE 1.50
KN1
HEATER-ISITICI
LINE(L)
Trafolu Yüzey
RELAY -RÖLE
RELAY -RÖLE
RELAY -RÖLE
MEŞE POWER BOARD / ANA KART
SPI_MOSI
SPI_MISO
SPI_SCK
RST
RX
TX
GND
+5V
KN9
LOWER LED - YERE IŞIK YANSITMA
GND
GND
DOOR SWITCH - KAPI ŞALTERİ
RINSE - PARLATICI
GND
KN8
BEYAZ/WHITE 0,35
MOR/VIOLET 0,35
MAVİ / BLUE 0,35
MAVİ / BLUE 0,35
SARI / YELLOW 0,35
SARI / YELLOW 0,35
GND
ODD-1
ODD-2
KN7
+5V
BLDC-1
BLDC-0
LED - İÇ AYDINL.
GND
GND
3WV POS
KN6
SARI -YELLOW 0,35
MOR-VIOLET 0,35
SİYAH / BLACK 0,35
MOTOR BOARD MOTOR KARTI
MKN2
MKN1
NOTR
LINE
KAHVE-BROWN 0.50
VIOLET 0.50
KN2
KN3
KN4
KN5
MAVİ-BLUE 0,50
KIRMIZI-RED 0,50
BEYAZ-WHITE 0,50
MOR-VIOLET 0,50
MAVİ-BLUE 0,50
KAHVE-BROWN 0,50
YEŞİL - GREEN 0,50
GRİ -GRAY 0,50
SARI -YELLOW 0,35
BEYAZ-WHITE 0,35
SİYAH-BLACK 0,35
MAVİ-BLUE 0,35
SARI -YELLOW 0,35
MOR-VIOLET 0,35
MOR-VIOLET 0,35
Turbidty Sensor
TR1
TR-E
+5V
LED -
LED1
FDW103

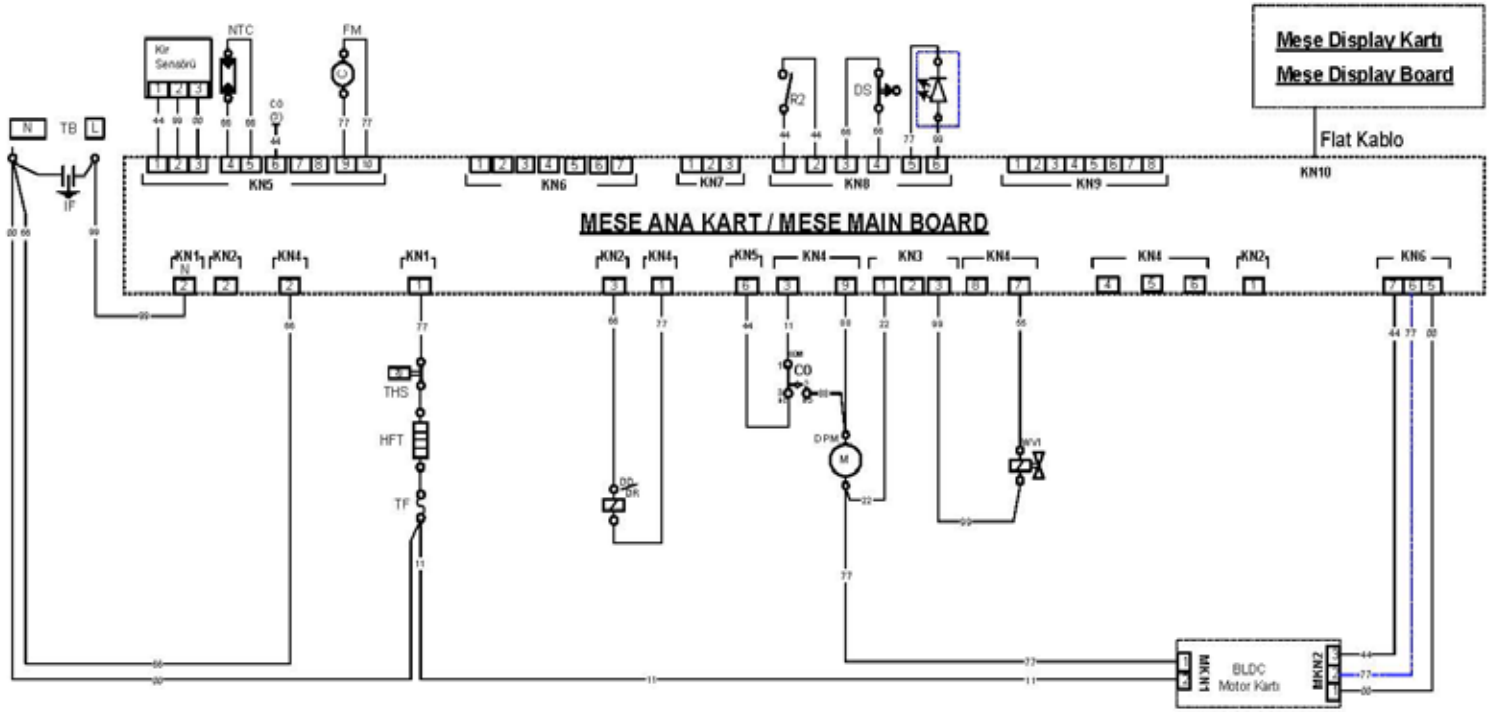


TB	Klemens Kutusu	Terminal Block
DS	Kapı anahtarı	Door Switch
R1	Tuz uyarı şalteri	Salt Reed Relay
R2	Parlatıcı uyarı şalteri	Rinse-Aid Reed Relay
HFT	Boru tip ısıtıcı	Flow Through Heater
THS	Isıtıcı Koruma Termostatı	Heater Thermostat
TF	Isıtıcı Koruma Sigortası	Heaters Fuse
DPM	Tahliye pompası	Drain Pump Motor
CO	Taşma şamandıra şalteri	Over Flow Micro Switch
BLDC	Sirkülasyon Motoru	Circulation Mot.
WV2	Rejenerasyon vanası	Regeneration Valve
DD/DR	Deterjan kutusu	Thermoactuator Dispenser Unit
NTC	NTC	NTC
FM	Su sayacı (counter)	Flow meter
FAN	FAN	FAN
3WVm	3 yollu vana motor	3 Way Valve Motor
3WVs	3 yollu vana sivic	3 Way Valve Switch
PRS	Su basınç şalteri	Pressure Switch
WV3	Boşaltma Vanası	Drain Valve
K / A	Kapı Açma Mekanizması	Door Open
KPM	Depo Pomp / MFT (Filtre Temizleme)	Tank Pump / Filter Cleaner
I/A	İç Aydınlatma	Interior Lighting
MXV	Karışım Vanası	Mixing Valve
WV1	Su Giriş Vanası	Water valve 1

Renk Kod		Colour Code	
0	Siyah	0	Black
1	Kahve	1	Brown
2	Kırmızı	2	Red
3	Turuncu	3	Orange
4	Sarı	4	Yellow
5	Yeşil	5	Green
6	Mavi	6	Blue
7	Mor	7	Violet
8	Gri	8	Grey
9	Beyaz	9	White
P	Pembe	P	Pink

FDW103WS

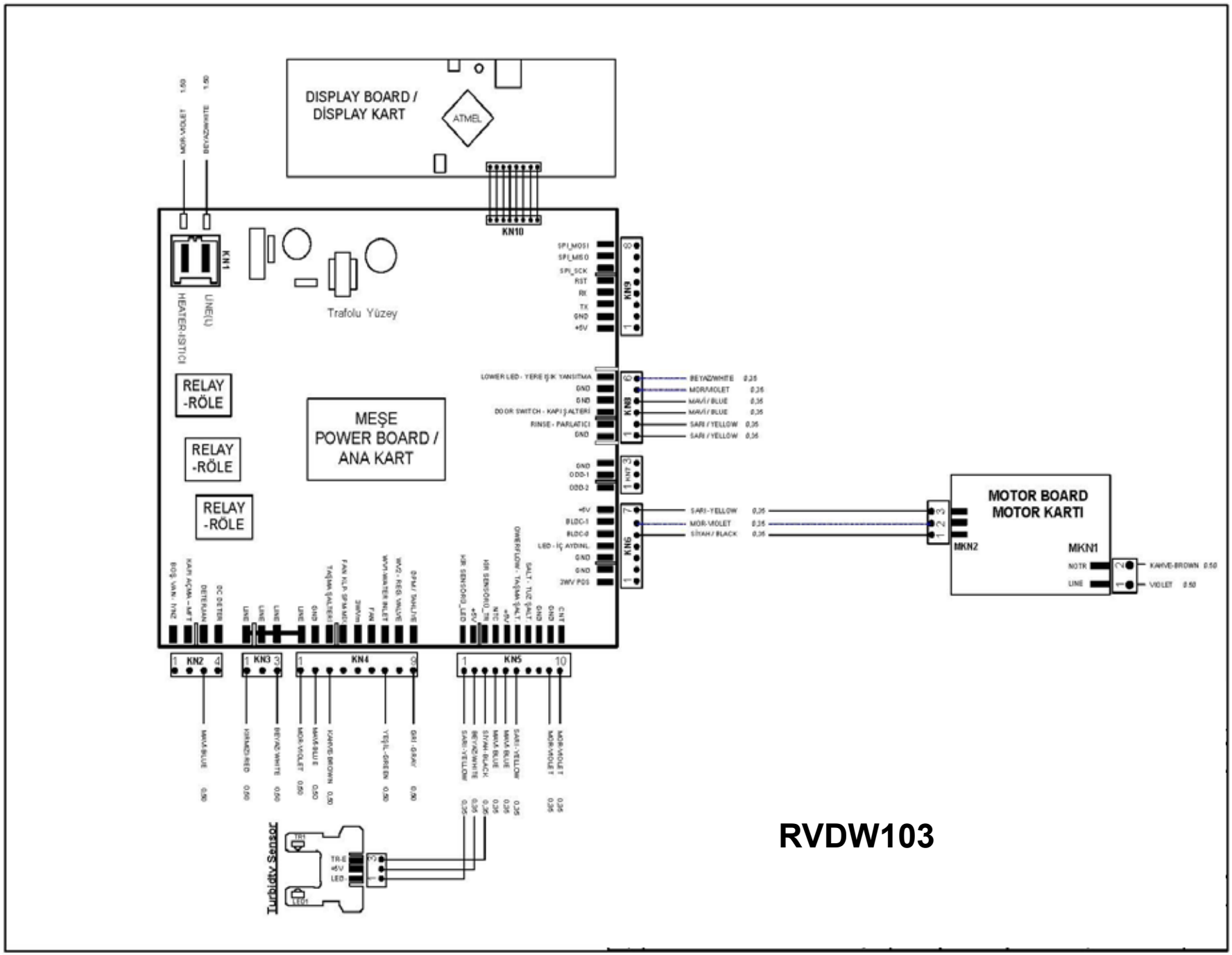

DISPLAY BOARD /
DİSPLAY KART
ATMEL
KN10
KN1
HEATER-ISITICI
LINE(L)
Trafolu Yüzey
RELAY
-RÖLE
RELAY
-RÖLE
RELAY
-RÖLE
MEŞE
POWER BOARD /
ANA KART
KN2
KN3
KN4
KN5
MOTOR BOARD
MOTOR KARTI
MKN1
MKN2
Turbidity Sensor
FDW103WS

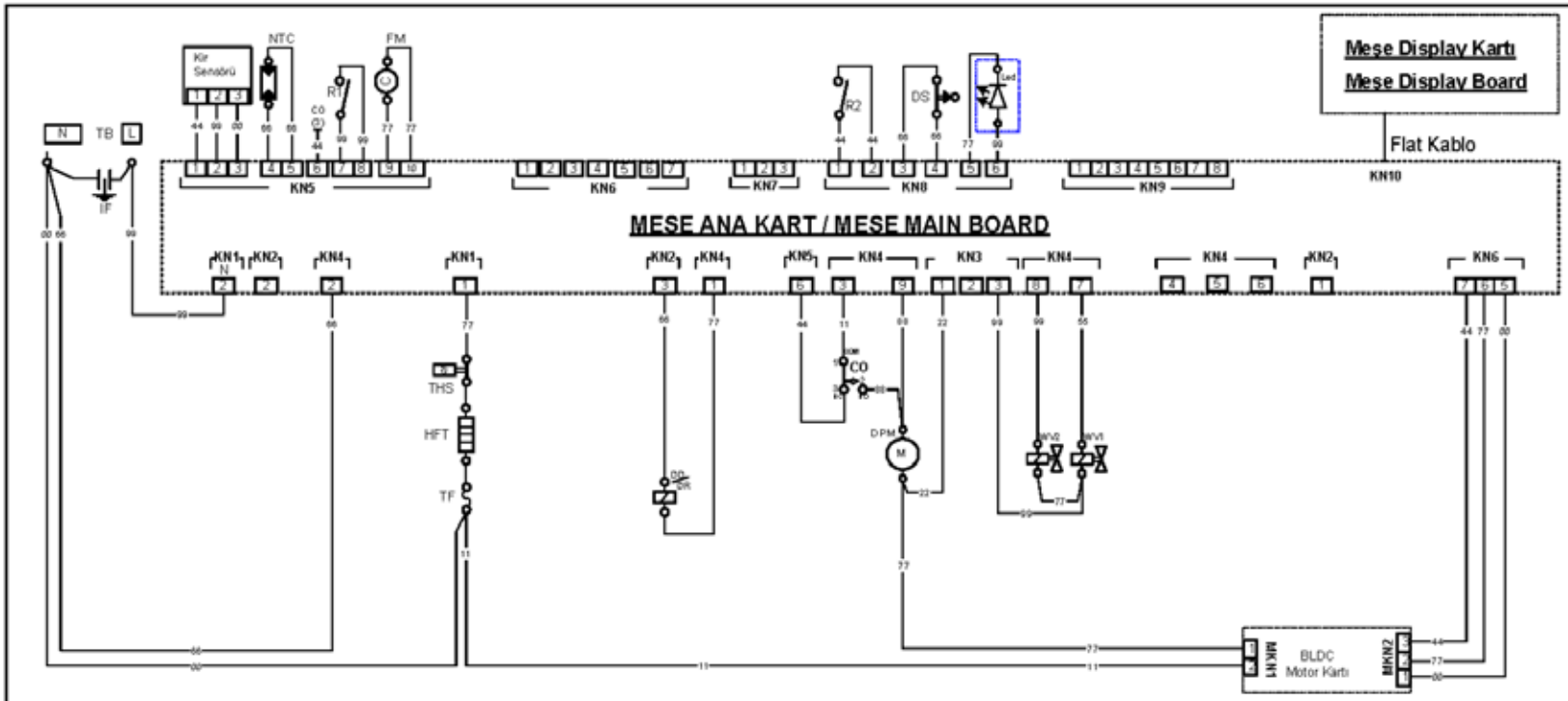


TB	Klemens Kutusu	Terminal Block
DS	Kapı anahtarı	Door Switch
R1	Tuz uyarı şalteri	Salt Reed Relay
R2	Parlatıcı uyarı şalteri	Rinse-Aid Reed Relay
HFT	Boru tip ısıtıcı	Flow Through Heater
THS	Isıtıcı Koruma Termostatı	Heater Thermostat
TF	Isıtıcı Koruma Sigortası	Heaters Fuse
DPM	Tahliye pompası	Drain Pump Motor
CO	Taşma şamandıra şalteri	Over Flow Micro Switch
BLDC	Sirkülasyon Motoru	Circulation Mot.
WV2	Rejenerasyon vanası	Regeneration Valve
DD/DR	Deterjan kutusu	Thermoactuator Dispenser Unit
NTC	NTC	NTC
FM	Su sayıcı (counter)	Flow meter
FAN	FAN	FAN
3WVm	3 yollu vana motor	3 Way Valve Motor
3WVs	3 yollu vana sviç	3 Way Valve Switch
PRS	Su basınç şalteri	Pressure Switch
WV3	Boşaltma Vanası	Drain Valve
K/A	Kapı Açma Mekanizması	Door Open
KPM	Depo Pomp / MFT (Filtre Temizleme)	Tank Pump / Filter Cleaner
İA	İç Aydınlatma	Interior Lighting
MXV	Karışım Vanası	Mixing Valve
WV1	Su Giriş Vanası	Water valve 1

Renk Kod		Colour Code	
0	Siyah	0	Black
1	Kahve	1	Brown
2	Kırmızı	2	Red
3	Turuncu	3	Orange
4	Sarı	4	Yellow
5	Yeşil	5	Green
6	Mavi	6	Blue
7	Mor	7	Violet
8	Gri	8	Grey
9	Beyaz	9	White
P	Pembe	P	Pink

RVDW103

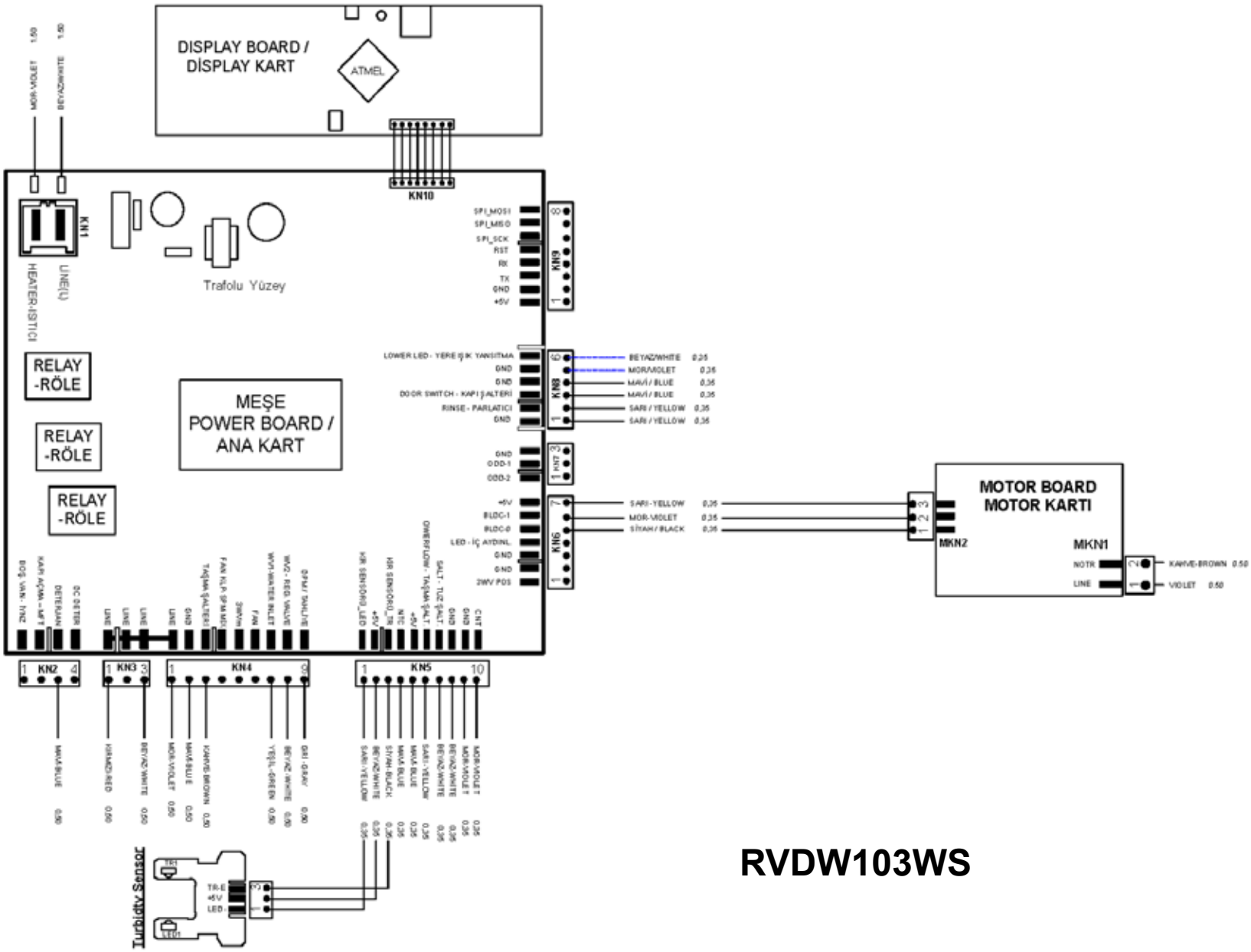

DISPLAY BOARD / DİSPLAY KART
ATMEL
KN10
KN1
HEATER-ISITICI
LINE(L)
Trafolu Yüzey
RELAY -RÖLE
RELAY -RÖLE
RELAY -RÖLE
MEŞE POWER BOARD / ANA KART
KN9
KN8
KN6
KN2
KN3
KN4
KN5
MOTOR BOARD MOTOR KARTI
MKN2
MKN1
Turbidity Sensor
RVDW103



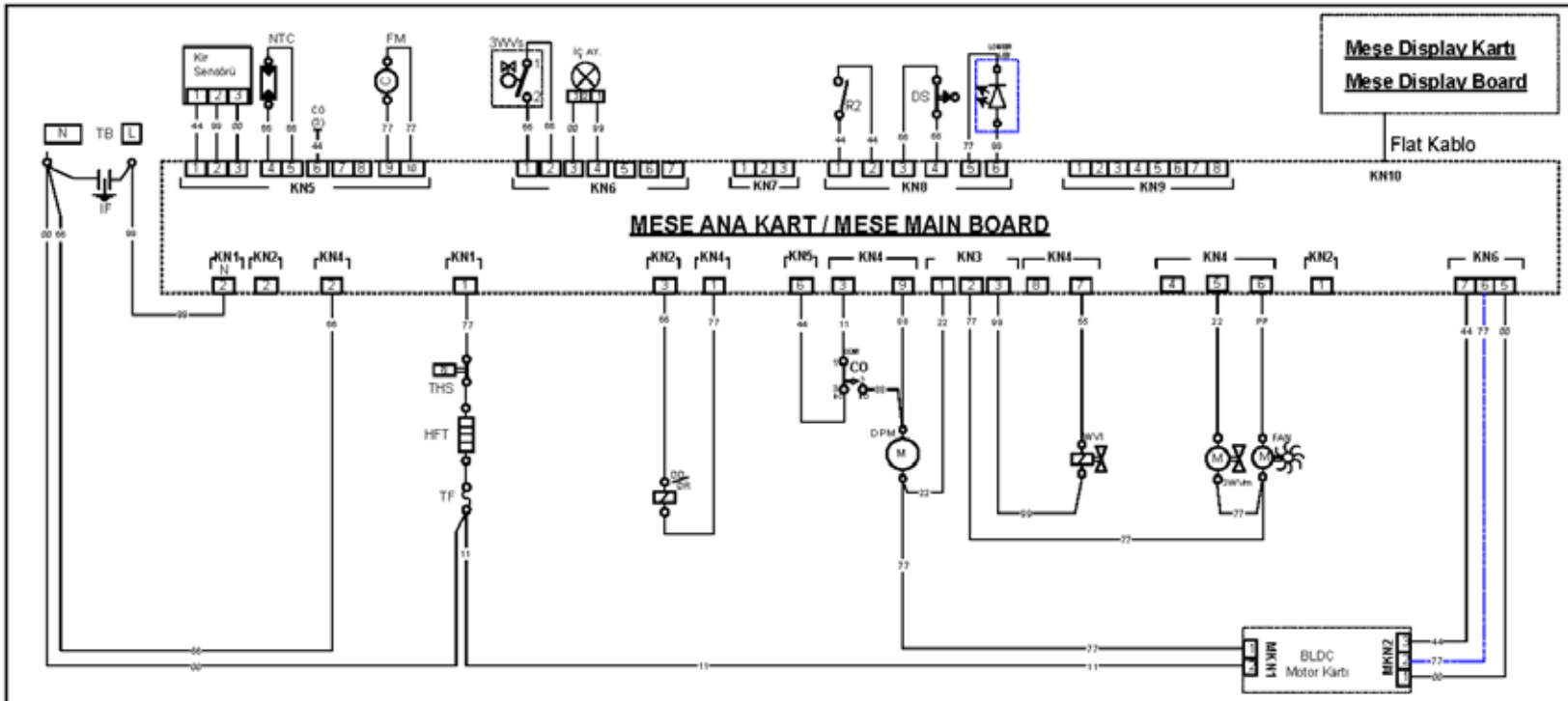
TB	Klemens Kutusu	Terminal Block
DS	Kapı anahtarı	Door Switch
R1	Tuz uyarı şalteri	Salt Reed Relay
R2	Parlatıcı uyarı şalteri	Rinse-Aid Reed Relay
HFT	Boru tip ısıtıcı	Flow Through Heater
THS	Isıtıcı Koruma Termostatı	Heater Thermostat
TF	Isıtıcı Koruma Sigortası	Heaters Fuse
DPM	Tahliye pompası	Drain Pump Motor
CO	Taşma şamandıra şalteri	Over Flow Micro Switch
BLDC	Sirkülasyon Motoru	Circulation Mot.
WV2	Rejenerasyon vanası	Regeneration Valve
DD/DR	Deterjan kutusu	Thermoactuator Dispenser Unit
NTC	NTC	NTC
FM	Su sayacı (counter)	Flow meter
FAN	FAN	FAN
3WVm	3 yollu vana motor	3 Way Valve Motor
3WVs	3 yollu vana sviç	3 Way Valve Switch
PRS	Su basınç şalteri	Pressure Switch
WV3	Boşaltma Vanası	Drain Valve
K./A.	Kapı Açma Mekanizması	Door Open
KPM	Depo Pomp / MFT (Filtre Temizleme)	Tank Pump / Filter Cleaner
I/A	İç Aydınlatma	Interior Lighting
MXV	Karışım Vanası	Mixing Valve
WV1	Su Giriş Vanası	Water valve 1

Renk Kod		Colour Code	
0	Siyah	0	Black
1	Kahve	1	Brown
2	Kırmızı	2	Red
3	Turuncu	3	Orange
4	Sarı	4	Yellow
5	Yeşil	5	Green
6	Mavi	6	Blue
7	Mor	7	Violet
8	Gri	8	Grey
9	Beyaz	9	White
P	Pembe	P	Pink

RVDW103WS


DISPLAY BOARD /
DİSPLAY KART
ATMEL
KN10
KN1
HEATER-ISITICI
LINE(L)
Trafolu Yüzey
RELAY
-RÖLE
RELAY
-RÖLE
RELAY
-RÖLE
MEŞE
POWER BOARD /
ANA KART
KN2
KN3
KN4
KN5
KN9
KN8
KN6
MOTOR BOARD
MOTOR KARTI
MKN1
MKN2
Turbidity Sensor

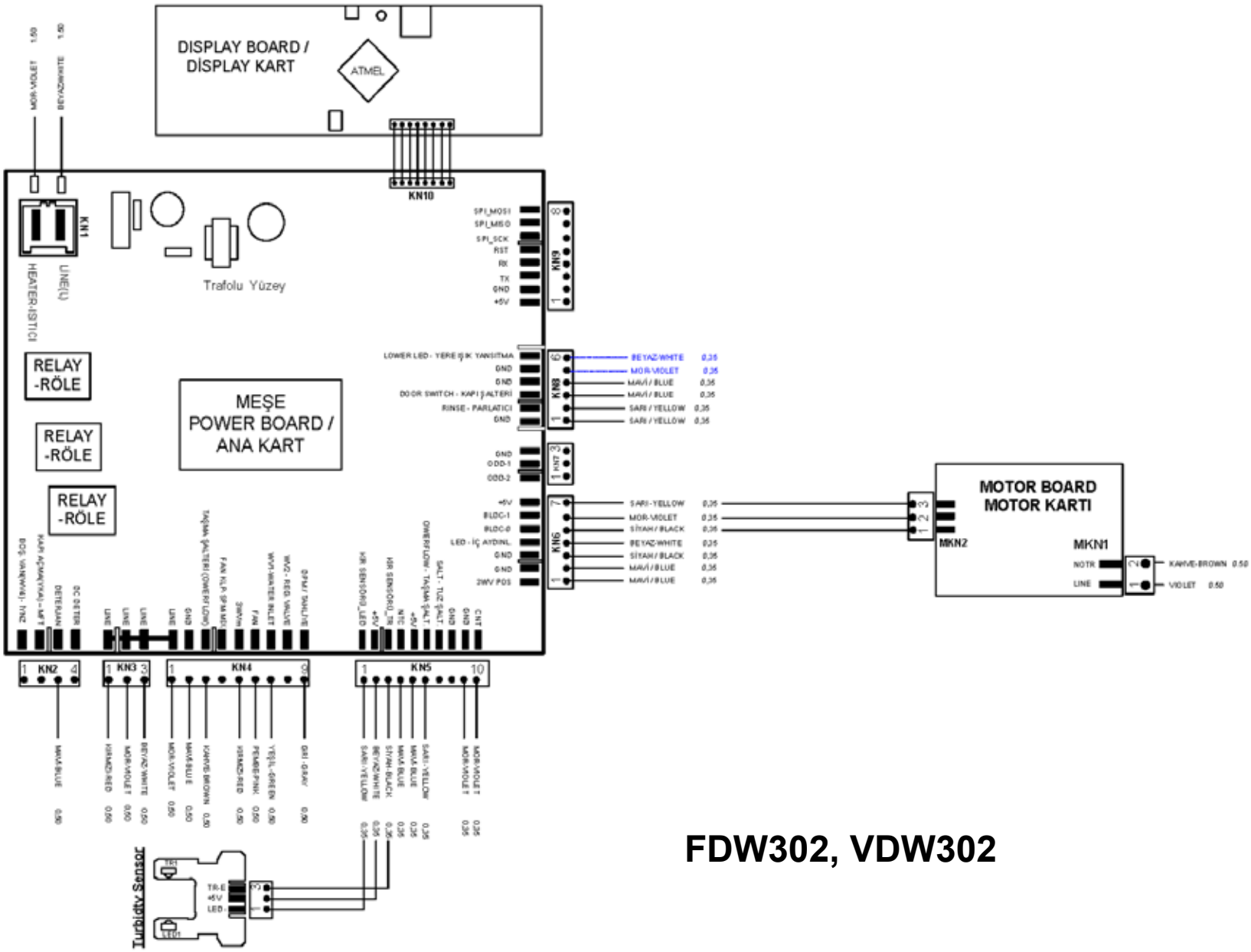
RVDW103WS



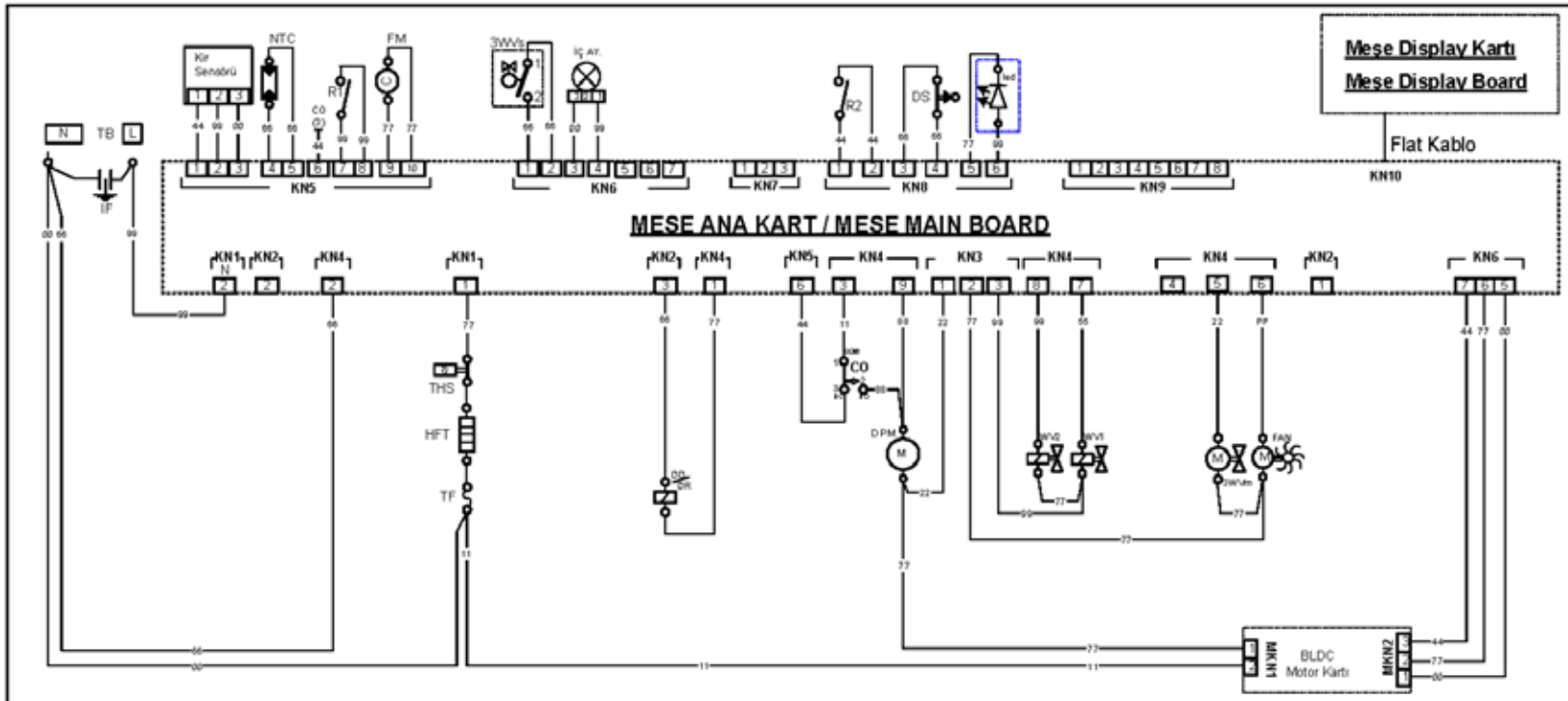
TB	Klemens Kutusu	Terminal Block
DS	Kapı anahtarı	Door Switch
R1	Tuz uyarı şalteri	Salt Reed Relay
R2	Parlatıcı uyarı şalteri	Rinse-Aid Reed Relay
HFT	Boru tip ısıtıcı	Flow Through Heater
THS	Isıtıcı Koruma Termostatı	Heater Thermostat
TF	Isıtıcı Koruma Sigortası	Heaters Fuse
DPM	Tahliye pompası	Drain Pump Motor
CO	Taşma şamandıra şalteri	Over Flow Micro Switch
BLDC	Sirkülasyon Motoru	Circulation Mot.
WV2	Rejenerasyon vanası	Regeneration Valve
DD/DR	Deterjan kutusu	Thermoactuator Dispenser Unit
NTC	NTC	NTC
FM	Su sayacı (counter)	Flow meter
FAN	FAN	FAN
3WVm	3 yollu vana motor	3 Way Valve Motor
3WVs	3 yollu vana sviç	3 Way Valve Switch
PRS	Su basınç şalteri	Pressure Switch
WV3-4	Boşaltma Vanası	Drain Valve
K./A.	Kapı Açma Mekanizması	Door Open
KPM	Depo Pomp / MFT (Filtre Temizleme)	Tank Pump / Filter Cleaner
İ/A	İç Aydınlatma	Interior Lighting
MXV	Karışım Vanası	Mixing Valve
WV1	Su Giriş Vanası	Water valve 1

Renk Kod		Colour Code	
0	Siyah	0	Black
1	Kahve	1	Brown
2	Kırmızı	2	Red
3	Turuncu	3	Orange
4	Sarı	4	Yellow
5	Yeşil	5	Green
6	Mavi	6	Blue
7	Mor	7	Violet
8	Gri	8	Grey
9	Beyaz	9	White
P	Pembe	P	Pink

FDW302, VDW302



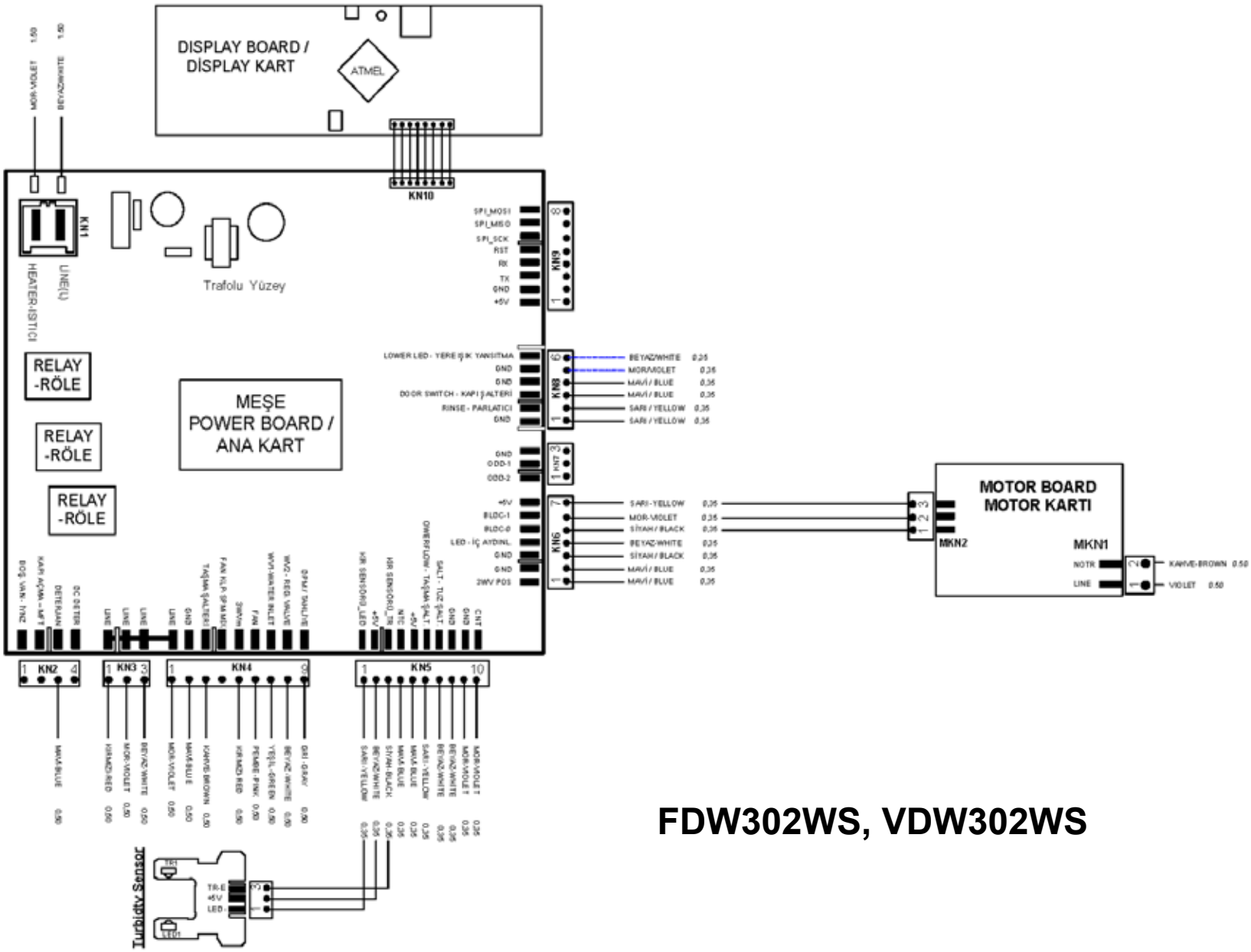
FDW302, VDW302



TB	Klemens Kutusu	Terminal Block
DS	Kapı anahtarı	Door Switch
R1	Tuz uyarı şalteri	Salt Reed Relay
R2	Parlatıcı uyarı şalteri	Rinse-Aid Reed Relay
HFT	Boru tip ısıtıcı	Flow Through Heater
THS	Isıtıcı Koruma Termostatı	Heater Thermostat
TF	Isıtıcı Koruma Sigortası	Heaters Fuse
DPM	Tahliye pompası	Drain Pump Motor
CO	Taşma şamandıra şalteri	Over Flow Micro Switch
BLDC	Sirkülasyon Motoru	Circulation Mot.
WV2	Rejenerasyon vanası	Regeneration Valve
DD/DR	Deterjan kutusu	Thermoactuator Dispenser Unit
NTC	NTC	NTC
FM	Su sayacı (counter)	Flow meter
FAN	FAN	FAN
3WVm	3 yollu vana motor	3 Way Valve Motor
3WVs	3 yollu vana sviç	3 Way Valve Switch
PRS	Su basınç şalteri	Pressure Switch
WV3	Boşaltma Vanası	Drain Valve
K./A.	Kapı Açma Mekanizması	Door Open
KPM	Depo Pomp / MFT (Filtre Temizleme)	Tank Pump / Filter Cleaner
I/A	İç Aydınlatma	Interior Lighting
MXV	Karışım Vanası	Mixing Valve
WV1	Su Giriş Vanası	Water valve 1

Renk Kod		Colour Code	
0	Siyah	0	Black
1	Kahve	1	Brown
2	Kırmızı	2	Red
3	Turuncu	3	Orange
4	Sarı	4	Yellow
5	Yeşil	5	Green
6	Mavi	6	Blue
7	Mor	7	Violet
8	Gri	8	Grey
9	Beyaz	9	White
P	Pembe	P	Pink

FDW302WS, VDW302WS



FDW302WS, VDW302WS