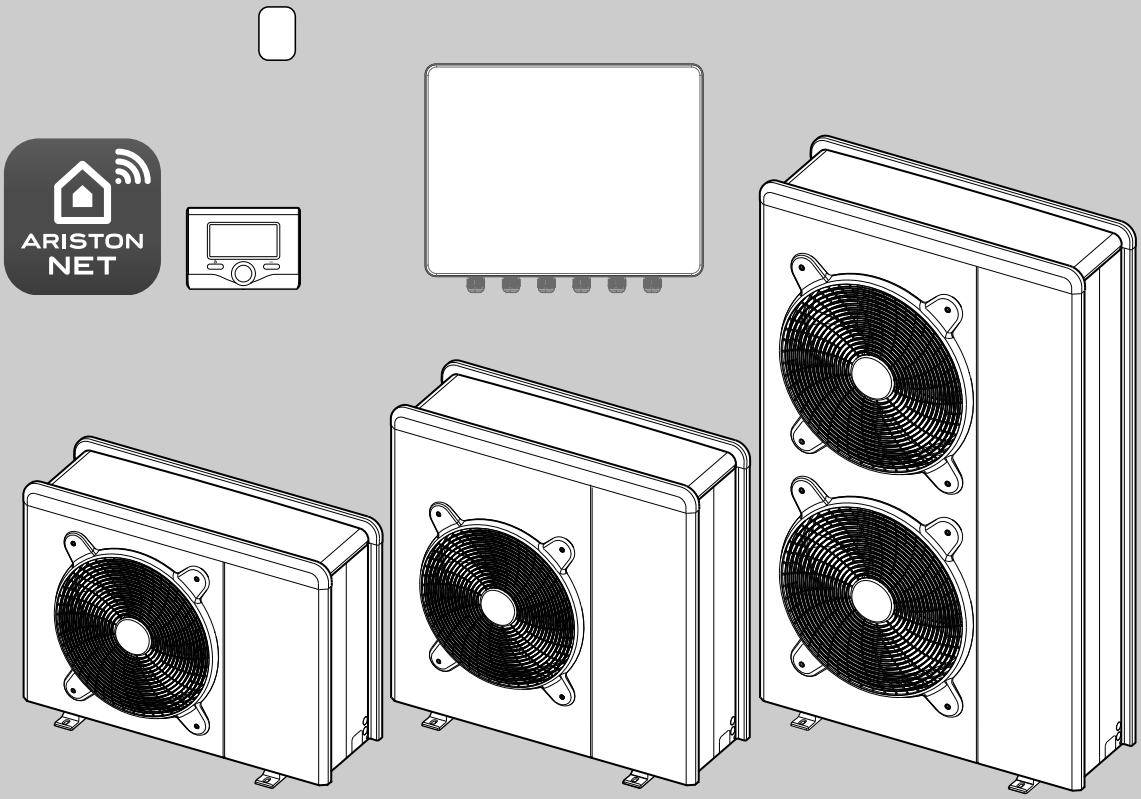


NIMBUS POCKET M NET

3319105

ARISTON

ISTRUZIONI TECNICHE PER L'INSTALLAZIONE E LA MANUTENZIONE
TECHNICAL INSTRUCTIONS FOR INSTALLATION AND MAINTENANCE

420000454000

ELECTRICAL WIRING

⚠ ATTENTION
The electrical connections shall be made after completing all hydraulic connections.

The internal and external units must be powered separately according to what is indicated on the tables. Between the internal and external units should also be made a MOD BUS connection. This connection may be made through the use of a cable of reduced section (recommended section 0,75 mm^2). Do not let this cable walk along a power connection.

Electrical circuit
- Check that the voltage and frequency of power supply from the network coincide with the data shown in the data plate of the appliance (see table)
- In order to ensure greater security, the main electrical system should be checked by a qualified technician before proceeding with the installation (see note).
- The manufacturer is not liable for any damage caused by installation with improper grounding or abnormalities in the electrical system.
- Check that the installation is adequate to support the power consumption of the installed units, indicated on the data plate of the product.
- The electrical connections must be carried out with the aid of a fixed supply connection (do not use mobile sockets) and equipped with a bipolar switch, having a distance between the contacts of at least 3 mm.
- It is essential to connect the appliance to a correctly grounded electrical circuit, as to ensure the safety of the installation. It is also forbidden to use for the grounding of the system and the hydraulic connection of the heating tubes.
- The manufacturer is not liable for any damage caused by installation with improper grounding or implant level anomalies electric.
- Connect the power cord to a 230V-50Hz or (400V-50Hz), verifying the polarizations of the L-N (or L1, L2, L3, N) connection and the connection to the earth. The section of the used cables must comply with the power of the installation (see plate characteristic).
- For the electrical connection of the installation, you shall not use power strips, extension cords and adapters. It is also prohibited to use the hydraulic pipes and heating system pipes to ground the installation.

The system is not protected against lightning. If you need to change the fuses, use fast fuses.
Warning: Before obtaining access to terminals, all supply circuits must be disconnected.

TABLE OF ELECTRICAL CONNECTIONS

EXTERNAL UNIT		**40 M EXT**	**50 M EXT**	**70 M EXT**	**70 M-T EXT**	**90 M-T EXT**	**110 M-T EXT**
Nominal running current / phase	A	6.4	8	11	3.8	6	7.3
Maximum running current / phase	A	9	11	16	5.4	8.4	10
Circuit breaker size (*)	A	16-C type	16-C type	20-C type	10-C type	12-C type	12-C type
Nominal Voltage	V	230	230	230	400	400	400
Operating voltage limits	V	216-243	216-243	216-243	376-424	376-424	376-424
Cos phi		> 0,9					
Power supply cable	Reference	H07RN-F					
		3G2.5	3G2.5	3G2.5	5G2.5	5G2.5	5G2.5
	Max ϕext	16.2	16.2	16.2	19.9	19.9	19.9
Communication cable	Reference	H05RN-F					
	Type	2x0.75mm^2					

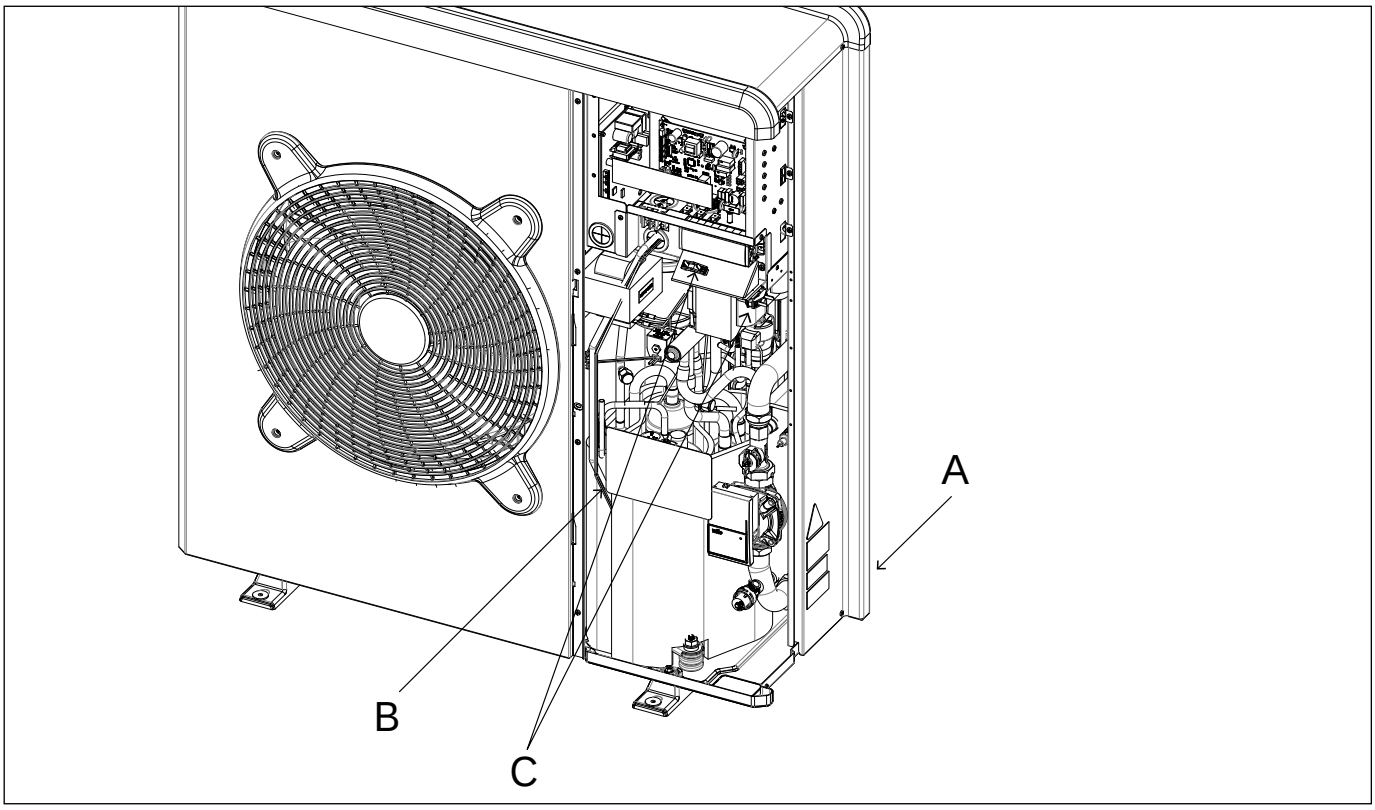
(*) For the installations in ERDF network it is better to follow the instructions provided by "SeQuelec" and use the circuit breaker type D.

INTERNAL UNIT		
Electrical supply	V - ph - Hz	230 - 1 -50
Admitted voltages field	V	196 ÷ 253
Rated power input	kW	10
Max current	mA	25 (nominal) - 140 (maximal)
Thermal cutout/ differential circuit breaker	A	20A - type C
Supply cable dimensions		2x0.75 mm^2

Wiring signal EDF, AFR, PV	mm^2	H07RN-F 2 x 0,75 mm^2

N.B. It is strongly recommended to separate the supply cables from the communication cables.

WARNING:
Make ground connection prior to any other electrical connections.
The internal and external units must be powered separately.
To prevent any risk, the power supply cable of the outdoor and indoor unit must only be replaced by the technicians of the after-sales service.



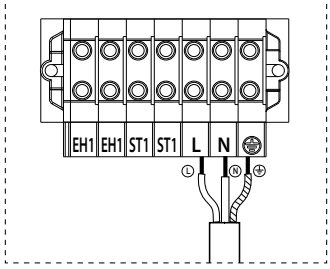
External Unit electrical connection

- When removing the front panel, the electric parts appear at the front side.
- The power supply cables can be inserted into the precut holes (A) in the back (Take off the knockout part)
- Be sure to fix the power cable (B) and indoor/outdoor communication cable with all the clips provided into the units and if necessary add bundling bands sold on the market in order to be sure that they will not be in contact with the compressor and the hot pipes.
- To ensure good tensile strength, the electric cables must be fastened using the cable-holder on the plate (C).
- Connect the communication cable to the terminals as identified by their respective numbers on the terminal block of indoor and outdoor unit.

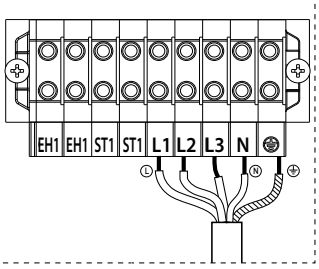
According to the installation instructions, all devices for disconnection from the power supply mains must have a contact opening (4 mm) to allow total disconnection according to the condition provided for the overvoltage class III.

Warning: Before obtaining access to terminals, all supply circuits must be disconnected.

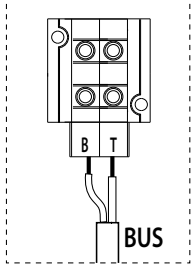
External unit terminal block 1Ph



External unit terminal block 3Ph



Bus terminal block



EH1 - Antifreeze electric heaters for water piping.
ST1 - Safety thermostat connection (230 V) for under-floor system (shunt connection).

Internal Unit electrical connection

Before any operation on the system, turn off the main power. Observe the phase and neutral connections.

To access the control panel of the internal unit, proceed as follows: Remove the three screws (A) indicated in figure and remove the cover of the electrical panel (B).

When opening the internal unit, you will find the following connections:

ANODE - Tank Protech anode connection. Observe the electrical polarities.

TA1 - Ambient contact thermostat connection, zone 1.

TA2 - Ambient contact thermostat connection, zone 2.

SE - Outdoor temperature sensor connection.

TNK - Tank sensor connection.

BUF - Buffer sensor connection.

BUS - BUS connection for System interface and BUS connection between internal and external unit.

IN-AUX - Humidistat/auxiliary input connection.

HV IN 3 - 230V Input. Select the operation mode by the parameter 17.1.2.

PV Integration: through this input is possible to use the DHW tank as energy storage in case of a surplus of energy production by a PV system. Connect the output contact from an energy meter to the PV input, the output contact is closed when the energy production is higher than a threshold settable on the energy meter.

HV IN 1 - 230V Input. Select the operation mode by the parameter 17.1.0.

- EDF (Night tariff): applying a 230V signal to the input the tank charge is enabled according to the DHW modes HC-HP or HC-HP 40°C selectable by the parameter 17.5.2
- SG Ready 1: input signal nr 1 for the SG Ready standard (see paragraph SMART GRID READY STANDARD).

HV IN 2 - 230V Input. Select the operation mode by the parameter 17.1.1.

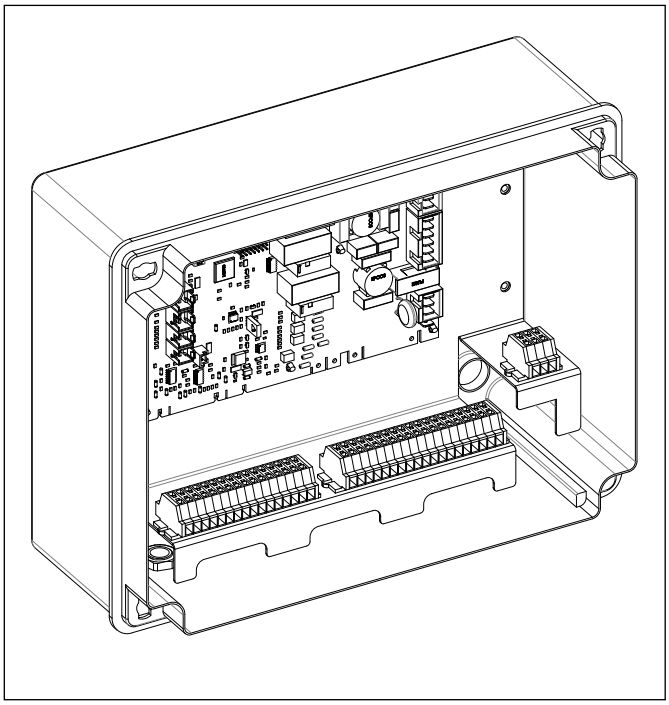
- DLSG (load shedding): this input signal, if supplied by the electrical grid provider, disable the heating resitors.
- SG Ready 2: input signal nr 2 for the SG Ready standard (see paragraph SMART GRID READY STANDARD).

OUT-AUX 1- Auxiliary output, free potential contact (see parameter 17.1.4)

ST1 - Safety thermostat connection (230 V) for under-floor system (shunt connection).

PM AUX- Auxiliary pump connection.

V1 - Diverter valve connection for domestic water circuit



V 2 - Diverter valve connection for cooling circuit

L 1 - Three-phase power phase 1 connection (230 V) for internal unit

L 2 - Three-phase power phase 2 connection (230 V) for internal unit

L 3 - Three-phase power phase 3 connection (230 V) for internal unit

N - Connection of the neutral point (230 V) of the internal unit .

⏚ - Earth connection of the internal unit .

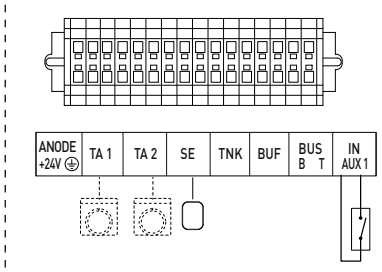
The size and length of the cables must be sized according to the power indicated on the data plate of the internal unit.

Ensure that the power cables are properly tightened in order to avoid overheating.

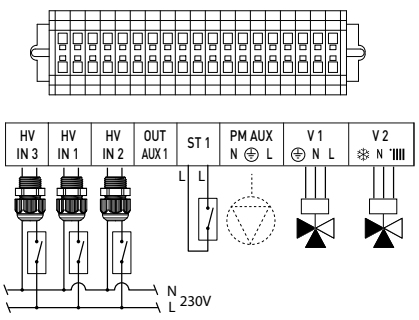
WARNING

After carrying out the connections between the indoor and outdoor units, put back both panels of the respective units.

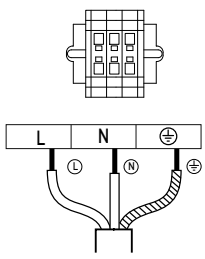
Low voltage terminal block of internal unit



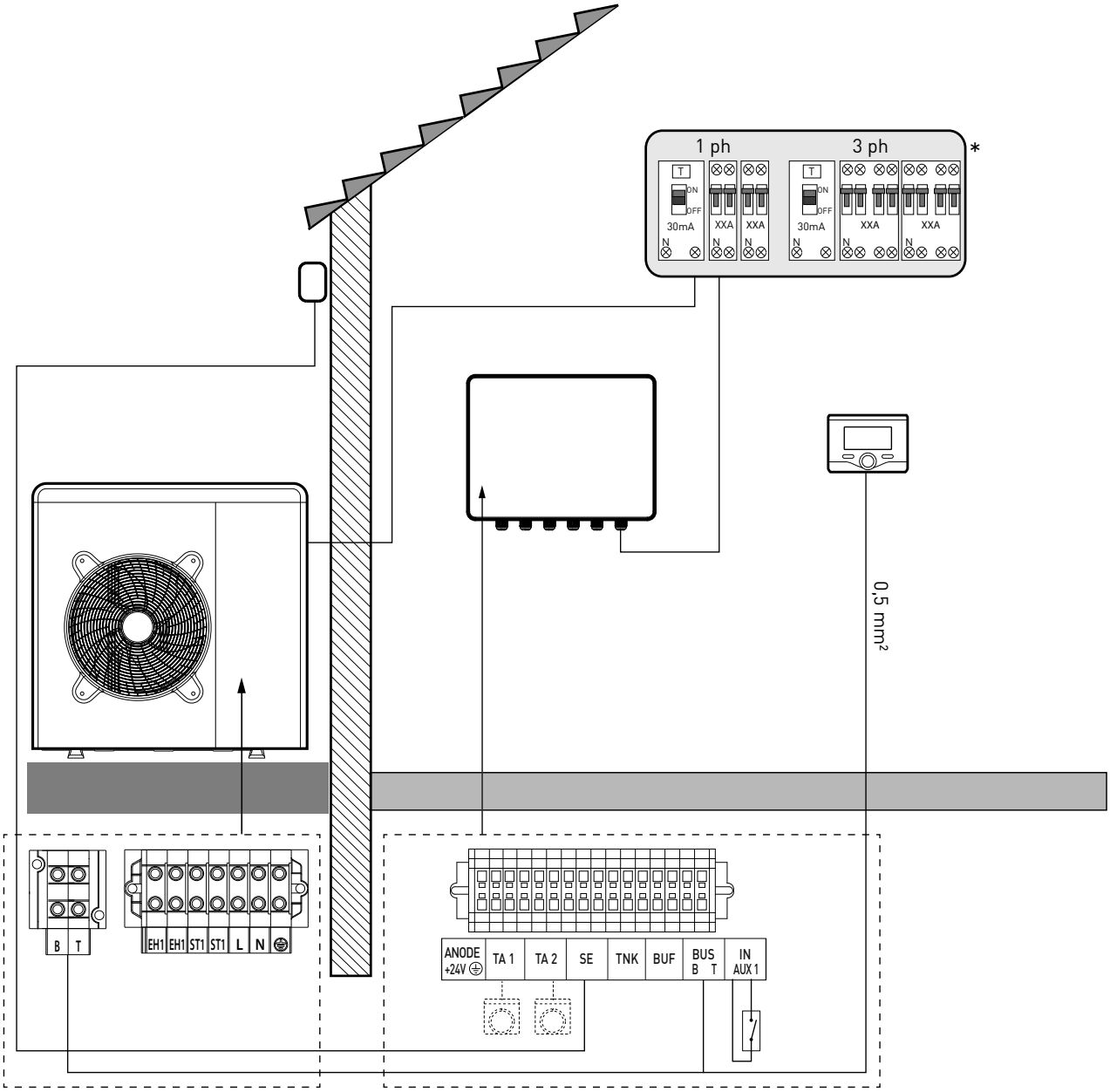
High voltage terminal block of internal unit



Power supply terminal block of internal unit



Electrical connections between internal and external unit
Before any work on the system, shut off the power at the breaker.

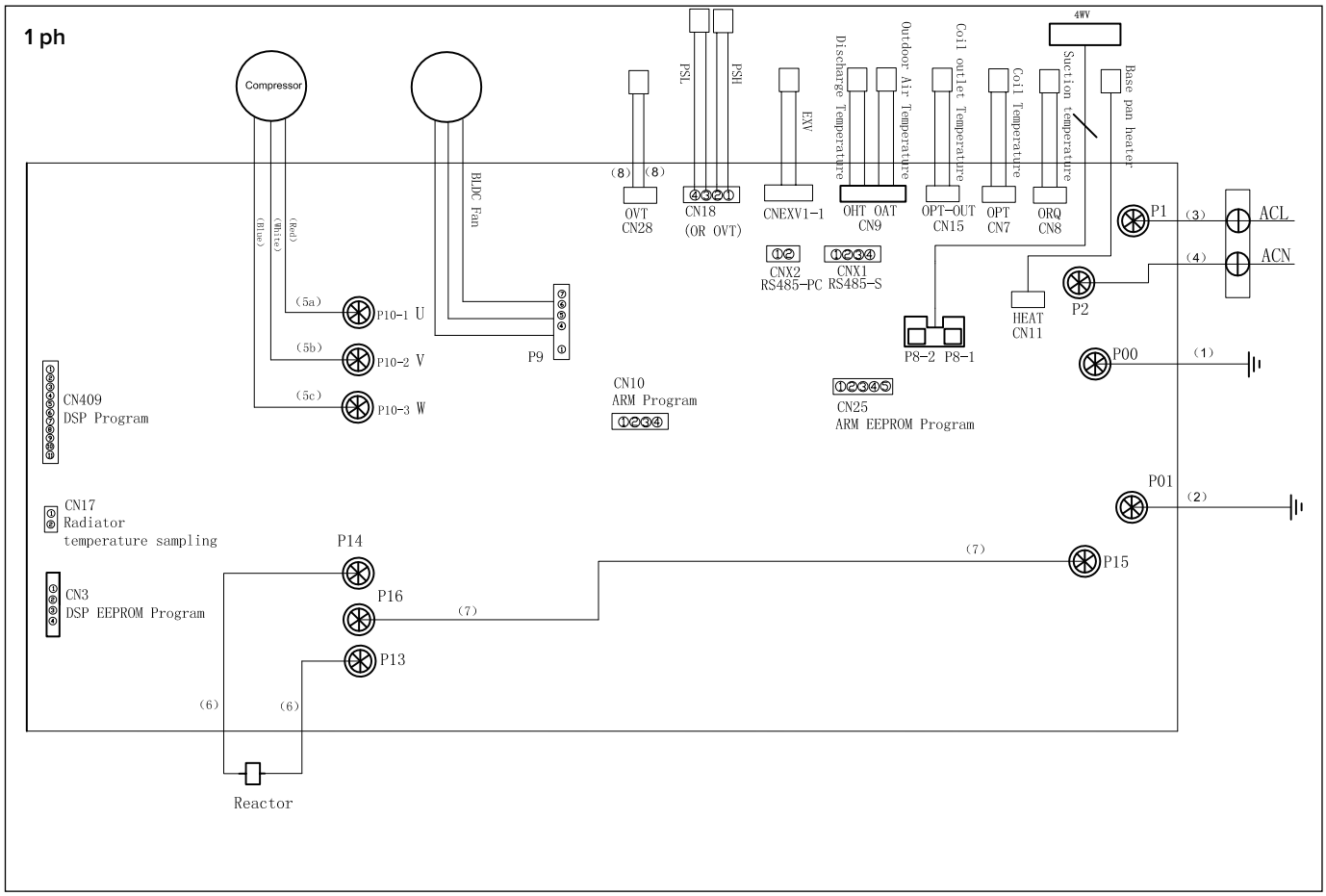


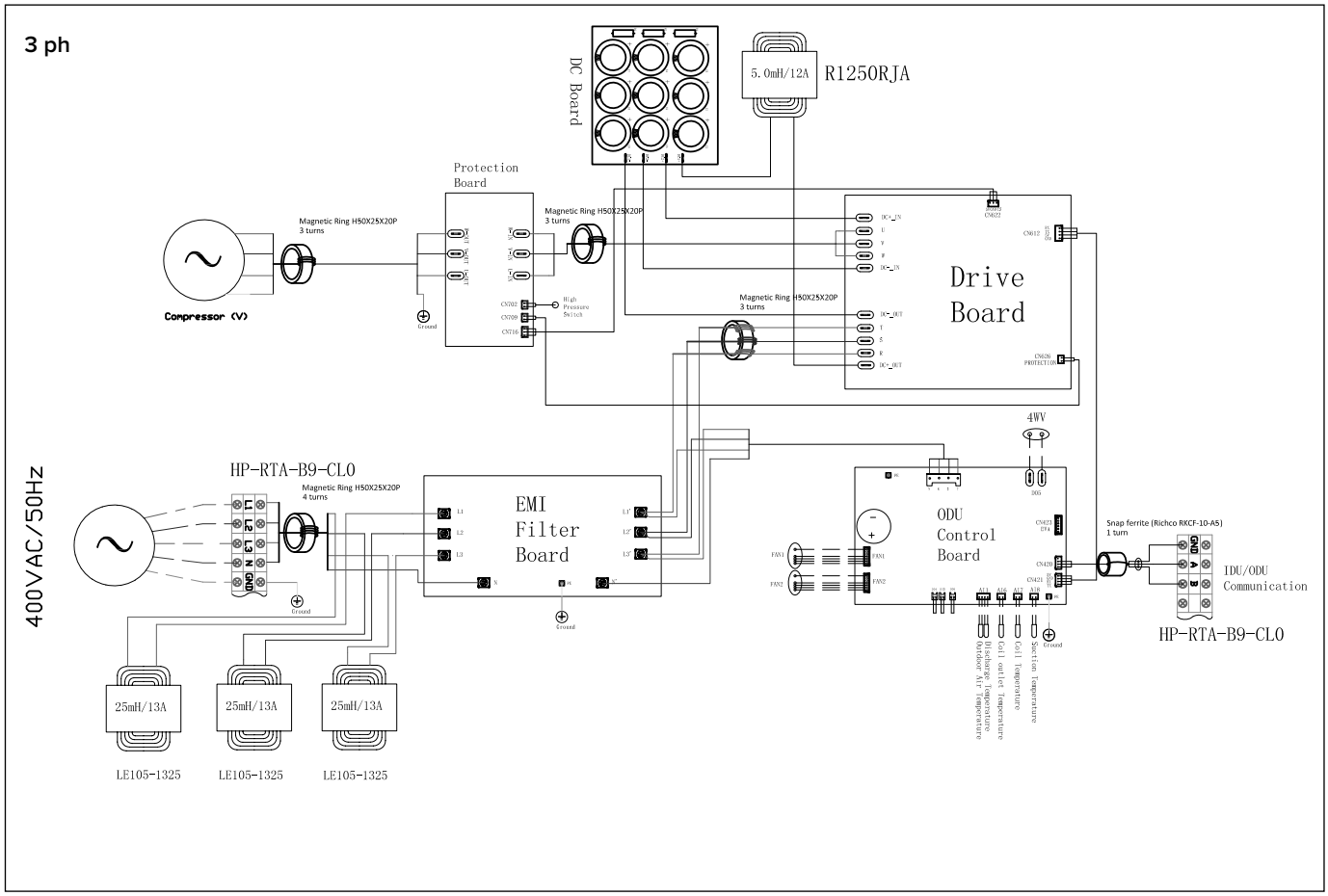
NOTE
It is strongly recommended to verify the presence of a surge protection device (SPD) on main power line and of circuit breakers connected to the external and internal unit's control box

* See table of electrical connections

WARNING
After carrying out the connections between the indoor and outdoor unit, put back both panels of the respective units.

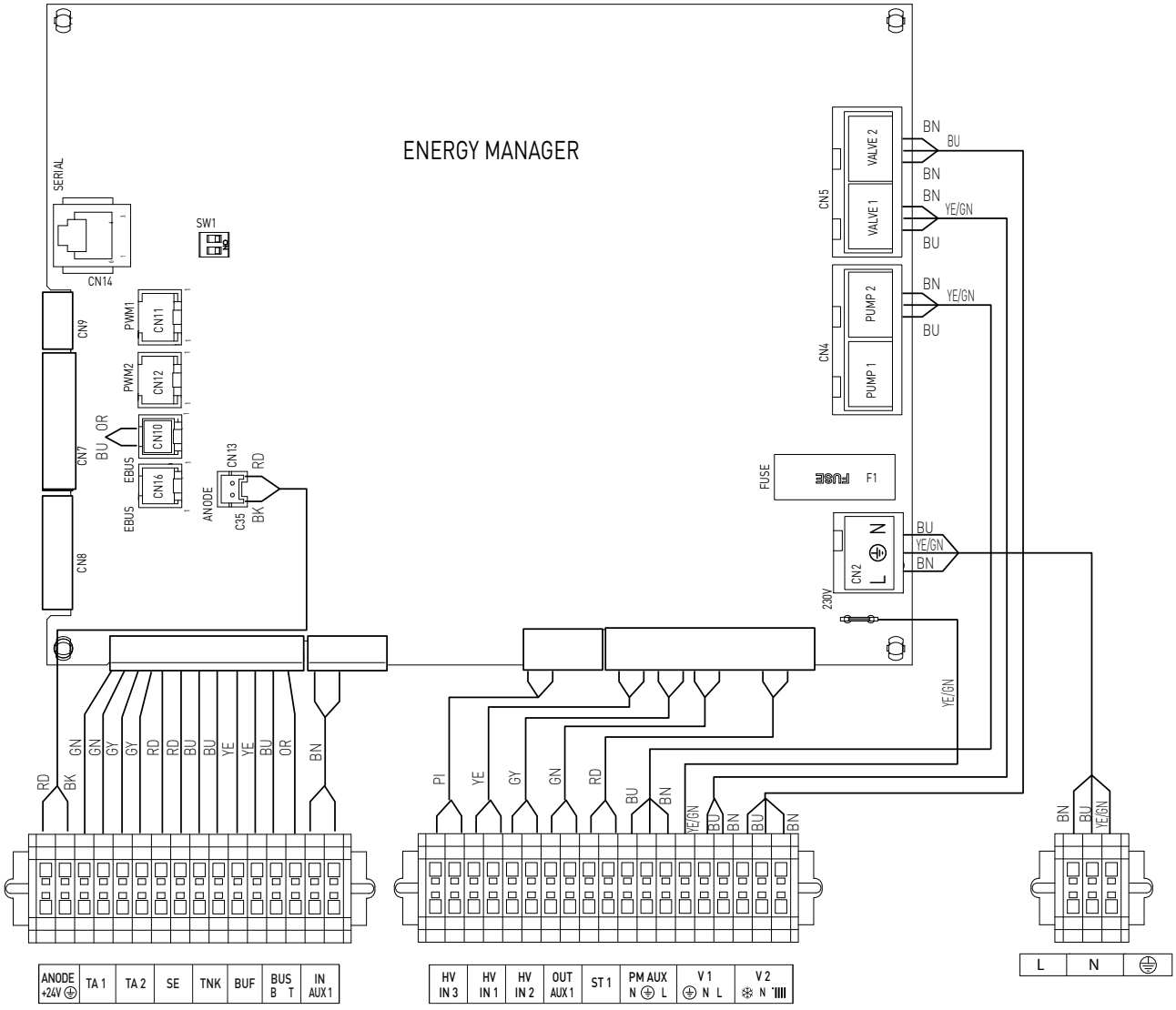
ELECTRICAL SCHEME - BOX OF EXTERNAL UNIT





ELECTRICAL SCHEME - LIGHT BOX 1Z

BK = Black
BN = Brown
BU = Blue
RD = Red
OR - Orange
YE = Yellow
GN = Green
GY = Grey
WH = White
PI - Pink



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