

# CONTROL PANEL

FOR IX...

## CONTROL PANEL

The IX control panel is a highly developed panel with a built-in programmable electronic control system that manages the most complex commercial applications. All settings are carried out using a control panel installed on the front panel of the boiler. The control panel has a large backlit display making it simple and easy to use. Ergonomic controls mean, that with the use of a rotary button, you can intuitively navigate dropdown menus and the display presents the most important operating information (time, temperatures, operating modes etc.) and the status of different installation components (valves, pumps etc.) clearly and simply. The programmable electronic control system adapts the boiler temperature by acting on the modulating burner based on the outdoor temperature (the outdoor temperature sensor is supplied with the boiler) and possibly the room temperature if an interactive remote control is connected (optional SA47). As standard, the control system is able to automatically run a central heating system with one direct circuit and one DHW circuit (DHW sensor to be ordered in optional SA49). Connection of the DHW sensor means the DHW circuit can be programmed and managed. Up to three circuits can be managed by the control system: one direct + two mixing zones. Each mixing zone is controlled by an integrable three-way valve circuit control module (flow sensor included in SA45 package). Each of these circuits can be fitted with an SA47 room sensor which is available as an option. This control system has been specifically developed to enable optimal management of systems combining different heating generators (boilers in cascade, wood boilers, oil-fired boilers, solar system, buffer tanks, etc.). It allows the installer to configure the entire heating system, no matter how complex. For larger installations, it is possible to connect to the control system up to 16 boilers in cascade configuration (see "IX cascades" technical leaflet). Each boiler in the cascade can manage up to three circuits. One of the boilers is designed to manage the assembly of boilers. It can also manage (without programming) the boiler through a configurable 0-10 V signal.

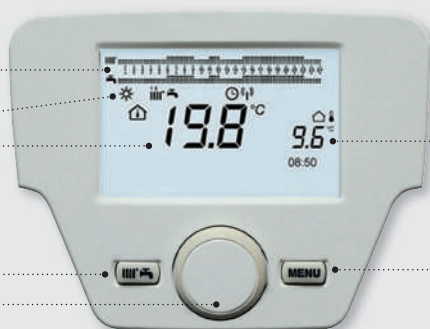
Heating and hot water  
timer programmes

Operating mode

Room temperature

User menu

Navigation knob



Outdoor temperature

Main menu

IX\_Q011

The "User menu" button provides direct access to basic settings such as: establishing temperature set points, operating mode (heating mode, heating set point, forced DHW mode, DHW set point, operating mode, etc.)

The main menu provides access for 3 different skill levels:

- **User level:** accessible by the end user, enabling them to alter the parameters relating to the temperatures of the various operating modes and the timer programmes.
- **Installer level:** accessible by the installer for the purpose of configuring the various installation parameters, to perform commissioning
- **Specialist level:** only accessible by the installer. Used to configure the programmable inputs and outputs.

## CONTROL PANEL

### INFORMATION

The system set points, real-time measurements and operating modes can be viewed on the control panel screen:

- Outdoor temperature,
- Room temperature of circuits 1, 2 and 3,
- Water temperature in DHW tank,
- Water temperature in the buffer tank- swimming pool water temperature,
- Flow water temperature in circuits 1, 2 and 3,
- The set point values in the installation operation.

### HEATING PROGRAMMING

For each circuit connected to the control system, a timer programme can be applied.

Programming can be done easily using the menu.

Programming is possible day by day or in blocks of 7 days, in 10-minute intervals, i.e. up to 6 periods per day and per circuit. It is possible at any time to restore the standard programs (06:00/22:00) presents upon initial commissioning.

### DIAGNOSTIC HELP

The IX control system has a test program used to check the operation of all the installation components (remote control, valves), pump(s), etc.).

### ALARMS

In case of an operating fault, the screen displays in clear text an error message and a code corresponding to the malfunction.

### DHW PRODUCTION

The control panel includes the DHW production function by an independent tank. Management of the DHW preparation is activated upon connection of the universal DHW sensor, SA49. A second DHW sensor can be connected to optimise the tank load (maximising the load and the DHW available). Installing 2 DHW sensors reduces: burner start-ups, pre-ventilation and post-ventilation. IX 145/245 boilers are compatible with all the instant DHW tanks, FWPC, FWS and FWM. In this way the tank load will be optimised with a high available DHW capacity.

## CONTROL PANEL

### CHOICE OF OPTIONS ACCORDING TO THE CONNECTED CIRCUITS (UP TO 3 MIXING ZONES)

|                   |            |               |             |                  |           |                         |                |                     |
|-------------------|------------|---------------|-------------|------------------|-----------|-------------------------|----------------|---------------------|
| Circuit type (1)  |            |               |             |                  |           |                         |                |                     |
|                   | DHW        | direct        | valve       | direct + 1 valve | 2 x valve | direct + 2 x with valve | 3 x with valve |                     |
| Control panel (2) | IX 145/245 | 1 or 2 x SA49 | as standard | 1 x SA45         | 1 x SA45  | 2 x SA45                | 2 x SA45       | 2 x SA45 + 1 x SA44 |

(1) Each of the heating circuits can have an additional remote control, SA47

(2) 4-boiler cascade possible. Each boiler in the cascade can control 1 direct zone and 2 mixing zones (with 2 x option SA45).

### CHOICE OF OPTIONS ACCORDING TO THE CONNECTED CIRCUITS (UP TO 6 MIXING ZONES)

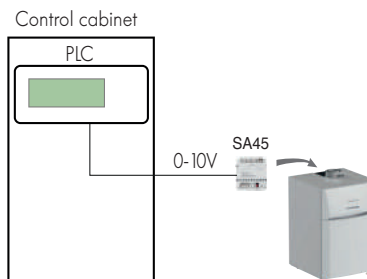
If there are more than 3 connected circuits, one or more VH HSM external modules (package SA43) will need to be used, connecting the additional circuits to them. Communication between the boiler panel and the VM HSM module is via the OCI 345 communication module (package SA50), to be installed in the boiler.

|                               |                                |                |                                |                         |                                |                 |                                |                 |
|-------------------------------|--------------------------------|----------------|--------------------------------|-------------------------|--------------------------------|-----------------|--------------------------------|-----------------|
| Circuit type (1)              |                                |                |                                |                         |                                |                 |                                |                 |
|                               | 3 x with valve                 | 1 x with valve | 3 x with valve                 | 1 direct + 1 with valve | 3 x with valve                 | 2 x with valves | 3 x with valve                 | 3 x with valve  |
| Control panel + VM HSM module | 2 x SA45 + 1 x SA44 + 1 x SA50 | SA43           | 2 x SA45 + 1 x SA44 + 1 x SA50 | SA43                    | 2 x SA45 + 1 x SA44 + 1 x SA50 | SA43 + 1 x SA44 | 2 x SA45 + 1 x SA44 + 1 x SA50 | SA43 + 2 x SA44 |

(1) Each of the heating circuits can have an additional remote control, SA47

### BOILER CONTROL WITH A 0 - 10 V SIGNAL

The IX... boiler can be controlled by means of a 0 - 10 V signal from a control cabinet in the boiler room; this will manage all the secondary circuits. (1) integrable zone controller SA45, installed in the boiler - with the 0 - 10 V input installed on contact H2)



IX\_F002

## IX CONTROL PANEL OPTIONS



IX\_Q0013

### PROGRAMMABLE WIRED ROOM SENSOR - PACKAGE SA47

Room appliance with backlit screen with dropdown menu and clear text.  
Choice of operating mode: Automatic (three different programs), Manual, Frost protection, Holiday etc.  
Access to boiler parameters.  
Fault alerts with fault codes and breakdown history.  
Management of two circuits.  
Room sensors can be added to the system to increase energy performance.



IX\_Q0012

### NEWM THREE-WAY VALVE CIRCUIT CONTROL MODULE, INTEGRABLE - PACKAGE SA45

Control module that can be integrated in the boiler, and can manage a circuit with a three-way valve (flow sensor included) or a solar DHW tank.  
It also manages an external boiler via a 0-10 V signal.  
It has an outlet to manage a pump in PWM or 0-10 V mode.



IX\_Q0017

### OCI 345 COMMUNICATION MODULE (LPB MODULE) - PACKAGE SA50

Fitted under the boiler cover, it allows you to connect boilers in cascade or external regulators.



IX\_Q0014

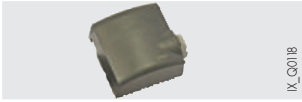
### UF6C DHW UNIVERSAL SENSOR FOR SENSOR TUBE (LENGTH 6 M) - PACKAGE SA49

This enables temperature control and programming of DHW production.

# CONTROL PANEL

## OPTIONS

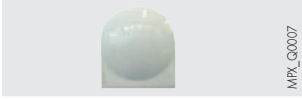
### IX CONTROL PANEL OPTIONS



IX\_Q018

#### UAF6C STRAP-ON FLOW SENSOR AFTER MIXING VALVE - PACKAGE SA48

It can be used as a cascade sensor (flow/return) in the case of a IX boilers cascade (provide 2 sensors).



MPX\_Q0007

#### OUTDOOR TEMPERATURE SENSOR, QAC 34 - PACKAGE HX94

Sensor supplied with the boiler.



IX\_Q0120

#### VM HSM CONTROLLER - PACKAGE SA43

External zone controller enabling management of a direct zone, a three-way valve circuit and a DHW circuit. Contains the necessary temperature sensors. See technical sheet "VM HSM".



IX\_Q0119

#### NEWM THREE-WAY VALVE CIRCUIT CONTROL MODULE, WALL-MOUNTED - PACKAGE SA44

Wall-mounted control module, able to manage a circuit with a three-way valve (flow sensor included) or a solar DHW tank. It can also control an external boiler via a 0-10 V signal. It has an outlet to manage a pump in PWM or 0-10 V mode.



IX\_Q0122

#### OZW WEB SERVER:

- OZW 672.01 (FOR 1 BOILER) - PACKAGE SA51
- OZW 672.04 (FOR 4 BOILERS) - PACKAGE SA52
- OZW 672.16 (FOR 16 BOILERS) - PACKAGE SA53

With the OZW communication module (to be connected to the internet), there are multiple communication options:

- Create a website for your boiler room.
- Remote access to parameters for the boiler and the circuits it is controlling.
- Access to boiler parameters locally, on a PC (USB).
- Data exchange with other systems (API).

# CONTROL PANEL

## WEB

### REMOTE MANAGEMENT OF A FLEET OF BOILERS - WEB GATEWAY/WEB SERVER

Remote fleet management:

- Error code feedback,
- Report generation (define frequency and parameters),
- Maintenance reminder message (by number of operating hours),
- Data updates,
- Equipment operation information retrieval,
- Option of accessing all the boiler parameters.

