OJ Air2 AHU control system

OJ-Air2Master

- Complete control system
- OJ Air Cloud®
- 3.5" touch control panel
- Intuitive web server
- BMS interface
- QuickPlug™ installation

OJ Air2 system
The OJ Air2 system has been specially designed to control air handling units and forms a complete control system where all components are fully integrated and optimised.

The OJ-Air2Master is the system's central controller. The controller is pre-programmed for approximately 90% of all known applications and is configured intuitively via the built-in web server.

The OJ Air2 system can be scaled to meet your customers' needs and is designed to ensure efficient mounting, easy installation, energy-saving operation and minimum maintenance costs.

Choose just what is needed
The OJ Air2 system can be assembled with precisely the components needed in the situation concerned. Such components could for example include fan controllers, rotor controllers, pressure transmitters and various sensors – all direct from OJ Electronics and equipped with QuickPlug™ Modbus, ensuring trouble-free interconnection and operation.

Intuitive user interface
No matter whether the system is operated from the 3.5" colour touch control panel or from the built-in web server, you always have full overview. Tell the system who you are and access is automatically adapted to your needs.

Cloud access
With OJ Air Cloud®, users have full access to the same, fully updated data, making remote support, diagnostics and troubleshooting simpler and easier than ever. The OJ Air Cloud® system is available on all new OJ Air2 units.

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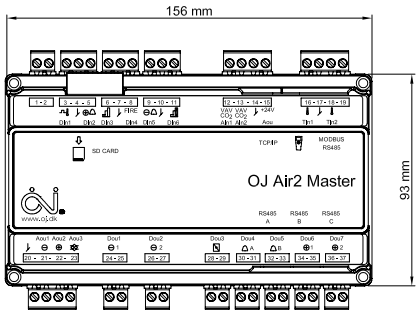

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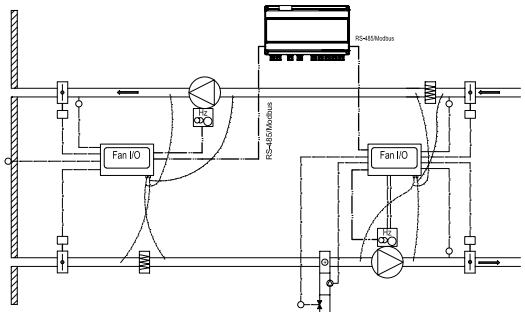
Connection



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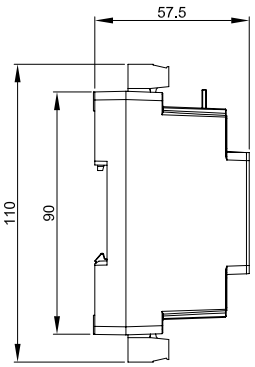
Application example



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Dimensioned drawing

Simple installation

The OJ-Air2Master is connected to other control components of the air handling unit via QuickPlug™ Modbus, eliminating time-consuming installation faults and troubleshooting. Installing the AHU control system has never been easier. Everything is Plug & Play, and the AHU controller has built-in BMS protocols.

Energy-saving functions

The OJ-Air2Master features a wide range of energy-saving functions such as interface for centralised, decentralised or reversible exhaust air heat pumps, adiabatic cooling, dew point controlled dehumidification and enthalpy controlled mixing dampers.

Climate control functions

The OJ-Air2Master is pre-programmed to control air exchange, temperature, humidification and dehumidification. Control of associated ventilation components is selected by ticking them in the Web interface and connecting the corresponding control signals. All functions have been thoroughly tested and are currently in use in air handling units throughout Europe and North America.

Installing the controls

OJ-Air2Master should be installed on a 35 mm DIN rail in an enclosure that corresponds to the classification of the installation location. The AHU controller must be supplied with 24 V AC.

CE marking

OJ-Air2Master complies with the requirements of the following directives:

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

PRODUCT PROGRAMME

TYPE	PRODUCT
OJ-Air2Master	AHU controller
OJ-Air2-HMI-35T	OJ Air2 touch control panel
OJ Air Cloud®	Cloud solution for OJ-Air2
OJ-DV-xxxx	Fan drive, 0.5 to 15 kW
DRHX-xxxx	Drive for rotary heat exchangers
OJ-Air2Ext	I/O extension module
OJ-Air2FanIO	Double pressure transmitter with fan and damper interface
xTH-xxxx	QuickPlug™ transmitters
ETF-xx98	PT1000 temperature sensors

TECHNICAL DATA

Supply voltage	24 V AC ±10%, 50/60 Hz
Power consumption	< 5 VA
Max. consumption	60 VA
Electrical connection	Screw terminals, max. 1,5 mm²
TCP/IP	10/100 Mbit Ethernet, RJ45 connector
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, 230 V AC 5 A 5 x potential-free relays, 30 V AC 5 A
Analogue inputs	2 x 0-10 V DC
Analogue outputs	3 x 0-10 V DC
Sensor inputs	2 x PT1000
Ambient temp., operating	0/+50°C
Ambient temp., storage	-50/+70°C
Dimensions	156 x 110 x 58 mm
Enclosure	IP20, ABS
Weight	430 g
BMS protocols	BACnet and Modbus TCP/IP Modbus RTU
Web server	Built-in