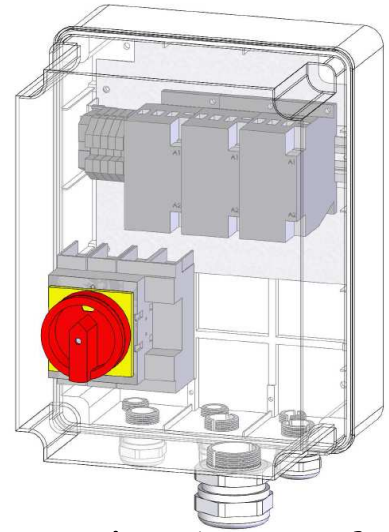
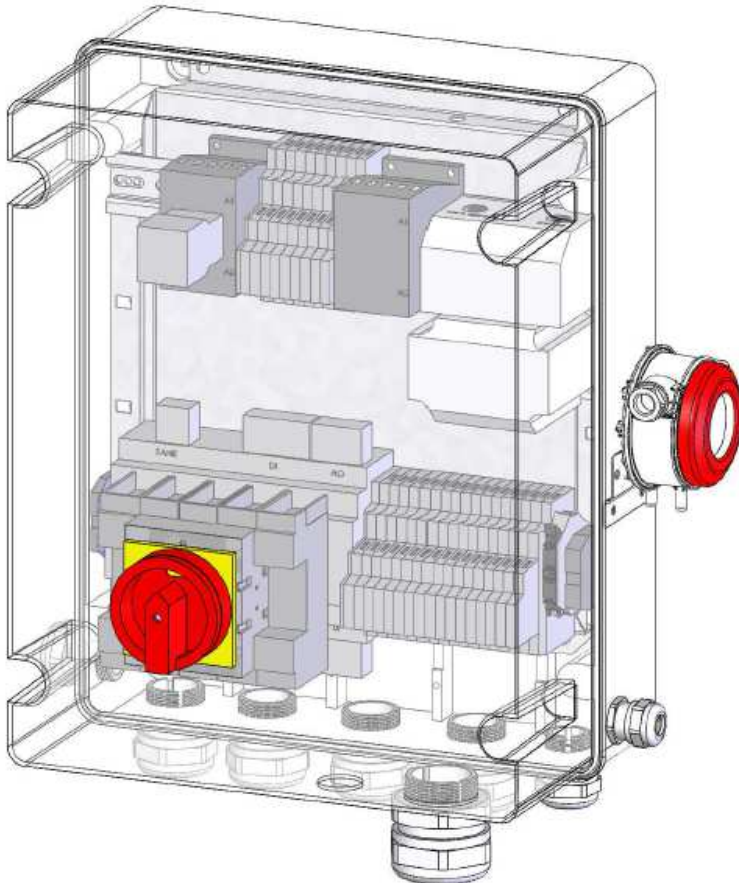
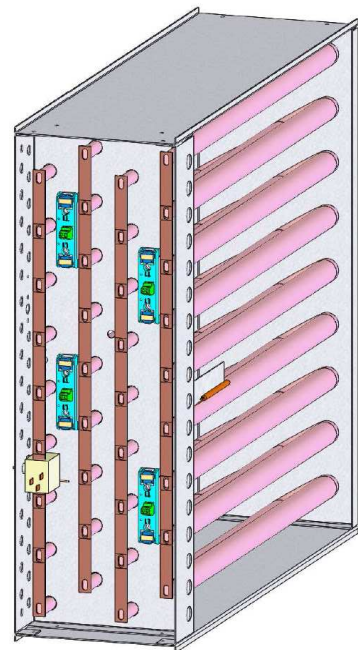
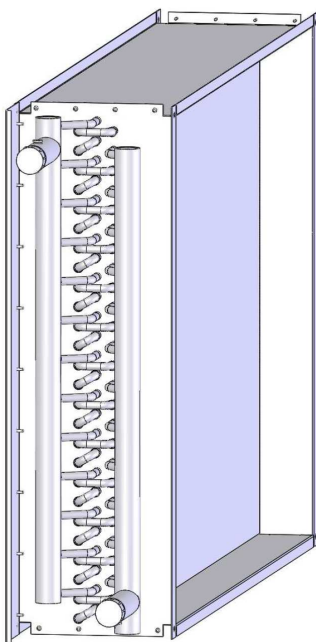


OPERATING AND COMMISSIONING INSTRUCTIONS



Additional cabinet for
ELECTROPACK 542-813

AQUAPACK - ELECTROPACK



OPERATING AND COMMISSIONING INSTRUCTIONS

TABLE OF CONTENT

I.	RECEIVING THE EQUIPMENT	4
I.1.	Checks on reception	4
I.2.	Unpacking	4
I.3.	Storing	4
I.4.	End of life	4
II.	INSTALLATION	5
II.1.	Handling	5
II.2.	Space required	5
II.3.	Installation	5
III.	GENERAL FONCTIONNING	5
III.1.	GENERAL	5
III.2.	FUNCTIONAL ANALYSIS	6
III.3.	MODE DE REGULATION	6
III.3.a.	ECO	6
III.3.b.	DIVA®	6
III.3.c.	LOBBY®	7
III.3.d.	MAC2®	7
III.3.e.	QUATTRO®	7
III.4.	COMPOSITION	8
III.4.a.	COMPOSITION AQUAPACK DF and ELECTROPACK DF	8
III.4.b.	COMPOSITION AQUAPACK TA et ELECTROPACK TA	9
III.5.	REPERAGE DES ELEMENTS DANS L'ARMOIRE DE REGULATION	9
IV.	ELECTRIC WIRING	9
IV.1.	Power supply	9
IV.2.	Temperature sensor	10
IV.3.	Terminal blocks	10
IV.4.	Upper terminal block	11
IV.5.	Electrical connection and operation of the 3-way module (FEE)	12
IV.6.	Connection of filter pressure switches	13
IV.7.	Connecting fan pressure switches	13
IV.8.	Connection of pressure transmitters for LOBBY®/MAC2®/QUATTRO®	14
IV.9.	Connecting the CO2 transmitter for DIVA® QUATTRO® and M3V	14
IV.10.	Night Cooling (Nocturnal overselling)	15
IV.11.	Hot water battery / cold / changeover	15
IV.12.	Cold direct trigger battery alone or reversible	16
IV.13.	Electrical battery	17
IV.13.a.	ELECTROPACK 271	17
IV.13.b.	ELECTROPACK 542	17
IV.13.c.	ELECTROPACK 813	17
IV.14.	Fire function	18
IV.15.	Dehumidification function	18
IV.16.	Kitchen solution 1 speed	19
IV.17.	Kitchen solution 2 speed 1	20
IV.18.	Kitchen solution 2 speed 2	21
IV.19.	Kitchen solution 2 speed 3	22
IV.20.	CAR2V3	23
IV.21.	CAR2V EC1	24
IV.22.	Kitchen solution 0-10V	25
IV.23.	MODBUS / WEB / BACNET wiring	26
IV.24.	Repeater wiring	26
IV.25.	LON	27
V.	PARAMETRAGES	27
V.1.	Command (integrated or remote control)	27
V.2.	Example of settings	27
V.3.	Standard settings (operator menu)	28
V.3.a.	Running mode menu	29
V.3.b.	Temperature menu	30

OPERATING AND COMMISSIONING INSTRUCTIONS

V.3.c.	Ventilation menu.....	30
V.3.d.	Timer menu.....	31
V.4.	Operator parameters modification (password 3333 required).....	32
V.4.a.	Dates and hours clocks setting	32
V.4.b.	Speed /pressure modification in LS and HS.....	32
V.4.c.	Temperature setpoint modification	33
V.4.d.	Forced stop of the unit or forced start LS or HS on the relote control	33
V.4.e.	Choice of language.....	33
V.4.f.	CO2 setpoint 3-way module.....	33
V.5.	Intermédiaire settings (service level)	33
V.5.a.	Menu configuration in service access	34
V.6.	Modification of the services parameters (password 2222).....	34
V.6.a.	Regulation mode of the unit.....	34
V.6.b.	Overventilation parameters	34
V.6.c.	CO2 setpoint for DIVA® QUATTRO® option.....	34
V.7.	Administrator settings.....	35
V.7.a.	Configuration menu with admin level access.....	35
V.8.	Modification of the service parameters (password 1111)	36
V.8.a.	MODBUS	36
V.8.b.	Repeaters.....	36
V.8.c.	WEB Communication	36
V.8.d.	BACNET.....	37
V.8.e.	Communication LON (if CORRIGO with the option LON).....	37
V.8.f.	Fire function activation	37
V.8.g.	Activating the dehumidification function.....	38
VI.	REPAIR	38
VI.1.	Different types of defaults	38
VI.2.	List of des alarms.....	38
VI.3.	Acknowledge the default « timer service ».....	40
VII.	MAINTENANCE	40
VII.1.	Obligatory maintenance.....	40
VII.2.	Battery replacement.....	41
VIII.	ANNEXES	42
VIII.1.	Command scheme AQUAPACK-ELECTROPACK 542-813.....	42
VIII.2.	Command scheme ELECTROPACK 271	43
VIII.3.	Adjusting the minimum fresh air flow of the FEE module	44
VIII.4.	MODBUS and BACNET tables	45
IX.	NOTES.....	47

OPERATING AND COMMISSIONING INSTRUCTIONS

SAFETY INSTRUCTIONS

In compliance with the current norms, the machine should be installed only by a technical person qualified for this type of work.

Use the required personal protection devices so as to avoid injuries caused by electrical and mechanical hazards (injuries by touching panels, sharp edges, etc.). Use EN170 protective eyewear and ear protection.

Do not use the unit for an other used which it designed. This unit can't be use for extract or supply dangerous air.

Move the machine as given in chapter *handling*.

Grounding is carried out in compliance with current standards. Never start the device without grounding

Before any intervention ensure that device is powered off and wait for complete stop of every rotative component such as damper, fan, rotative exchanger...

During device is running inspection doors must be mounted and closed.

Start is to be done only with padlockable swith.

Do not shut off or short circuit the safety and control equipment.

During interventions, be careful with hot components such as hot water coil or electric resistances.

The machine should be installed in compliance with fire norms.

The waste must be disposed of in compliance with the current standards. No packaging should be discarded into the environment.

We disclaim any responsibility for any damages resulting from wrong utilisation of the equipment, reparation, modification or non compliance of these instructions.

I. RECEIVING THE EQUIPMENT

The units are delivered fixed on longitudinal members or on blocks then wrapped in plastic film.

I.1. Checks on reception

When the equipment is received, the state of the packaging and the equipment must be checked. In the event of damage, make an accurate note of any problems on the carrier's delivery note

I.2. Unpacking

When the equipment is unpacked, check the following:

- The total number of packages is present.
- All accessories are present (dampers, roof, electric switchgear, etc.). After unpacking the equipment, the waste must be disposed of in compliance with the current standards. No packaging should be discarded into the environment

I.3. Storing

The equipment must be stored in shade, in a dry place, at a temperature between -20°C and 40°C. The packaging can't be considered sufficient for an external storage.

I.4. End of life

In accordance with the partnerships with the company ECOLOGIC. CALADAIR fulfills the obligations to finance the collection, removal and treatment of Waste Electrical and Electronic Equipment.

At the end of the life of this equipment, the user contacts the company ECOLOGIC who will propose a collection solution or a place of deposit for the product.

Contacts for pick-up requests:

E-mail: operations-pro@ecologic-france.com

Phone: 01 30 57 79 14

Internet: www.e-dechet.com

OPERATING AND COMMISSIONING INSTRUCTIONS

II. INSTALLATION

II.1. Handling

If the product is mounted on a central unit, the transport of the units must be carried out only in their installation position. If the unit is handled using a forklift, take care that the forklift supports the load-bearing structure and not the trim panels. Adapt the choice of handling equipment to the weight of the approved device (refer to the weight given in the manual). If the unit is transported by crane, use 4 cables of the same length. These should be at least as long as the greater distance between 2 anchor points. The unit must be lifted using a rudder bar.

II.2. Space required

In general, it is desirable to have an access space at least equal to 1 time the width of the box on the access side for maintenance (see details in the manual of the box or the plant). In all cases, provide a minimum access of 500mm on the control side to access the cabinet.

II.3. Installation

When the control cabinet is not factory fitted, it must be installed vertically or horizontally with the lid on top.

Installation of ELECTROPACK and AQUAPACK cabinets outdoors:

Check the tightness of the cable glands



Before starting up the box, check the tension and tightness of all the wires added on site (in particular the general power supply).

III. GENERAL FONCTIONNING

III.1. GENERAL

ELECTROPACK: Global control cabinet of a single flow or double flow CTA equipped with:

- Electric battery associated or not with a cold water battery
- Electric battery associated or not with a cold direct expansion battery only (only ON / OFF management for the DX)

271/542/813 = maximum power of the electric battery. The ELECTROPACK 542 and 813 are composed of a base AQUAPACK + 1 box electric battery 2 or 3 stages. **ATTENTION: 27Kw 400V TRI maximum per step**

TA = simple flow

DF = Double flow with or without plate heat exchanger

T = Three phase motor or motor fan

M = Motor or motor fan single phase (valid for three phase motor + VFM)

4C / 5/6 / 7A / 7B / 8 = size of CBZ EC in MAC2 and QUATTRO

ECO/LOBBY.... = Type of control (see next page)

AQUAPACK: Global control cabinet of a single flow or double flow CTA equipped with:

- Hot water coil associated or not with a cold water coil
- Changeover or reversible DX battery (only ON / OFF management for the DX)
- Hot water coil associated or not with a cold direct expansion battery only (ON / OFF management only for the DX)

TA = simple flow

DF = Double flow with or without plate heat exchanger

T = Three phase motor or motor fan

M = Motor or motor fan single phase (valid for three phase motor + VFM)

4C / 5/6 / 7A / 7B / 8 = size of CBZ EC in MAC2 and QUATTRO

ECO/LOBBY.... = Type of control (see next page)

OPERATING AND COMMISSIONING INSTRUCTIONS

III.2.FUNCTIONAL ANALYSIS

Starting sequence:

- The supply air fan starts and the fresh air register opens.
- The extract air fan starts and the extract air register opens
- Temperature regulation starts defined in the regulation mode set. Electric heater (if set) starts with airflow controller.
- Pumps start.
- After a defined time, alarms management function is activated. Installation is in normal mode.

Start conditions:

- Installation starts when one of these conditions are filled:
- Timer normal or reduced are activate
 - Manual start is activated with controller
 - One of the digital input for extended operation is activated.

Stop sequence:

- Installation stops with following process:
- Deactivation of the alarm management function.
 - Electric heater stops (if set).
 - After a defined time (individually defined for each fan) fans are stopped.
 - Supply and return air registers are closed.
 - Signals toward actuator are reset and pumps closed

Stop conditions:

- Installation stops when one these conditions are filled:
- Timers normal or reduced are not activated and digital input for extended operation is not activated.
 - Digital Input for External stop is activated.
 - Manual stop is activated with controller
 - An alarm configured with stop function is activated. Installation will automatically start when alarm is reset.

III.3.MODE DE REGULATION

III.3.a. ECO

1 or 2 speeds adjustable with display unit / remote controller / external command « MODE VENTIL (%) »

Adjustment of a minimum speed (LS - 1/2) and a maximum speed (HS - 1/1) in %.

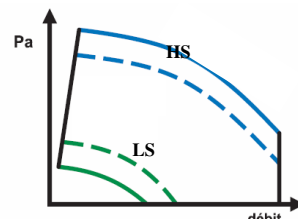
Fitted with a factory turned clocked set:

- (HS - 1/1) from 06h00 to 22h00
- (LS - 1/2) from 22h00 to 06h00

Possibility of adding a remote forced start (LS - 1/2) or (HS - 1/1) (free voltage contact NO)

Possibility of adding a remote forced stop (free voltage contact NO)

OBLIGATION for units without EC motor to add a 0-10V drive on each motor if you want an adjustable speed



III.3.b. DIVA®

Proportional ventilation between two airflows (LS/HS) with CO2 management

« AUTO CO2 MODE »

Adjustment of a minimum speed (LS - 1/2) and a maximum speed (HS - 1/1) in %.

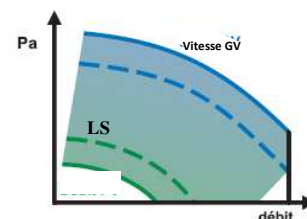
CO2's setpoint is set in factory to 1000ppm (compliant to French RT2012).

Variation between (LS - 1/2) and (HS - 1/1) is managed from CO2 level

Fitted with a factory turned clocked set in (LS - 1/2) from 00h00 to 24h00.

Possibility of adding a remote forced start (LS - 1/2) or (HS - 1/1) (free voltage contact NO)

Possibility of adding a remote forced stop (free voltage contact NO)



Note: In order for the CO2 regulation works, installation must follow these constraints:

- Clock (HS - 1/1) is not activated (normal speed timer)
- Clock (LS - 1/2) is activated (reduced speed Timer)



External operation (HS - 1/1) and external stop are not activated

OBLIGATION for units without EC motor to add a 0-10V drive on each motor if you want an adjustable speed

OPERATING AND COMMISSIONING INSTRUCTIONS

III.3.c. LOBBY®

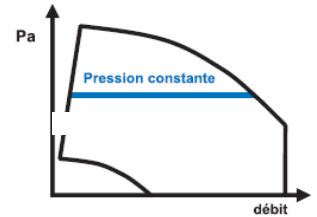
Constant pressure ventilation. (Pa) « CONSTANT PA MODE»

Constant pressure adjustment (Pa).

Fitted with a factory turned clocked set in (LS - 1/2) from 00h00 to 24h00.

Possibility of adding a remote forced start (LS - 1/2) (free voltage contact NO)

Possibility of adding a remote forced stop (free voltage contact NO)



OBLIGATION for units without EC motor to add a 0-10V drive on each motor if you want an adjustable speed

III.3.d. MAC2®

1 or 2 constant air flow (m³/h) adjustable « MODE CONSTANT M3/H »

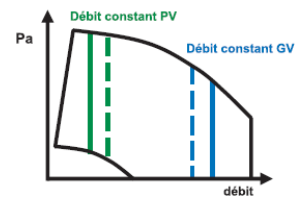
Adjustment of a minimum constant air flow (LS - 1/2) and a maximum air flow (HS - 1/1) in m³/h.

Fitted with a factory turned clocked set:

- (HS - 1/1) from 06h00 to 22h00
- (LS - 1/2) from 22h00 to 06h00

Possibility of adding a remote forced start (LS - 1/2) or (HS - 1/1) (free voltage contact NO)

Possibility of adding a remote forced stop (free voltage contact NO)



VALID ONLY in combination with a CBZ EC

III.3.e. QUATTRO®

Proportional ventilation between two constant airflows (m³/h) adjustable with CO2 manager

Adjustment of a minimum constant air flow (LS - 1/2) and a maximum air flow (HS - 1/1) in m³/h.

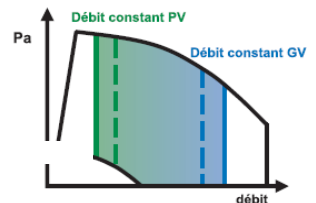
CO₂'s setpoint is set in factory to 1000ppm (compliant to French RT2012).

Variation between (LS - 1/2) and (HS - 1/1) is managed from CO₂ level

Fitted with a factory turned clocked set in (LS - 1/2) from 00h00 to 24h00.

Possibility of adding a remote forced start (LS - 1/2) or (HS - 1/1) (free voltage contact NO)

Possibility of adding a remote forced stop (free voltage contact NO)



VALID ONLY in combination with a CBZ EC

Note: In order for the CO₂ regulation works, installation must follow these constraints:

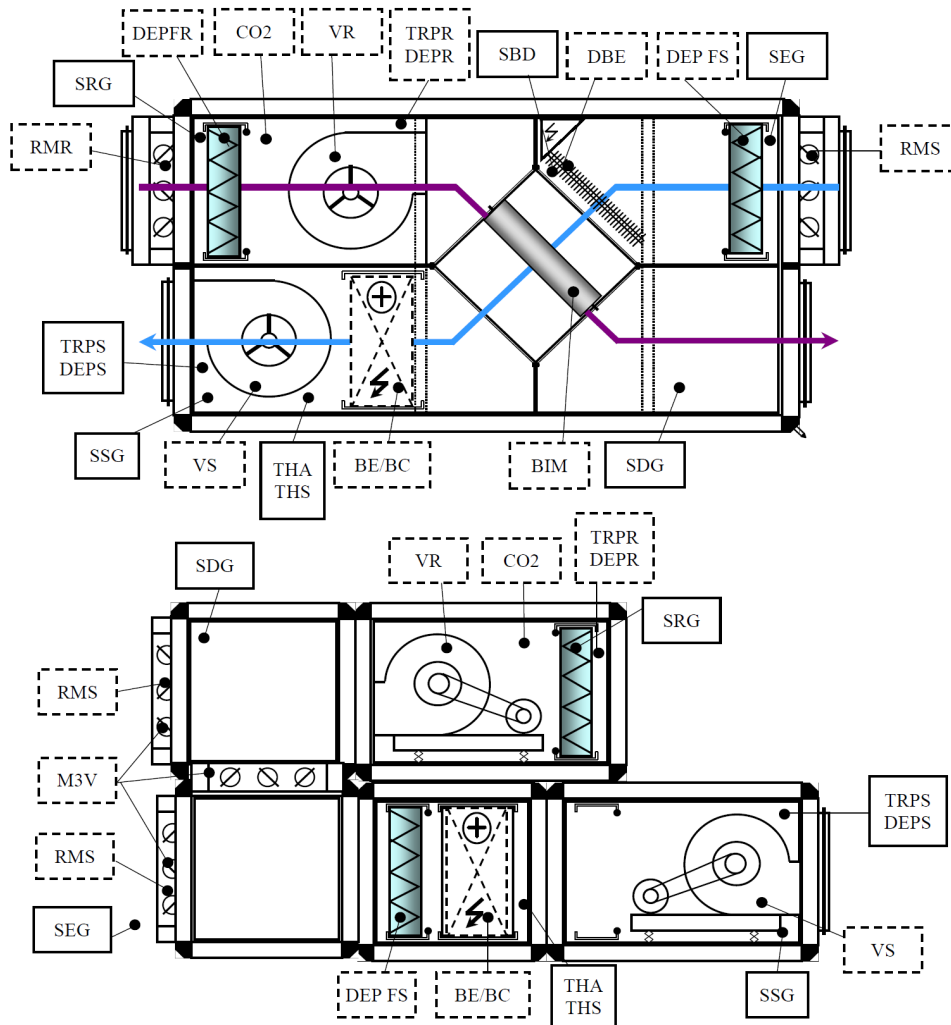


- Clock (HS - 1/1) is not activated (normal speed timer)
- Clock (LS - 1/2) is activated (reduced speed Timer)
- External operation (HS - 1/1) and external stop are not activated.

OPERATING AND COMMISSIONING INSTRUCTIONS

III.4.COMPOSITION

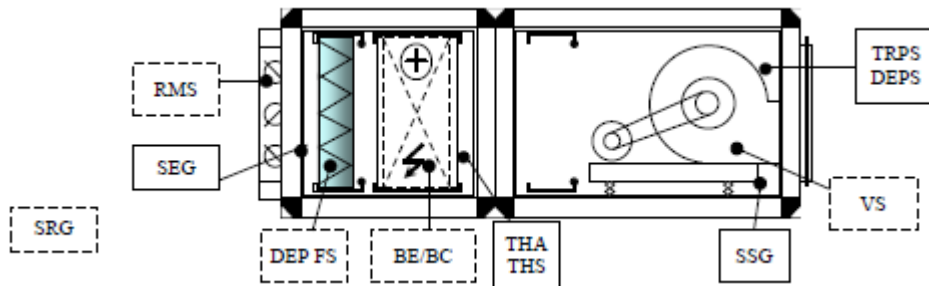
III.4.a. COMPOSITION AQUAPACK DF and ELECTROPACK DF



Name	Details
VS	Supply air fan (VAS/VS)
VR	Extract Air fan (VAR/VR)
CO2	CO2 transmitter (version DIVA®-QUATTRO® only)
SEG	Outdoor temperature sensor SEG
SRG	Extract temperature sensor SRG
SSG	Supply temperature sensor SSG
SDG	Deicing temperature sensor SDG
DEPFS / DEPFR	Supply filter pressure switch DEPFS - Extract filter pressure switch DEPFS
RMS / RMR	Fresh air damper / Extract damper
DEPS / TRPS	Supply pressure switch or supply pressure transmitter for version LOBBY®-MAC2®-QUATTRO®
DEPR / TRPR	Extract pressure switch or extract pressure transmitter for version LOBBY®-MAC2®-QUATTRO®
THA / THS	Deicing thermostat / Overheat security thermostat
BIM	Bypass
M3V	Three ways mixing damper
BC/BE	Hot water coil or electrical coil
DBE	Deicing battery

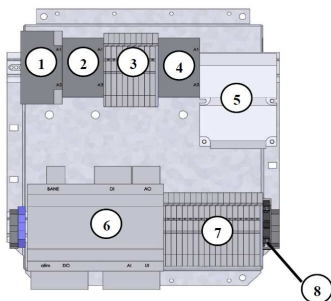
OPERATING AND COMMISSIONING INSTRUCTIONS

III.4.b. COMPOSITION AQUAPACK TA et ELECTROPACK TA

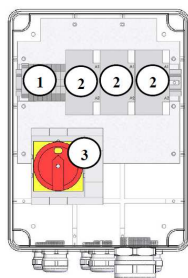


Name	Details
VS	Supply air fan (VAS/VS)
SEG	Outdoor temperature sensor SEG
SRG	Extract temperature sensor SRG
SSG	Supply temperature sensor SSG
DEPFS	Supply filter pressure switch DEPFS
RMS	Fresh air damper
DEPS / TRPS	Supply pressure switch or supply pressure transmitter for version LOBBY®-MAC2®-QUATTRO®
THA / THS	Deicing thermostat / Overheat security thermostat
BC/BE	Hot water coil or electrical coil

III.5. REPERAGE DES ELEMENTS DANS L'ARMOIRE DE REGULATION



Name	Details
1	K1 Heating Electrical battery relay (ELECTROPACK 271)
2	KVS Supply air fan relay
3	Terminal blocks (35 to 52)
4	KVR Extract air fan relay
5	Transformer 230V/24V TRAF075
6	Controller E283W3
7	Terminal blocks (1 to 34)
8	Fuse terminal blocks (fuse 3.15A)



Name	Details
1	Terminal blocks
2	K1/K2/K3 Heating Electrical battery relay
3	3 = Proximity security switch

IV. ELECTRIC WIRING

IV.1. Power supply

L'ELECTROPACK 271 is always supplied in 400V three phase + N.

ELECTROPACK 542 and 813 need **2 different power supply**:

- Cabinet for electrical battery is always supplied 400V TRI.
- The fan and accessories control box is connected to either 230 V single phase or 400V three phase + NEUTRAL depending on the type of motor

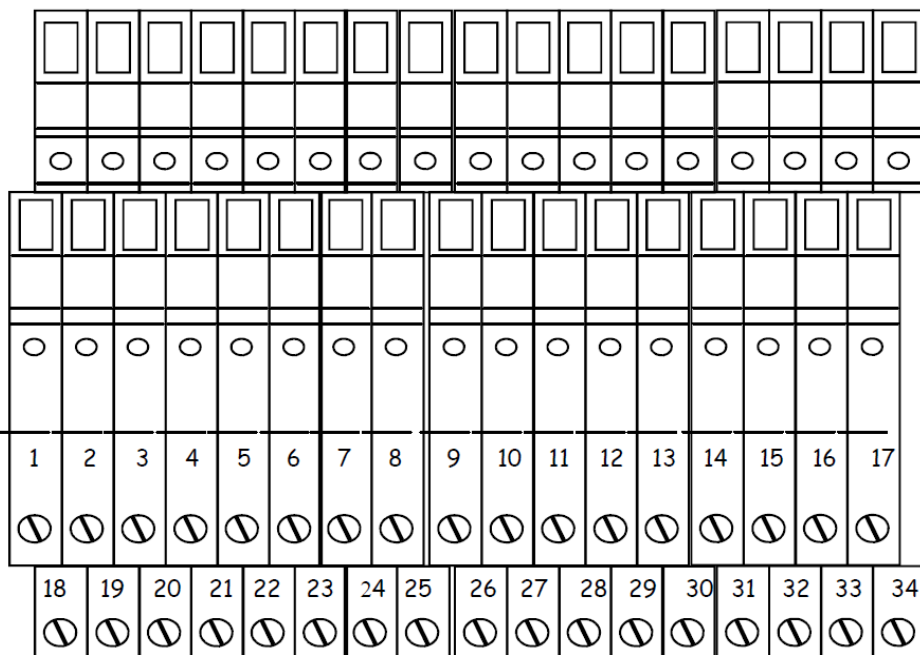
OPERATING AND COMMISSIONING INSTRUCTIONS

IV.2. Temperature sensor

Temperature sensors are connected on the regulator

- **SSG**: Duct supply temperature sensor on Agnd(30) et AI1(31)
- **SEG**: Duct outdoor temperature sensor on Agnd(30) et AI2(32)
- **SDG**: Duct deicing temperature sensor on Agnd(33) et AI3(34)
- **SRG**: Duct extract temperature sensor on Agnd(33) et AI4(35)
- **SBD**: Duct deicing battery temperature sensor on Agnd(36) and AI4(37) on SMART et INFINITE versions (replaced by a 1030 Ohms resistance on other versions)

IV.3. Terminal blocks



Designation	Terminals	Connection
ADP (shunted if not used)	1-2	Connect on fire emergency stop (free voltage NC contact)
DAD (shunted if not used)	3-4	Connect on DAD (smoke detector) default contact (NC)
THA/THS (shunted if not used)	5-6	Connect to NC free voltage contact of THA (PREMIUM BC/CO and INFINITE BC/CO) Or Connect to NC free voltage contact of THS (PREMIUM BE et INFINITE BE)
ED-TOUCH	7-8 + A*-B* (port2)	Connect to remote touch screen display
MF PV	9-10	Connect to NO free voltage contact of reduced Speed extended operation
MF GV	11-12	Connect to NO free voltage contact of normal Speed extended operation
ARR EXT	13-14	Connect to NO free voltage contact of external stop
BC	15-16-17	BC : Connect to 3 ways valve of the hot water battery (see chapter IV.11)
BE	18 + DO3**	BE : Connect to static contactor of the electric battery (see chapter IV.13)
Heating pump	18 + DO3**	Connect to hot water circulator (Note: 24V 2AMax to relay) (see chapter IV.11)
Cooling pump	19 + DO4**	Connect to cold water circulator (Note: 24V 2AMax to relay) ** (see chapter IV.11)

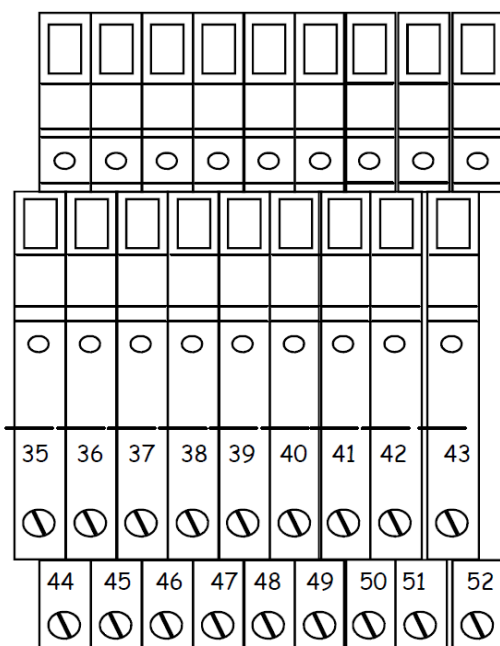
OPERATING AND COMMISSIONING INSTRUCTIONS

AL	20 + DO5**	24V output available if unit is in default (Note: 24V 2A Max to relay)
DBE	21 + DO6**	Connect to static contactor of the defrost battery
NC (Night cooling) (LOBBY®)	22 + DO7**	24V output available if the plant is associated with the LOBBY® EC option for opening terminal registers during Night Cooling. (Attention 24V 2A Max to relay)
TRPS (LOBBY® MAC2® QUATTRO®)	23 Agnd* + UI2*	Connect to supply Pressure T ransmitter (see chapter IV.8)
DEPS (ECO® DIVA®)	24 + UI2*	Connect to terminal 1 and 3 of supply pressure switch (see chapter IV.7)
TRPR (LOBBY® MAC2® QUATTRO®)	25 Agnd* + UI3*	Connect to return pressure T ransmitter (see chapter IV.8)
DEPR (ECO® DIVA®)	26 + UI3*	Connect to terminal 1 and 3 of return pressure switch (see chapter IV.7)
CO2 (DIVA®)	27 Agnd* UI4*	Connect to CO2 sensor (see chapter IV.9) DIVA/QUATTRO option
BF	28-29-30	BF : Connect to 3 ways valve of the cold water battery (see chapter IV.11)
DEP FS DEP FR	31-32 33-34	To be connected to terminals 1 and 3 of the Blowing Filter DEP (Cf IV.6) To be connected to terminals 1 and 3 of the Return Filter DEP (Cf IV.6)

* To be connected directly to CORRIGO regulator

** To be connected directly on CORRIGO and 8A max regulator on all DO

IV.4. Upper terminal block



OPERATING AND COMMISSIONING INSTRUCTIONS

Designation	Terminals	Connection
RMS	35 + 14 KVS	To be connected on terminals 1 and 2 of the motorised blowing damper
SW S (shunted if not used)	36-37	Blower door switch to be connected to NF contact
PTO S (shunted if not used)	38-39	PTO Blowing (contact NF)
0-10V S	40-41	To be connected to the 0-10V of the blower fan
RMR	43 + 14 KVR	To be connected to terminals 1 and 2 of the Return Register
BIM	44-45-46	To be connected to the servomotor of Bypass 44=24V (G)/ 45=10V (G0)/ 46=10V (Y)
SW R (shunted if not used)	47-48	Blower door switch to be connected to NF contact
PTO R (shunted if not used)	49-50	PTO Supply (contact NF)
0-10V R	51-52	To be connected to the 0-10V of the return fan

IV.5. Electrical connection and operation of the 3-way module (FEE)

ONLY FOR AQUAPACK DF ELECTROPACK DF WITHOUT PLATE EXCHANGER

The 3-way module (FEE module) is factory connected. Add and wire a CO2 probe if not factory ordered.

Its operation is automatically controlled thanks to the programming of the CORRIGO controller and the standard installed probes in our double-flow control panels without plate exchanger.

ISOLATION: If the plant is shut down, the new and returned air dampers serve as isolation dampers.

TEMPERATURE FUNCTION OF THE FEE MODULE

In Winter:

When heat is required, the Module 3 Tracks closes in a suitable way until maximum recycling (adjustable minimum flow of new air (see chapter V.6.6)) to recover a maximum of calories. If this is not enough to reach the temperature guideline, the hot battery is activated.

In Summer:

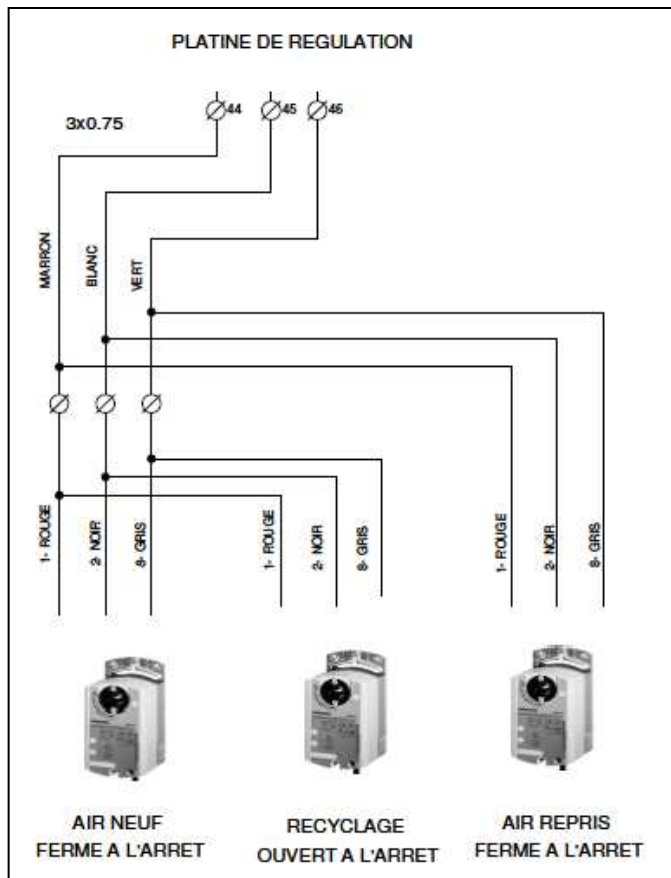
COLD ANNEALING: If the outside temperature is higher than the inside temperature and cold is required, the Module 3 Tracks closes in a suitable way until the maximum recycling (minimum adjustable new air flow (see chapter V.6.6)) so as not to allow the outside heat directly into the building. If it is not sufficient to reach the set temperature, the cold battery comes into action.

FREE COOLING: If the outside temperature is lower than the inside temperature and we are in demand for cold, the 3-way module opens in an adapted way up to the new air to recover a maximum of calories. If it is not sufficient to reach the set temperature, the cold battery comes into action.

The functions below will not be active if the plant is associated with an option DIVA or QUATTRO

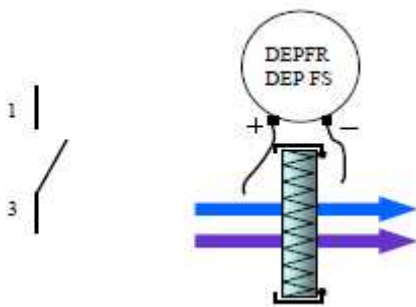
CO2 FUNCTION OF THE FEE MODULE: The 3-way module also manages indoor air quality. In case the CO2 level in the building is higher than the guideline then the signal imposing the newest air (temperature or CO2) will be given priority.

OPERATING AND COMMISSIONING INSTRUCTIONS



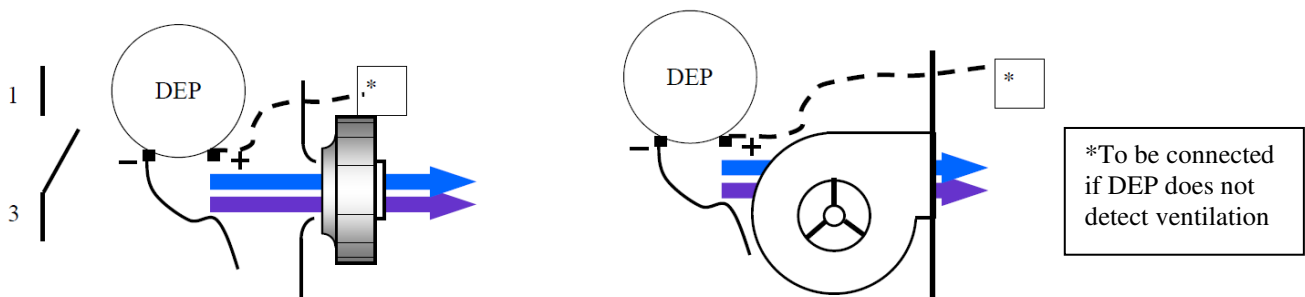
IV.6. Connection of filter pressure switches

New air filter pressure switch is wired and factory connected.



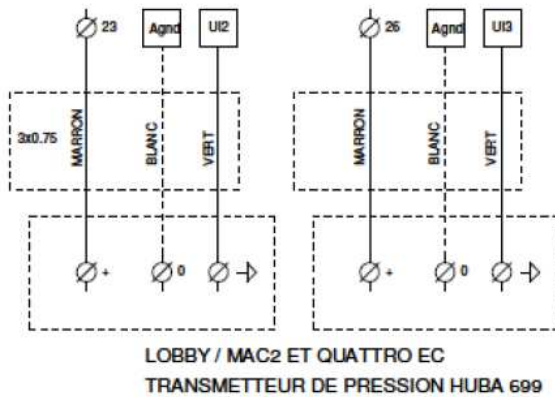
IV.7. Connecting fan pressure switches

The fan pressure switches are wired and connected aeraulically from the factory.

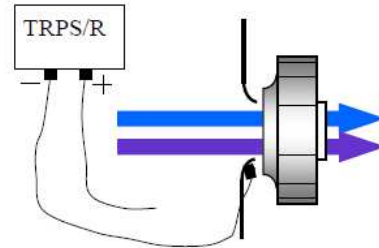


OPERATING AND COMMISSIONING INSTRUCTIONS

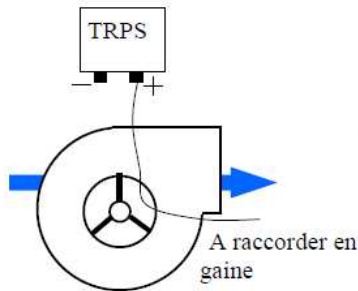
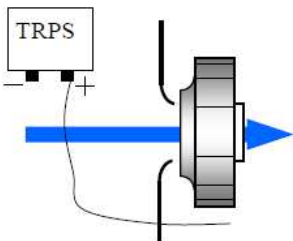
IV.8. Connection of pressure transmitters for LOBBY®/MAC2®/QUATTRO®



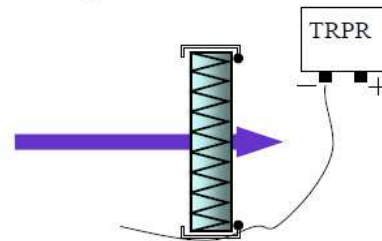
MAC2 / QUATTRO



Soufflage LOBBY

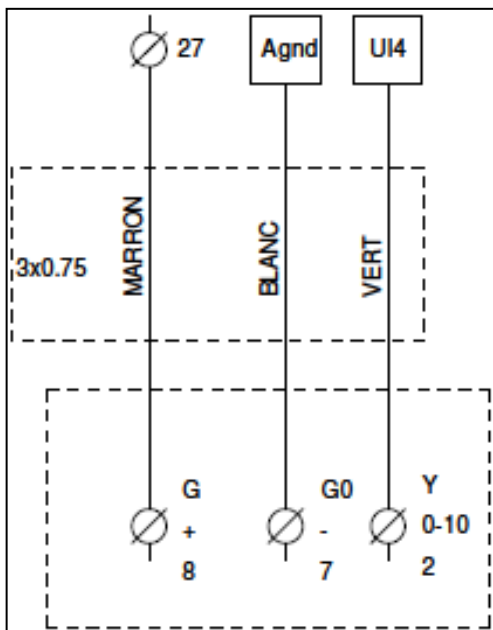


Reprise LOBBY



IV.9. Connecting the CO2 transmitter for DIVA® QUATTRO® and M3V

The CO2 transmitter is factory wired



OPERATING AND COMMISSIONING INSTRUCTIONS

IV.10. Night Cooling (Nocturnal overselling)

This function is used during the summer to cool buildings at night using fresh outdoor air. This reduces the amount of cold power to be delivered during the day. The Night Cooling function only works from 00:00 to 07:00 in the morning. During a period of Night Cooling, the hot and cold exits are blocked at 0V. The exchanger passes in all new air. At the end of a Night Cooling period the heating is blocked at 0V for 60 minutes.

Operating conditions: configurable in chapter V.5

- Outside temperature was above 22°C during the day
- The clocks are set either in PV or at the stop between 00:00 and 07:00
- Outside temperature is below 18°C during the Night Cooling period
- Outside temperature is greater than 10°C during the Night Cooling period
- Room ambient temperature is greater than 18°C

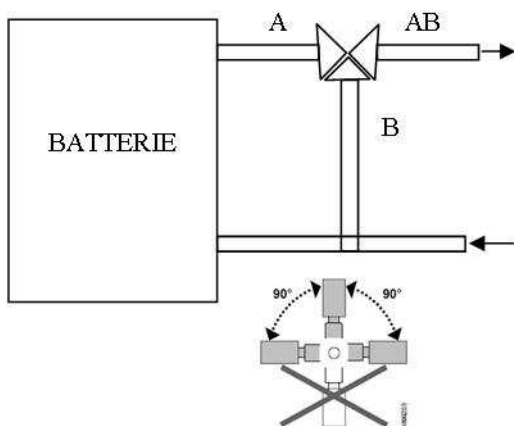
During the Night Cooling period the fans turn to 85%. This speed is adjustable (see chapter V.5)

For the LOBBY® versions, a 24V output (to be relayed) is made available between terminals 22 and DO7 to force the opening of the zone registers during the Night Cooling period.

IV.11. Hot water battery / cold / changeover

Be careful not to interfere with the opening of access doors (pipes, cables, etc.)

The Antifreeze Thermostat is connected when the battery is mounted in the CTA. However, you must wire the 3-way valve. If you are using a cold battery or changeover duct, move the blow probe away after the battery.



THE VALVE MUST BE DISCONNECTED
Connect the 3-way valve actuator as follows:

Hot battery:

Terminal **15** on +24V (G) of the valve actuator

Terminal **16** on the 0V (G0) of the valve actuator

Terminal **17** on the 10V (Y) of the valve actuator

Connect the NF contact (C and 2) of the **THA (THERmostat Antigel)** to 5 and 6.

Possibility to control the operation of the circulator of hot water at the central on the terminals **DO3 of the regulator** and **18 of the terminal block**. (Attention output 24V to relay)

Cold battery:

For control panels with sheathed BF module, the additional module is equipped with a condensate tray. A condensate connection via a siphon is to be provided.

Terminal **28** on +24V (G) of the valve actuator

Terminal **29** on the 0V (G0) of the valve actuator

Terminal **30** on the 10V (Y) of the valve actuator

Connect the NF contact (C and 2) of the **THA (THERmostat Antigel)** to 5 and 6.

Possibility to control the running of the circulator of cold water at the central on the terminals **DO4 of the regulator** and **19 of the terminal block**. (Attention output 24V to relay)

OPERATING AND COMMISSIONING INSTRUCTIONS

Battery changeover:

For control panels with integrated or sheathed CO modules, the control panel or additional module is equipped with a condensate tray. A condensate connection via a siphon is to be provided.

The 3-way mark must be attached to the water inlet before the bypass.

You need to wire the 3-way valve and the changeover pellet.

Connect the assembly as follows:

10V (Y) Valve Actuator Pellet (CO) Red Wire

Terminal **15** on +24V (G) of the valve actuator

Terminal **16** on the 0V (G0) of the valve actuator

Terminal **17** on the brown lead of the pellet (hot signal)

Terminal **30** on the black wire of the pellet (cold signal)

Connect the NF contact (C and 2) of the **THA (THERmostat Antigel)** to 5 and 6

Possibility to control the flow of the circulator on the terminals **DO3 of the regulator** and **18 of the terminal block** (hot demand) and on the terminals **DO4 of the regulator** and **19 of the terminal block** (cold demand). (Attention output 24V to be relayed).

CAUTION In this case use a relay for each output and wire them in parallel on the M/A of the circulator.

IV.12. Cold direct trigger battery alone or reversible

For control panels with sheathed DX module, the additional module is equipped with a condensate tray. A condensate connection via a siphon is to be provided.

We put at your disposal:

- 24V output when the plant is in hot or cold demand
- Hot 0-10V output and cold 0-10V output

Hot Demand:

- 24V output: To be connected on the terminals DO3 of the regulator and 18 of the terminal block and to give the order of operation to drive a module DX (Attention 24V 2A Max to relay)
- 0-10V output: To be connected to the terminals **16** and **17 (16=0V et 17 =0/10V)**

Cold Demand:

- 24V output: To be connected to the terminals DO4 of the regulator and 19 of the terminal block and to give the order of operation to drive a module DX (Attention 24V 2A Max to relay)
- Sortie 0-10V: To be connected to the terminals **29** and **30 (29=0V et 30 =0/10V)**

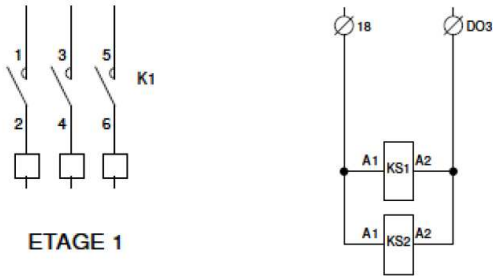
ATTENTION: In case you are using the 24V outputs, use a relay for each output and wire them in parallel on the M/A of the DX group

ATTENTION: The 24V and 0-10V operating orders do not in any way manage any security, a short anti cycle ... of the direct trigger.

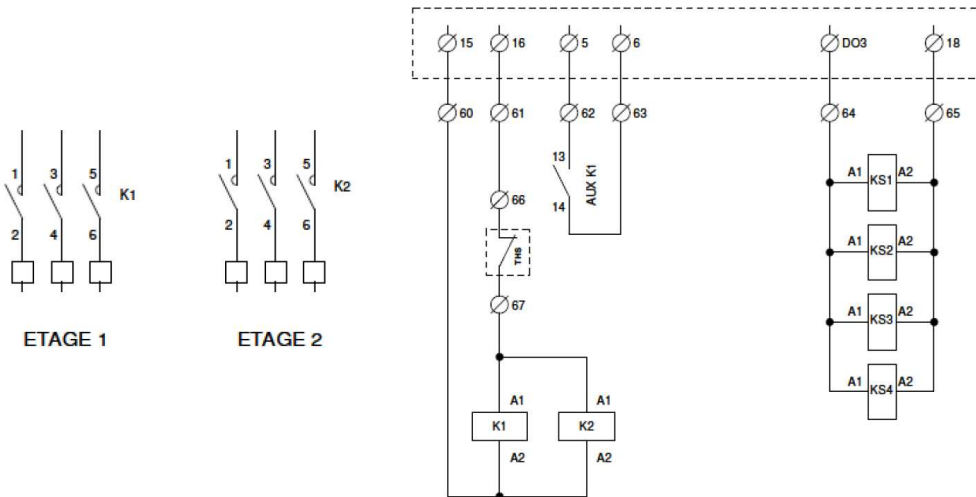
OPERATING AND COMMISSIONING INSTRUCTIONS

IV.13. Electrical battery

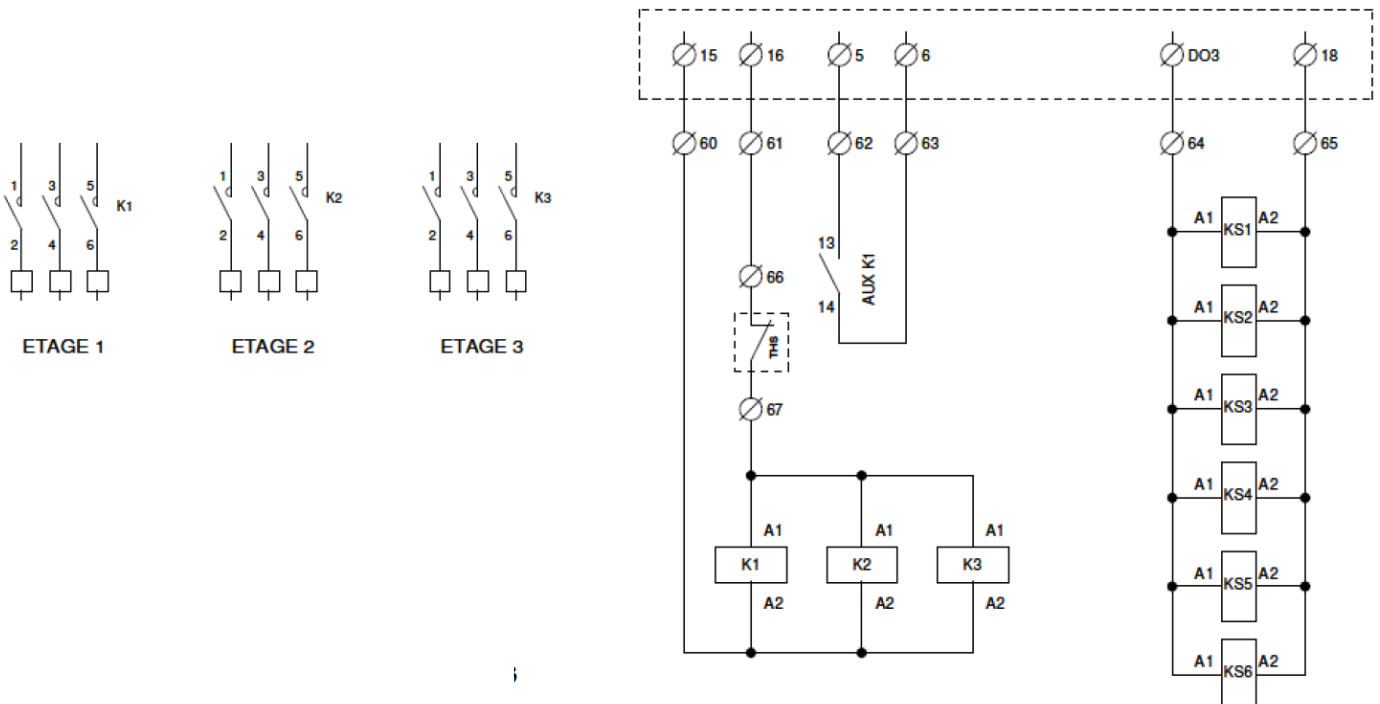
IV.13.a. ELECTROPACK 271



IV.13.b. ELECTROPACK 542



IV.13.c. ELECTROPACK 813



OPERATING AND COMMISSIONING INSTRUCTIONS

IV.14. Fire function

See settings chapter V.8

There are 2 ways to manage the fire function:

- Emergency Fireman stop: cable between 1 and 2 terminals (NF free voltage contact). Total stop of the central control. (no display available)
- Fire alarm: This function exhaust and return fans with 5 modes available in the parameters of the regulation (the function can be activated on site). "Fire Alarm" will be on the display.
 1. « **Stop** »: Complete stop of the unit.
 2. « **Continuous work** »: Start of the unit in HS, fire function will have priority on all the other alarms.
 3. « **Normal work** »: Keeps the unit running with parameters activated on site (Stop/LS/HS).
 4. « **Supply fan only** »: Starts or keeps in HS the supply fan (extracted stopped)
 5. « **Extract fan only** »: Starts or keeps in HS the extract fan (supply stopped)

Digital input « external stop » is priority on fire function.



This function is not adapted anymore to the French market and will be in all cases validated by the control office.

Digital input fire alarm will be connected between **DI8 terminal of the controller and 13 of the terminal block (free voltage contact required)**

IV.15. Dehumidification function

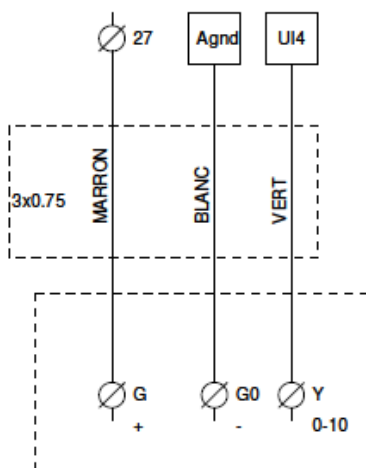
See configuration chapter V.8

It is possible to associate the unit to a COMBIBOX CONCEPT® module equipped with a cold battery (water or cold direct expansion module only) followed by a hot battery (water or electric or hot direct expansion module DX heat). In this case controller will manage automatically the heating or cold inputs for the dehumidification and will keep an ideal functioning temperature. During cold needs period, the temperature management will have priority on dehumidification.

Connect batteries as indicated in chapters IV.11 to IV.13

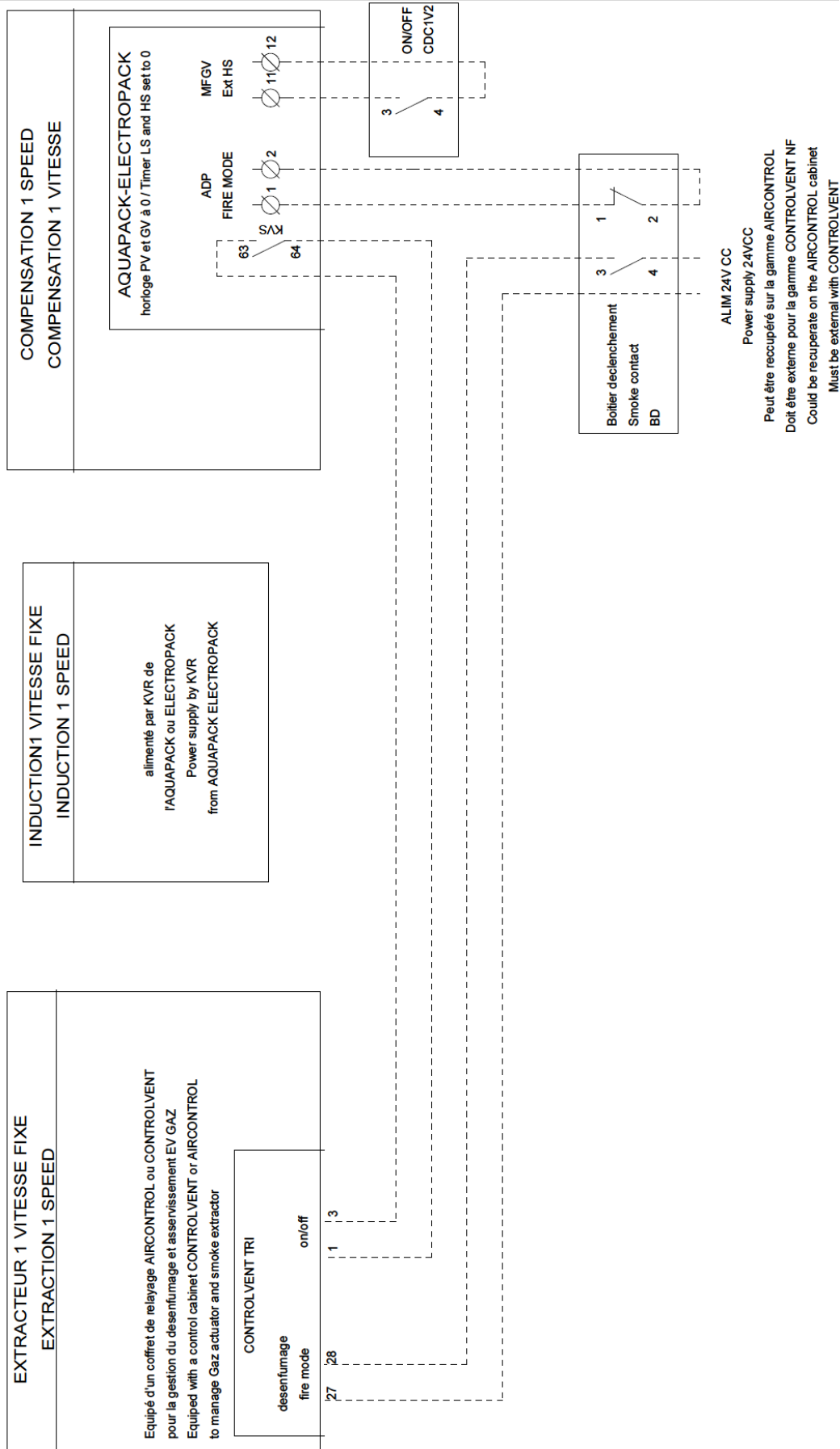
Install the humidity duct sensor in supply or extract air, following the humidity control mode.

Connect the humidity sensor as following instructions:



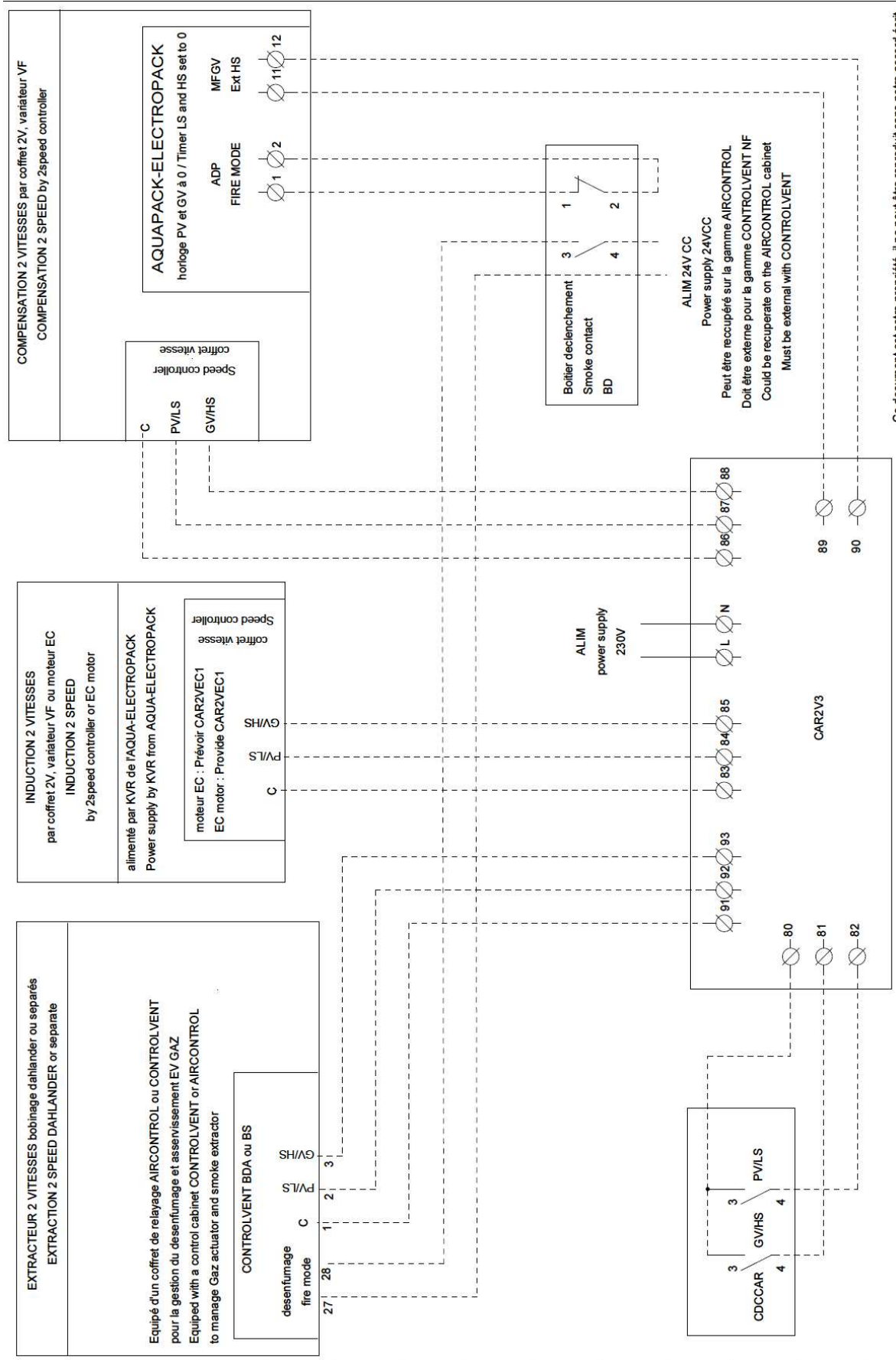
OPERATING AND COMMISSIONING INSTRUCTIONS

IV.16. Kitchen solution 1 speed



OPERATING AND COMMISSIONING INSTRUCTIONS

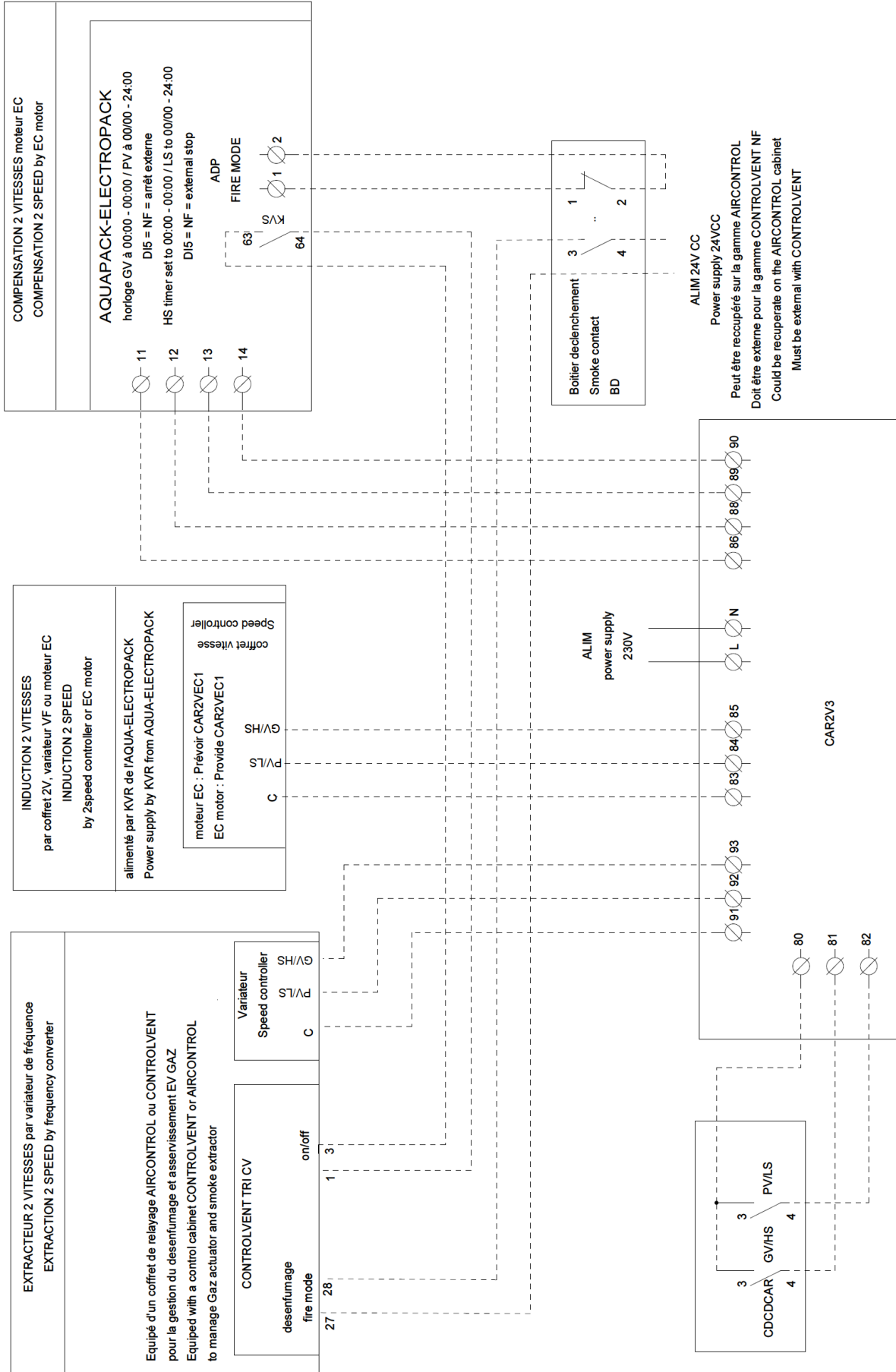
IV.17. Kitchen solution 2 speed 1



Ce document est notre propriété, il ne peut être reproduit sans notre accord écrit.

OPERATING AND COMMISSIONING INSTRUCTIONS

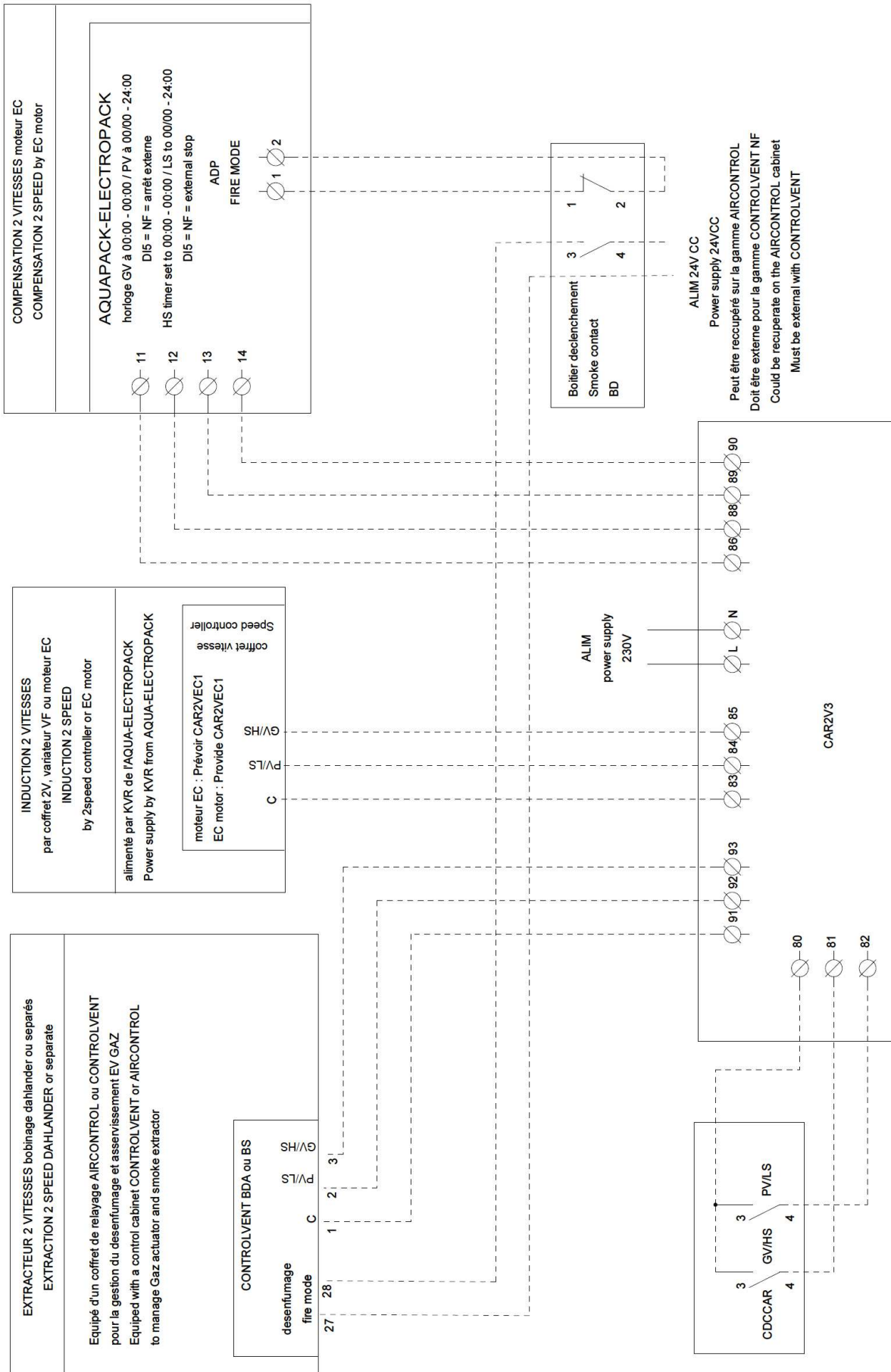
IV.18. Kitchen solution 2 speed 2



Ce document est notre propriété, il ne peut être reproduit sans notre accord écrit.

OPERATING AND COMMISSIONING INSTRUCTIONS

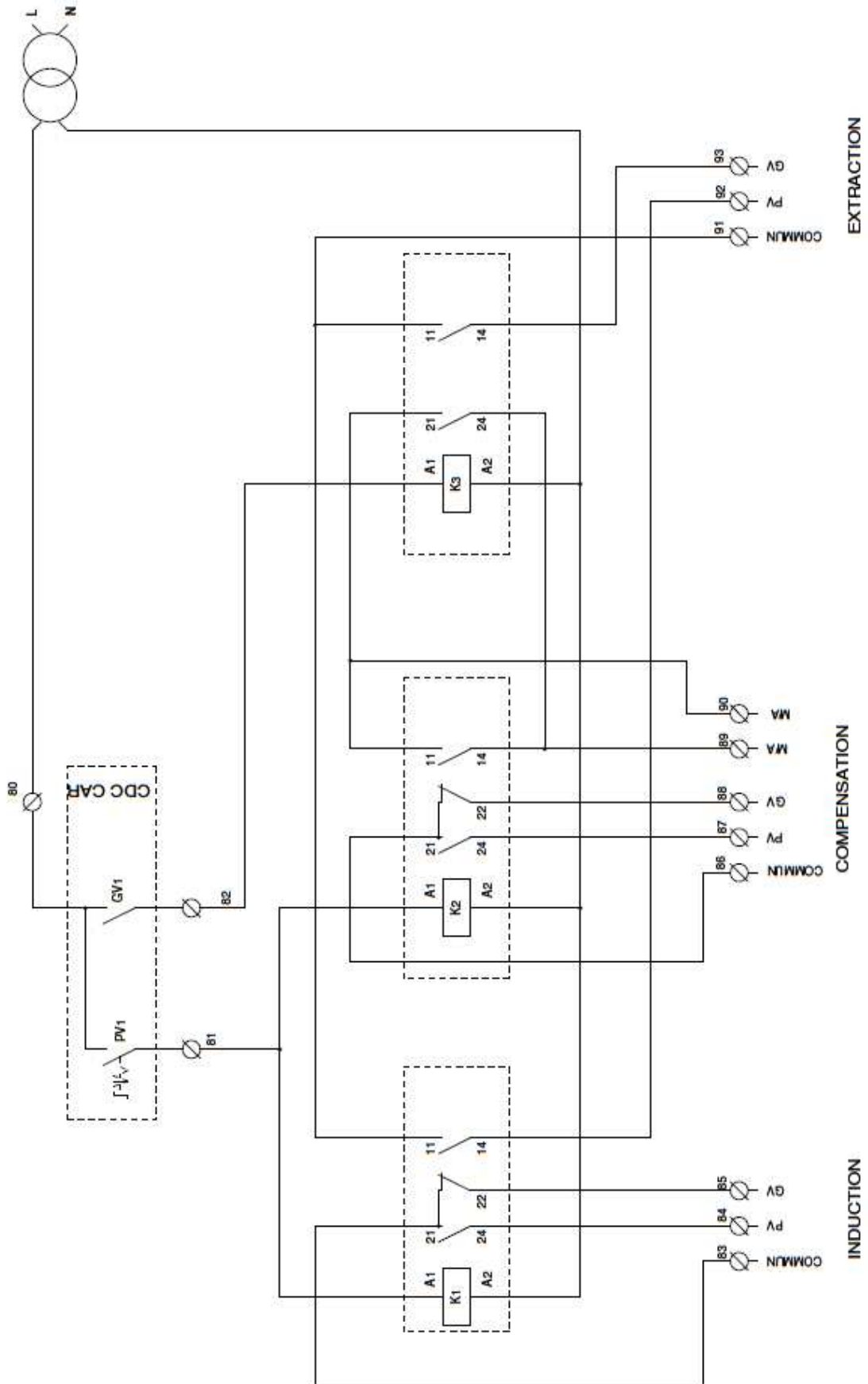
IV.19. Kitchen solution 2 speed 3

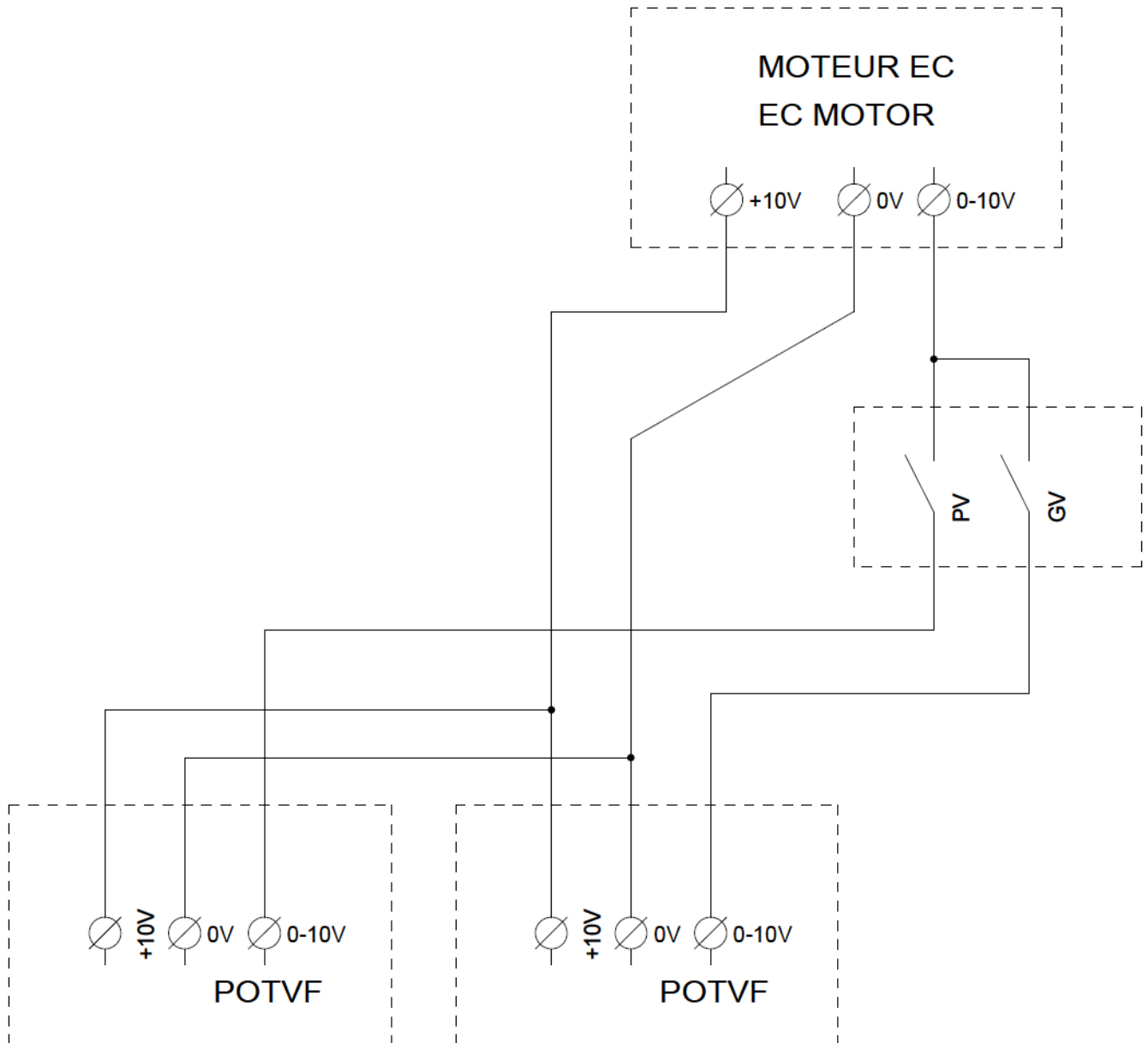


Ce document est notre propriété, il ne peut être reproduit sans notre accord écrit.

OPERATING AND COMMISSIONING INSTRUCTIONS

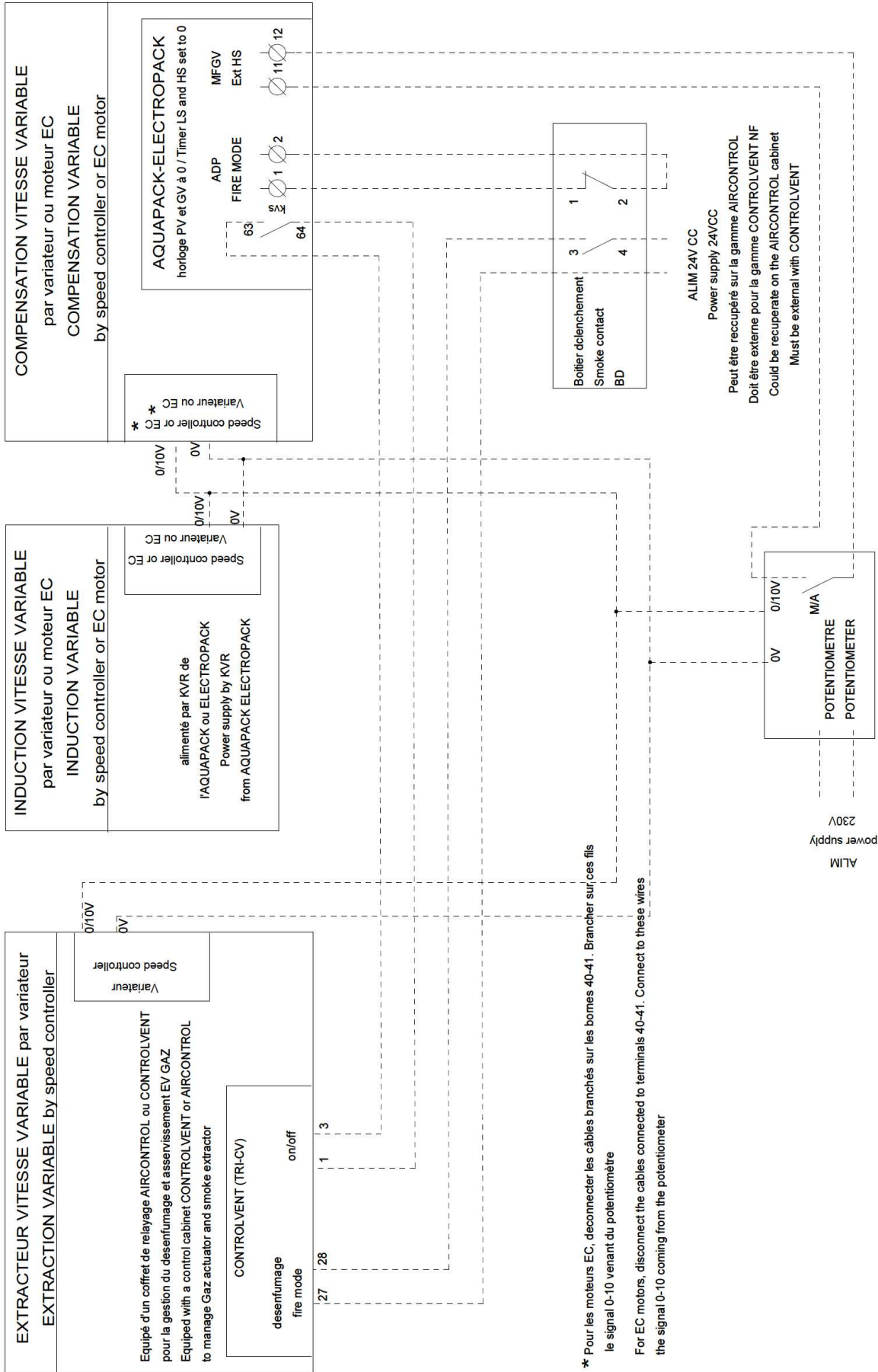
IV.20. CAR2V3



OPERATING AND COMMISSIONING INSTRUCTIONSIV.21. CAR2V EC1

OPERATING AND COMMISSIONING INSTRUCTIONS

IV.22. Kitchen solution 0-10V



OPERATING AND COMMISSIONING INSTRUCTIONS

IV.23. MODBUS / WEB / BACNET wiring

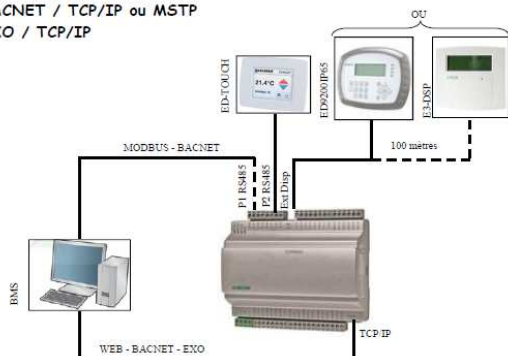
(see parameters in chapters V.8)

MODBUS RS485 and BACNET MS/TP : Use armored cable 2 crossed pairs wire type BELDEN 8723 or similar to connect BMS to controller (to connect to port 1 (BANE) / connect armor to N and don't connect E)

WEB / MODBUS TCP/IP and BACNET IP: to connect to TCP/IP port

BMS : en standard

- MODBUS / RS485 ou TCP/IP
- WEB / TCP/IP
- BACNET / TCP/IP ou MSTP
- EXO / TCP/IP



IV.24. Repeater wiring

(see setting chapter V.8)

You need to use a repeater in case of you want to connect:

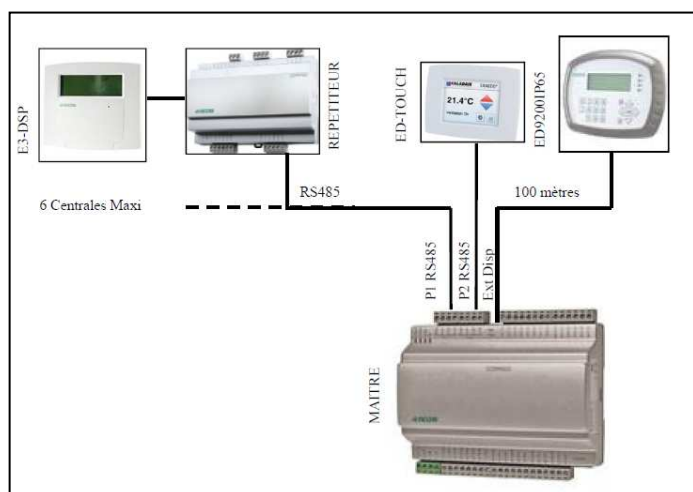
- More than one unit on the same display (maximum 6)
- A remote control at a distance higher than 100m

In this case you can move to 1 kilometer the remote control. Use 2 crossed wire type BELDEN 8723 or similar between repeater and controller. Supply repeater in 230V single mono phase.

Connect on port 1 the wires as following instructions:

- B of repeater on B terminal of the regulation board (armor wire as in drawing under)
- A of repeater on A terminal of regulation board (armor wire as in drawing under)
- N of repeater on N terminal of regulation board (armor wire as in drawing under)

Plan a 230V single phase power supply on the repeater

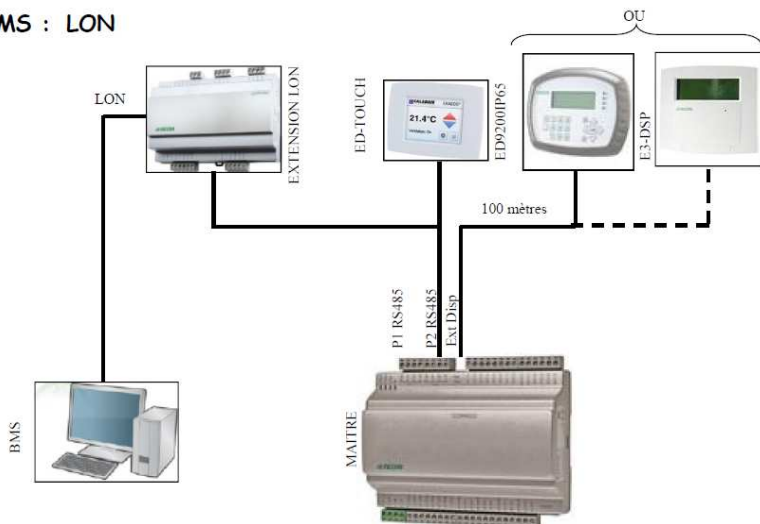


OPERATING AND COMMISSIONING INSTRUCTIONS

IV.25. LON

(see configuration in chapter V.8) Cable port 2 of master on port 1 of LON controller

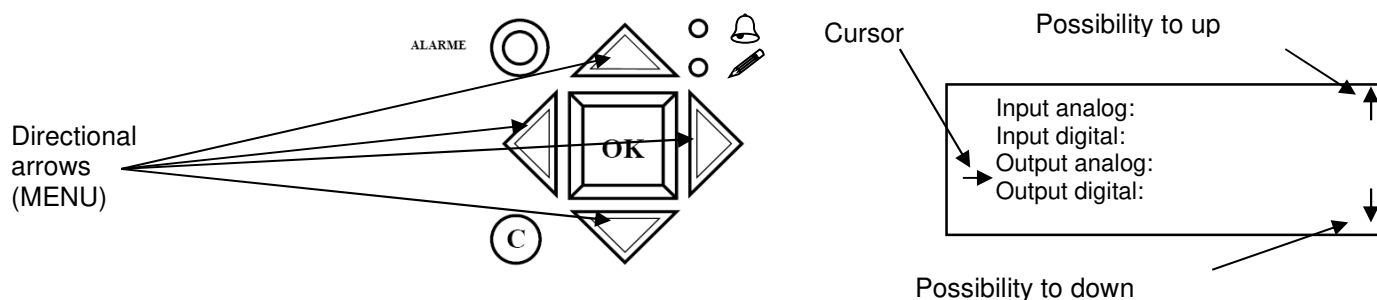
BMS : LON



V. PARAMETRAGES

V.1. Command (integrated or remote control)

- Directional arrows up, down, left and right help to navigate in the menus.
- Les Up and Down buttons help to increase or decrease the values of a parameter when you have access to. Right and left buttons help to navigate inside the parameter.
- OK button help to enter the value and to confirm a choice. C button helps to cancel it.
- Alarm button (red) allows the access of the defaults list.
- Left arrow also helps to go out of the alarm menu and go back to the main menu.
- Cursors indicate the possible movements and which arrows to press.



V.2. Example of settings

- Move the cursor to the required menu

In the required menu:

Hour: ex : **10:33**
Date: ex : **08/12/23** (year/month/day)
Day: ex : **Tuesday**

press OK

And enter the password if necessary

- Enter the required value with arrows or with numerical keyboard
- Press OK to valid and go to next step.

When values are updated press the left arrow to come back to the welcome screen.

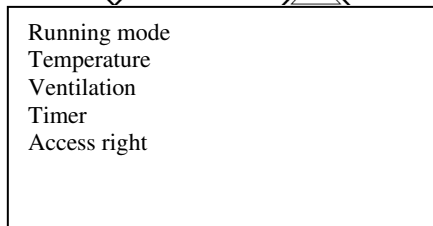
OPERATING AND COMMISSIONING INSTRUCTIONS

V.3. Standard settings (operator menu)

Words in normal writing = viewing only / **Words in bold** = Modification is possible / **Outlined words in bold** = Modification is possible with password 3333 ... = non accessible or not used.



ATTENTION: Do not modify parameters which are not in bold characters, in this case no after sales will be admitted

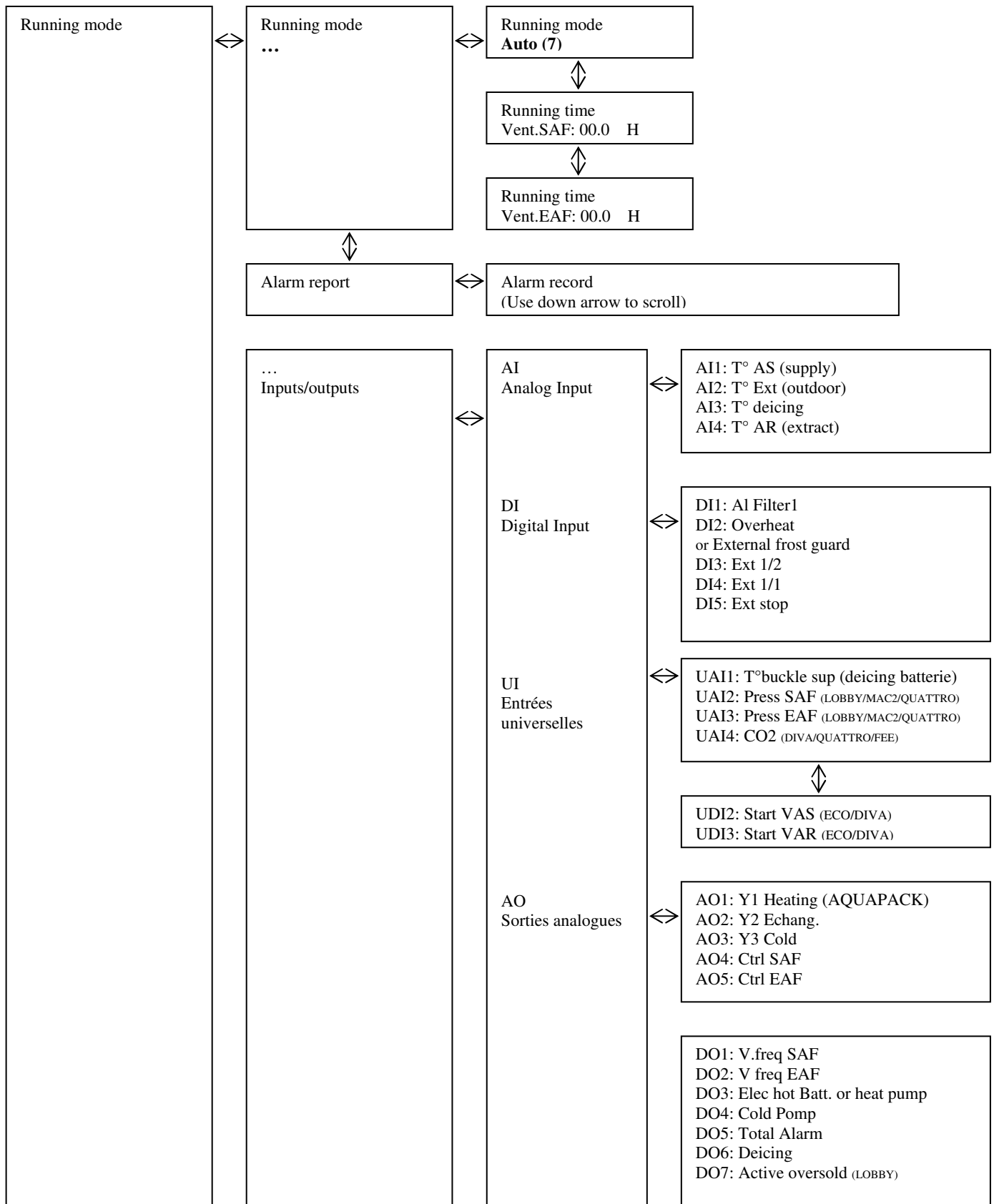


List of the accessible and modifiable main menus with password 3333.
Humidity regulation menu is only accessible when unit is in humidity control mode.

(10) Language settings (see chapter V.4.e)

OPERATING AND COMMISSIONING INSTRUCTIONS

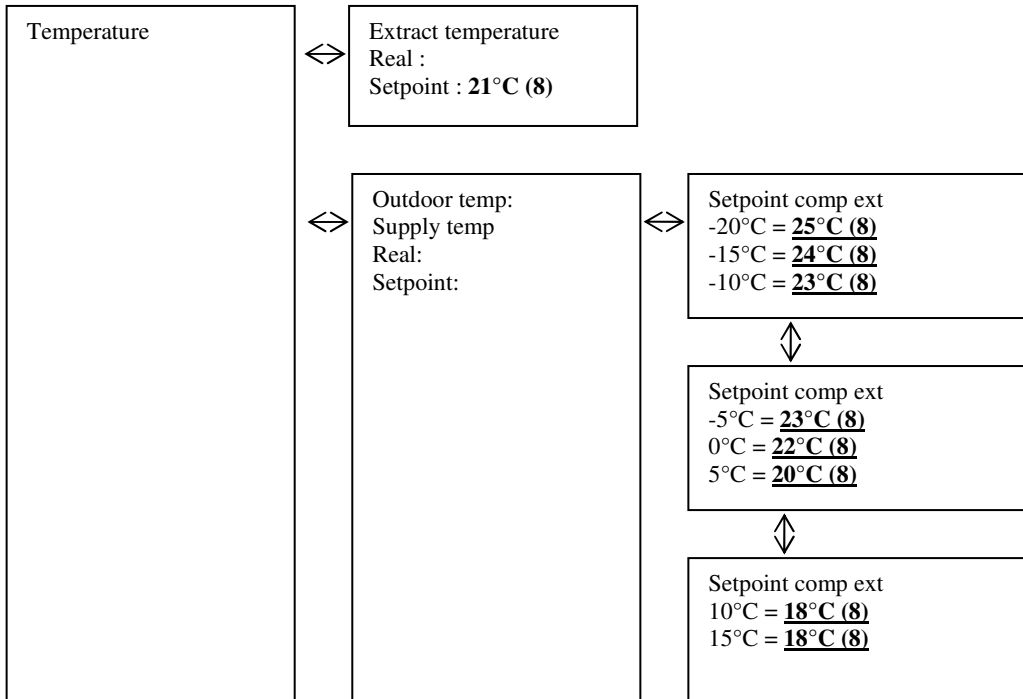
V.3.a. Running mode menu



(7) **Unit Start/Stop (see chapter V.4.d)**

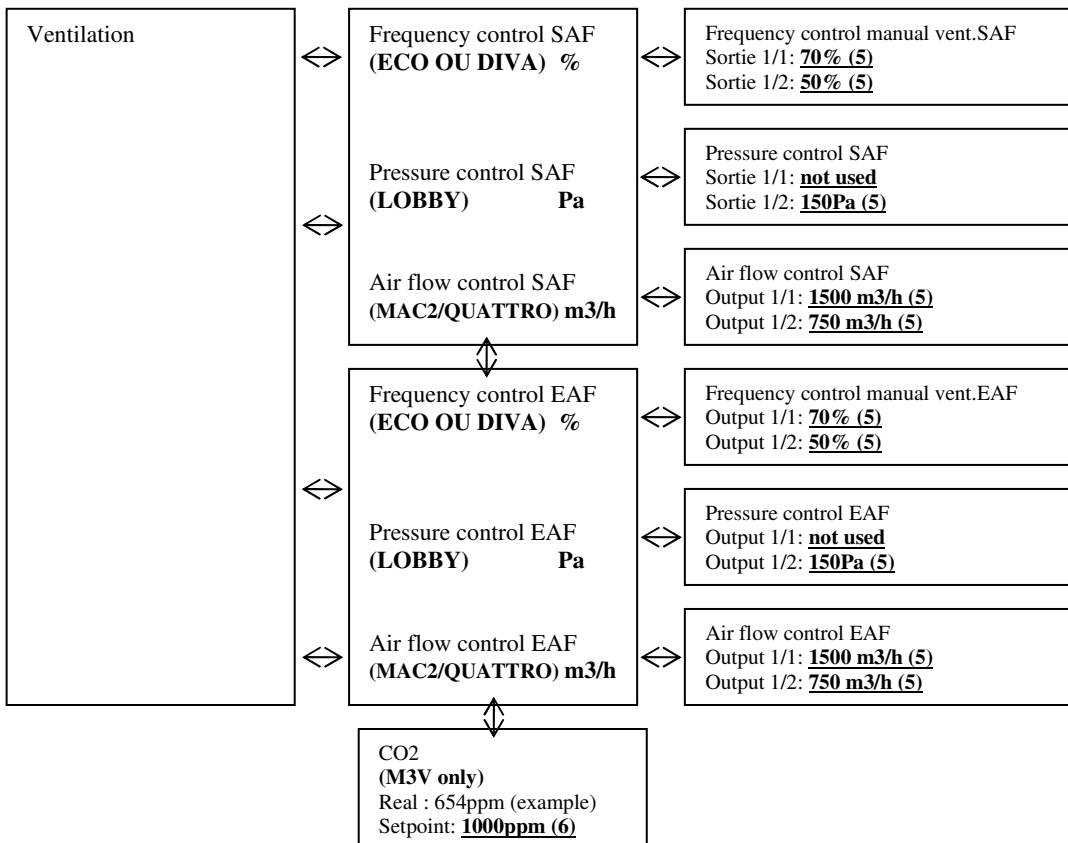
OPERATING AND COMMISSIONING INSTRUCTIONS

V.3.b. Temperature menu



(8) Temperature setpoint setting (see chapter V.4.c)

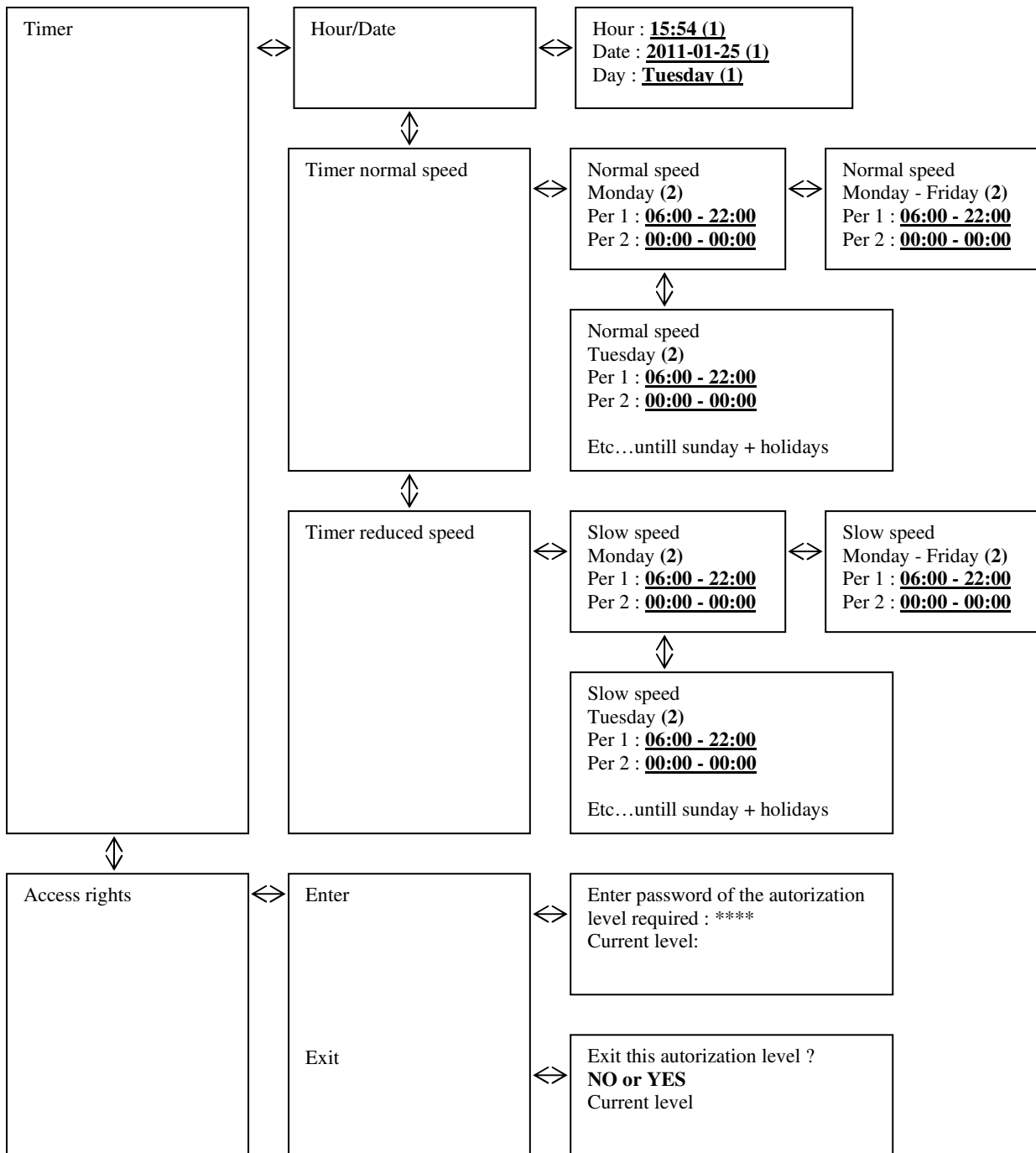
V.3.c. Ventilation menu



(5) Speeds, pressures, airflows (see chapter V.4.b)
(6) CO2 setpoint 3-way module (see chapter V.4.f)

OPERATING AND COMMISSIONING INSTRUCTIONS

V.3.d. Timer menu



1. Hour and date setting (see chapter V.4.a)
2. HS program setting (see chapter V.4.a)
3. LS program setting (see chapter V.4.a)
4. Holidays period setting (see chapter V.4.a)

OPERATING AND COMMISSIONING INSTRUCTIONS

V.4. Operator parameters modification (password 3333 required)

V.4.a. Dates and hours clocks setting

V.4.a.1. Date and hour of the CORRIGO controller [(1) chapter V.3.d]

Access: Hour Date setting

Date and hour of the regulator are set by default in the CORRIGO controller. Summer/Winter time is automatically managed.

V.4.a.2. Hour programming of the functioning system [(2) (3) chapter V.3.d]

Access:

- **Timer normal speed:** Time settings / normal speed program
- **Timer reduced speed:** Time settings / slow speed program

System is set to work in normal speed (HS-1/1) **07:00 - 22:00** in slow speed (LS-1/2) **22:00 - 06:00** except DIVA / LOBBY / QUATTRO versions which work in slow speed (LS-1/2)


As indicated in arborescence you also have the possibility to modify Monday to Friday periods by pressing the right button when you are on the Monday screen

Note: if slow speed (LS-1/2) and normal speed (HS-1/1) are activated in the same time window, unit works in high speed

Operation exceptions :

DIVA®/QUATTRO®: For CO2 regulation do not activate any normal speed time window (GV-1/1)

LOBBY: Only slow speed clock (LS-1/2) must be activated

 NIGHT COOLING: Only works if unit is in slow speed (LS-1/1) between 00:00 and 07:00.AM (Example: If unit is in (LS-1/2) between 02:00 and 06:00 and in (HS-1/1) the rest of the time. Then NIGHT COOLING is allowed to work only from 02:00 to 06:00 AM)

V.4.a.3. Vacation time [(4) chapter V.3.d] (password 3333 required)

Access: Hour settings / holidays

System is set with no vacation time. If you need to reduce functioning time during vacation time, set the functioning time window as indicated in chapter V.3.4), and set the vacation days.

V.4.b. Speed /pressure modification in LS and HS

V.4.b.1. ECO / DIVA® / [(5) chapter V.3.c]

Access: ventilation Regul / Frequency control VAS 1/1 and 1/2 or frequency control VAR 1/1 et 1/2

You can modify the rotation speed of the unit in PV-1/2 (slow speed) and in HS-1/1 (normal speed) for each fan to set the airflows.

- To set the initial airflow (GV-1/1), force the system in normal speed with available terminals « Forced start HS » (bridge between 11 and 12 terminals).
- To set the initial airflow LS, force the system in slow speed with available terminals « Forced start LS » (bridge between 9 and 10 terminals).

V.4.b.2. LOBBY® [(5) chapter V.3.c]

Access: ventilation Regul / Pressure control VAS 1/2 or Pressure control VAR 1/2

You can modify the constant pressure of the unit for each fan to set the airflows.

- To set the initial airflows LS, force the system in normal speed with available terminals « Forced start LS » (bridge between 9 and 10 terminals).

V.4.b.3. MAC2®/QUATTRO® [(5) chapter V.3.c]

Access: ventilation Regul / Airflow control VAS 1/1 and 1/2 or Airflow control VAR 1/1 and 1/2

You can modify the rotation speed of the unit in PV-1/2 (slow speed) and in HS-1/1 (normal speed) for each fan to set the airflows.

- To set the initial airflow (GV-1/1), force the system in normal speed with available terminals « Forced start HS » (bridge between 11 and 12 terminals).
- To set the initial airflow LS, force the system in slow speed with available terminals « Forced start LS » (bridge between 9 and 10 terminals).

OPERATING AND COMMISSIONING INSTRUCTIONS

V.4.c. Temperature setpoint modification

[(8) chapter V.3.b]

Access: temperature Regul

Regulation is based on the temperature control of:

- Supply with external compensation (set in standard). Supply temperature setpoint follows outside temperature in compliance with RT 2012 norm.
- Extract

V.4.d. Forced stop of the unit or forced start LS or HS on the remote control

[(7) chapter V.3.a]

Access: running Mode / running Mode

You can stop (7) (**stop**) unit with CORRIGO controller or do a forced start LS (7) (**manual speed 1/2**) or HS (7) (**manual speed 1/1**). In standard unit works automatically with clocks (7) (**Auto**)



If unit do not work in automatic mode an alarm will start. Manual speed 1/1 and manual speed 1/2 modes must be used only for the commissioning and repair. An other setting will lead to a failure of the unit.

V.4.e. Choice of language

[(10) chapter V.3]

Access: Starting screen / language choice

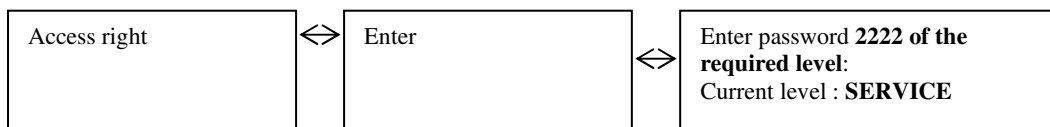
V.4.f. CO2 setpoint 3-way module

[(6) chapter V.3]

Access: Regul ventilation

V.5. Intermédiate settings (service level)

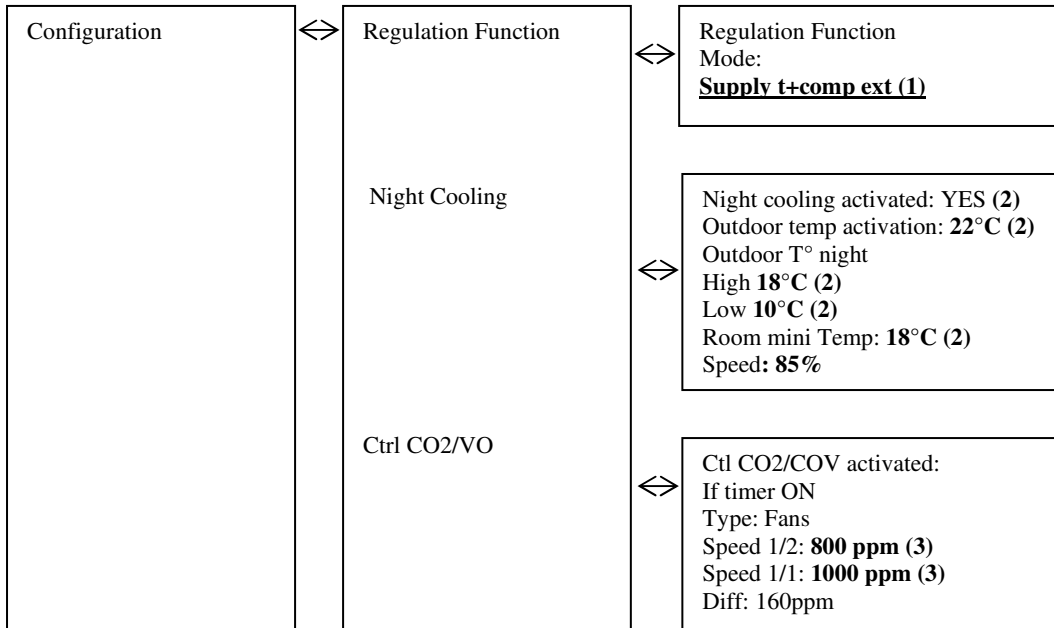
Type of regulation type setting, Night Cooling parameters and **CO2 setpoint** require an access to the Configuration menu. You need the access right to the « Service » level. Follow the instructions below.



Enter **2222** with directional arrows and validate with OK. Press left arrow twice to reach the access of the menus. In case of mistake press C button twice and start again.

OPERATING AND COMMISSIONING INSTRUCTIONS

V.5.a. Menu configuration in service access



1. Regulation type choice (see chapter V.5.b.1)
2. Parameters modification Night Cooling (see chapter V.5.b.2)
3. CO2 set point modification (only in DIVA and QUATTRO) (see chapter V.5.b.3)

V.6. Modification of the services parameters (password 2222)

V.6.a. Regulation mode of the unit

[(1) chapter V.5.a]

Access: Configuration / Regulation function.

Regulation type is set by default in the CORRIGO controller in outside compensation exhaust. You can also select return control mode.

(ATTENTION, if you want to regulate following a room temperature, select the regulation mode« Ctrl extract » Any other mode will lead to the failure of the unit)

V.6.b. Overventilation parameters

[(2) chapter V.5.a]

Access: Configuration / Night cooling

Night cooling speed is set in standard in 85%. You can modify it. You can also change the temperature of Night Cooling activation (outside temperature day...) and deactivate it.

V.6.c. CO2 setpoint for DIVA® QUATTRO® option

[(3) chapter V.5.a]

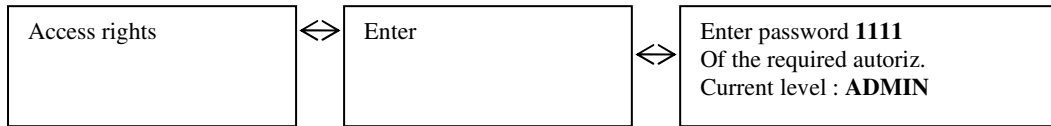
Access: Configuration / Ctrl CO2/COV

CO2 setpoint is set in standard: LS = 800ppm HS = 1000ppm. Unit will increase its speed proportionally to reach its maximum speed when CO2 will be at 1000ppm.

OPERATING AND COMMISSIONING INSTRUCTIONS

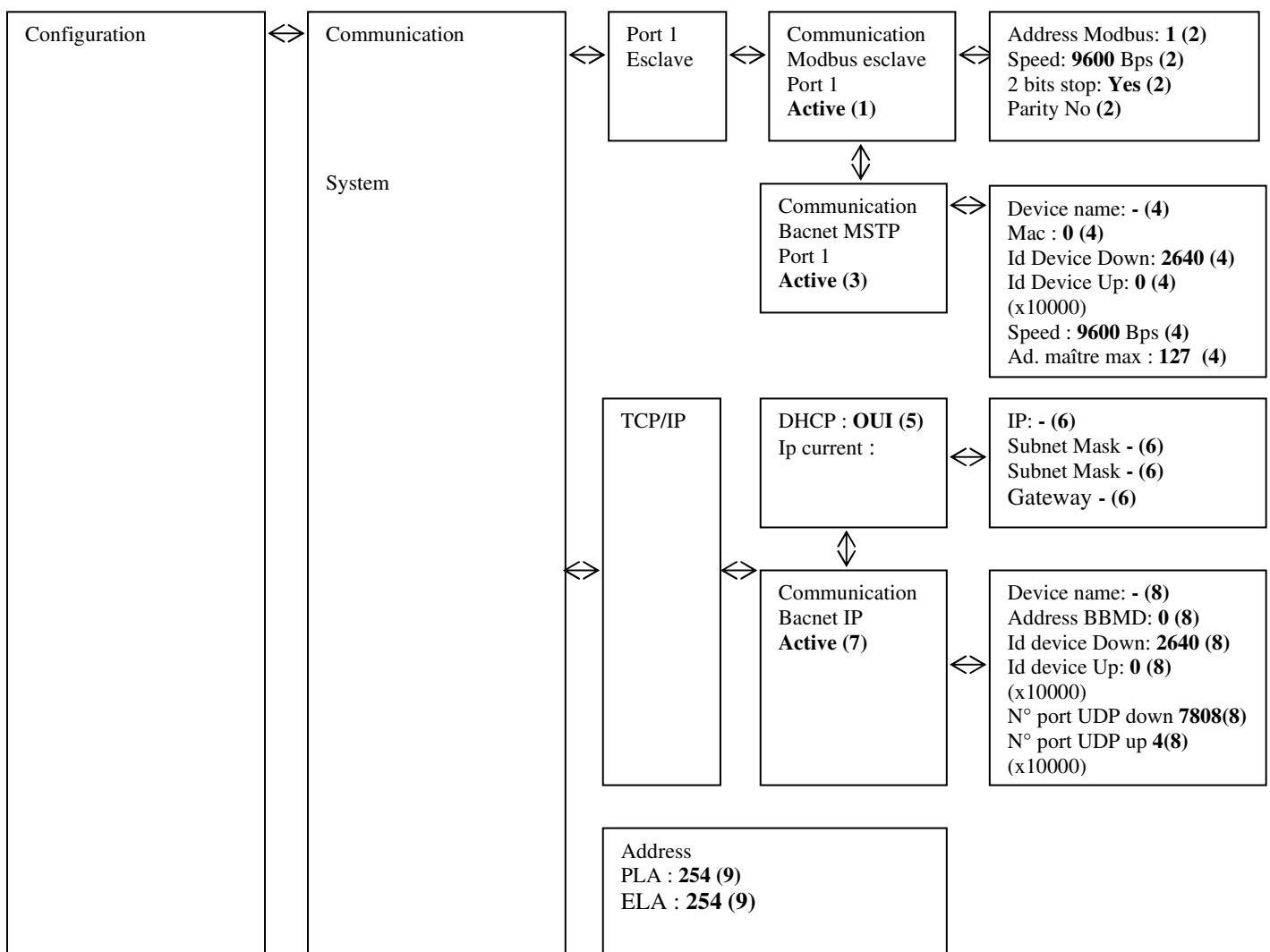
V.7. Administrator settings

Activation of the **communication, dehumidification and fire function** requires an access to Configuration menu in system level. You have to get the access rights to « Admin » level. Follow the instructions below:



Enter **1111** with directional arrows and validate with OK button. Press left arrow twice to reach the menu. In case of mistake press C button twice and start again.

V.7.a. Configuration menu with admin level access



- 1 et 2 Activation MODBUS RS485 and settings (see chapter V.8)
- 3 et 4 Activation BACNET MSTP and settings (see chapter V.8)
- 5 et 6 Settings TCP/IP (see chapter V.8)
- 7 et 8 Activation du BACNET IP and settings (see chapter V.8)
- 9 Addressing Repeater (see chapter V.8)

OPERATING AND COMMISSIONING INSTRUCTIONS

V.8. Modification of the service parameters (password 1111)

V.8.a. MODBUS

You will find the simplified MODBUS at the end of the instructions and commissioning manual.

Access: Configuration / Communication

MODBUS TCP/IP is activate in standard in DHCP. Possibility to know DHCP address or set IP fixe [(5)(6) chapter V.7],

Modbus Port = 502 / Device ID = 255

Le **MODBUS RS 485** must be activate [(1) chapter V.7]. Possibility to set speed, parity, stop bits... [(2) chapter V.7].

Modbus Type

1 = Coil status register (Modus function 1, 5 and 15)

2 = Input status register (Modus function 2)

3 = Holding register (Modus function 3, 6 and 16)

4 = Input register (Modus function 4)

Supported Modbus functions

Read Coils (1)

Read discrete input (2)

Read Holding registers (3)

Read Input registers (4)

Write single Coils (5)

Write single register (6)

Write multiple Coils (15)

Write multiple register (16)

EXOL Type

R = Real (-3.3E38 – 3.3E38)

I = Integer (-32768 – 32767)

X = Index (0 – 255)

L = Logic (0/1)

Transmission mode

Controller is set in RTU mode.

A maximum of 47 registers can be read in one message.

The Modbus must wait at least 3.5 times a character (4ms to 9600Bps) between two messages. It is limited to 10 rapid communications every 30 seconds, the other communications have a response time of about 1s.

All real number (floating-point) signals have a scale factor of 10, with the exception of time setting signals that have a scale factor of 100, and air flow signals that have a scale factor of 1. Integer signals, index and boolean have a scale factor of 1.

V.8.b. Repeaters

[(3) Chapter V.7]

Access: Configuration/ System

A notice is delivered with each repeater. In case you have several CORRIGO connected to the same remote control (up to 6 CORRIGO), you must change the PLA/ELA address of each CORRIGO. In this case you will need to have a different address on each CORRIGO and enter them identically in the repeater. Follow the instructions provided with the repeater to use it and to set the repeater address.

V.8.c. WEB Communication

You have the possibility to communicate via TCP/IP WEB in language. In this case the device is delivered with Web page and regulator set in DHCP.

Possibility to know DHCP address or set IP fixe [(5)(6) chapter V.7], or via E-tool software <http://www.regin.se>

OPERATING AND COMMISSIONING INSTRUCTIONS

V.8.d. BACNET

You will find the simplified BACNET at the end of the instructions and commissioning manual.

Access: Configuration / Communication

BACNET IP must be activate [(7) chapter V.7]. Possibility to know DHCP address or set IP fixe [(5)(6) chapter V.7].

Possibility to set ID / N°port... [(8) chapter V.7].

BACNET MSTP must be activate [(3) chapter V.7]. Possibility to set speed, ID, address... [(4) chapter V.7]. Speed = 9600 / MAC address = 0 / Device ID = 2640 / Max master = 127

BACnet Type

10XXX = Read and write Binary

20XXX = Read binary

30XXX = Read and write analogue

40XXX = Read analogue

30XXX = Read and write multistate

40XXX = Read multistate

(XXX = MODBUS Address)

AV = Analogue Value

BV = Binary Value

MSV = Multistate value

BMMD Address: The BBMD address is used for discovering devices that are attached to different BACnet/IP subnets and separates by an IP router. The address is entered as host:host can be the host's name if DNS ins configures. If DNS is not configured, the host address should be entered in the format xxx.xxx.xxx.xxx followed by the port number (default settings 47808)

MAC: The MAC address of the device. This need to be unique only to the subnet.

Device ID: The ID of a device, used to identify it on the BACnet network. This number cannot be duplicated anywhere on the BACnet network and must therefore be unique. To set an ID value of 34600, the low number would be set to 4600 and the high number to 3

For more information see CORRIGO Pics via <http://www.regin.se>

V.8.e. Communication LON (if CORRIGO with the option LON)

Set the LON function as below:

In Configuration menu/ Communication / Function port 2 = Activate the Port 2 function in extension unit.

Go on the right and activate extension unit. 1 an CORRIGO E28 LON

Button for the PIN service is at the back of the regulator.

Communication table is on <http://www.regincontrols.com>

V.8.f. Fire function activation

Setting of the Input

Access: Configuration / Input Output / DI / DI8

Declare input DI8 in « AI fire » « NO »

Configuration of the function

Access: Configuration / Fire function

Choose the required mode when activating the fire function

« Stop »: Complete stop of the unit

«Continuous operation »: Start or keeping of the unit in HS. Fire function will have priority on all other alarms.

«Normal operation»: keeps the unit in the same parameters chosen on site (stop/LS/HS)

« Exhaust fan only »: Start or keep in HS the exhaust fan (return is stopped)

« Return fan only »: Start or keeps in HS the return fan (exhaust stopped)

Alarm setting

Access: Configuration / alarm configuration

Enter alarm number « 10 » go on the right and enter in priority « C alarm C » « Active »

OPERATING AND COMMISSIONING INSTRUCTIONS

V.8.g. Activating the dehumidification function

Input settings

Access: Configuration / Input Output / UI / UI4

Declare UI4 input in « Ambiance Humidity »

Function setting

Access: Configuration / Ctrl Humidity

Choose « Dehumidification »

Setpoint setting

Access: Humidity Regul

Enter the required setpoint

VI. REPAIR

VI.1. Different types of defaults

The EASY control of FREETIME® control panels is equipped with alarms. A specific screen appear if you have an alarm (see ED-TOUCH manual). This will be Class A, or C (see details below)

Type of default:

A: The default stops the ventilation system. The unit does not start until the problem has been resolved and the default acknowledged.

C: Default do not stop the ventilation system and automatically disappears when a solution is found.

To solve a default press the alarm button (red), « delete » then « enter » the default with directional arrows and press OK button Attention: do not « block »

Description	Cause
CORRIGO screen do not light up	- Unit is not powered correctly (LED P/B of CORRIGO switched off) - To light up the screen, press a button (backlit). - Command fuse is disused
Fans do not start	- Clocks are on 0 - No external start order - External stop - Active alarm
Remote control do not run or gives wrong values	Remote control further than 100m Repeater is not connected correctly

VI.2. List of des alarms

n°	View	Description	Type	Tempo	Cause
1	Malfunction supply air fan	(UDI2 must be closed « Fer »if fan runs) Or UAI2 must be higher than 30Pa if fan runs)	A	30s (120s for LOBBY)	1. Pressure switch is wrongly connected (pressure switch must be set in 30Pa). 2. Pressure on the transmittor is lower to 30Pa. (LOBBY®) (contact us) 3. Motor is disused 4. Thermic protection motor is activated 5. Control the connection of the crystal tubes (chapter IV.7 et IV.8 6. Water in crystal tube 7. 0-10V motor is inverted
2	Malfunction extract air fan	(UDI3 must be closed « Fer »if fan runs) Or UAI3 must be higher than 30Pa if fan runs)	A	30s (120s for LOBBY)	1. Pressure switch is wrongly connected (pressure switch must be set in 30Pa). 2. Pressure on the transmittor is lower to 30Pa. (LOBBY®) (contact us) 3. Motor is disused 4. Thermic protection motor is activated 5. Control the connection of the crystal tubes (chapter

OPERATING AND COMMISSIONING INSTRUCTIONS

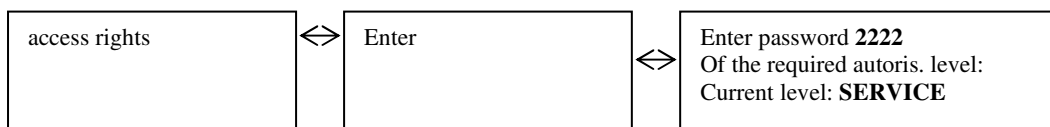
					IV.7 and IV.8 6. Water in the crystal tubes 7. 0-10V motor is inverted
6	Filter guard 1	DI1 must be open « Ouv » if there is no default	C	5s	1. Filters are dirty 2. Filters pressure switches are wrongly connected (Pressure switches must be set on 150 Pa for G4 200Pa for F7). 3. Control the connection of the crystal tubes (chapter IV.6)
8	External frost guard	For hot water battery Ext DI2 must be closed « Fer » if there is not default	C	120s	1. THA thermostat is not set on 5°C 2. THA thermostat s disused 3. Circulating pump is disused 4. 3 ways valve 3 is wrongly connected, hydraulically or is disused
15	High supply air temp	Ext AI1 is mounted higher than 50°C	A	30s	1. Exhaust temperature is higher than 50°C 2. Temperature setting is too high 3. Exhaust fan is stopped (vent AS Default) when hot battery is in full capacity. 4. Blocked blowing network
23	Electric heating is overheated	Ext DI2 must be closed « Fer » if there is no default	A	5s	1. Safety thermostat THS is activated. To reset THS, push on the rearmament on the electric battery 2. Power cut 3. Exhaust fan is stopped (vent AS Default) when electric battery is in full capacity
27	Sensor error outdoor temp	Control the value Ext AI2	A	5s	1. Outside temperature sensor SEG is disused. 2. Outside temperature sensor SEG is wrongly connected (see chapter IV.3)
29	Rotation sentinel exchanger	Control the value DI6	C	300s	1. The belt of the exchanger is broken 2. Check terminals ø21 and ø22
31	Supply air fan control error	Difference higher than 50Pa between exhaust setpoint and pressure on Ext UAI1	C	30min	1. The network of blowing do not correspond to the fan or to the setpoint. 2. Filter is dirty
32	Extract air fan control error	Difference higher than 50Pa between exhaust setpoint and pressure on Ext UAI2	C	30min	1. Return network do not correspond to the fan or to the setpoint. 2. Filter is dirty
35	Manual	Runs in manual mode	C	5s	1. Default for information purposes (the plant is switched off in PV or GV directly on the display (see (7) chapter V.3.a)
36 to 44	... in Manual mode	Functions are modified in manual mode	C	5s	1. In the Auto Manual menu everything must be in Auto.
48	Internal battery	Error battery Intern	A	5s	1. Intern battery of the CORRIGO is disused 2. Change the battery quickly in order to not loose program. See chapter VII.2
49	Sensor error supply air temp	Control the Value on Ext AI1	A	5s	1. Blowing temperature sensor SSG is disused 2. Blowing temperature sensor SSG is wrongly connected (see chapter V.3.a)

OPERATING AND COMMISSIONING INSTRUCTIONS

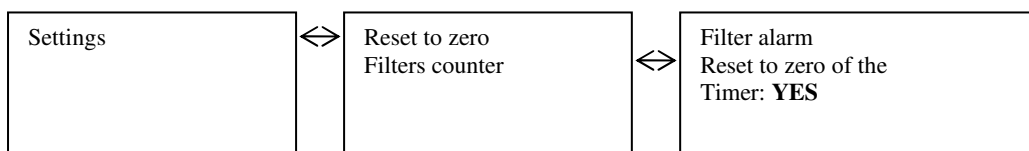
50	Sensor error extract air temp	Control the value on Ext AI3	A	5s	Supply temperature sensor SRG is disused Supply temperature sensor SRG is wrongly connected (see chapter V.3.a)
55	Sensor error Pressure SAF	Control the value on Ext UAI1	A	5s	1. 0-10V signal is inverted 2. Pressure transmitter on fresh air is in short-circuit
56	Sensor error Extract EAF	Control the value on Ext UAI2	A	5s	1. 0-10V signal is inverted 2. Pressure transmitter on intake air is short circuited
59	CO2 sensor error	Control the Value on Ext AI4	A	5s	1. 0-10V signal is inverted 2. CO2 transmitter is in short-circuit
85	... in manual mode	Functions are modified in manual mode	A	5s	1. In Manuel Auto menu everything must be in Auto.
86	Time for service	Regular visit	C	5s	1. See chapter VII.1
87	... in manual mode	Functions are modified in manual mode	C	5s	1. In Manuel Auto menu everything must be in Auto.

VI.3. Acknowledge the default « timer service »

These settings require an access to the setting menu. You need the access rights to “service” level. Follow the instructions below.



Enter the code **2222** with directional arrows then press the OK button. Press the left arrow twice to reach the menus. In case of mistake press C button twice and start again.



An alarm occurs every 6 months to remind the maintenance visit. Enter YES to reset the counter to zero

VII. MAINTENANCE

VII.1. Obligatory maintenance

Check electrical connections annually.

OPERATING AND COMMISSIONING INSTRUCTIONS

VII.2. Battery replacement

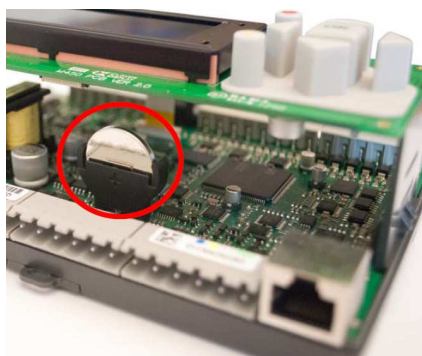
When low battery alarm starts and red LED is lighting, this indicates that the safety battery for the safeguard of the memory and clock is too low. Follow the instructions below to change them. A condenser keeps the safeguard and let the clock running for 10 minutes left after power cut. If the replacement of the battery takes less than 10 minutes, you will not have to reset the program and clock will work normally.

Replacement battery is a CR2032 type



Press the clips on each sides of the box with a little screwdriver to open the top of the box.

Location of the battery

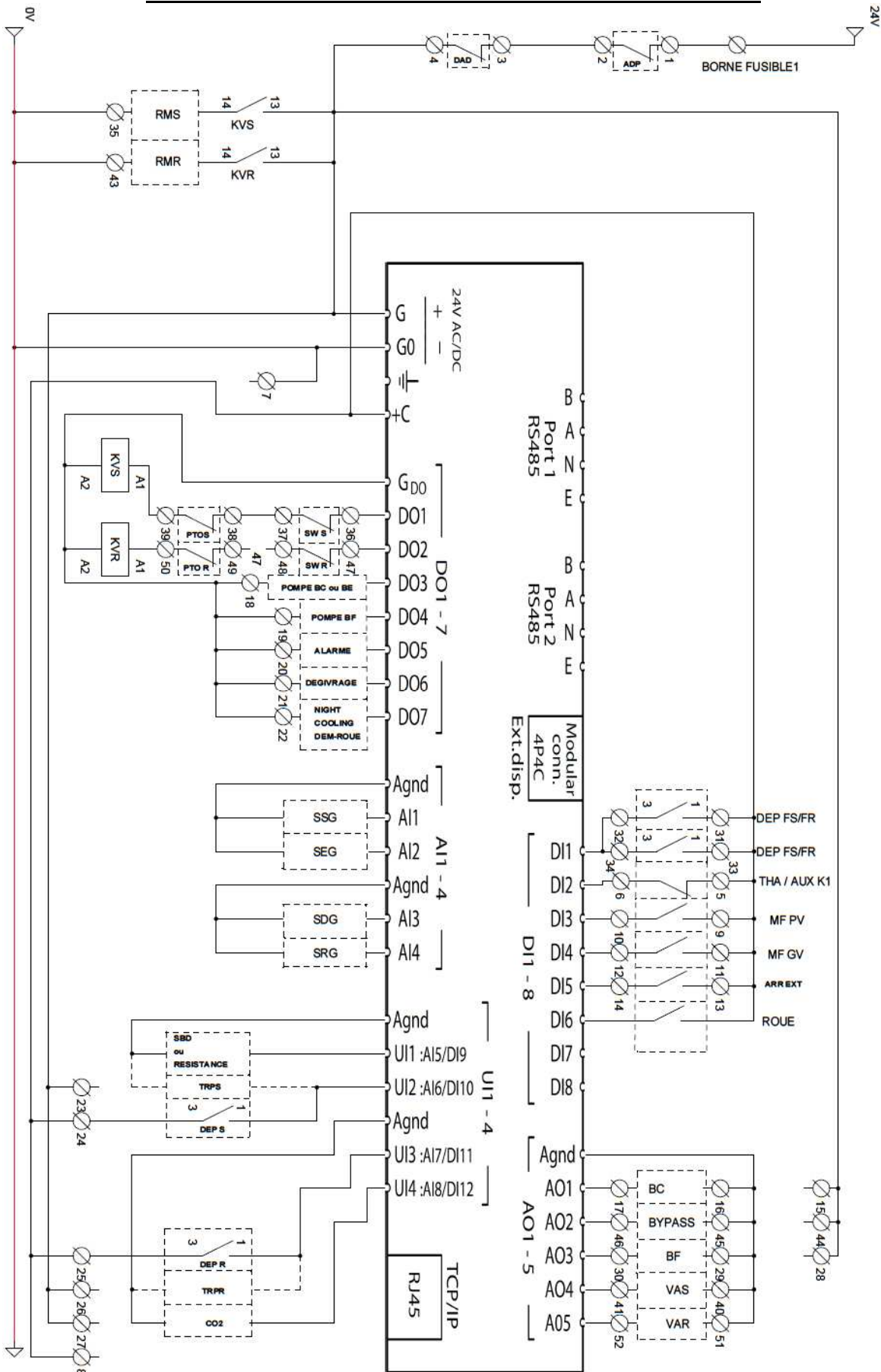


Take the battery and remove it softly. Press firmly the new battery in the support.
Note: Attention to the direction and polarity of the battery.

OPERATING AND COMMISSIONING INSTRUCTIONS

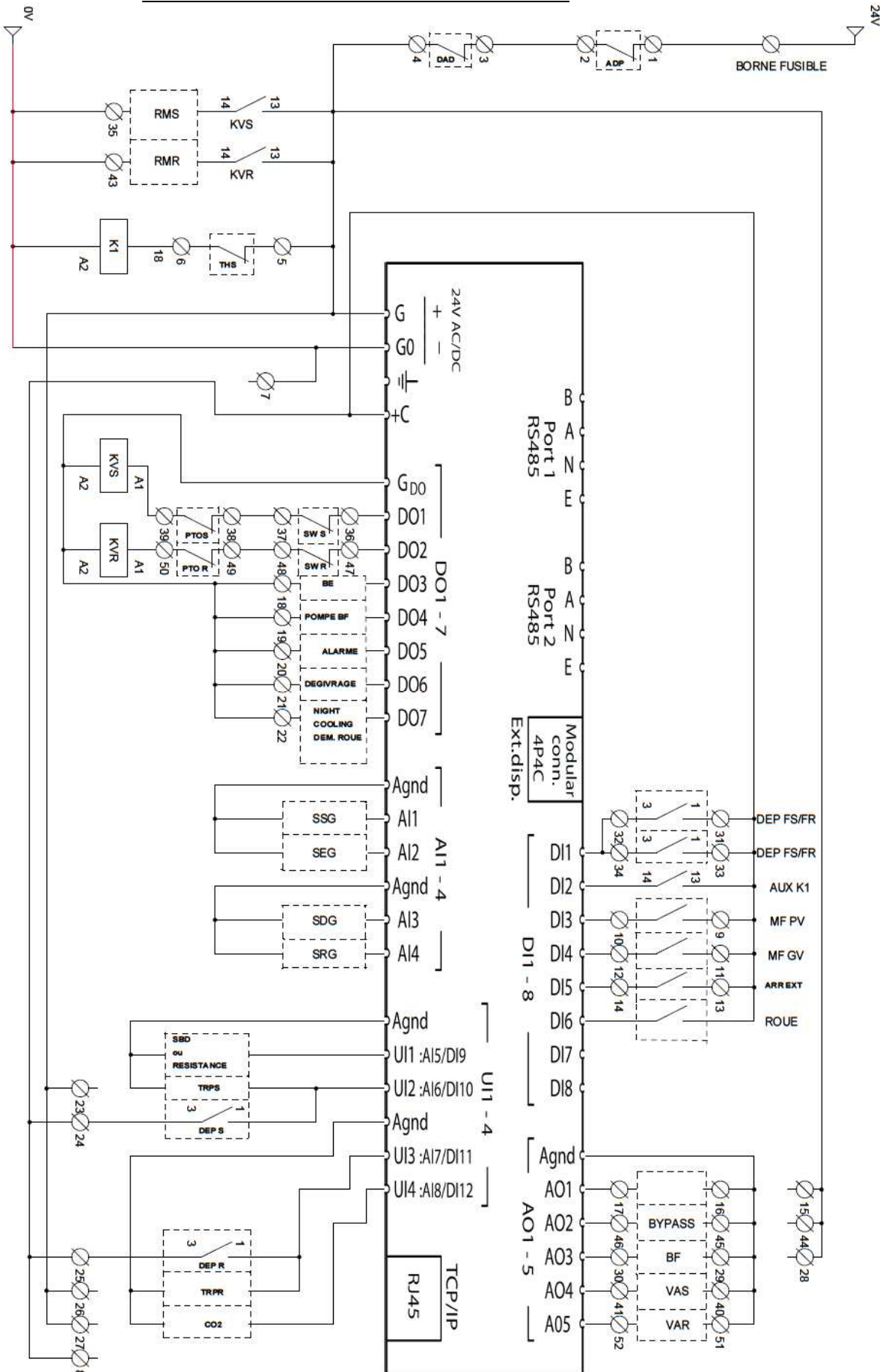
VIII. ANNEXES

VIII.1. Command scheme AQUAPACK-ELECTROPACK 542-813



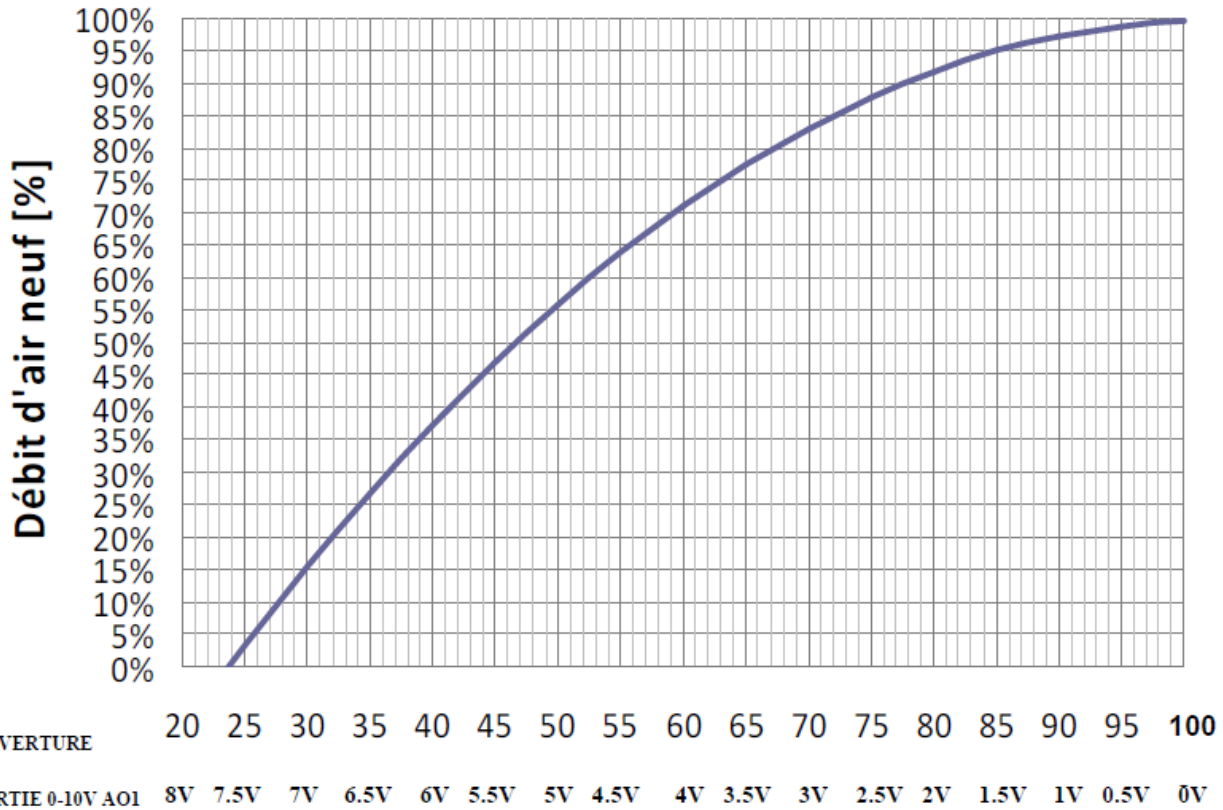
OPERATING AND COMMISSIONING INSTRUCTIONS

VIII.2. Command scheme ELECTROPACK 271

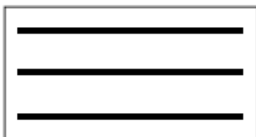


OPERATING AND COMMISSIONING INSTRUCTIONS

VIII.3. Adjusting the minimum fresh air flow of the FEE module



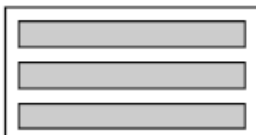
ouvert



En Standard le % minimum d'ouverture des registres RMR et RMS est de 30% soit environ 15% de débit d'air neuf

100% d'ouverture des registres d'air neuf RMS et d'air repris RMR = sortie AO1 = 0V = tout air neuf

fermé



0% d'ouverture des registres d'air neuf RMS et d'air repris RMR = sortie AO1 = 10V = tout recyclage

30% d'ouverture des registres d'air neuf RMS et d'air repris RMR = sortie AO1 = 7V = mélange

OPERATING AND COMMISSIONING INSTRUCTIONS

VIII.4. MODBUS and BACNET tables

INPUT REGISTER

Function	Description	Exo type	Modbus Address	Bacnet Address
Unit operation state	Modbus: 0= stop 1= start 2= Start low speed 3= Start max speed 4= Start normal speed 5= In operation 8= CO2 operation 9= Night cooling 11= Stopped BACNET : 1= Stop 2= Start 3= Low speed start 4= Max speed start 5= Normal speed start 6= In operation 9= CO2 operation 10= Night cooling operation 12= Stopped	X	3	MSV,40003
Outdoor temperature	In °C	R	1	AV,40001
Operating time of the supply fan	In hours	R	4	AV,40004
Operating time of the extract fan	In hours	R	5	AV,40005
Supply air temperature	In °C	R	7	AV,40007
Extract air temperature	In °C	R	9	AV,40009
Supply air pressure	In Pa for LOBBY® version	R	13	AV,40013
Extract air pressure	In Pa for LOBBY® version	R	14	AV,40014
Supply air flow	In m3/h for MAC2® and QUATTRO® versions	R	15	AV,40015
Extract air flow	In m3/h for MAC2® and QUATTRO® versions	R	16	AV,40016
CO2	In ppm for DIVA® and QUATTRO® versions	R	17	AV,40017
Deicing temperature	In °C	R	21	AV,40021
Humidity	In %	R	23	AV,40023
Analog output	0-10V Heating (water only)	R	54	AV,40119
Analog output	0-10V Heat exchanger	R	55	AV,40120
Analog output	0-10V Cooling	R	56	AV,40121
Analog output	0-10V SAF	R	57	AV,40122
Analog output	0-10V EAF	R	58	AV,40123

OPERATING AND COMMISSIONING INSTRUCTIONS

HOLDING REGISTER

Function	Description	Exo type	Modbus Address	Bacnet Address	Factory Value
Supply setpoint	Set in constant supply	R	1	AV,30001	18
Supply setpoint	Set in constant supply ext comp for out temp -20°C	R	10	AV,30010	25
Supply setpoint	Set in constant supply ext comp for out temp -15°C	R	11	AV,30011	24
Supply setpoint	Set in constant supply ext comp for out temp -10°C	R	12	AV,30012	23
Supply setpoint	Set in constant supply ext comp for out temp -5°C	R	13	AV,30013	23
Supply setpoint	Set in constant supply ext comp for out temp -0°C	R	14	AV,30014	22
Supply setpoint	Set in constant supply ext comp for out temp +5°C	R	15	AV,30015	20
Supply setpoint	Set in constant supply ext comp for out temp +10°C	R	16	AV,30016	18
Supply setpoint	Set in constant supply ext comp for out temp +15°C	R	17	AV,30017	18
Extract setpoint	Set in extract control	R	18	AV,30018	21
HS supply setpoint	In % for ECO and DIVA® versions	R	424	AV,30424	70
LS supply setpoint	In % for ECO and DIVA® versions	R	425	AV,30425	50
HS extract setpoint	In % for ECO and DIVA® versions	R	426	AV,30426	70
LS extract setpoint	In % for ECO and DIVA® versions	R	427	AV,30427	50
HS pressure supply setpoint	In Pa for LOBBY® version	R	24	AV,30024	150
LS pressure supply setpoint	In Pa for LOBBY® version	R	25	AV,30025	150
HS pressure extract setpoint	In Pa for LOBBY® version	R	26	AV,30026	150
LS pressure extract setpoint	In Pa for LOBBY® version	R	27	AV,30027	150
HS supply air flow setpoint	In m3/h for MAC2® and QUATTRO® versions	R	28	AV,30028	xxx
LS supply air flow setpoint	In m3/h for MAC2® and QUATTRO® versions	R	29	AV,30029	xxx
HS extract air flow setpoint	In m3/h for MAC2® and QUATTRO® versions	R	30	AV,30030	xxx
LS extract air flow setpoint	In m3/h for MAC2® and QUATTRO® versions	R	31	AV,30031	xxx
CO2 setpoint	In ppm for DIVA® and QUATTRO® versions	R	32	AV,30032	1000
Unit operation mode forcing	MODBUS 0= Manual stop 1= Manual low speed 2= Manual high speed 3= Auto				3
	BACNET 1= Manual stop 2= Manual low speed 3= Manual high speed 4= Auto	X	368	MSV,30368	4

OPERATING AND COMMISSIONING INSTRUCTIONS