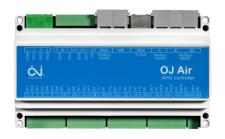
# Product information No. 541A

May 2019



## OJ-Air AHC-3000-X Software 1.02

Software 1.02 is now released for up-grade by the free PC tool. In the production at OJ Electronics is version 1.00 still used until further notice.

## Changes

Compared to version 1.01 there were following improvements:

### **Functionality**

- AHU type Mixing, Supply and Extract.
- · Features requiring flow measurements on fans
  - o Counterflow pressure de-icing added.
  - o Flow dependent filter pressure alarm (Pressure dynamic)
  - VOC/C0<sub>2</sub> control loop.
  - Humidity control loop.
- Supply Air unit Mixing damper.
- Pump for Heater/Cooling water coil is now controlled by DO1.
- Heater electric coil analogue output AO2 is forced to 0V if no Air flow or digital input "Supply Fan alarm" is active.
- OJ-Air2Ext address 3: Din1 is now "not used" and Din2 is "Frost thermostat"
- Filter switch alarm digital inputs can be selected Normally open (NO) or Normally closed (NC)
- Fan alarm digital input can be selected Normally open (NO), Normally closed (NC) or Tacho.
- Maximum Electric heating coil power is reduced at low fan speed if fan control loop is "Constant motor speed%"
- · Room temperature symbol is only shown if sensor is installed
- Digital inputs "El-heater alarm" and "Cooler alarm" added.
- Exhaust fan Modbus address corrected to 55 dec.
- BMS Modbus RTU communication.
- Flow selection m3/h, I/s and CFM shows automatically correct values. OBS: k-factors for fans shall always be entered in I/s.
- Datalog includes 78 parameters. PC-tool vers. 1.1 shall be used for read-out with correct headers.

**OBS:** All changes in the configuration shall be made in Service Stop.

#### **Alarms**

- DRHX alarm is now released after 3 seconds if motor cable is disconnected.
- Alarms added for CO<sub>2</sub>, Temperature and Humidity sensor error on 0-10V input Al1, Al2 and Al3.

#### **Software versions**

- AHC-3000-X software 1.02
- AHC-3000-HMI-35T software 1.01

#### **Affected articles**

AHC-3000-T

AHC-3000-B

AHC-3000-S

AHC-3000-HMI-35T



## **Coming into force**

Version 1.02 is released in week 19 2019.

#### Features to be released in the summer 2019

- BasicBMS and Satellites
- VOC/C0<sub>2</sub> control loop without flow measurement.
- Humidity control loop without flow measurement.
- AHC-3000-S together with OJ-Air2-HMI-20T
- AHC-3000-S VOC/C0<sub>2</sub> and humidity control loops

## **Software Upgrade**

The software file are available at OJ Electronics <u>Customer log-in</u>, and can be upgraded using PC-Tool vers. 1.0 or higher.

AHC3000\_MCUSW\_102\_00\_0000.zip

**OBS**: In order to make a safe software update please follow this procedure:

- 1. Remove power plug from AHC-3000
- 2. Connect USB to RS485 cable to AHC-3000 HMI port
- 3. Power up AHC-3000
- 4. Update the AHC-3000 controller by the PC tool
- 5. Remove power plug from AHC-3000
- 6. Remove USB to RS485 cable from AHC-3000 HMI port
- 7. Power up AHC-3000
- 8. Wait until red flashing LED at the power plug starts flashing green
- 9. Hot plug the HMI to the AHC-3000 HMI port
- 10. Wait until the HMI stops flashing White/black
- 11. The HMI is now updated and the new version can be read out in the sw menu.

#### Converting k-factor to I/s

The k-factor used for air volume calculation shall always be entered in l/s. Available k-factors in another engineering unit shall be converted to l/s before entering. This is done by multiplying the k-factor by the correct value in the table below:

	to I/s multiply by	to CFM multiply by	to m³/h multiply by
From m <sup>3</sup> /h	0,277778	0,588578	1
From I/s	1	2,11888	3,6
From CFM	0,471947	1	1,699009

#### **Contact**

If further technical information is required please contact our support at: <a href="mailto:support@oj.dk">support@oj.dk</a>.



