

This diagram illustrates the main control board of the indoor unit, showing its connection to the outdoor unit and various internal components. The board is divided into two main sections: PCB1 (Main control board of outdoor unit) and PCB2 (Main control board of indoor unit).

PCB1 (Main control board of outdoor unit):

- Refrigerant cooling:** Indicated by a large upward arrow.
- Inductor:** Connected to the main power supply.
- Wire controller:** Manages the power distribution to the outdoor unit.
- Components:** Includes a magnetic ring (2 laps), YE/GN terminal, P1, CN2 PFC1, CN1 PFC2, CN3 N, CN4 L, CN6 WH, CN7 BK, CN9 YE, CN10 GY, CN5 BL, CN21 AC FAN, CN23 LP HP, CN26 PS1, WP5 T7 YE, CN19 T3 T4 TP, CN27 RD, and a COMP (Compressor).
- Wiring:** Shows connections for BL, RD, BK, and YE/GN lines, along with various control signals like SW1, SW2, SW3, SW4, SW5, SW6, and SW7.

PCB2 (Main control board of indoor unit):

- Power and Control:** Includes a POWER terminal, CN30 RD, CN5 RD, CN4 RD, CN5 GR, and CN6 GR.
- Heating and Cooling:** Features a Crank1/SV1_A, Crank2/SV1_B, and Crankcase Heater 1 and 2.
- Temperature Sensors:** Includes a Crankcase Heater 1, Crankcase Heater 2, and various temperature sensors like T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T33, T34, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55, T56, T57, T58, T59, T60, T61, T62, T63, T64, T65, T66, T67, T68, T69, T70, T71, T72, T73, T74, T75, T76, T77, T78, T79, T80, T81, T82, T83, T84, T85, T86, T87, T88, T89, T90, T91, T92, T93, T94, T95, T96, T97, T98, T99, T100.
- Wiring:** Shows connections for BL, RD, BK, and YE/GN lines, along with various control signals like SW1, SW2, SW3, SW4, SW5, SW6, and SW7.

Legend:

- External heat source interface terminal
- Unit operation signal interface terminal
- Unit defrost signal interface terminal
- Unit alarm signal interface terminal
- Zone2 on/off pump (Reserved)

Wiring Diagram:

The diagram illustrates the electrical connections for the DHW control unit. The power supply (220-240V AC) is connected to the unit's terminals (L, N, PE). A 3KW electric heating element is connected to the L and N lines. A magnetic ring (3 laps) is connected to the PE line. The diagram also shows the connection of a relay and a terminal block for various sensors and actuators.

Modbus Network Address:

SW8 4-OFF		SW8 4-ON	
SW1 CODE	Network address	SW1 CODE	Network address
0	32	0	16
1	1	1	17
2	2	2	18
3	3	3	19
4	4	4	20
5	5	5	21
6	6	6	22
7	7	7	23
8	8	8	24
9	9	9	25
A	10	A	26
B	11	B	27
C	12	C	28
D	13	D	29
E	14	E	30
F	15	F	31

SW4 Dial definition:

SW4 1	SW4 2	Modbus baud rate(bit/s)	SW4 3	SW4 4	Modbus parity check
OFF	OFF	9600(default)	OFF	OFF	No check
ON	OFF	4800	ON	OFF	Even check(default)
OFF	ON	19200	OFF	ON	Odd check
ON	ON	38400	ON	ON	No check

SW5 Dial definition:

SW5 1-OFF	Modbus stop bit 1 bit(Default except Riello)	SW5 1-ON	Modbus stop bit 2 bit(Riello default)
1-OFF: Heat pump	1-ON: Heating only		
2-OFF: Wired controller control	2-ON: Thermostat control		
3-OFF: Normal control	3-ON: Laboratory test mode		
4-OFF: With DHW mode	4-ON: Without DHW mode		