# Regulation extension kit AVS 55 code 075311

for heat pump, Split single service or 2 services



 These instructions apply to the installation and connection of the extension regulation kit.
 To install and configure the heat pump, please refer to the heat pump's technical instructions manuals.





Installation instructions

# intended for the professional technician

these must be kept safe for subsequent consultation

Société Industrielle de Chauffage BP 64 - 59660 MERVILLE - FRANCE

Subject to modifications without notice. Non contractual document.

CE

Complies with: - Low voltage directive 2006/95/EC, under standard EN 60335-1. - Electromagnetic compatibility Diretive 2004/108/EC.

# **1** Description of the equipment

#### 1.1 Package

• 1 package: Regulation extension kit.

On reception, before you fit anything, it is essential that you check the parts received and search for any damage caused during transport.

#### 1.2 Scope of application

The management of the 2<sup>nd</sup> heating zone option, pool,... requires the installation of the extension board kit.

#### 1.3 Description

- 1. Board bracket.
- 2. Extension board AVS 55.
- 3. Pilot-wire connector.
- 4. Interconnection batt.
- 5. Modem / pool connector.



figure 1 - Description

# **2** Installation instructions



figure 2 - Installing the extension board AVS 55

#### Boards:

- 1 Regulation system RVS 21.
- 2 Extension board AVS 55.

#### Connector:

- 3 Power supply regulation board AVS 55.
- 4 Pilot-wire / Mixed circuit
- (2<sup>nd</sup> circuit kit option).
- 5 Pool valve (Swimming pool kit option).

- 6 Interconnection batt RVS/AVS.
- **7** Room thermostat Mixed circuit
- (2<sup>nd</sup> circuit kit option).
- 8 Telephone modem / Swimming pool.
- 9 Mixed flow temperature sensor
- (2<sup>nd</sup> circuit kit option).
- 10 Pool temperature sensor (Swimming pool kit option).
- 11 Pilot-wire Shunt : Mixed circuit (2nd circuit kit option).



figure 3 - Connection to the AVS 55 extension board (accessories and options)

#### 2.3 Pilot-wire

Before making connections, check that the phaseneutral polarity is respected.

Refer to the manual supplied with electric heaters to their electrical connections.

Verify the absence of continuity between the Pilot-wire and other wires:

- Switch off the general electrical supply, leaving all the disconnectors on the electrical panel on "On",
- Verify the absence of continuity between the pilot wire, the neutral and phase (or phases in 3-phase).

The fuse protects the board from an accidental connection of its "pilot wire" on the neutral or phase. A phase / neutral inversion on radiators does not destroy the fuse but the radiators are not correctly controlled.

- It's possible to order up to 15 electric heaters via output "pilot wire".
- The "pilot wire" handles only the hourly operation of radiators (comfort mode / reduced mode commutation and Frost protection mode).
- The comfort temperature setting should be done directly on the radiator(s). The "pilot wire" does not handle the temperature of the radiators. Refer to the manual supplied with the radiator(s).
- The difference between the comfort temperature and the reduced temperature is from 3,5 °C.
- Frost protection temperature is preset at 8°C (parameter 1014).

#### 2.3.1 Connections and Settings

- Connect the pilot wire on the connector **X110** (**Y1** terminal / ref. **4**, figure 3, page 5) through the fuse.

- Put the shunt in position **"FP**" (ref. **11**, figure 3, page 5).
- Configure the parameter 5700 on a configuration
  1 circuit (menu "Configuration" / Pre-setting 1 :
  1 heating circuit with or without electrical back-up or Pre-setting 3 : Boiler connection, 1 heating circuit).

The adjustment parameters of the circuit "pilot wire" are those of the circuit 2 (set CC2 time programme).

- Put the radiators on "**PROG**" mode or "**AUTO**" mode for piloting by the regulation board.
- Stick the label on the electrical panel "DISJONCTEUR PAC A SECTIONNER AVANT TOUTE INTERVENTION SUR LE FIL PILOTE" ("SWITCH OFF THE PAC DISCONNECTOR BEFORE ANY WORK ON THE PILOT WIRE")

#### 2.3.2 Standard orders and corresponding electrical signals

Order	Correspondi	ng electrical signals
Comfort	No signal	
Reduced	Full-wave 230V	
Frost protection	Negative half-wave	

In the absence of signal, radiators operating in comfort mode.



figure 4 - Mounting Fuseholder



figure 5 - Pilot-wire connections



figure 6 - Schematic wiring diagram of wiring pilot wire

#### 2.4 Telephone modem

#### 2.4.1 Operating principle

It is possible to command the switching of the heating mode to reduced mode (or frost protection mode) (and vise versa) on the heat pump using a modem contact

Warning : When the "Modem" function is used, the pool kit is not possible any more.

#### 2.4.2 Connecting and set to

- Connect the outlet of the telephone control to the **X152** connector.
- Set to : "Configuration" menu, lines 6420 and 6421. Please refer to the manual provided with the heat pump.

In accordance with the setting, any temperature requests from the heating circuits and the DHW are ignored or activated.

This function is only active in automatic mode.

- Other(s) setting(s) (depending software version)
- Before version 5.8 (parameter 6220)

The telephone command switches the current heat pump settings to "**frost protection mode**" (Protection mode) (and vise versa).

#### • From version 5.8 (parameter 6220)

Factory setting : the telephone command switches the current heat pump settings to **"reduced mode"** (and vise versa). Depending user needs, it possible to modify this setting : refer settings **900** (CC1) and **1200** (CC2) - factory setting : **"Reduced"**.



figure 7 - Telephone modem

### 3 Spare parts

When ordering spare parts, specify the appliance type and serial number, the name of the part and the part number. Qty = Total quantity on the appliance.

N°	Code	DesignationQty
1	175062	Bracket
2	165341	Board AVS 5501
3	110869	Connector
4	153018	Flat cable
5	110865	Connector
6	199910	Fuse01
7	102153	Connection box01
8	158831	Fuseholder01
9	199923	Fuse
10	943127	Pilot-wire kit





This appliance is marked with this symbol. This means that electrical and electronic products shall not be mixed with general household waste.

European Community countries(\*), Norway, Iceland and Liechtenstein should have a dedicated collection system for these products.

Do not try to dismantle the system yourself as this could have harmful effects on your health and on the environment.

The dismantling and treatment of refrigerant, oil and other parts must be done by a qualified installer in accordance with relevant local and national regulations.

This appliance must be treated at a specialized treatment facility for re-use, recycling and other forms of recovery and shall not be disposed of in the municipal waste stream. Please contact the installer or local authority for more information.

\* subject to the national law of each member state



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