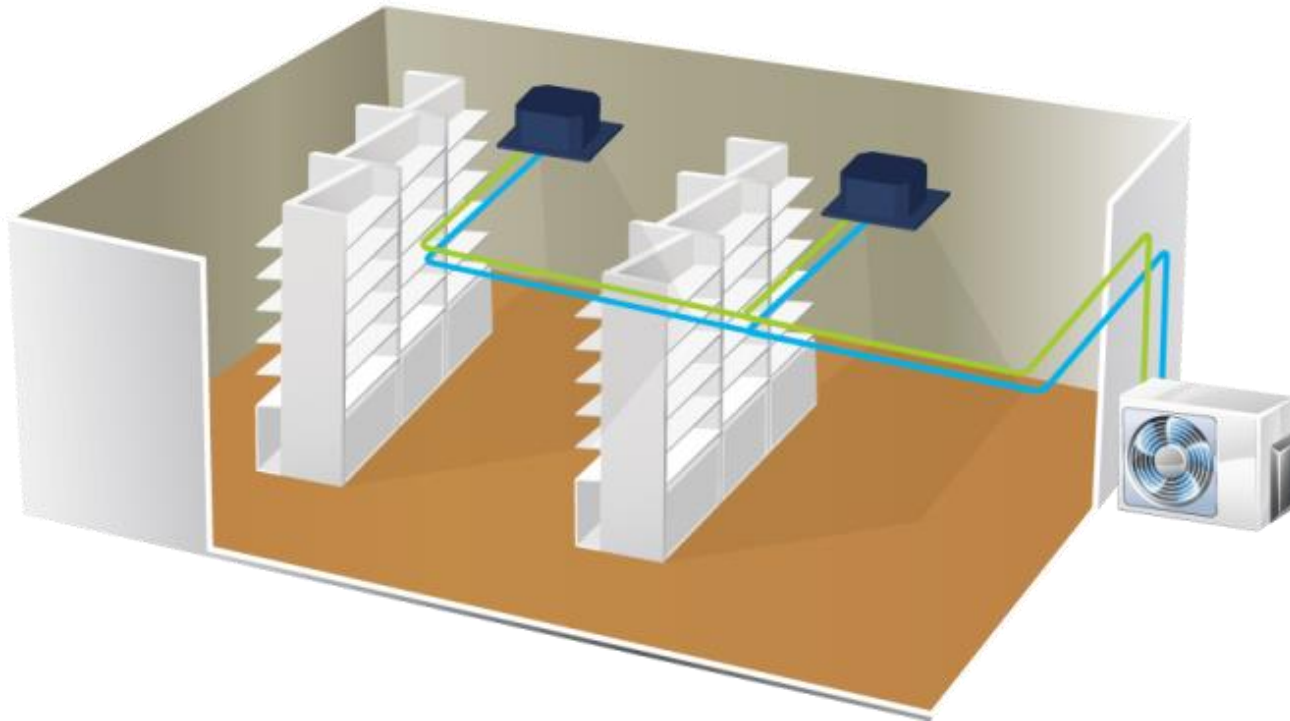# Introduction of Twins System

Twins System

● **Brief Introduction**

- Twins systems: one outdoor unit is connected with two same rating indoor units.

Twins System

● **Available Products**

- DC inverter New super-slim 4-way cassette, A6 duct and ceiling-floor units.

Twins System

Combination Rules

| R32	Indoor Units	Outdoor Unit
Twins System	12K+12K*	24K
	18K + 18K*	36K
	24K + 24K	48K
	30K + 30K*	60K

- The indoor units must be in the same ratings.
- 12K indoor unit only have New A6 Ducted.
- 18K indoor unit only have New A6 Ducted unit and Under Ceiling unit.
- 30K indoor unit only have New Cassette unit and A6 Ducted unit.

Twins System

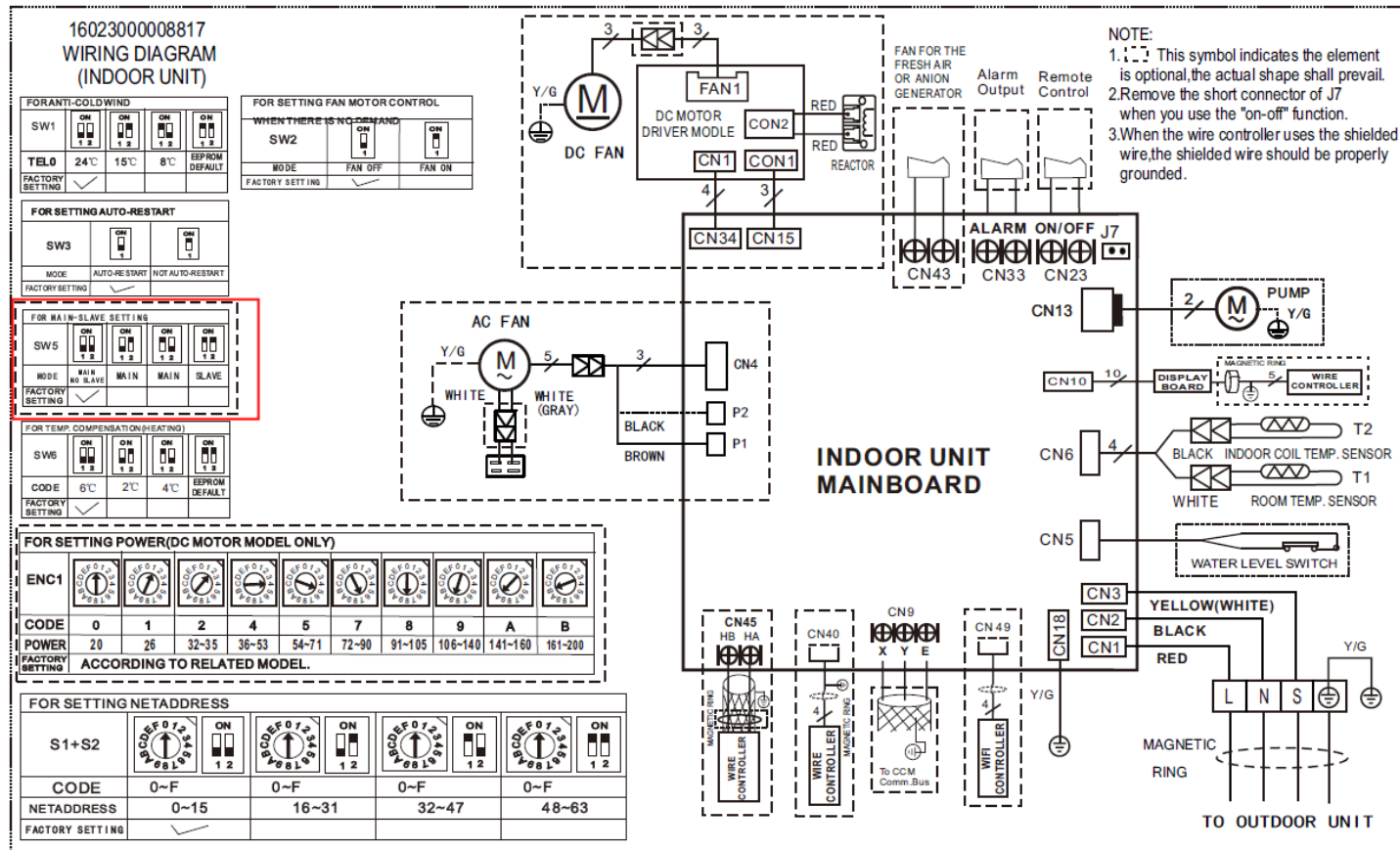## Indoor Units Settings

New Super-slim 4-way unit wiring diagram
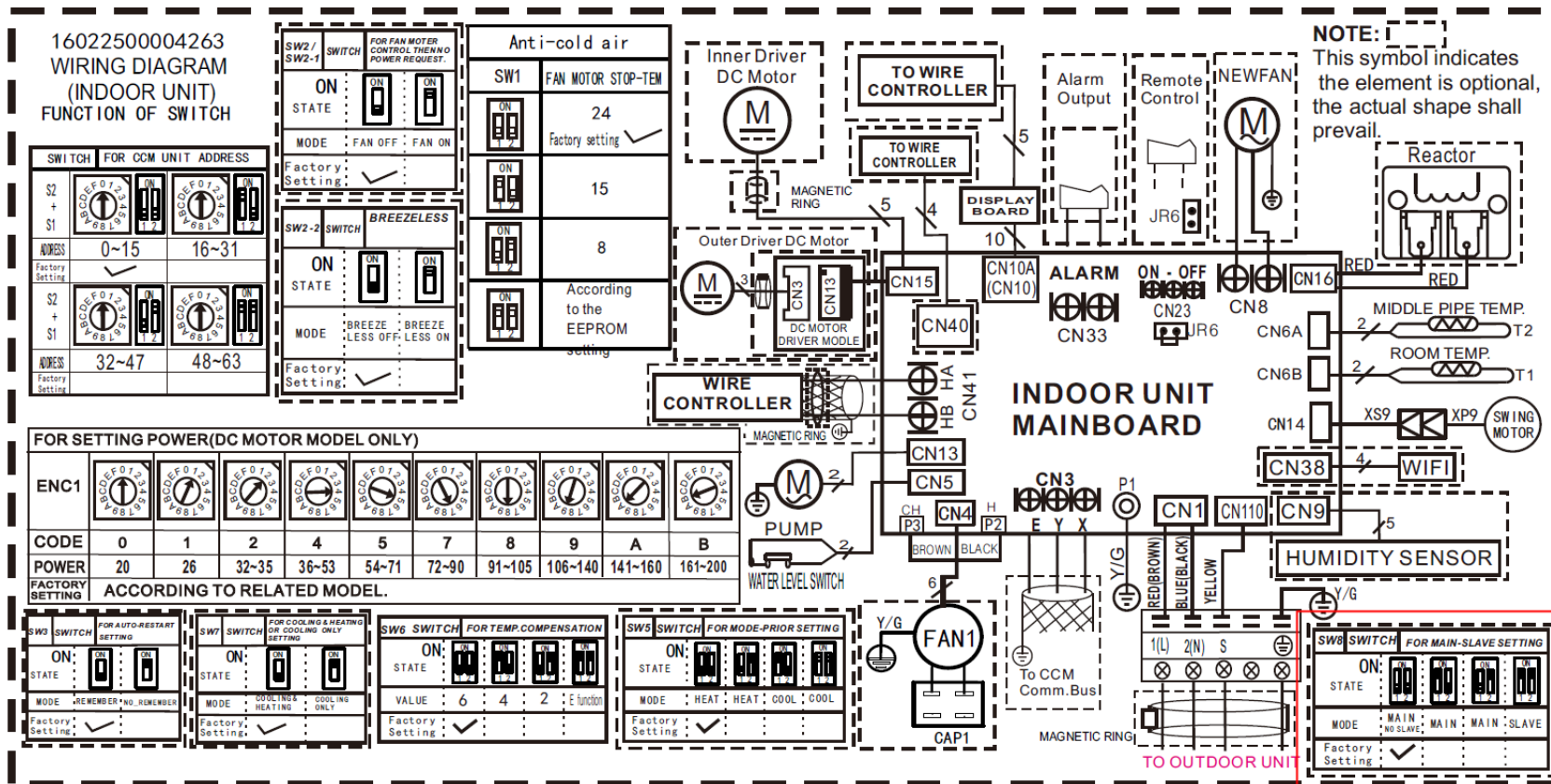
- The dial switch SW8 must to be set to make the unit as one part of a twin system.

Twins System

● Indoor Units Settings

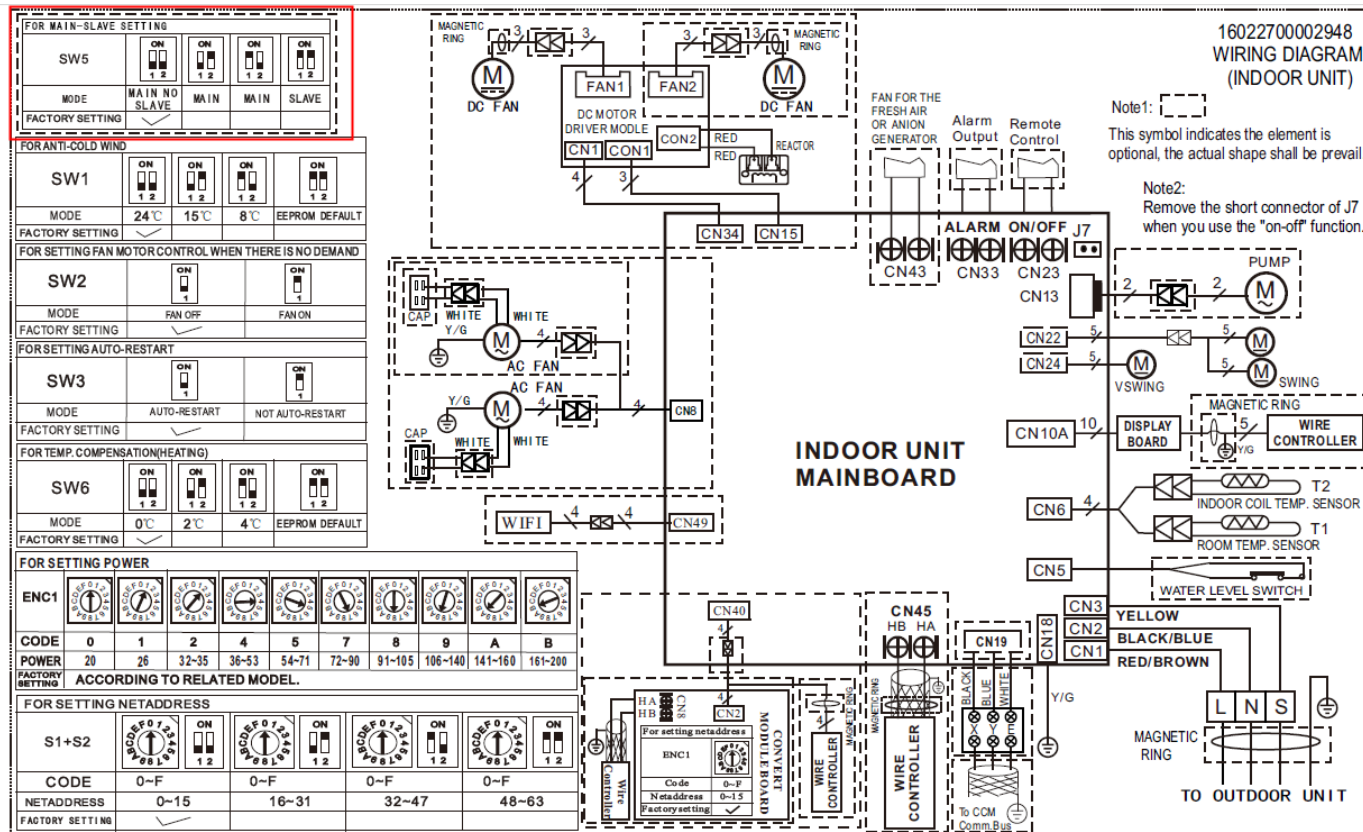### New A6 duct unit dial switch diagram

- The dial switch SW5 must to be set to make the unit as one part of a twin system.

Twins System

- ## Indoor Units Settings

Ceiling-floor unit dial switch diagram

- The dial switch SW5 must to be set to make the unit as one part of a twin system.

Twins System

● **Indoor Units Settings**

SW5/SW8

FOR MAIN-SLAVE SETTING				
SW5	ON 1 2	ON 1 2	ON 1 2	ON 1 2
MODE	MAIN NO SLAVE	MAIN	MAIN	SLAVE
FACTORY SETTING	✓			

- "MAIN NO SLAVE" means the unit is set as an indoor unit of 1 drive 1 system;
  "MAIN" means the unit is set as an indoor unit of a twin system;
  "SLAVE" means the unit is slave unit.

Twins System

- **Control Rules**

**M**

S
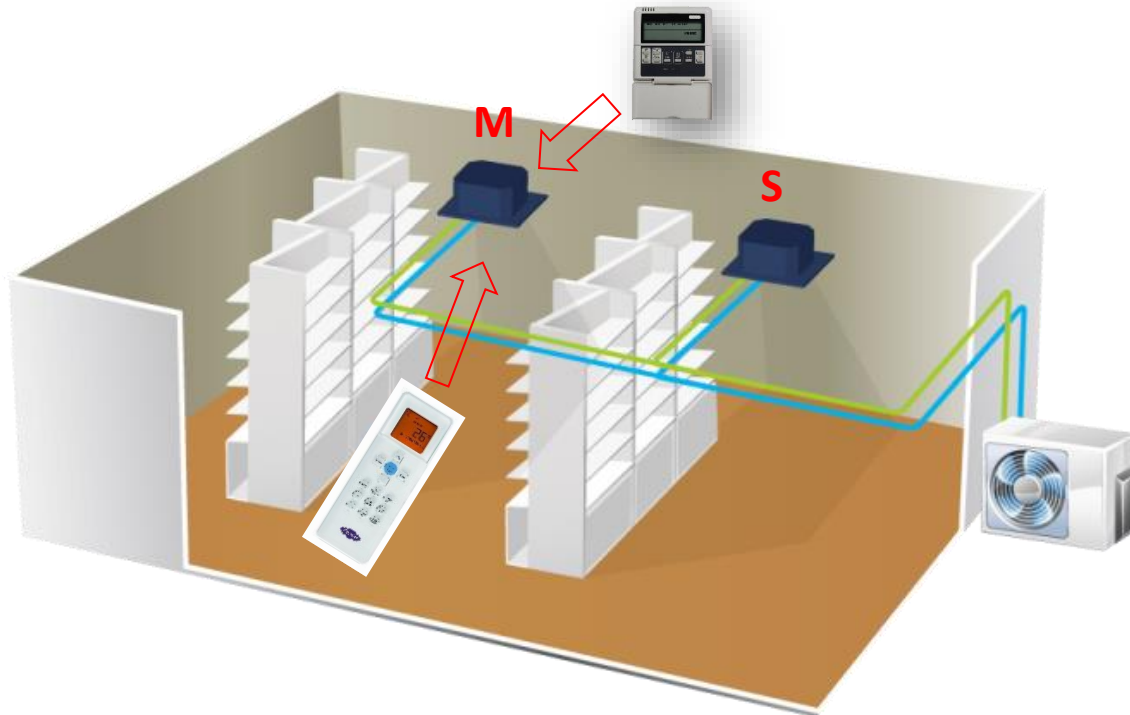
When a twin system is working, the controller can control only the main unit. The slave unit works in the same state as the main unit.

- 2 indoor units work in same state such as working mode, set temperature, fan-speed and etc. The outdoor unit output capacity is based on the sum of both indoor unit capacity request.

- When the main unit stops, the slave unit will stop as well.
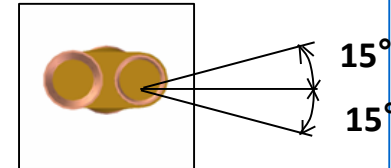
Twins System

Installation
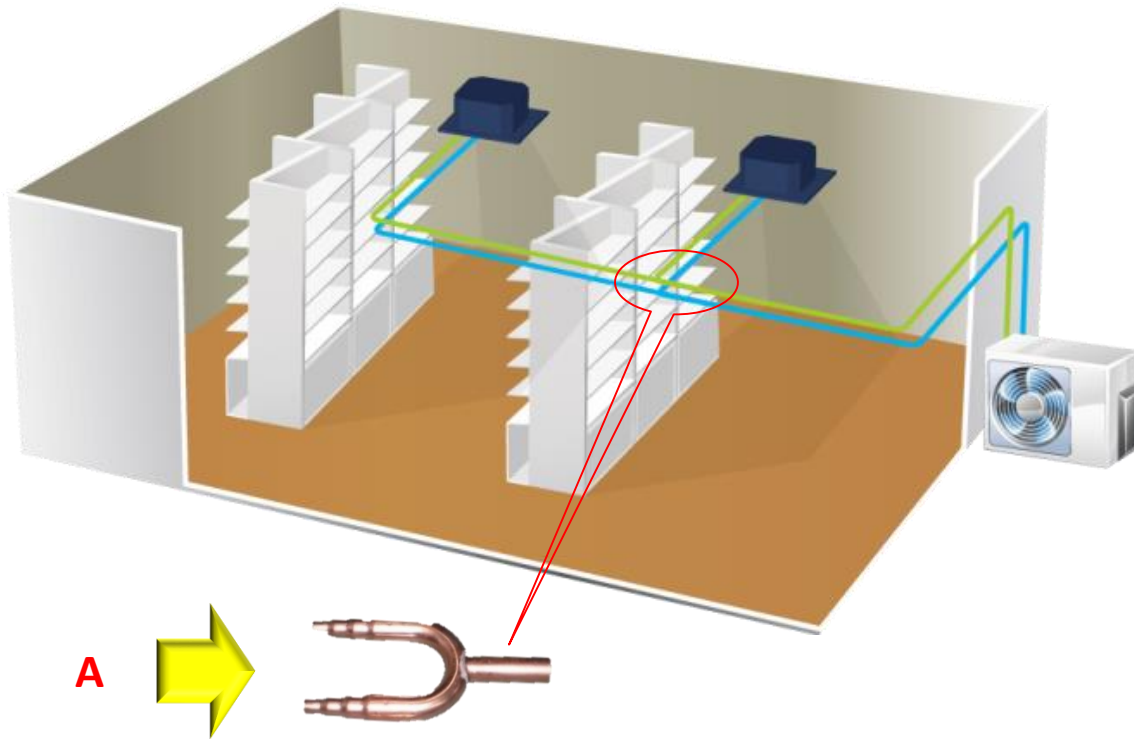
Avoid refrigerant distribution unbalance.

A direction

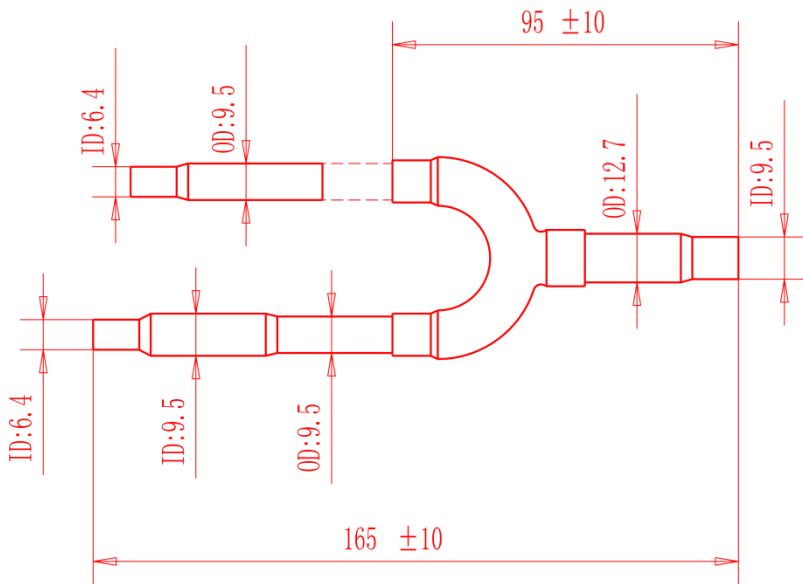| Wrong	Correct

15°
15°

Horizontal

A
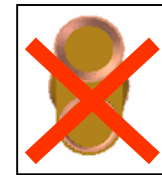
- The pipe joint must be branch joint, which must be installed horizontally.
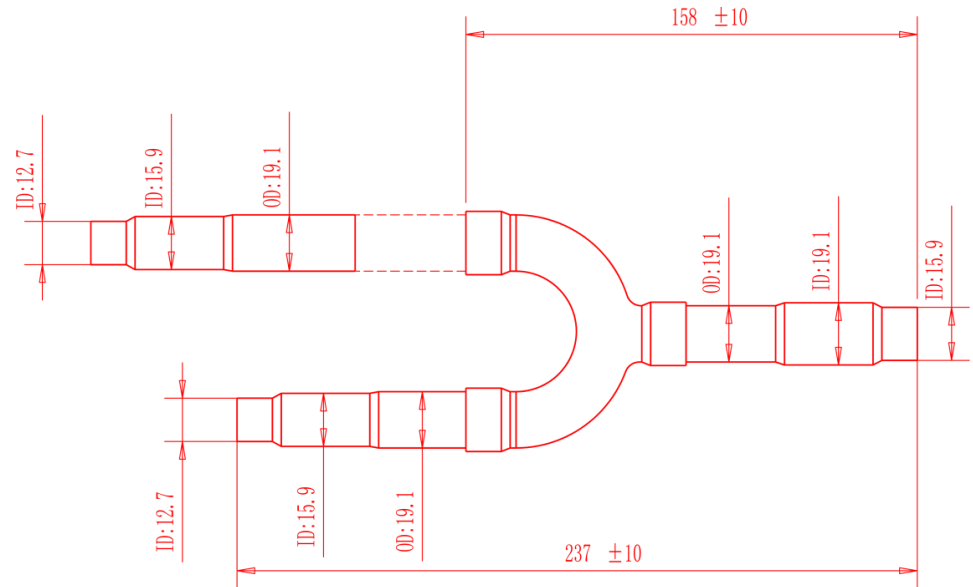
Twins System

● **Branch Joint**

Liquid side joints

Gas side joints

FQZHN-01C.1

FQZHN-01C.2

- To use the branch joint, please cut the pipe at different size position to get the correct size to match the indoor and outdoor pipe.

Twins System

Pipe Length Limits
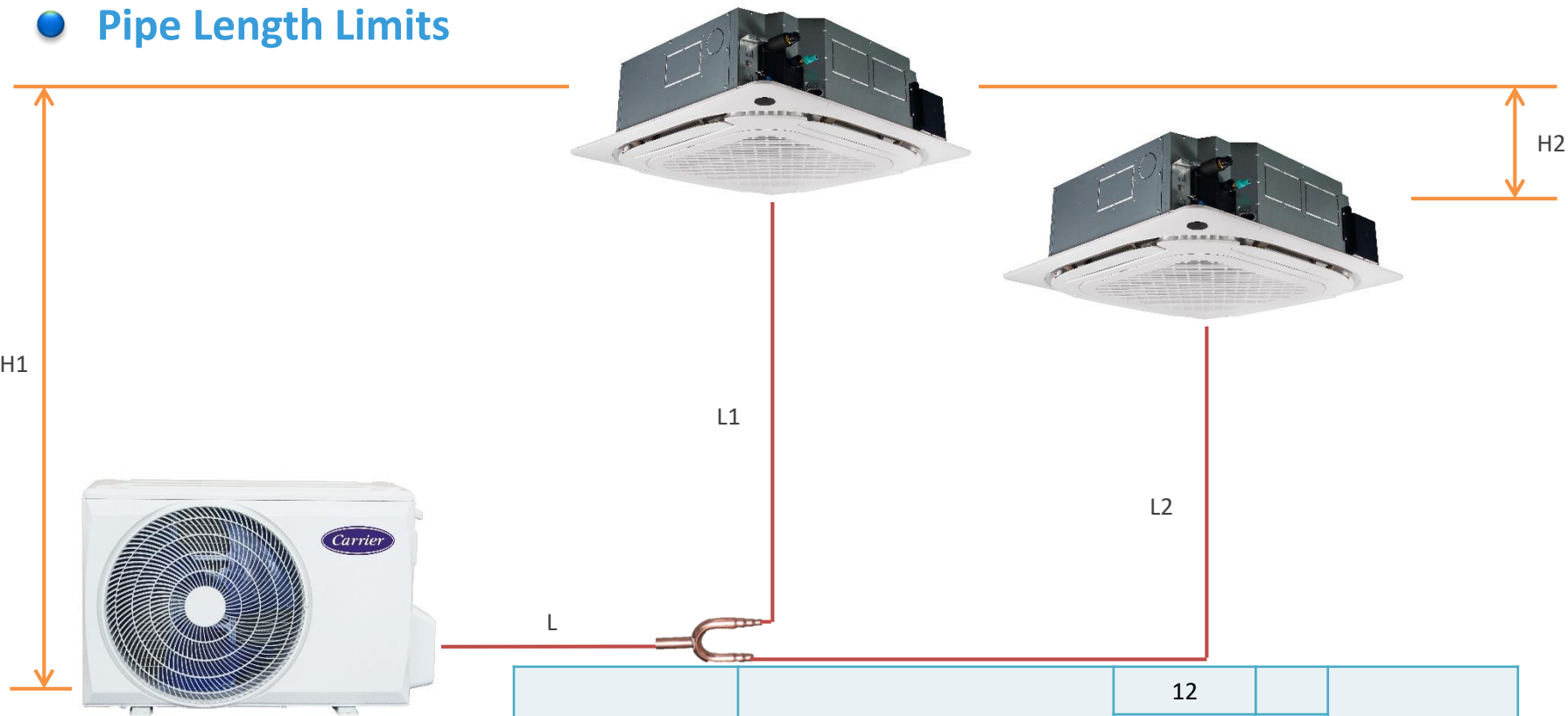
Piping length	Total piping length	12		L+Max (L1, L2)
		18K+18K	**30**	
		24K+24K	**50**	
		30K+30K	50	
	Farthest distance from line pipe branch	15		L1, L2
	farthest distance from the line pipe branch	10		L1-L2
Drop height	Drop height between indoor and outdoor unit	20		H1
	Drop height between two indoor units	0.5		H2

Twins System

Wiring

Master IDU   Slave IDU

INDOOR UNIT 1   CN3   E Y X   ⊕ 1(L) 2(N) S

INDOOR UNIT 2   CN3   E Y X   ⊕ 1(L) 2(N) S

OUTDOOR UNIT

⊕ S 1(L) 2(N)

⊕ L3 N L1 L2

Power supply:3-Phase 380–415V~
5-core cable 5x2.5mm²

Power supply:3-Phase 220V~
5-core cable 5x4.0mm²
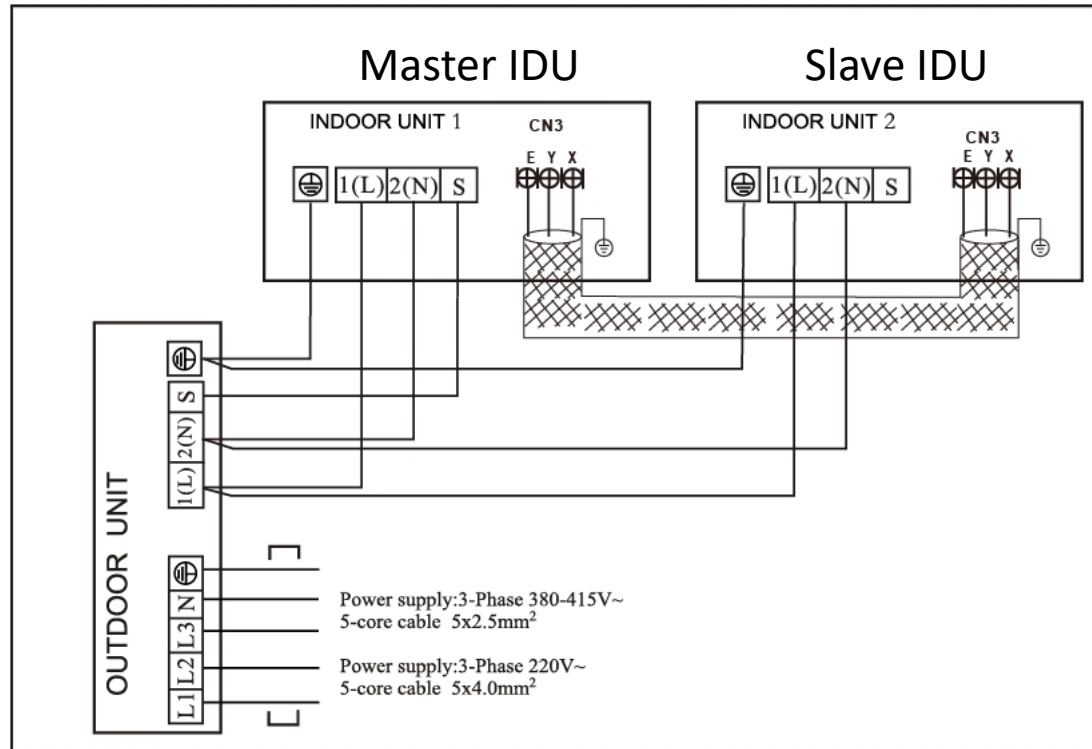
- Master and slave indoor unit communicate between with XYE terminal ，and the master indoor unit communicate with outdoor unit by S terminal.

Twins System

● **Fault**

Fault	LED				Digital Tube
	Deforest	**Alarm**	**Running**	**Timer**	
EEPROM Failure	Quick Flash	Off	Off	Off	EH00
Indoor Fan Speed Lost	Quick Flash	Quick Flash	Off	Off	EH38
Room Temp. Sensor Fault	Off	Off	Quick Flash	Off	EH60
Pipe Temp. Sensor Fault (T2)	Off	Off	Quick Flash	Off	EH61
Water Level Alarm	Off	Quick Flash	Off	Off	EH0E
Communication Failure Between Indoor and Outdoor Units	Off	Off	Off	Quick Flash	EL01
Other Faults of Main and Slave Units	Off	Quick Flash	Quick Flash	Off	EH12
Outdoor Unit Failure	Off	Slow Flash	Off	Off	EC0d

• When one indoor unit stops because of fault, another one will stop as well with "EH12" fault code displaying. The faulty indoor unit will display the error code in accordance with different faults.

Thank You!