

HVAC CONTROLS & POWER

FLOOR HEATING

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OJ GreenZone[™] – Zone-controlled VAV system



OJ-Zonemaster

- Energy-optimised VAV operation
- QuickPlug™ installation
- Automatic configuration
- Intuitive Web server
- BMS interface

The OJ GreenZone™ system is tailored for energy-optimised operation and comfort control in buildings with VAV dampers. Airexchange and temperature are adjusted as needed in up to 125 zones per AHU.

The OJ Zone Master features advanced functions which ensure energy savings on the basis of damper position while simultaneously controlling both branch dampers and zones with common extract.

The OJ Zone Master can be connected to up to 25 auto-configuring Zone Modules, which are controlled and monitored via the Master's built-in Web server and BMS interface.

Smart savings

The OJ GreenZone[™] system reduces the energy consumed in fan operation by up to 65% by constantly monitoring all VAV damper positions and optimising the speed of the supply and extract fans individually.

Simple installation

The OJ GreenZone™ system is automatically configured and put into operation without any need for programming using the intuitive Web interface.

Time-consuming network errors between zones are eliminated with QuickPlug™ Modbus connections. Where necessary, BMS integration can be easily achieved at low cost thanks to the Master's built-in BACnet and Modbus protocols.

Wi-Fi connection

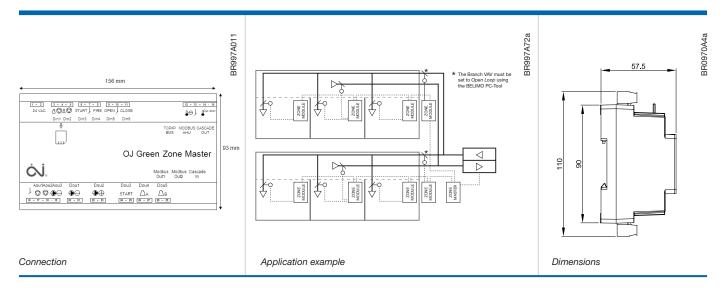
The OJ Zone Master has a built-in user-friendly Web server, allowing the system to be monitored, adjusted and controlled at all times. The Web server is accessible from anywhere in the building via smartphone, tablet or PC if a suitable Wi-Fi router is connected.





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Optimum interplay with the AHU

The OJ Zone Master ensures coordinated operation with the AHU under special circumstances, e.g. fire, summer night cooling, outdoor temperature compensation and shutdown. Control signals are transmitted via conventional inputs and outputs, configurable Modbus or directly with QuickPlug™ Modbus to an OJ Air2 Master.

INSTALLATION

Controller installation

The OJ Zone Master should be installed on a 35 mm DIN rail in an enclosure that corresponds to the classification of the installation location. The Master must be supplied with 24 V AC.

Cable connections

Cables are connected to screw terminals for wires of max. 1.5 mm². OJ Zone Modules are connected by means of QuickPlug™ Modbus connections using a standard telecom cable, e.g. INEC TD6006, fitted with RJ12 connectors.

AHU connection

Supply and extract fans are controlled individually with a conventional 0-10 V signal or via Modbus. If the air handling unit is equipped with OJ Air2 controls, connection should be made with QuickPlug™ Modbus.

BMS connection

Where a BMS system is used, it should be connected by means of a standard RJ45 LAN cable inserted into a standard Ethernet connector with access to a Web server, BACnet and Modbus TCP/IP.

PRODUCT PROGRAMME

TYPE	PRODUCT
OJ-Zonemaster	OJ GreenZone™ Master
OJ-Zonemodul-MP	OJ GreenZone™ Module MP Bus
OJ-Zone Modul-M	OJ GreenZone™ Module Modbus
OJ-Zone Modul-A	OJ GreenZone™ Module Analogue
OJ-RPT-20T	OJ GreenZone™ 2" room panel
PTH-6202	0-2500 Pa pressure transmitter
OJ-Air2 PWR80	Power supply: 230 V AC to 2x24 V AC, 2x60 VA

TECHNICAL DATA

Supply voltage	24 V AC ±10%, 50 Hz
Power consumption	< 5 VA
Electrical connection	screw terminals, max. 1.5 mm ²
TCP/IP	10/100 Mbit Ethernet, RJ45 connector (8P8C)
QuickPlug™ Modbus	5 x RJ12 (6P6C)
SD card	max. 8 GB SDHC
Digital inputs	6 x internal pull-up
Digital outputs	2 x potential-free relays, max. 230 V AC, 5 A
	3 x potential-free relays, max. 30 V AC, 5 A
Analogue outputs	3 x 0-10 V DC
Sensor inputs	2 x PT1000
Ambient operating tempera	ture 0/+50°C
Dimensions	156 x 110 x 58 mm
Enclosure	IP20, ABS
Weight	430 g

CE marking

OJ Zone Master meets the requirements of the following directives:

EMC Directive Low Voltage Directive EN-61000-6-2 EN 60730-1 EN-61000-6-3