



OMEGA

VRF

TECHNOLOGY

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VRF Indoor Units Trouble Shooting

Indoor Unit Error Code

Wired controller display/digital tube display

Definitions of malfunction	Contents appearing
The first time to switch on and there is no address	FE
Errors of phase sequence or fault of losing phase	E0
Communication failure of indoor and outdoor unit	E1
T1 sensor fault	E2
T2 sensor fault	E3
T2B sensor fault	E4
Malfunction of outdoor unit	E5
Testing fault of zero-crossing signal	E6
EEPROM malfunction	E7
Wind testing fault of PG electric motor	E8
Communication fault of wire controller	E9
Alarming fault of water level switch	EE
Model conflict	EF

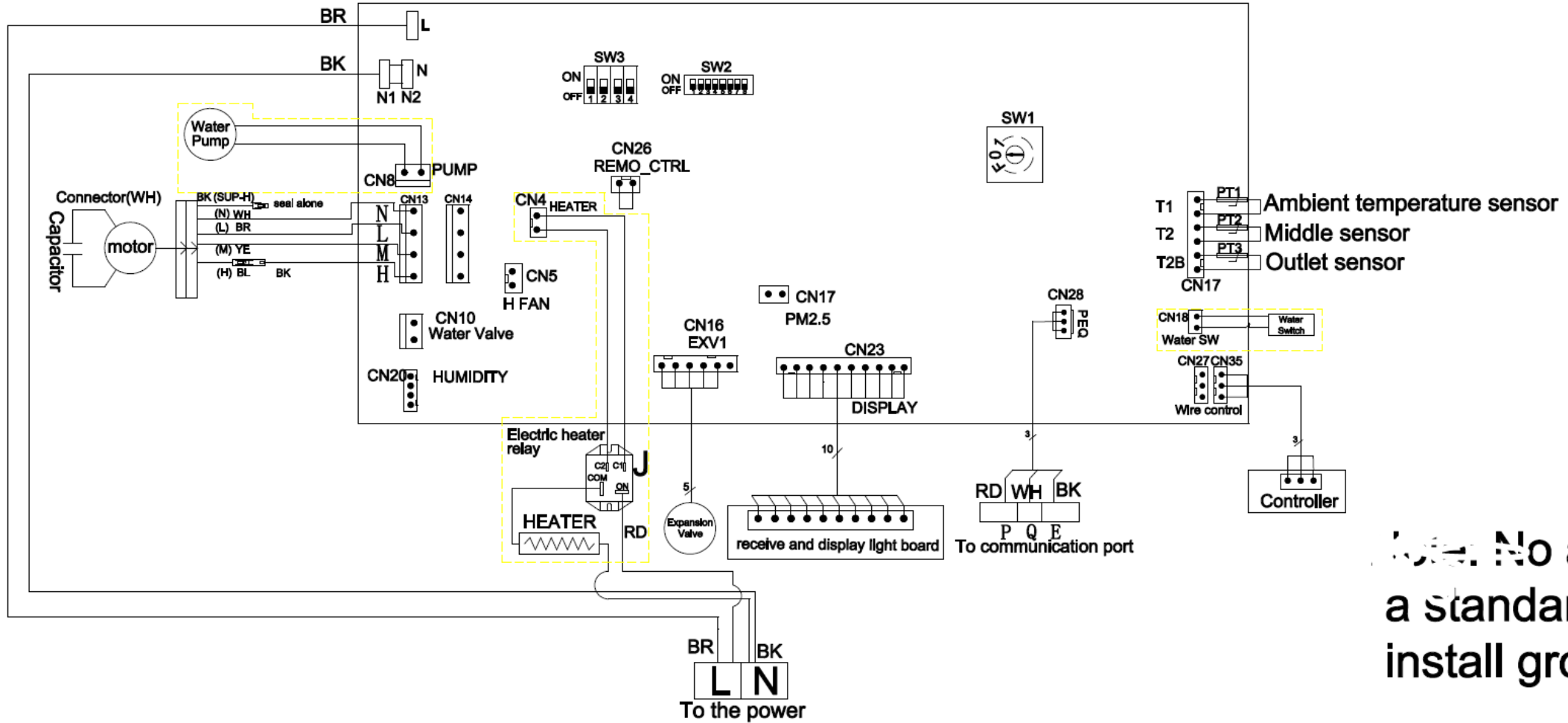
Indoor Unit Error Code

The LED display illuminates with slow-moving running indicators upon being powered and reset. During standby mode, all indicators turn off, but upon start-up, they illuminate. If the appliance is in anti-cold or defrost mode, the preheating/defrost light turns on. If the timing function is activated, the timing light illuminates. In case of a malfunction, the display will indicate an error message.

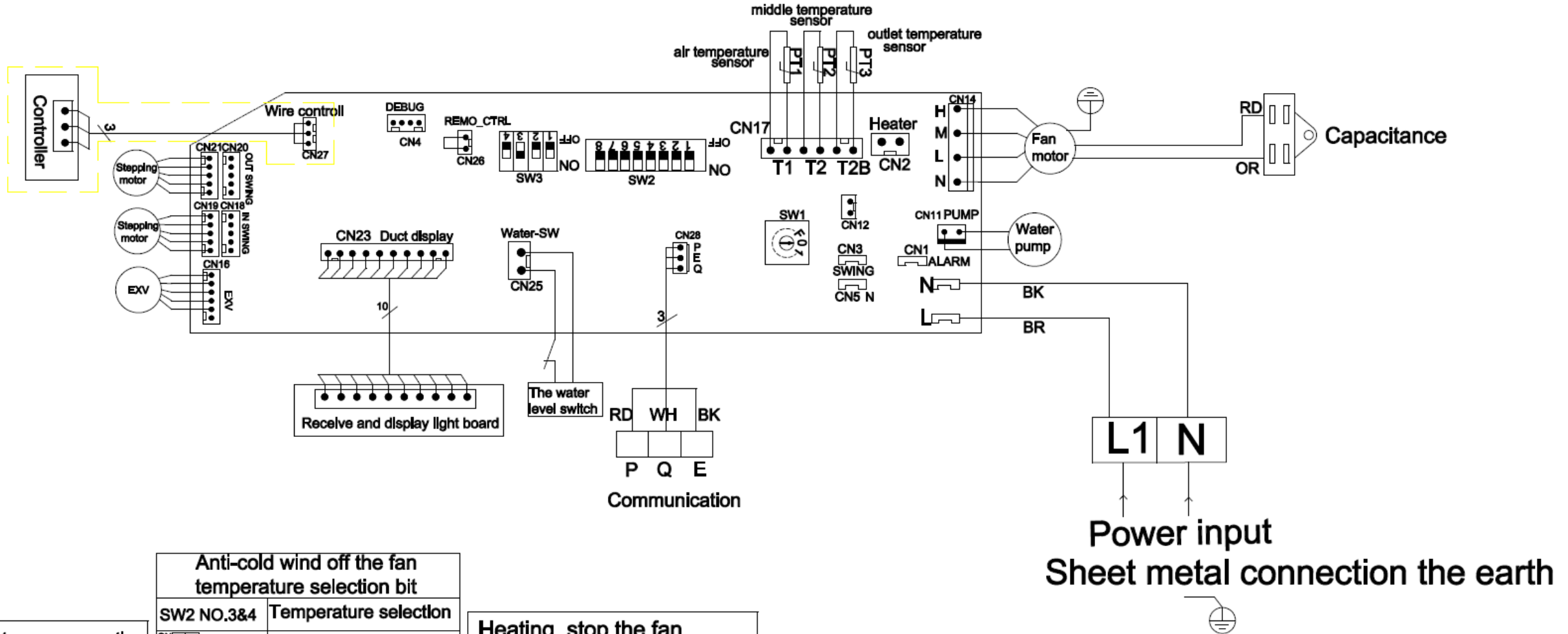
Definitions of malfunction	Contents appearing
The first time to switch on and there is no address	LED timing light and running light shine slowly at the same time.
Communication failure of indoor and outdoor unit	LED timing light shines quickly
Fault of indoor temperature sensor	LED running shines quickly
Alarming fault of water level	LED alarming light shines quickly
Mode impact fault	LED defrost light shines quickly
Outdoor unit fault	LED alarming light shines slowly
EEPROM malfunction	LED defrost light shines slowly

It illuminates at a slow pace, with a 2-second cycle, and at a fast pace, with a 0.4-second cycle.

Ducted Wiring Diagram



Cassette Wiring Diagram



Anti-cold wind off the fan temperature selection bit	
SW2 NO.3&4	Temperature selection

Heating stop the fan

Indoor Unit Troubleshooting



FE: No address when indoor unit first time power on

Reason: There is no communication with the indoor unit when the outdoor unit is power on

Solution :

First, verify if the indoor unit communication wire is correctly connected to the PQE terminal by checking the connection from the main board to the terminal block and the communication wire. If the wire connection is confirmed to be proper, move on to the next step.

Next, using either the remote control or wire controller, set the address for the indoor unit. Make sure not to assign an address that is already in use by another model. Refer to the instructions for the remote control or wire controller for the specific steps to set the address. Alternatively, you can power on the outdoor unit again.



E1: Communication error between indoor and outdoor units

Reason : Communication between internal and external computers is interrupted (The address of the indoor unit has been set)

Solution :

First, confirm that the indoor unit communication wire for the PQE terminal is properly connected from the main board to the terminal block and the communication wire. If there are no issues with the wire connection, move on to the next step. Check whether the address assigned to the indoor unit is already being used by another unit. If the address is repeated, assign a new address to the unit to avoid repetition.

If the error code E1 still persists and there are no issues with the wire connection or address repetition, check whether the communication wire is broken or short-circuited. Use a multimeter to measure the resistance between PQ and check for a short-circuit. If there is no short-circuit, short-circuit the PQ and measure whether it is open-circuit from the PQ terminal of the outdoor unit.

If it is confirmed that there is no open circuit or short circuit, the issue may be due to communication interference. Connect a 100Ω resistor between the PQ of the last indoor unit of the system. If the issue persists, check for the source of interference and eliminate it. If the issue still cannot be resolved, replace the main board.

Indoor Unit Troubleshooting



E2/E3/E4: T1/T2/T2BSensor error

Reason : Sensor reading error or sensor is damaged

Solution :

First, confirm if the sensor is firmly connected to the main board. If it is not firmly connected, reconnect it firmly. If it is still not functioning properly, proceed to the next step.

Unplug the sensor and measure the resistance of the sensor. Check whether it is open or short. If the resistance is open or short, replace the sensor group. If the resistance is normal, replace the main board as it may be faulty.

E5: Outdoor unit error

Reason: Outdoor unit is showing error

Solution :

1. Please refer to outdoor unit error and troubleshooting

E7: EEPROM error

Reason: Indoor unit main board failure

Solution :

1. Replace the Indoor unit main board

E6: Testing fault of zero-crossing signal

Reason: Indoor unit main board failure

Solution :

1. Replace the Indoor unit main board

E8: Wind testing fault of PG motor

Reason: The PG motor failure

Solution :

1. Check the motor connect terminal in the Indoor unit main board

Indoor Unit Troubleshooting



E2/E3/E4: T1/T2/T2BSensor error

Reason : Sensor reading error or sensor is damaged

Solution :

First, check if the sensor is properly connected to the main board. If it is not securely connected, connect it firmly. If it is still not functioning correctly, proceed to the next step.

Next, unplug the sensor and measure its resistance to check whether it is open or short. If the resistance is open or short, replace the sensor. If the resistance is normal, the main board may be faulty, and it needs to be replaced.



E9: Communication fault of wire controller

Reason: The communication between the wire controller and the main board is interrupted

Solution :

1. First, check whether the communication wire of the wire controller is firmly connected. Also, check that the communication wire is not damaged, open or short-circuited. If there is any issue with the wire, reconnect it firmly.
2. If there are no problems with the wire, but the communication problem persists, replace the wire controller.
3. If replacing the wire controller doesn't solve the issue, then the main board may be faulty and needs to be replaced.

Indoor Unit Troubleshooting

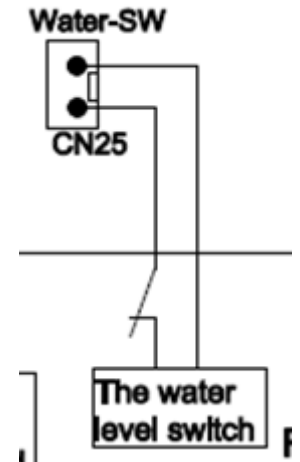
EE: Water level alarm error

Reason: Water level switch failure

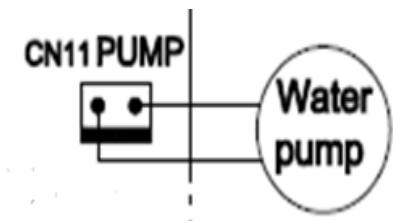
Solution :

1. First, check whether the water level switch is securely connected, and ensure that the connection is stable.
2. Next, verify whether the power socket of the water pump is functional and the voltage is within the range of 220-240V. Check whether the drain port of the water pump is blocked or damaged.
3. If the power socket and drain port of the water pump are functioning correctly, but the water pump is still unable to discharge water, then the water pump needs to be replaced.
4. Check whether the water level switch is functioning properly. Use a multimeter to measure the resistance of the water level switch. If the resistance is infinity, it indicates disconnection, and if it has resistance, it indicates conduction. If the water pump is in good working condition, and the resistance of the water level switch is infinite, it means that the water level switch is faulty. (You can directly connect it to the "Watch-SW" terminal. If the fault disappears, then the water level switch is faulty. If the fault does not disappear, then the water level switch is normal.)

“Watch-SW” Terminal



“Water pump” Terminal



Indoor Unit Troubleshooting



EF: Mode conflict

Reason: In the same system, part of the indoor unit running cooling mode part of the internal machine heat

Solution :

1. Change the mode of the indoor unit showed EF, otherwise replace the main control board





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