

**HVAC**CONTROL & POWER

FLOOR HEATING

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### Master Module - Intelligent Temperature Control



OJ Waterline™

## WLM3

- Heating & cooling control in one
- Network communication
- Modbus® communication for BMS & remote access

# The OJ Waterline™ system ensures the best possible comfort and reduces energy consumption.

The WLM3 has been developed as a temperature control system for room heating and cooling, integrating switch of primary heating and cooling sources with precise control of water temperature and mixing devices.

The WLM3 has a number of built-in features, which makes it scalable for both domestic as well as large commercial installations. Used on its own or as part of a larger network, the WLM3 offers flexibility, ease of installation and cost saving benefits in every part of the installation and user process.

#### **WLM3** features

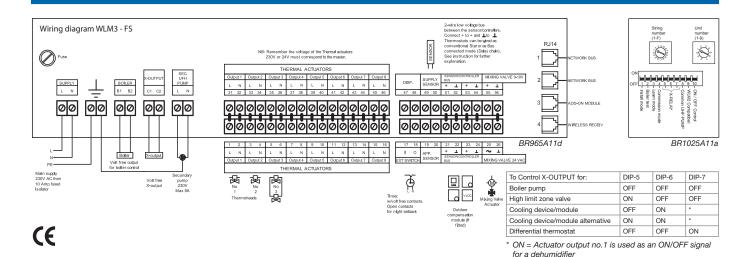
- Heating & cooling control in one on the same or two separate manifolds (e.g. devided ceiling and floor control).
- Network communication for large applications
  Support for more than 1800 zones.
- Modbus® communication interface for Building Management Systems (BMS) and remote access
- High Power relay outputs for boiler and pump.
- A wide range of hardwired & wireless controllers/ sensors.
- Flexible installation combining hardwired and wireless connection.
- Safe 5 volt connection to hardwired room controllers/sensors.
- Optional Dew point calculation on cooling systems to prevent condensation on floors.
- Optional outdoor temperature compensation with output for mixing valve.



Save up to 55% energy

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#### **Heating functions**

The OJ waterline™ system provides true comfort through precise room temperature control, always ensuring optimal energy savings through advanced control of boilers, pumps, etc.

#### **Cooling functions**

All WLM3 Masters also have the ability to control the system for cooling. To enable the cooling function, just add a heating/cooling changeover switch and a humidity sensor to handle dew point problems. A dehumidifier also can be controlled by the Master.

#### Room temperature control

Different types of room sensors/controllers can be connected offering true comfort PI controlled temperatures, area control, automatic temperature setback and many other possibilities. Even hard wired and wireless versions can be combined in the same system.

#### Remote smart access

The FMS Gateway has been designed to create a total user interface. Suitable for use in all installation types from domestic to large commercial, the simplicity and flexibility of the FMS offers a level of control suitable for all applications.

- · WiFi and Bluetooth connectivity
- Local and remote monitoring and control via tablet, computer and Smartphone
- Compatible with Android, iOS, Windows, Linux, etc.

#### **Products**

OJ WATERLINE™ MASTERS	PRODUCT INFORMATION
WLM3-xBA	8 actuator outputs, pump & boiler control.
WLM3-xFS	8 actuator outputs, display, 0-10Vdc mixing valve
	control and optional outdoor temperature compensation.
	BMS and remote access interface based on the
	standard RTU Modbus® protocol.
WLM3-xAO	Add On module that extends the system with
	additional 6 outputs.
"x" represents the outp	out voltage for the thermal actuators: 1 = 230V , 3 = 24V

OJ WATERLINE™ MASTERS	PRODUCT INFORMATION
WL-FMS-BASIC	FMS Gateway for remote control of up to 22 rooms
WL-FMS-PRO	FMS Gateway for remote control of up to 50 rooms
WL-FMS-PROPLUS	FMS Gateway for remote control of up to 106 rooms

OJ WATERLINE™ UNITS	PRODUCT INFORMATION
WLRC3-19	Receiver for wireless room sensors/controllers
WLHX3-19	Humidity sensor for calculation of DEW point
WLAC3-1	Manual Heating / Cooling changeover switch
WLM-NET	Connection kit for WLM3 Networks
WLOC3-19	Digital outdoor temperature compensation sensor
ETF-522	Spare supply sensor
WLM-DINRAIL	DIN RAIL kit for WLM3 Masters
WLM3-BA-COOL	"What you need" Cooling kit for WLM3-xBA Masters.
	Contains a WLH3-19, WLAC3-1 and ETF-522.
WLM3-FS-COOL	"What you need" Cooling kit for WLM3-xFS Masters.
	Contains WLH3-19 and WLAC3-1.

#### Technical data

⊦10/-15%, 50 Hz	
10A	
Volt free signal. Max 4A	
A)	
50Hz Max. 10A	
6/8 x 230V	
6/8 x 24V	
NSB / Closed for	
tion	
5VDC 2-wire	
andard RS485	
neters in total)	
522 for water temp.	
1ax 6VA	
RTU Modbus®	