SERIE / SÉRIE / SERIE / SÉRIE

FDLA VALVE KIT

EDICIÓN / ÉDITION / PUBBLICAZIONE / EDIÇAO

12.17

CATÁLOGO / BROCHURE / CATALOGO / CATALOGO

FDLAVK 01

SUSTITUYE / REMPLACE / SOSTITUISCE / SUBSTITUI

FDLAVK 01

En

INSTALLATION MANUAL

VALVE KIT FOR FDLA SERIES
HYDRONIC DUCTED LOW STATIC
FDLA VK 01
FAN COIL AIR CONDITIONIERS

VALVE KIT FOR FDLA SERIES
2 / 4 PIPE HYDRONIC DUCTED LOW STATIC FAN COIL

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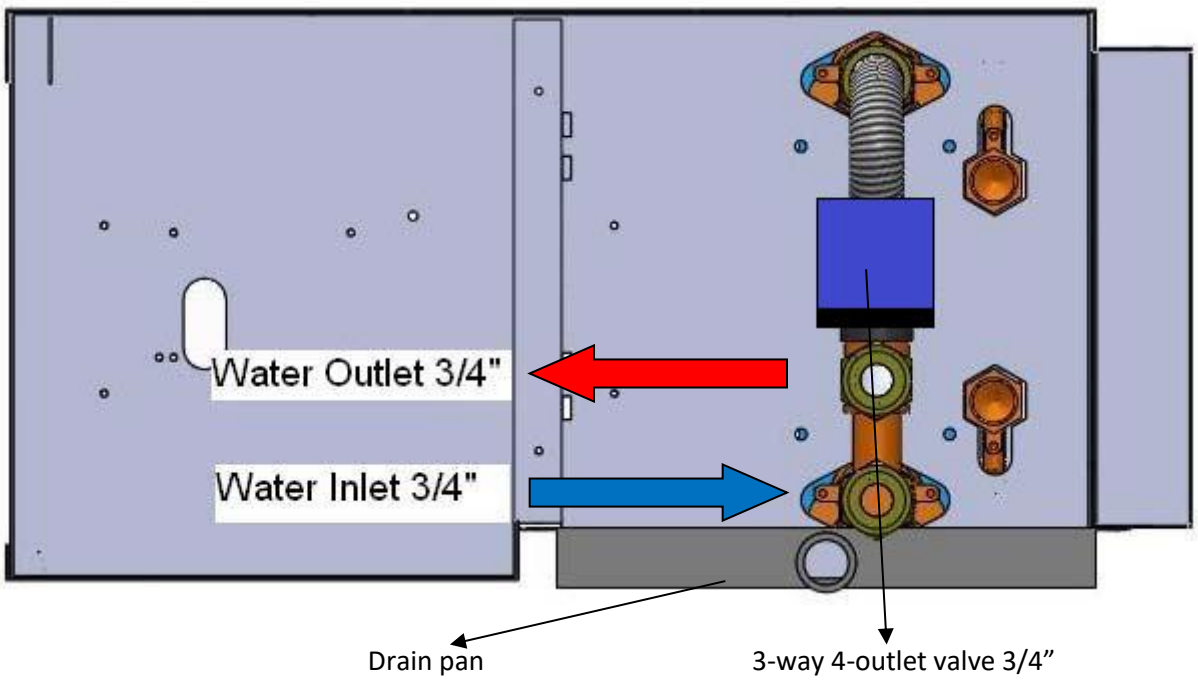
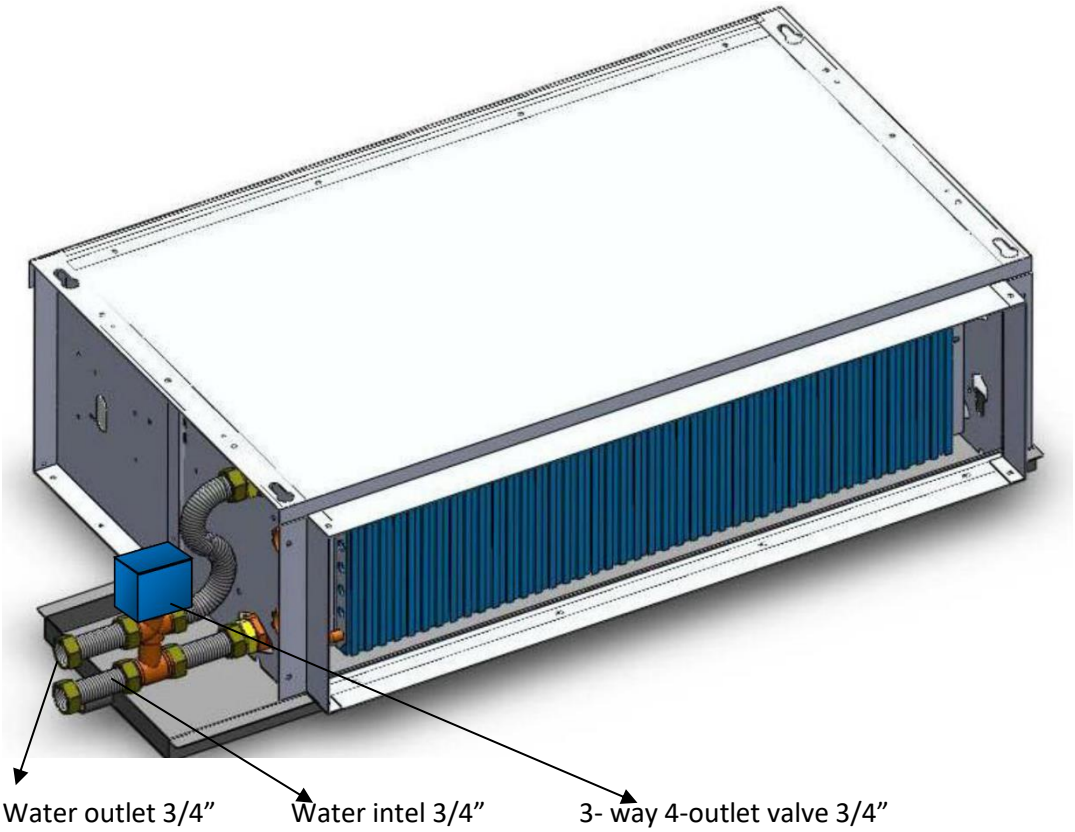
1. Valve Kit Installation

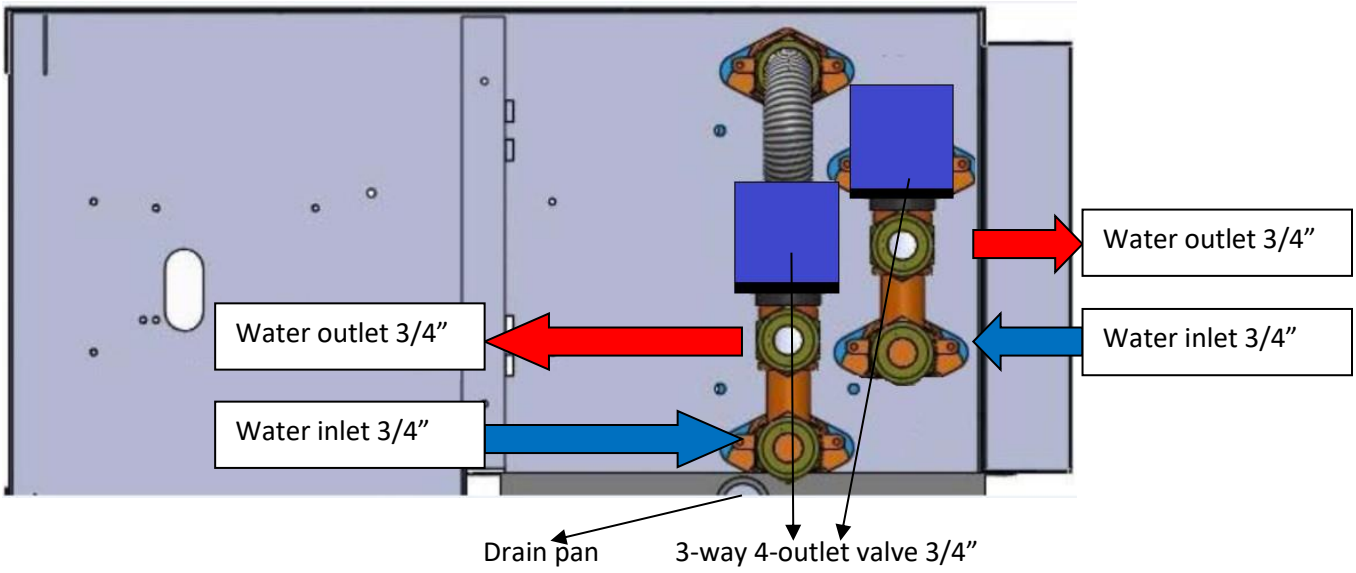
Piping for 2-pipe System

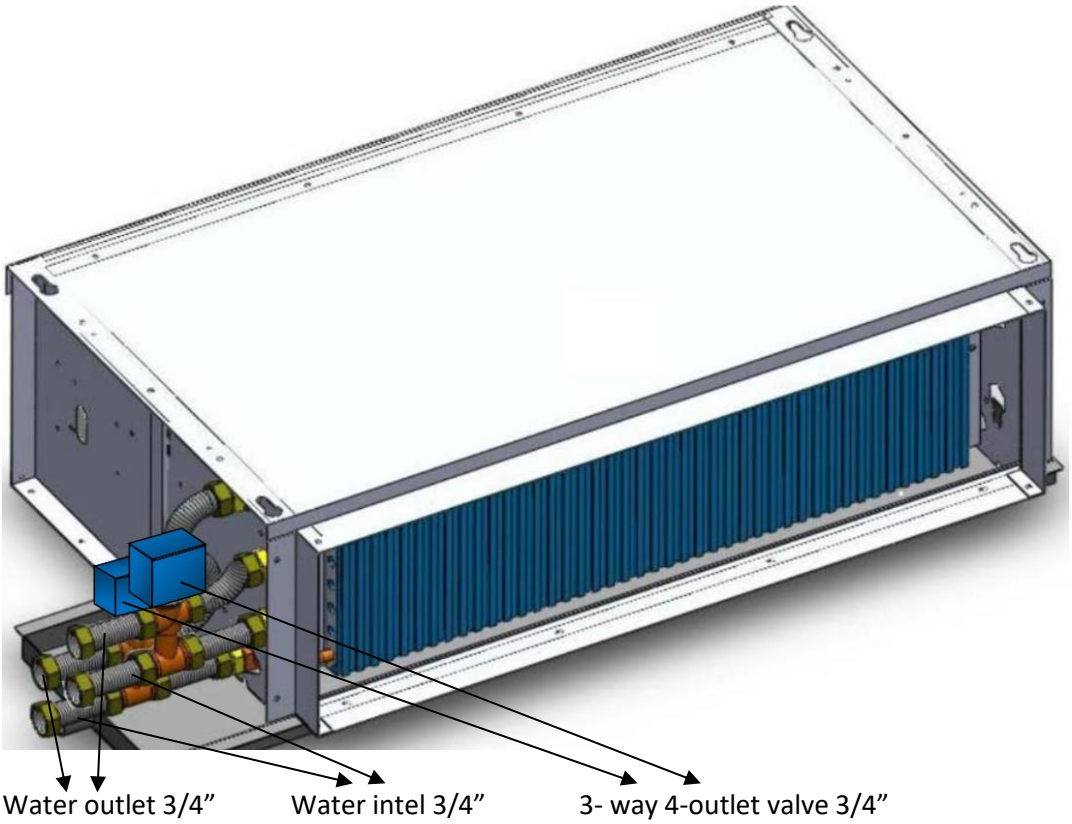




IMPORTANT
Gravity drainage maybe converted into forced drainage by fitting the condensate drain pump

Piping for 4-pipe System





IMPORTANT
Gravity drainage maybe converted into forced drainage by fitting the condensate drain pump

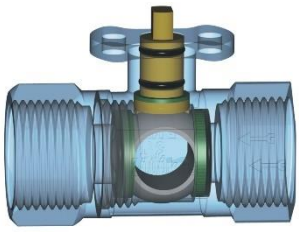
2. Technical Information according to version

Model Definitions

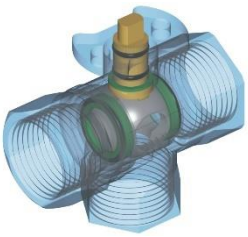
3-way ball valve with 3/4” connectors and on/off motorized actuator
2-way ball valve with 3/4” connectors and on/off motorized actuator

Specifications	Materials
Medium: Cool/Hot water or 60% glycol Structure: Two way or Three way Operating Mode: On/Off Power Supply: AC220V Power Consumption: 6W (during valve position change) Running Times: 15 sec. Pipe Fitting: NPT internal thread	Body: Forged brass, nickel plated Ball: Chrome plated brass Stem: Brass Seats: Fiberglass reinforced Teflon PTFE Seal: 2 EPDM O-rings, lubricated Pressure Rating: 2MPa Media Temp. Range: 34°F to 203°F (1°C to 95°C) Max. Differential Pressure: 1MPa Protection Grade: IP65 Types: 2-way Valve, 3-way Valve (base)

Structure Schematic of Valve Bodies

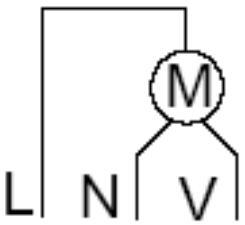


2- way Valve

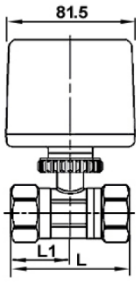


3- way Valve (base)

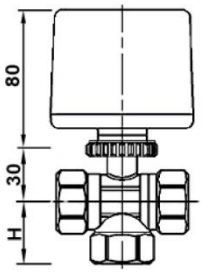
Wiring Diagrams



Dimensions and Kv Values



2-way Valve



3-way Valve

Caliber (inch)	Kv Value	L	L1	H
3/4" (DN20)	7.5	66	33	36

(All dimensions shown in mm)

Motorized Ball Valve

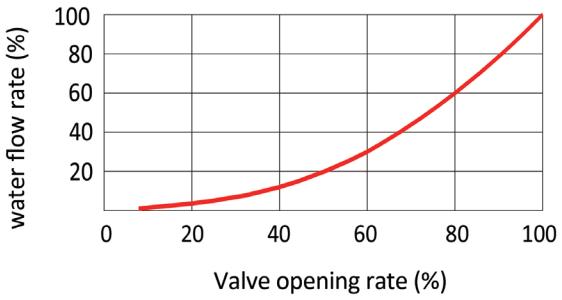
Ball valves are widely used in central air-conditioning cool/ heat water system.It can accurately control the flow of cool/heat medium depending upon the requirements of the given application.

● Ball Valve features:

- ◇ High Differential pressure up to 1MPa and strict closure
- ◇ High flux and no sediment due to direct flow through of valve
- ◇ Soft shut-off and open to eliminate water hammer in most applications
- ◇ Actuator can not be affected by temperature of valve and environment
- ◇ Quick and easy replacement by movable actuator
- ◇ The actuator can be installed after the application and pipe was fixed that is efficient for installation, Valve can be operated by general tools when actuator has been removed
- ◇ The actuator is available for all of 1/2"-1 1/4" ball valves

Valve size	KvS	Close Diff. Pressure (MPa)	Working Pressure(MPa)
3/4" (DN20)	6.3	0.6	2.0
1" (DN25)	10.0	0.6	2.0
1-1/4" (DN32)	21.8	0.6	2.0

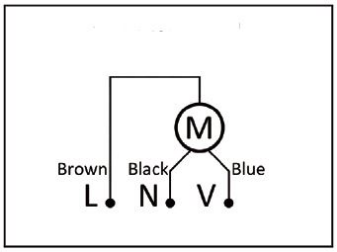
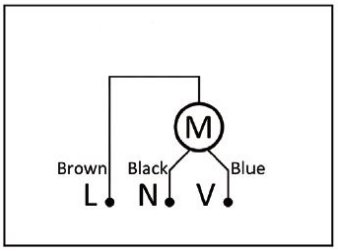
● Valve water flow curve



● Valve Actuator

◇ Valve Actuator types

There are 3 types of actuator. Two of them are on/off actuator, one of them is modulating actuator.

110~240Vac on/off actuator	24Vac on/off actuator
	

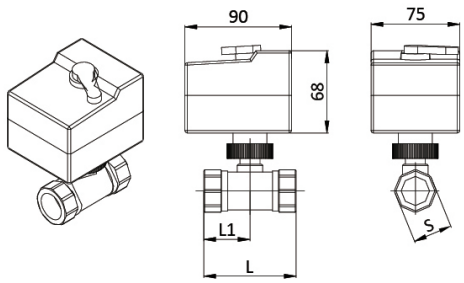
◇ Valve Actuator parameters

Running time: 45S (50Hz/90°)
Material: Upper cover : flame retardant ABS;
Bottom cover: flame retardant PC;
Gear: POM+ferrous powder metallurgy
Torque: 5Nm
IP code: IP40

● Ball Valve material:

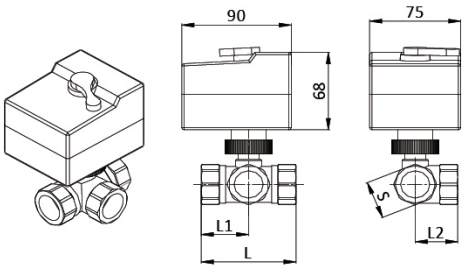
- ◇ Valve body: cast copper
- ◇ Valve ball & shaft: stainless steel
- ◇ Valve seat: PTFE
- ◇ Valve seal ring: NBR

● Dimensions of 2-way valve



2-way valve	L	L1	S
3/4"(DN20)	62	31	32
1"(DN25)	74	37	40
11/4"(DN32)	83	41	48

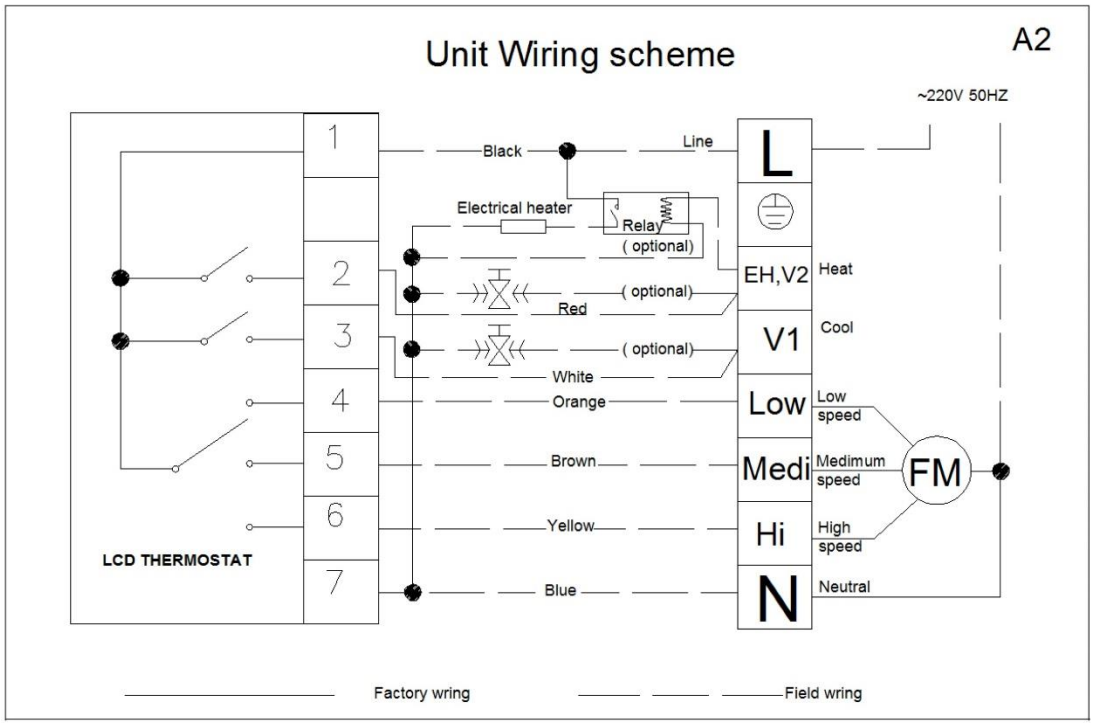
● Dimensions of 3-way valve



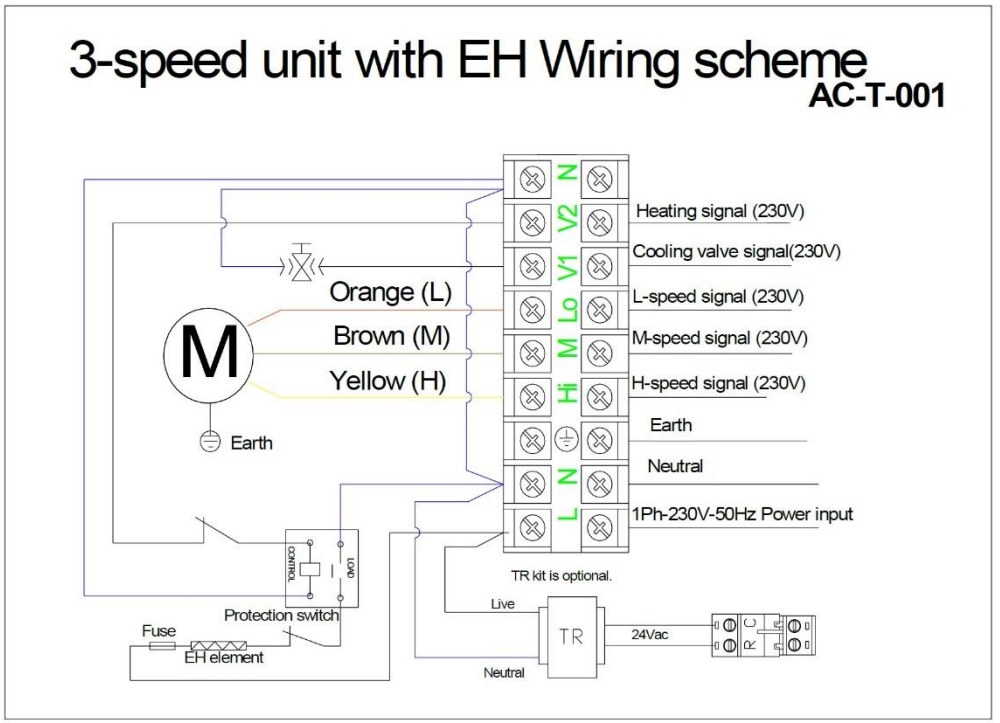
3-way valve	L	L1	L2	S
3/4"(DN20)	68	34	33	32
1"(DN25)	74	37	40	40

3. AC unit T Control Wiring Diagram (2-pipe/4-pipe)

2017 version

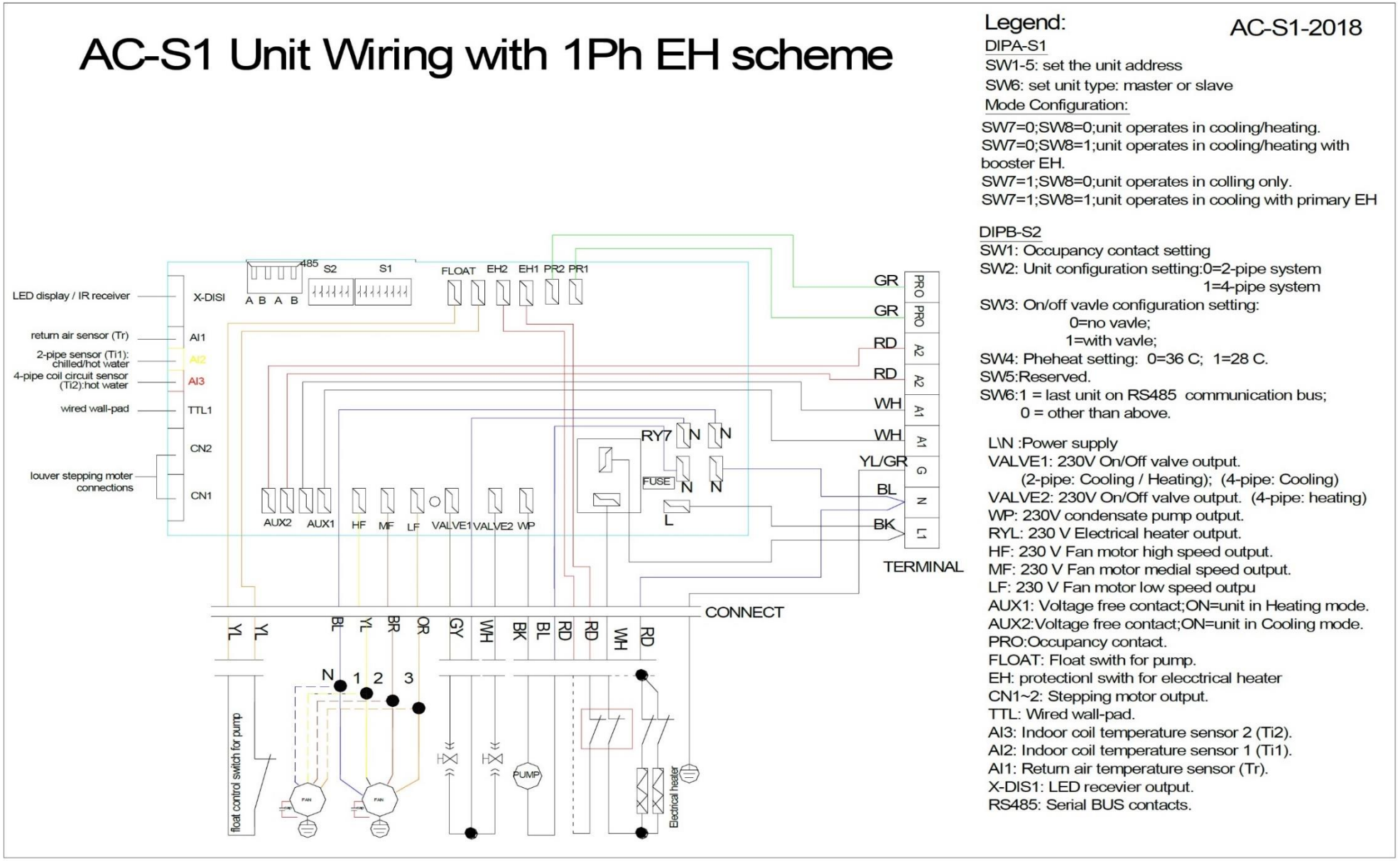


2018 version



Warning:
Switch shall be connected to the supply terminals and shall have a contact separation of at least 3 mm in each pole. Confirm that the unit has been switched OFF before installing or servicing the unit.

4. AC unit S Control Wiring Diagram (2-pipe/4-pipe)



Warning:

Switch shall be connected to the supply terminals and shall have a contact separation of at least 3 mm in each pole. Confirm that the unit has been switched OFF before installing or servicing the unit.