TX electronic controller

Version 1.1

Rev. 14 July 2010

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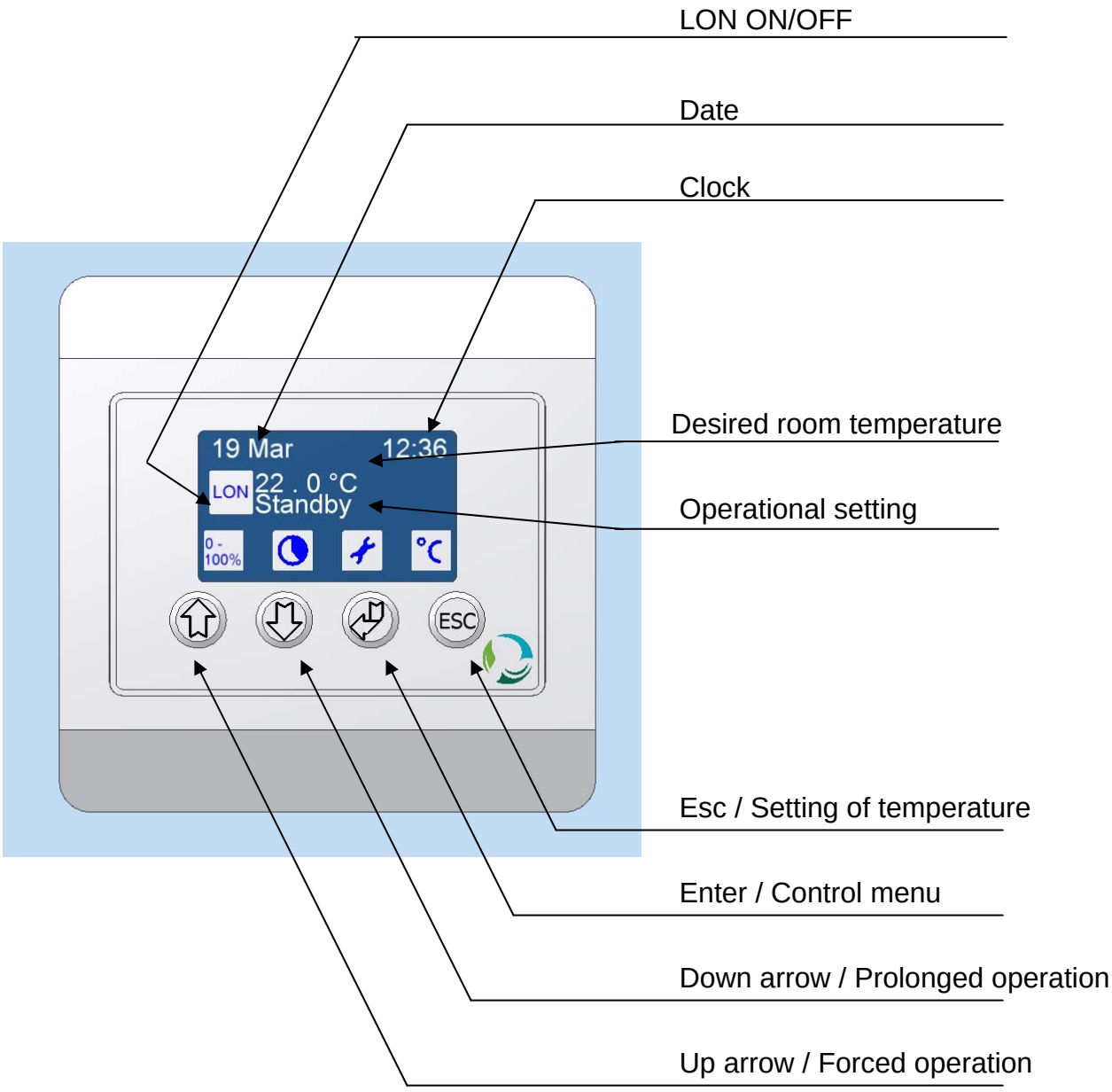
2.0.0 Summary



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3.0.0 Operational description

3.1.0 User functions

The functions activated via the display are described below.

3.1.1 Daytime operation

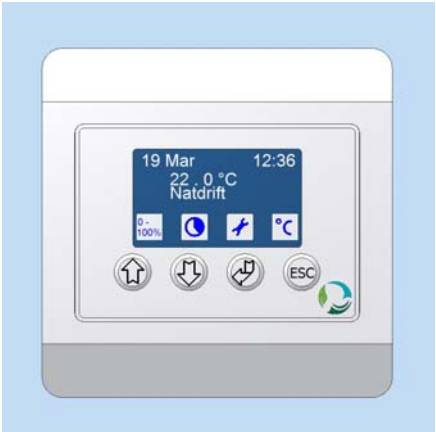
Daytime operation is the mode intended for operation by day. The unit renews 100% of the air.

The unit can be set to the desired room temperature. (However, the unit is not designed as a primary heat source. It is recommended not to set the temperature higher than the current room temperature).

3.1.2 Nighttime operation

Nighttime operation is the mode intended for operation by night. At night, the need for air renewal is generally lower than during the day and nighttime operation therefore allows a reduced velocity of ventilation. The unit performs at approximately 20% of its capacity.

Setting of the desired night temperature allows cooling of a room before sunrise in warm periods so that the room is comfortable the next day.



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3.1.3 PIR

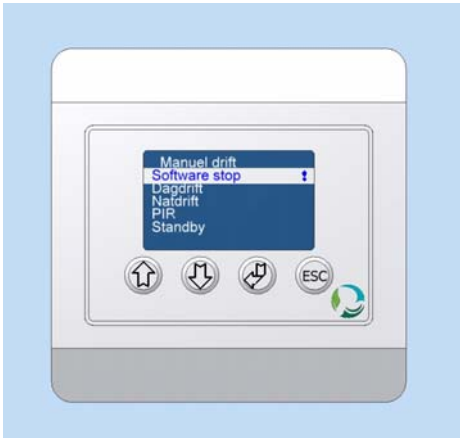
This function requires connection of a PIR sensor to the unit.

When the PIR sensor has been connected to the unit, choose PIR operation and the unit goes into nighttime operation mode until the PIR sensor registers a person in the room whereby the unit switches to daytime operation. When the unit no longer receives a signal from the PIR sensor, the unit switches back to nighttime operation mode after 30 minutes.

3.1.4 Standby

When in standby mode, the unit is not in operation. The dampers are closed and the motors are turned off.

3.1.5 Software stop



The software stop function can be used during servicing to ensure that the ventilator and other movable parts do not start up at the wrong moment.

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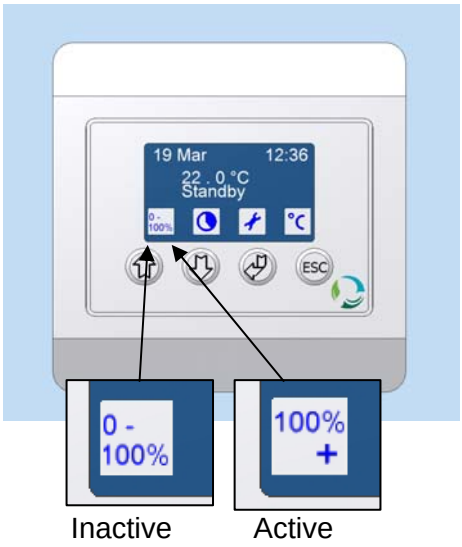
3.1.6 Forced operation

Forced operation allows an extra volume of airflow through the unit for a short period of time for quick aeration of the room.

The unit increases both the air supply and the air exhaust.

As a standard, forced operation runs for 10 minutes and subsequently switches back to the mode that was running before the function was activated.

Note, that the unit makes significantly more noise during forced operation.

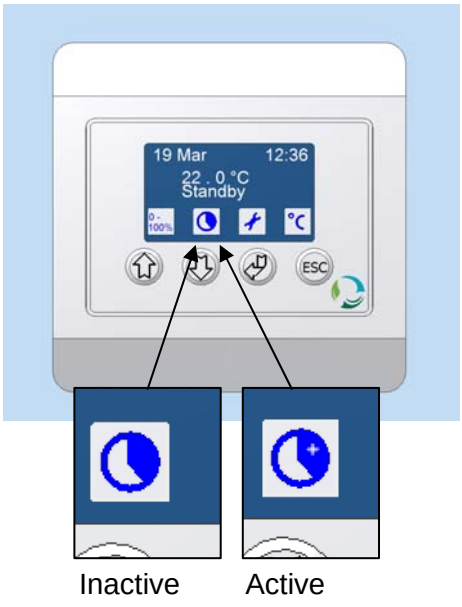


3.1.7 Prolonged operation

The prolonged operation function can be activated when the unit is in standby or nighttime operation modes.

As a standard, the prolonged operation function activates the unit to run in daytime operation for a period of 60 minutes.

The function is quick and easy to activate and convenient for use during evening meetings or during overtime work when ventilation of the room is desired.



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3.2.0 Automatic functions

As a standard, the units are equipped with a number of automatic functions described as follows.

3.2.1 Demand driven ventilation

The system is designed to automatically reduce the velocity of each ventilator independently as needed for heat recovery.

If the unit's postheating surface cannot keep up with the desired air supply temperature, the unit reduces the velocity of the air supply flow to obtain higher heat recovery in the heat exchanger.

If the unit's postheating surface still cannot keep up with the desired air supply temperature, the unit can also reduce the velocity of air extraction to further enhance heat recovery.

3.2.2 Bypass

The unit is designed with a bypass system that can lead the air around the heat exchanger.

The advantage of this function is that the room will be cooled slightly if the temperature gets warmer in the room relative to the desired temperature and if the outside temperature allows it.

The bypass system is operated by 3 temperature sensors. The function of the sensors is to control that the unit only uses the bypass function under specific conditions and to prevent cold air from being blown into the room.

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3.2.3 CO^2

This function requires connection of a CO^2 sensor to the unit and that the unit is set to perform this function (contact the dealer for description of this function).

A unit provided with a CO^2 sensor varies the velocity of the air renewal according to the quantity of CO^2 in the room.

If the quantity of CO^2 is below 500 ppm, the unit shuts down if set in daytime operation mode. When the quantity of CO^2 exceeds 1300 ppm, the unit runs at maximum speed.

If set in nighttime operation mode and connected to a CO^2 sensor, the unit activates background ventilation when the quantity of CO^2 is below 500 ppm, but can still attain maximum speed when the quantity of CO^2 exceeds 1300 ppm.

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3.3.0 Alarms

An alarm A or B indicates an error in the unit or need for servicing.

When the alarm is activated, the display must be checked to verify the type of error that has caused the alarm:

- Press Enter to go to the control menu
- Choose the alarm menu with the arrows
- Press Enter

The display now shows an alarm status of the different types of alarms. An exclamation mark (!) shows which alarm is active.
(The illustration indicates a filter stop).

If the unit is connected to master slaves, the error may appear on the following pages. Press the button down to verify whether there are errors in the slaves.

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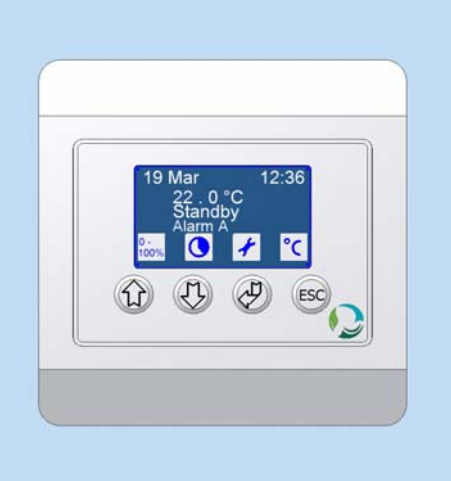
3.3.1 Alarm A

When alarm A is activated, the unit stops automatically until the error has been corrected.

An alarm A indicates that the error is serious and must be corrected before operation can resume.

Overheating of the postheating surface will, for instance, activate an alarm A.

Contact the dealer for further information.



3.3.2 Alarm B

When alarm B is activated the unit will run as usual. The error is not serious.

An alarm B can be activated by different incidents such as a filter stop (the filter must be replaced), a circuit board error or a communication error. Contact the dealer for further information.

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4.0.0 Operation

When connected to 230 V AC, the unit starts up from standby the first time and subsequently from the mode run the last time the function was activated.

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After a short start-up time, the status of the unit will be visible on the display.

4.1.0 Standby

If in operation, the unit can be stopped as follows:

- Press Enter to go to the control menu

- Choose operation start / stop with the arrows
- Press Enter

- Choose standby with the arrows
- Press Enter (Press Esc for cancellation of action)

Before switching to standby, the unit switches to nighttime operation for a short period of time to cool off the postheating surface.

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4.2.0 Start-up of unit

When set on standby or software stop, the unit can be started up as follows:

- Press Enter to go to the control menu

- Choose operation start/stop with the arrows
- Press Enter

- Choose daily or nighttime operation or PIR with the arrows
- Press Enter (Press Esc for cancellation of action)

The unit switches to and runs in the chosen operation mode.

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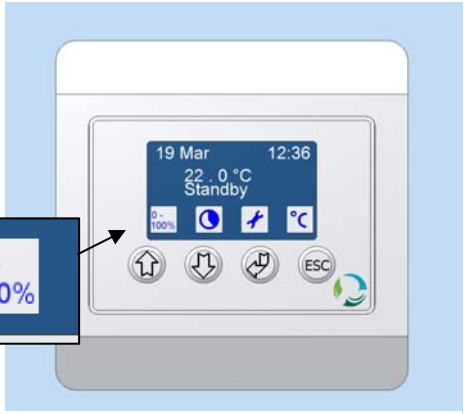
4.3.0 Forced operation

The forced operation function allows the unit to increase the velocity and renew the air at a faster pace for a short period of time.

Set the unit at forced operation as follows:

- Press the up arrow / forced operation

The icon over the button changes from inactive to active and the unit increases the air renewal in the room for a period of 10 minutes.



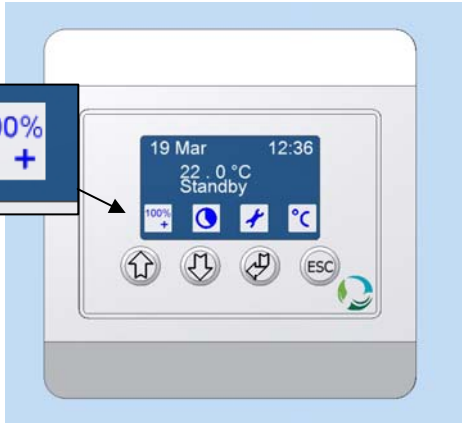
Forced operation is not activated

Deactivate the forced operation before expiration of the 10 minutes as follows:

- Press the up arrow / forced operation

The icon returns to the operation mode the unit ran before the forced operation function was activated.

If the calendar has changed the operation mode in the meantime, the unit will automatically return to the mode set in the calendar.



Forced operation is activated

The system allows a longer period of forced operation. It can be set as follows:

- Press the up arrow / forced operation as far as possible
- Choose the length of the period with the arrows and finish by pressing Enter

The forced operation can run for a period of maximum 250 minutes.

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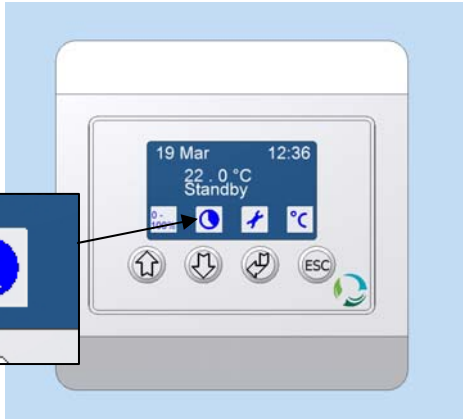
4.4.0 Prolonged operation

The prolonged operation function makes the unit run in daytime operation mode for a given time.



Prolonged operation is not activated

Activate the unit's prolonged operation function as follows:

- Press the down arrow / prolonged operation

The icon over the button will now change from inactive to active and the unit will increase the air renewal in the room for 60 minutes.

Deactivate the prolonged operation before expiration of the 60 minutes in the following way:

- Press the down arrow / prolonged operation

and the icon returns to the previous mode.

If the calendar has changed operation mode in the meantime, the unit will automatically return to the mode set in the calendar.

Prolonged operation is activated

The prolonged operation can be set for a longer period as follows:

- Press the down arrow / forced operation as far as possible
- Choose the prolonged time with the arrows and finish by pressing Enter

The prolonged operation can run for a period of maximum 250 minutes.

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4.5.0 Temperature

The temperature indicated on the display is the desired room temperature. **(However, the unit is not designed as a primary heat source. It is recommended not to set the temperature higher than the current room temperature.)**

The daytime and nighttime temperature can be set on the display.

Set the temperature as follows:

- Press Esc as far as possible
- Choose operation with the arrows

- Choose the desired temperature with the arrows and finish by pressing Enter

Reduction of the temperature set for nighttime operation will cool down the room by night.

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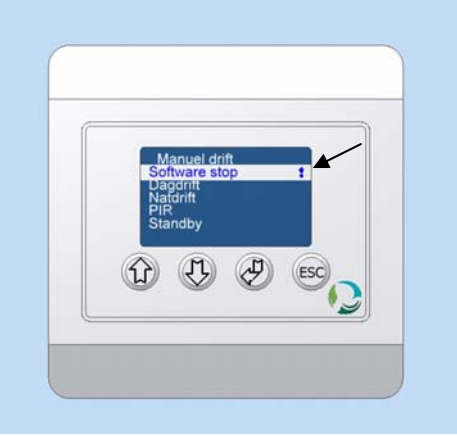
4.6.0 Software stop

The software stop function can be used in connection with servicing of the unit. When the function is on, the unit stops and cannot start up until another type of operation has been chosen.

Activation of the software stop:

- Press Enter
- Choose operation start / stop with the arrows



- Press Enter
- Choose software stop with the arrows and finish by pressing Enter

The software stop function has now been activated and the display shows an exclamation mark (!).

This screen image will remain until another operation mode is selected.

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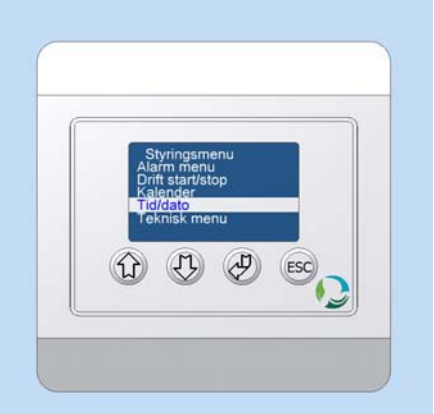
4.7.0 Setting the clock

Set the clock as follows:

- Press Enter to go to the control menu

- Choose time/date with the arrows
- Press Enter



In order to set the clock properly, the time, date and day must each be set.

Setting of the time:

- Choose time with the arrows
- Press Enter
- Set the hour and press Enter
- Set the minute and press Enter

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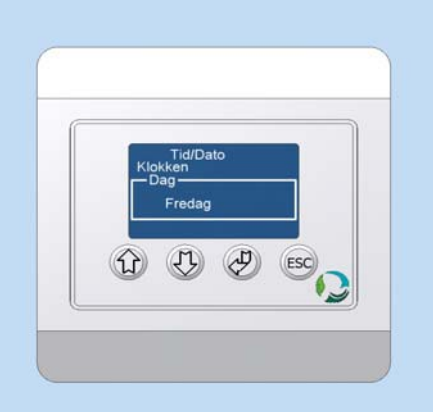
Setting of the date:

- Choose date with the arrows
- Press Enter
- Set the day and press Enter
- Set the month and press Enter
- Set the year and press Enter

Setting of the day:

- Choose day with the arrows
- Press Enter
- Set the day and press Enter



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4.8.0 Setting of the calendar

Set the calendar as follows:

- Go to the control menu. Press Enter
- Choose calendar with the arrows
- Press Enter

All the days of the week appear on the display.

- Choose the desired day with the arrows
- Press Enter

The system allows 10 operations per day.

- Choose the desired day with the arrows
- Press Enter

Set time and operation

- Set the hour and press Enter
- Set the minute and press Enter
- Set the desired operation and press Enter

Options:

Day	=	Daytime operation
Night	=	Nighttime operation
PIR	=	PIR operation
Stdby	=	Standby
- - -	=	None

(If set on - - - the time is not erased.)

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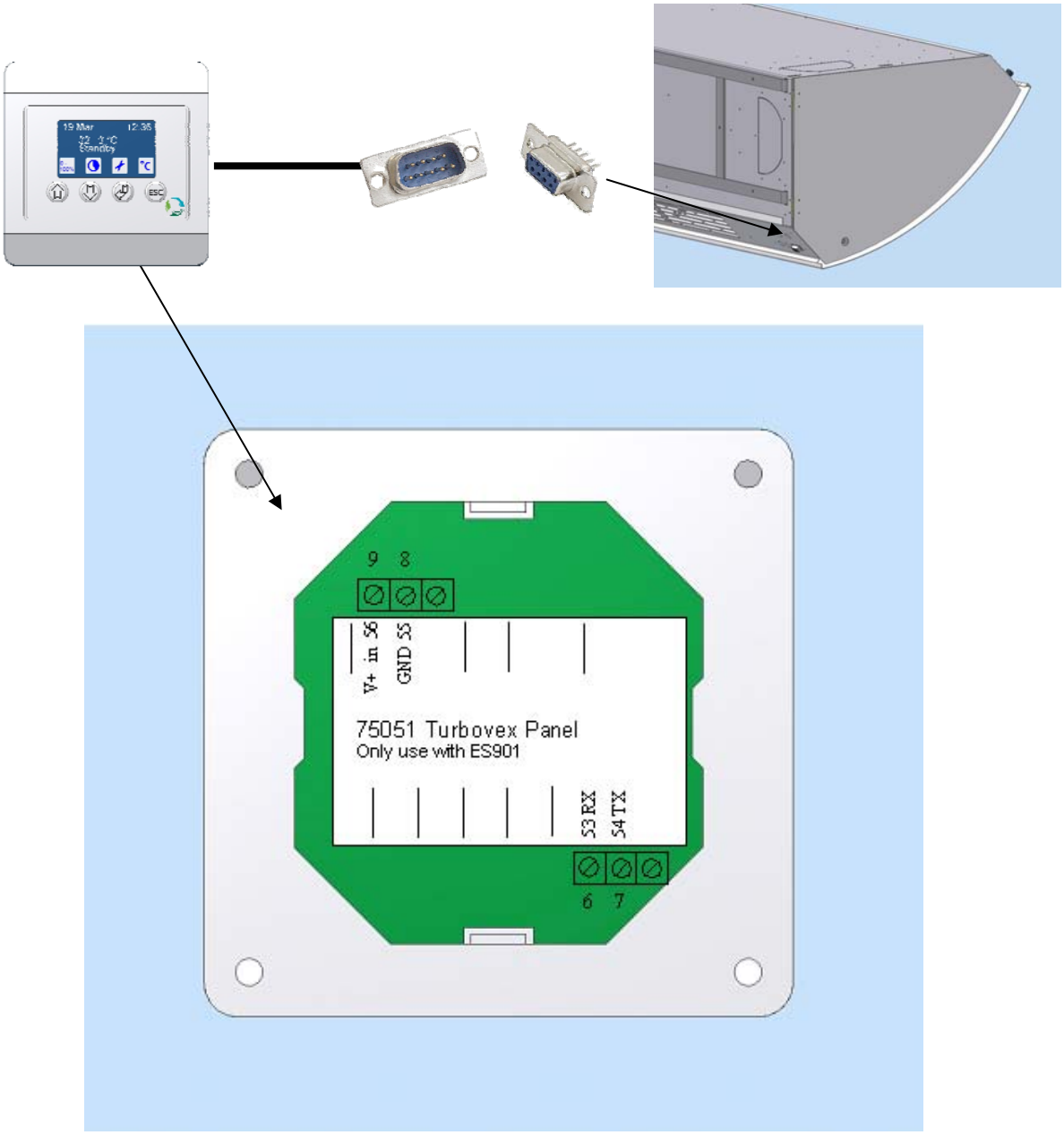
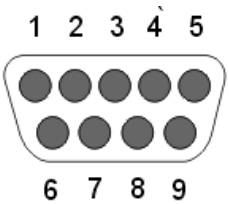
5.0.0 Wiring diagram



SUB 9 – No plug – Control panel

6 – 53
7 – 54
8 – 55
9 – 56



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