

Lindab **UltraLink®** Controller

FTCU

Mounting instruction

Planning

The longer distance to disturbance, i.e. the longer straight duct before the UltraLink®, the higher the measurement accuracy will be. It is not recommended to mount the UltraLink® so that the first flow sensor (* in the table on the next page) is placed on an outer radius of a fitting. Never use an UltraLink® on the outlet side of a duct fan. Place it on the inlet side or in worst case use a flow conditioner if it must be placed on the outlet side.

The sensor and the damper bodies can rotate relative to each other. This means that the sensors can be optimally positioned independently of the desired position of the display and damper body. View table on next page for directions on how to position the sensor body for optimal performance.



Mounting

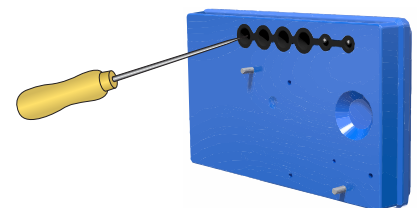
Position the Controller so that the display is visible from some direction. For future connections it is important that the screws on the lid of the display can be removed. Make sure the airflow arrow is pointing in the direction of the airflow. Note the ID-number of the monitor. The ID can be found on the label of the box the monitor was delivered in or on the label on the monitor and are the three last numbers of the serial number.

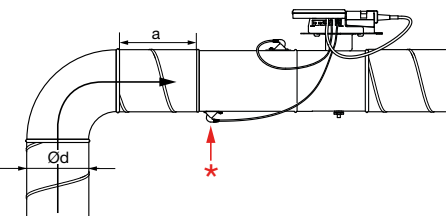
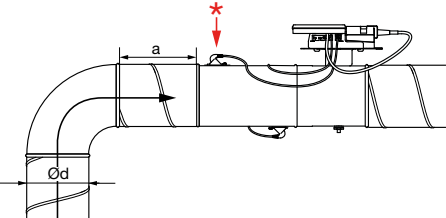
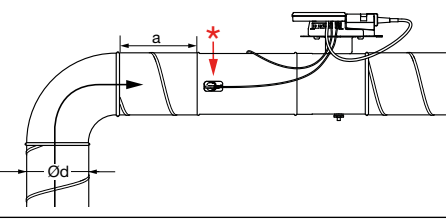
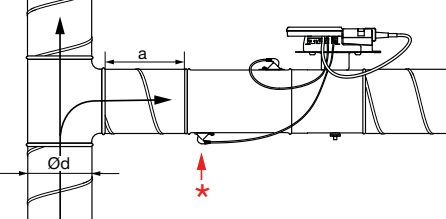
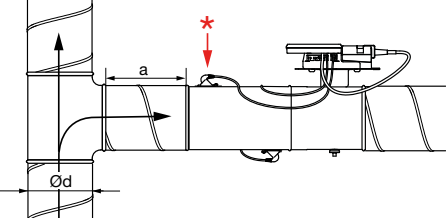
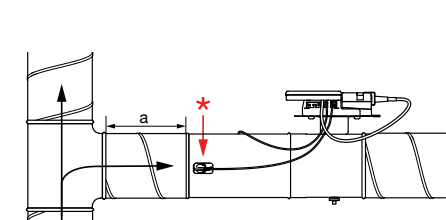
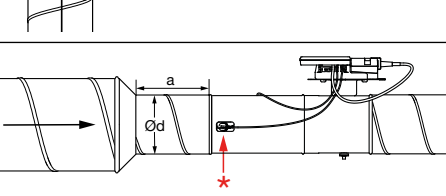
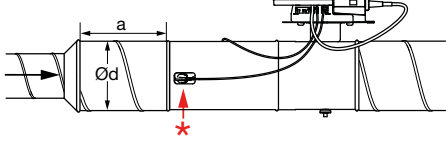
Mount the Controller into the air duct system according to the mounting instructions for Lindab Safe. Do not use the flow sensors as handles when you mount the Controller since they may break and changes in their positions might influence the measurement accuracy. When the sensor body is positioned accurately for FTCU of dimension 100—315 it should be connected with screws to the damper body in the same way as when you connect ducts and fittings.



FTCU of dimension 400—630 has a flange which needs to be loosened in order to rotate the sensor and damper bodies relative to each other. The flange needs to be tightened once the bodies are placed correctly.

The Controller can be connected to a RTU (remote terminal unit) via analog or RS485 communication (Modbus). To be able to connect cords to the terminal board the rubber cable grommet on the back of the display unit must be punctured, preferably using an awl or something pointy to ensure tightness to the environment. When the cords have been connected they must be strain relieved. The cords can be attached to the shelf by using cable ties that are attached around cut outs in the shelf. You must under no circumstances make any holes or connect anything with screws to the sensor body since this will have an impact on measurement accuracy.



Disturbance	* Placement of first flow sensor	Measurement uncertainty ± % or 1 l/s depending which is the greatest			
		a			
		2-4·Ød	>4-5·Ød	>5·Ød	
Bend		Inner radius	5	5	5
Bend		Outer radius (Not recommended)	20	10	5
Bend		Side	10	5	5
T-piece		Inner radius	10	5	5
T-piece		Outer radius (Not recommended)	20	10	5
T-piece		Side	10	5	5
Reducer		Duct diameter decrease	5	5	5
Reducer		Duct diameter increase	10	5	5



Declaration of incorporation for partly completed machinery and FCC statement

Ultrasonic device – FTCU

Company:

Lindab Ventilation AB
Stålhögavägen 115
26982 Båstad
Sweden
Telephone +46 431 85000
www.lindab.com

Hereby declares that the partly completed machinery of the type:

FTCU

are in conformity with the following essential requirements in Annex 1 of the Machinery directive 2006/42/EC: 1.1.2, 1.1.3, 1.3.4. In addition, the partly completed machinery is in conformity with all relevant provisions of ordinances in EMC-Directive 2004/108/EC. The partly completed machinery is developed, designed and manufactured with the essential requirements of the following standards:

EN 61000-6-1:2002 - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments

EN 61000-6-2:2005 - Part 6-2: Generic standards - Immunity for industrial environments

EN 61000-6-3:2002 - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments

EN 61000-6-4:2002 - Part 6-4: Generic standards - Emission standard for industrial environments

Furthermore, partly completed machinery must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of the Machinery directive 2006/42/EC.

We undertake to transmit, in response to a reasoned request by the national authorities, relevant information on the partly completed machinery.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any

interference received, including interference that may cause undesired operation.

Signed for and on behalf of the manufacturers by:

Authorised person: Karel Kleinmond
Group Operations Director
2019-01-21 Karlovarska, Czech Republic

FCC Caution:

Changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC exposure limits set forth for an uncontrolled environment..

FCC Statement:

"This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help."

