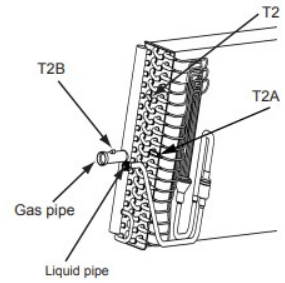
Checklist DIP-Switch Setting SYSVRF2 AHU BOX

Project:_____ Date:_____

Temperature sensors:

The sensors only have to be connected to the Master Box

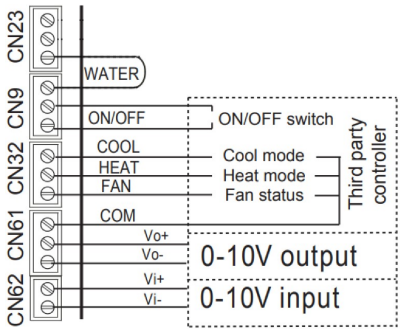
T1: inlet air temperature sensor
T2A: evaporator inlet temperature sensor
T2: evaporator intermediate temperature sensor
T2B: evaporator outlet sensor
TA: outlet air temperature sensor



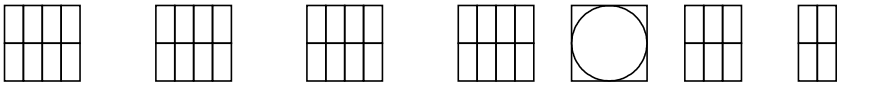
External Signals:

The contacts "WATER", "ON/OFF switch" and "Fan status" must be closed or manually bridged

To controll the AHU Box with external Signals following Signals are required:
"Cool mode" + "0-10V input" or
"heat mode" + "0-10V input"

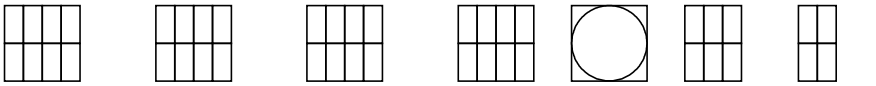


Master



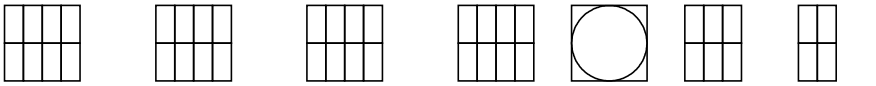
SW1 SW2 SW3 SW4 ENC1 SW9 SW10

Slave1



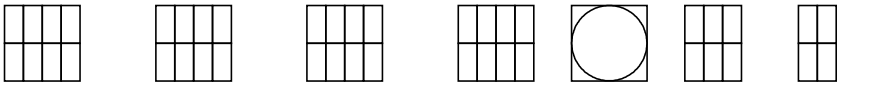
SW1 SW2 SW3 SW4 ENC1 SW9 SW10

Slave2



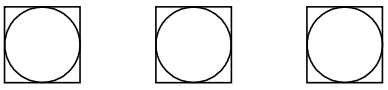
SW1 SW2 SW3 SW4 ENC1 SW9 SW10

Salve3



SW1 SW2 SW3 SW4 ENC1 SW9 SW10

ENC2 ENC3 ENC4

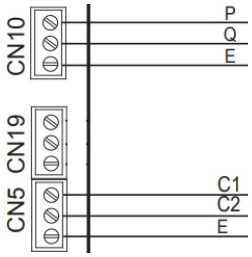


LOW MIDDLE HIGH

Master/Slave

Only the Master Box must be connected to the P/Q/ E bus.

The slave boxes must be wired in series with the master box via C1/C2/E



1) Definitions of each bit of SW1:

 Valid for the master unit only	SW1-1 is 0: shutdown compensation temperature (cooling) is 0°C (factory default) SW1-1 is 1: shutdown compensation temperature (cooling) is 2°C (outlet air temperature control is invalid)
 Valid for the master unit only	SW1-2 is 0: AHU control box provides three fan speeds (factory default) SW1-2 is 1: only one fan speed
 Valid for the master unit only	SW1-3 and SW1-4 are 00: the number of slave AHU control boxes connected in parallel is 0 (factory default); valid for the master unit
 Valid for the master unit only	SW1-3 and SW1-4 are 01: the number of slave AHU control boxes connected in parallel is 1
 Valid for the master unit only	SW1-3 and SW1-4 are 10: the number of slave AHU control boxes connected in parallel is 2
 Valid for the master unit only	SW1-3 and SW1-4 are 11: the number of slave AHU control boxes connected in parallel is 3

2) Definitions of each bit of SW2:

	SW2-1 is 0: automatic addressing (factory default) SW2-1 is 1: clearing AHU control box address
	SW2-2 is 0: no self-check (factory default) SW2-2 is 1: self-check
	SW2-3 and SW2-4 are 00: master AHU control box(factory default)
	SW2-3 and SW2-4 are 01: slave AHU control box 1
	SW2-3 and SW2-4 are 10: slave AHU control box 2
	SW2-3 and SW2-4 are 11: slave AHU control box 3

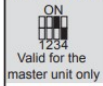
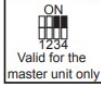
4) Definitions of each bit of SW4:

 Valid for the master unit only	SW4-1 is 0: return air temperature control (factory default) SW4-1 is 1: outlet air temperature control	 Valid for the master unit only	SW4-2 indicates high bit (ON indicates + 16)
 Valid for the master unit only	SW4-3 and SW4-4 are 00: factory controller mode (factory default)	 Valid for the master unit only	SW4-3 and SW4-4 are 01: capacity output mode of a third party controller
 Valid for the master unit only	SW4-3 and SW4-4 are 10: set temperature control mode of a third party controller	 Valid for the master unit only	SW4-3 and SW4-4 are 11: set temperature control mode of a third party controller (reserved)

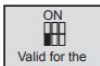
Table 4-1 Capacities of SW4-2 and ENC1

SW4-2 	ENC1	Capacity (hp)	Capacity (KW)	
0	0	0.8 hp	2.2	BOX 22-90
	1	1.0 hp	2.8	
	2	1.2 hp	3.6	
	3	1.7 hp	4.5	
	4	2.0 hp	5.6	
	5	2.5 hp	7.1	
	6	3.0 hp	8.0	
	7	3.2 hp	9.0	BOX 90-200
	8	3.6 hp	10.0	
	9	4.0 hp	11.2	
	A	4.5 hp	12.0	
	B	5.0 hp	14.0	
	C	6.0 hp	16.0	
	D	6.5hp	18.0	
	E	7.0hp	20.0	BOX 200-360
	F	8.0 hp	22.4	
1	0	10.0 hp	28.0	
	1	12.0 hp	33.5	
	2	14.0 hp	40.0	BOX 360-560
	3	16.0 hp	45.0	
	4	20.0 hp	56.0	

3) Definitions of each bit of SW3:

	Return Air Temperature Control (SW4-1 is 0)	Outlet Air Temperature Control (SW4-1 is 1)
 Valid for the master unit only	SW3-1 and SW3-2 are 00: anti-cold air temperature value in heating mode is 15°C (factory default)	SW3-1 and SW3-2 are 00: anti-cold air temperature value in heating mode is 14°C
 Valid for the master unit only	SW3-1 and SW3-2 are 01: anti-cold air temperature value in heating mode is 20°C	SW3-1 and SW3-2 are 01: anti-cold air temperature value in heating mode is 12°C
 Valid for the master unit only	SW3-1 and SW3-2 are 10: anti-cold air temperature value in heating mode is 24°C	SW3-1 and SW3-2 are 10: anti-cold air temperature value in heating mode is 16°C
 Valid for the master unit only	SW3-1 and SW3-2 are 11: anti-cold air temperature value in heating mode is 26°C	SW3-1 and SW3-2 are 11: anti-cold air temperature value in heating mode is 18°C
 Valid for the master unit only	SW3-3 and SW3-4 are 00: temperature compensation in heating mode is 6°C (factory default)	SW3-3 and SW3-4 are 00: Outlet air temperature control is invalid
 Valid for the master unit only	SW3-3 and SW3-4 are 01: temperature compensation in heating mode is 2°C	SW3-3 and SW3-4 are 01: Outlet air temperature control is invalid
 Valid for the master unit only	SW3-3 and SW3-4 are 10: temperature compensation in heating mode is 4°C	SW3-3 and SW3-4 are 10: Outlet air temperature control is invalid
 Valid for the master unit only	SW3-3 and SW3-4 are 11: temperature compensation in heating mode is 0°C(Follow Me function)	SW3-3 and SW3-4 are 11: No temperature compensation for outlet air temperature control by default

5) Definitions of each bit of SW9:

 Valid for the master unit only	SW9-1 is 0: 2-digit digital display panel (factory default) SW9-2 is 1: 3-digit digital display panel
Valid for the master unit only	SW9-2 is 0: One or more AHU control boxes are connected in parallel to one AHU; one coil is connected to multiple control boxes; (shielding faults from the slave unit's temperature sensors T1, T2, T2A, TA and T2B) (factory default) SW9-2 is 1: Multiple AHU control boxes are connected in parallel. In the event of multiple coils, one coil is connected to one control box; (shielding faults from the slave unit's temperature sensor T1,TA)
 Valid for the master unit only	SW9-3 is 0: no swing control (factory default) SW9-3 is 1: swing control

6) Definitions of each bit of SW10:

	00: AHU BOX 22-90 model
	01: AHU BOX 90-200 model
	10: AHU BOX 200-360 model
	11: AHU BOX 360-560 model

0-10V output Voltage

ENC2 (2V Factory Default)					ENC3 (7V Factory Default)						ENC4 (10V Factory Default)					
Fan output voltage of Low speed					Fan output voltage of Middle speed						Fan output voltage of High speed					
Dial code	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Voltage(V)	1	1	2	3	4	5	6	7	8	9	10	10	10	10	10	10

Note: ENC2<ENC3<ENC4. If not satisfied, fault H9 is reported.