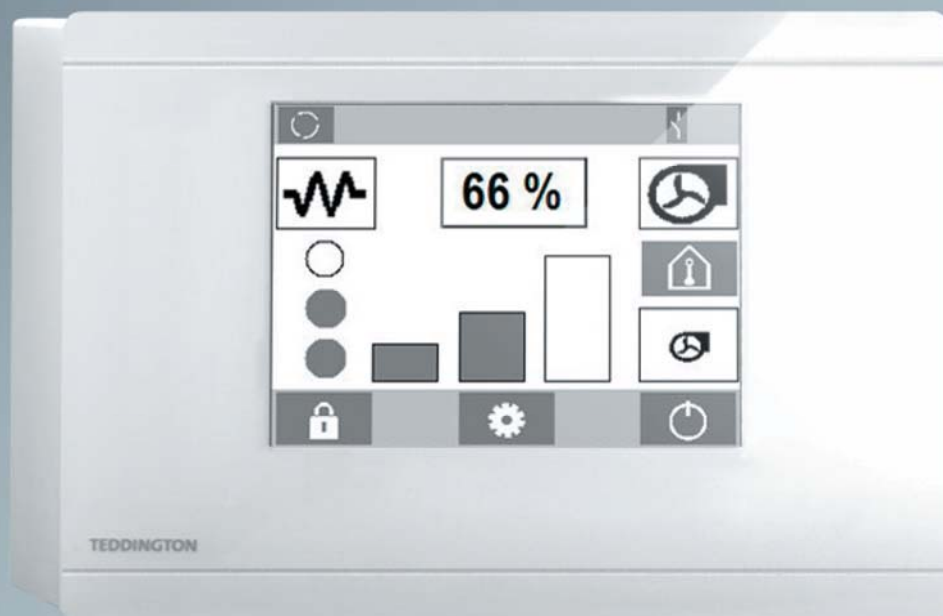




Supplementary operating instructions for your air curtain system

Controller TMC 300 E

(Translation of the original

Serial number: _____

Year: _____

Please quote this number when contacting customer
service!



TMC 300 E –Brief description

- TMC 300 E electronic air curtain controller with wired control element (remote control) for 3-stage or (in conjunction with ECM motors) infinitely adjustable actuation of Teddington air curtain systems.
- The TMC 300 E consists of a control element (remote control), control board (master) and optional power circuit board (slave); the control and power circuit board are in the air curtain device.
- A black and white touch display with graphics display enables the Teddington air curtain systems to be adapted simply and accurately to meet all requirements.
- The TMC 300 E is characterised by a simple, self-explanatory menu navigation that is available in 2 languages.
- Up to 9 air curtain systems can be connected to one control element and activated in parallel via the control element (TMC 300 E).
- Manual/automatic mode: automatic mode by means of room thermostat and/or door contact with freely programmable run-on time.
- Integrated room thermostat.
- Key lock can be activated manually or automatically by time control.
- Retrieval of error messages by means of a memory for remote diagnostics.
- Floating enable, operating and error message for simple communication with the BMS.
- Recommended bus cable: J-Y(ST)Y 2x2x0.8 mm² (shielded, twisted control cable). This guarantees fault-free transmission up to 400 m. The connection terminals have reverse polarity protection and short-circuit protection.
- Dimensions of control element: 135 x 96 x 28 mm
- Made in Germany.



PLEASE
NOTE

Observe all safety instructions in the device operating instructions!

Only adequately trained personnel who meet the requirements set out in the device operating instructions may work on the system. It is necessary to ensure that the main power supply has been turned off before all work.

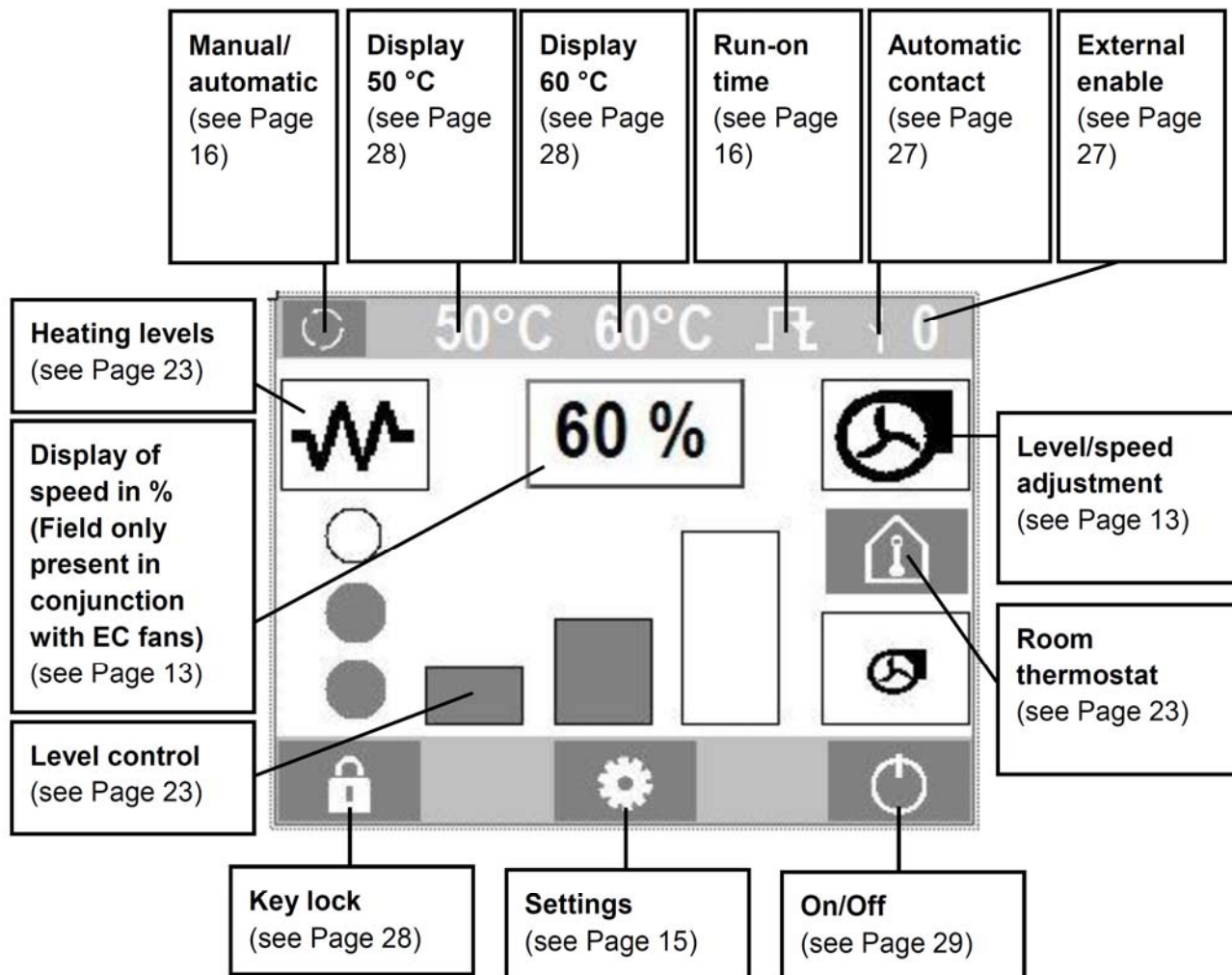


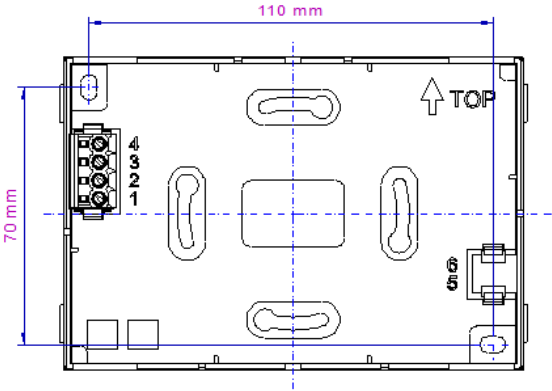
Table of contents

1	Assembly, technical data and eBus diagram	5
1.1	Assembly information	5
1.2	Wiring information	6
1.3	Technical data of the control element	7
1.4	Technical data of the TMC 300 E master	8
1.5	Technical data of the TMC 300 E slave	9
1.6	eBus diagram	10
2	Overview of buttons/keys	11
3	Operation using the TMC 300 E control element	12
3.1	Start screen on putting into operation for the first time	12
3.2	Main screen	13
3.3	Settings menu	15
3.4	Manual/automatic mode sub-menu	16
3.5	Information sub-menu	17
3.6	Room thermostat sub-menu	23
3.7	Error memory sub-menu	25
4	Basic operating principle	26
4.1	Switching on	26
5	Operating modes	26
5.1	Manual/automatic mode sub-menu	26
6	Functions	27
6.1	Fault statuses	27
6.2	External automatic contact	27
6.3	External enable	27
6.4	Error memory	27
6.5	Run-on function	28
6.6	Key lock	28
6.7	50 °C run-on	28
6.8	60 °C run-on	28
6.9	170 °C fault	29
6.10	Passing on an operating message and error message	29
7	Switching the air curtain system on and off	29
8	Display of version numbers	29
9	Cable plans and terminals	30
9.1	TMC 300 E master terminal diagram, AC motors	30
9.2	TMC 300 E slave terminal diagram, AC motors	31
9.3	TMC 300 E master terminal diagram, EC motors	32
9.4	TMC 300 E slave terminal diagram, EC motors	33
9.5	TMC 300 E master terminal description	34
9.6	TMC 300 E slave terminal description	35
9.7	Setting the slave addresses	36

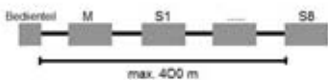


1 Assembly, technical data and eBus diagram

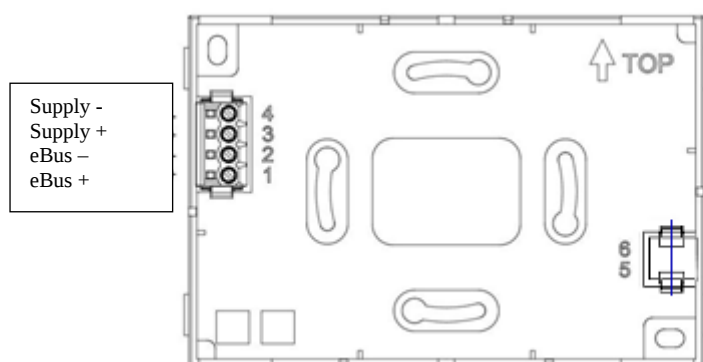
1.1 Assembly information

Assembly environment:	Closed, dry room that is protected from dirt.
Assembly:	Wall-mounting using the screws and dowels provided. The two fastening holes are positioned diagonally on two corners (see drawing).  Alternatively it is possible to assemble directly on a flush-mounted box. In this case it is necessary to ensure that only the four-wire connection cable of the control element is inside the flush-mounted box! Installation must be performed by an electrician; all applicable provisions and regulations of the responsible electricity supply company must be complied with.

1.2 Wiring information

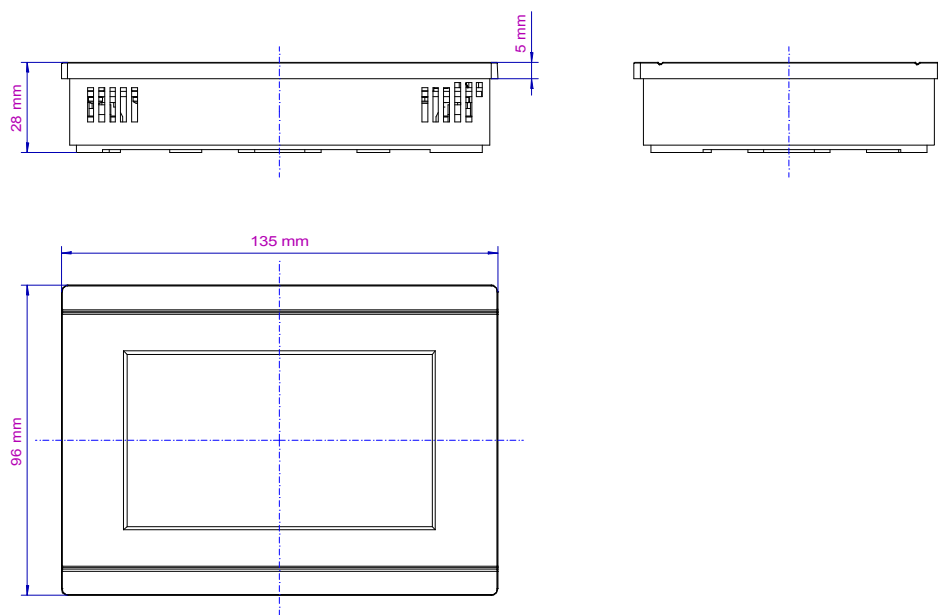
eBus networks:	A shielded, twisted two-wire cable must be used to set up eBus networks. The wire shielding must be fastened to the housing of the air curtain system. The bus cable must have the properties listed below: • The cable diameter <u>must</u> be at least 0.8 mm (cross-section 0.5 mm²). • The total of all bus cables must not exceed a maximum overall length of 400 m. • A maximum of 9 controllers or 8 slaves may be connected to one control element.  In contrast to the abovementioned, a four-wire cable is used for the wiring of the TMC control element. Two wires are for the eBus and two for the power supply. Details regarding the cable cross-section and the overall length etc. remain unchanged.
----------------	---

Electrical connection:





Dimensions:



1.3 Technical data of the control element

Electrical connection	eBus (max. 24 V, 50 mA DC) with ModBus protocol 4-wire connection 4, eBus and power supply
4-pole connecting terminal	Wire: 0.5 – 2.5 mm ² (rigid), 0.5 – 1.5 mm ² (flexible)
Keypad	Touch TFT display
TFT display	3.5", grey scale
Internal temperature sensor	NTC
Protection class	IP 20 in accordance with DIN EN 60529 (VDE 0470-1)
Ambient temperature	0 °C to + 50 °C
Storage temperature	-10 °C to + 60 °C
Assembly	Wall mounting
Housing material	Plastic, ABS, UV resistant
Housing colour	White RAL 9016
Dimensions	135 mm x 96 mm x 28 mm
Weight	185 g
Conformity CE	The TMC 300 E control element satisfies the provisions of the Electromagnetic Compatibility Directive (2004/108/EC), the Low Voltage Directive (2006/95/EC) and the harmonised standards DIN EN 60730-1, DIN EN 60730-2-9, and bears the CE mark.

1.4 Technical data of the TMC 300 E master

Supply voltage	230 V AC, 50 Hz
Power input (controller)	6 VA
	8 VA (with DBT-TMC300E control element)
Fusing	10 A T, microfuse 5 mm x 20 mm
	80 mA F, microfuse 5 mm x 20 mm
Interface	Electrical eBus (max. 24 V / 100 mA DC) with ModBus protocol
Protection class	IP00 in accordance with DIN EN 60529 (VDE 0470-1)
Ambient temperature	0 °C ... +50 °C
Storage temperature	-10 °C ... +60 °C
Max. connecting cross-sections (see terminal diagram)	2.5 mm ² (X1 / X2)
	1.0 mm ² (X3 / X4)
Digital inputs	4x, floating, wired with switching contact, < 1.5 mA (12 V)
Selectable fan levels	3 or variable in percentage steps (analogue output 0...10 V)
Analogue output	0 V... 10 V DC, < 35mA
Relay outputs (see terminal diagram)	R5 / R6 / R9, 8 A, $\Sigma I < 10 A$, 250 V AC (μ), ohmic load
	R1 / R7 / R8, 2 A, $\Sigma I < 10 A$, 250 V AC (μ), ohmic load
Dimensions	120 mm x 108 mm x 38 mm (L x W x H)
Weight	380 g
Conformity 	The TMC 300 E master control unit satisfies the provisions of the Electromagnetic Compatibility Directive (2004/108/EC), the Low Voltage Directive (2006/95/EC) and the harmonised standards DIN EN 60730-1, DIN EN 60730-2-9, and bears the CE mark.

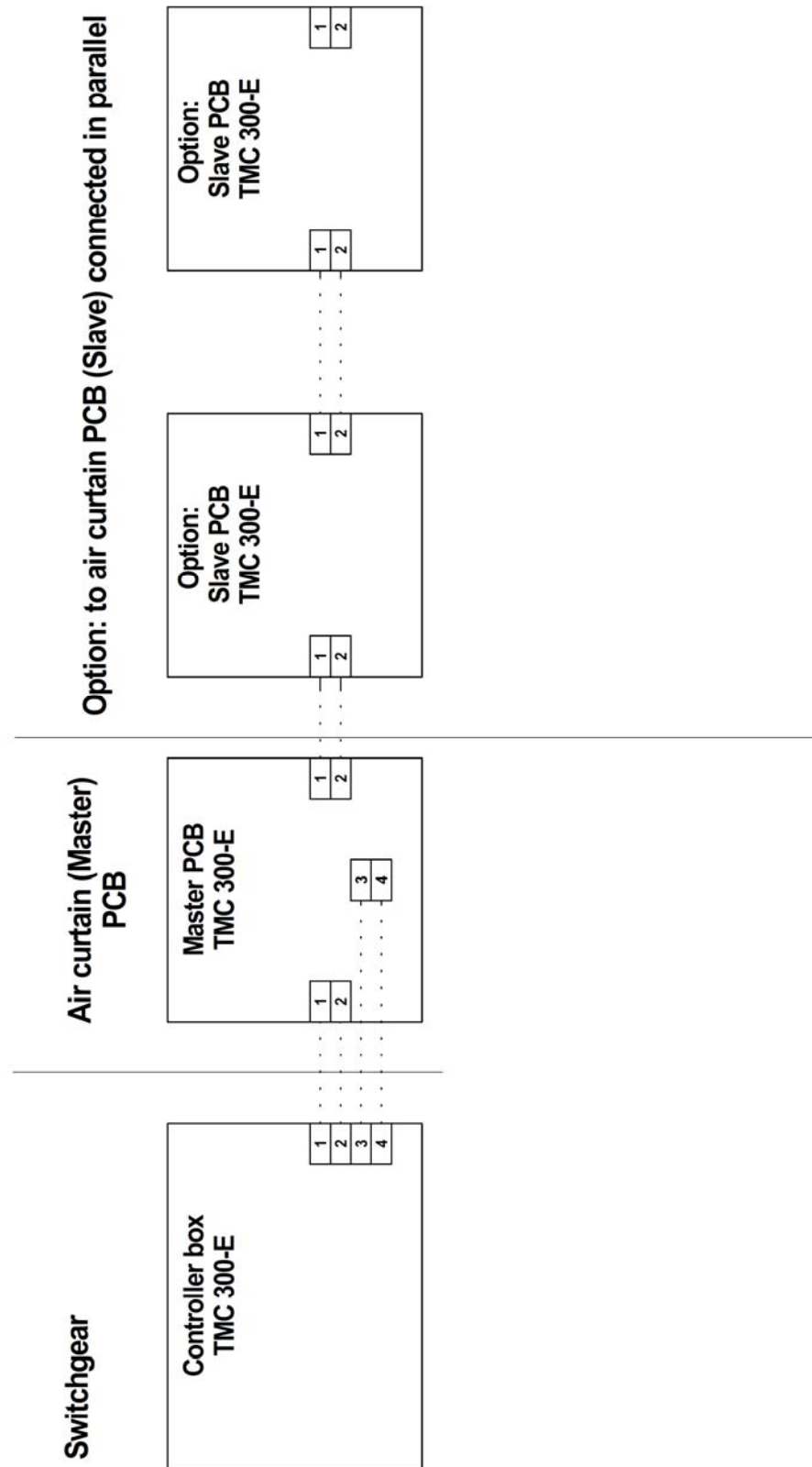


1.5 Technical data for the TMC 300 E slave

Supply voltage	230 V AC, 50 Hz
Power input (controller)	6 VA
Fusing	10 A T, microfuse 5 mm x 20 mm
	80 mA F, microfuse 5 mm x 20 mm
Interface	Electrical eBus (max. 24 V / 100 mA DC) with ModBus protocol
Protection class	IP00 in accordance with DIN EN 60529 (VDE 0470-1)
Ambient temperature	0 °C ... +50 °C
Storage temperature	-10 °C ... +60 °C
Max. connecting cross-sections (see terminal diagram)	2.5 mm ² (X1 / X2)
	1.0 mm ² (X3 / X4)
Digital inputs	3x, floating, wired with switching contact, < 1.5 mA (12 V)
Selectable fan levels	3
Relay outputs (see terminal diagram)	R5 / R6 / R9, 8 A, $\Sigma I < 10 A$, 250 V AC (μ), ohmic load
	R1 / R7 / R8, 2 A, $\Sigma I < 10 A$, 250 V AC (μ), ohmic load
Dimensions	120 mm x 108 mm x 38 mm (L x W x H)
Weight	370 g
Conformity CE	The TMC 300slave control unit satisfies the provisions of the Electromagnetic Compatibility Directive (2004/108/EC), the Low Voltage Directive (2006/95/EC) and the harmonised standards DIN EN 60730-1, DIN EN 60730-2-9, and bears the CE mark.

1.6 eBus diagram

eBus diagram TMC 300-E





2 Overview of buttons / keys

	Pressing the button for 10 seconds activates or deactivates the key lock
	Button takes you to the main screen
	Button takes you to the settings level
	Button to switch the system on and off
	Button to switch from manual to automatic mode and to display the active manual mode
	Button to switch from automatic to manual mode and to display the active automatic mode
	Display for integrated room thermostat active
	Display for 50 °C run-on thermostat active
	Display for 60 °C excess temperature thermostat active
	Display for run-on function active
	Display for automatic contact (e.g. door contact) not active
	Display for external enable
	Button to switch the heating level up and down
	Button to go back
	Button to scroll down
	Button to scroll up

	Button to turn down the level/speed
	Button to turn up the level/speed

3 Operation using the TMC 300 E control element

3.1 Start screen on putting into operation for the first time

 Note: This screen only appears when started for the first time!	
	Key lock: Is activated or deactivated when the “Key lock” button is pressed for 10 seconds.
	Forward button/key: The “Forwards” button takes you to the main screen.



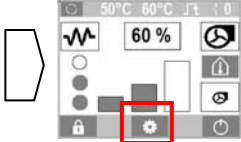
3.2 Main screen

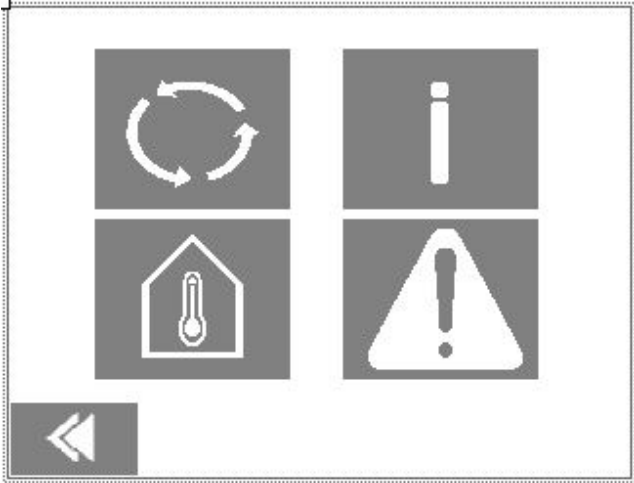
 	Fan buttons: You can turn the levels up and down by pressing the small and large fan buttons.
	Percentage display: On EC motors you can change the speed in 33% steps using the small and large fan buttons . You can also enter the % speed directly by touching the % speed display field. An input window then opens where you can enter the desired speed using the numeric keypad. Then press the arrow key and your entry will be accepted. This takes you back to the main screen.
	Heating level button: Using this heating level button you can switch the heating level up and down. (For more information, see Page 23).
	Room thermostat button: The room thermostat symbol shows that the room thermostat function is active, i.e. that the room temperature is lower than the set room temperature. The air curtain then heats the room until the specified temperature has been reached. (For more information, see Page 23).
	Manual/automatic mode: Button to switch back and forth between automatic and manual mode and to display the current mode.

	50°C display: The run-on thermostat is active, i.e. the residual heat in the air curtain is above 50 °C and the fan motor is switched on by the thermostat to dissipate the residual heat. (For more information, see Page 28).
	60°C display: Excess temperature thermostat switches the heating down one level at 60 second intervals. (For more information, see Page 28).
	Run-on function: Run-on function active, is only displayed in automatic operating mode.
	Automatic contact: This is displayed when the external automatic contact switches the system off.
	External enable: This is displayed when the external enable is not available.
	Key lock: To prevent unauthorised operation, the TMC 300 E can be locked by manually or automatically activating the key lock. The key lock can be deactivated in the sub-menu.
	Settings: Pressing the Settings button takes you to the Settings sub-menu. This button can also be faded out but is still present as hidden button (see Page 15).
	On/Off button/key: Switches the air curtain system off (to do this press the button for 1 second). When it is off, the word "OFF" is faded in.



3.3 Settings menu

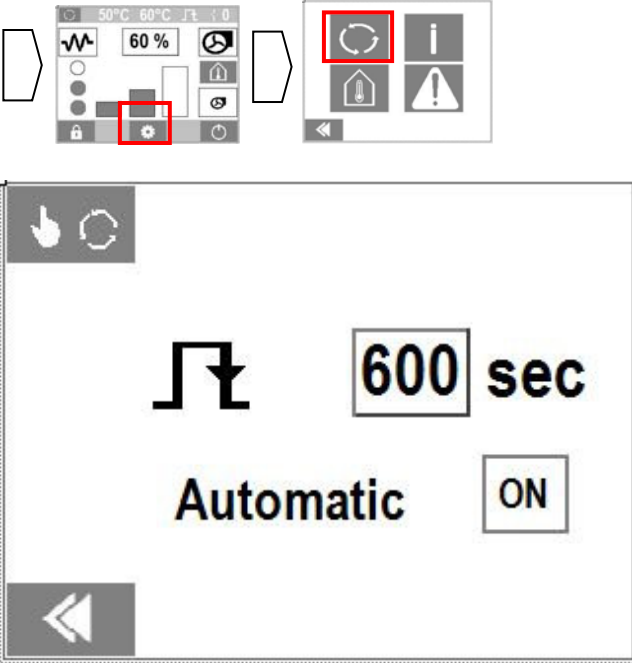




Pressing the “Settings” button  on the main screen takes you to this settings overview. Here you can access the various sub-menus where you can adjust the settings required for ideal functioning of the air curtain system. Pressing the arrow button  exits the Settings overview screen and returns you to the main screen.

	Manual/automatic mode sub-menu Pressing the Manual/automatic button opens the manual/automatic sub-menu
	Room thermostat sub-menu Pressing the Room thermostat button opens the room thermostat sub-menu
	Information sub-menu Pressing the Information button opens the information sub-menu
	Error memory sub-menu Pressing the error message button opens the error memory sub-menu

3.4 Manual/automatic sub-menu

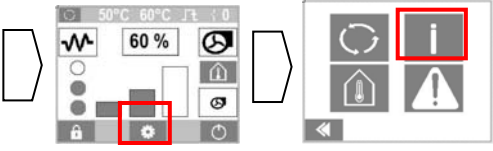


In this menu you can set a run-on time of between 0 and 600 seconds. When you touch the numeric keypad (showing 600 in this example), the keypad opens and you can enter the seconds required. The automatic mode (automatic operating mode) can also be completely deactivated here (OFF); only manual operation will then be available.

	Back button/key: Pressing the “Back” button returns you to the Settings overview screen.
---	--



3.5 Information sub-menu



SN 123456

BDT V. 1.0

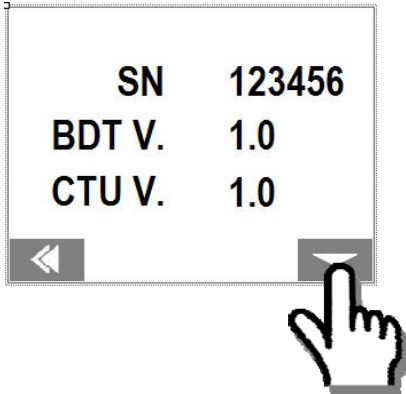
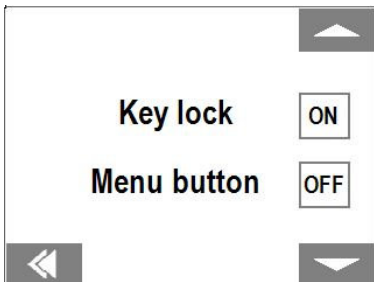
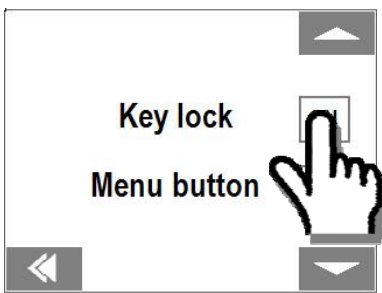
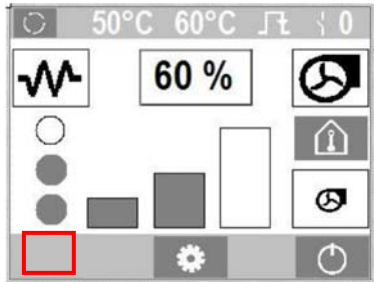
CTU V. 1.0

◀◀

▼

Information is displayed and general settings entered in this menu.

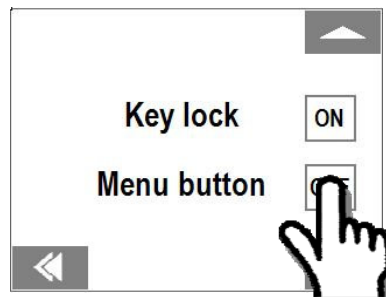
SN	Serial number of the air curtain system
BDT V.	Software version number
CTU V.	Hardware version number
◀◀	Back button/key: Pressing the “Back” button returns you to the Settings overview screen.

	Scroll down button When the scroll button is pressed,  a screen appears to deactivate the key lock and the menu button (settings button): 
Key lock	Press the box to set “ON” or “OFF”, thereby activating or deactivating the key lock.  If the key lock is set to “OFF”, the button is no longer displayed on the main screen and the function is no longer active/present: : 

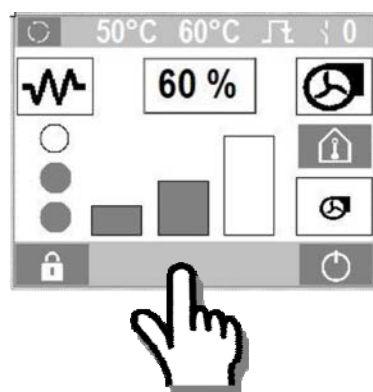


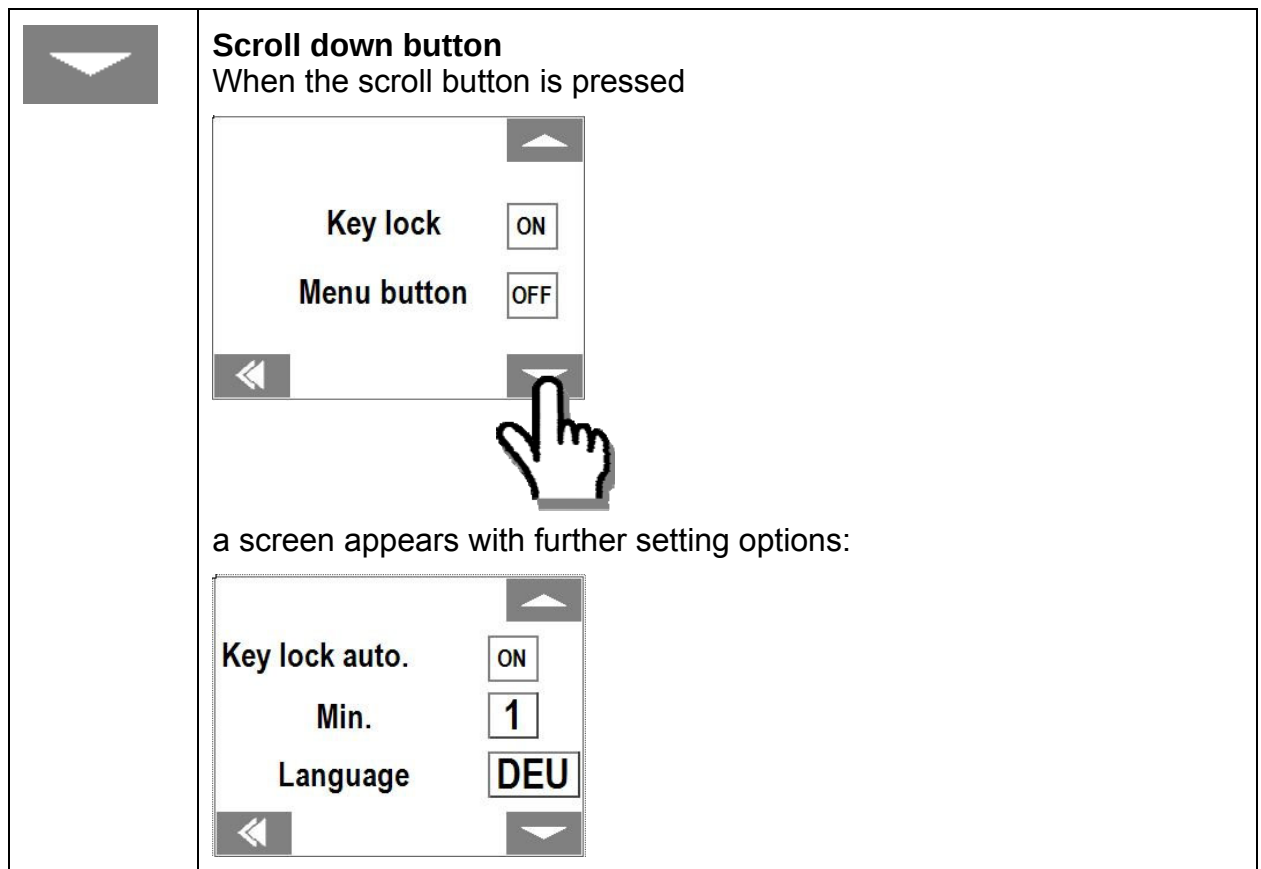
Menu button

Press the box to set “ON” or “OFF”, thereby fading the menu button (settings button) in or out on the main screen.

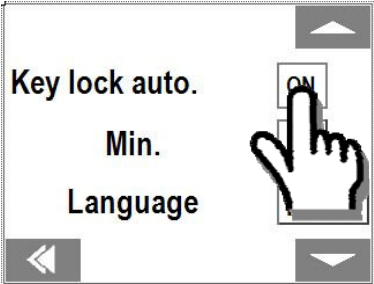
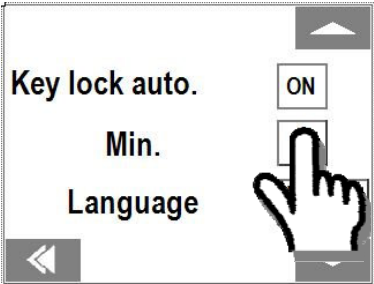
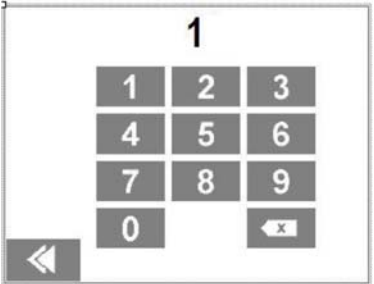
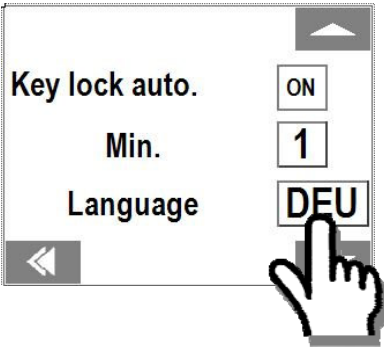


If the box on this screen is on “OFF”, the menu button (settings button) is no longer displayed on the main screen. However it is still active! The Settings menu opens when the menu button area is pressed for 5 seconds.





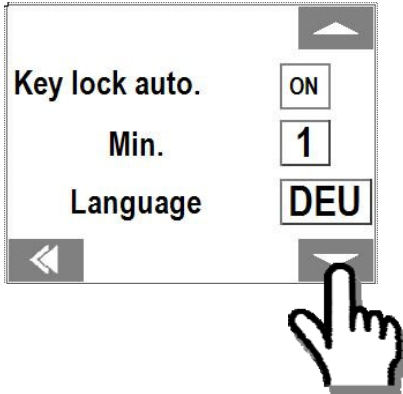


Auto key lock and Min.	Press the box to set “ON” or “OFF”, thereby activating or deactivating the automatic key lock. This means that the key lock will be activated automatically when no entries have been made on the control element within a specified period of time.  When the key lock is activated (“ON”), using the numeric keypad under the “Min” menu item you can specify the time after which the key lock will be switched on automatically.  In the numeric keypad that then opens, you can enter a maximum 9, for 9 minutes. 
Language	The system language can be set and switched between German and English here. 



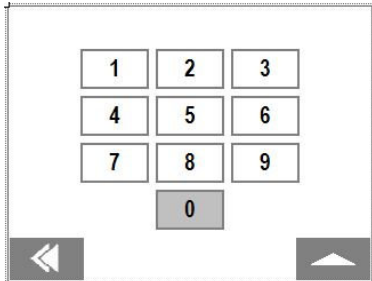
Scroll down button

When the Scroll button is pressed,



a screen appears showing how many circuit boards are connected to the eBus.

The master circuit board that is essential for the functioning of the air curtain always has the address 0 (as shown below). If other slave devices are connected in addition to the master device, these are also shown as grey boxes. This enables you to see all devices on the eBus at a glance.





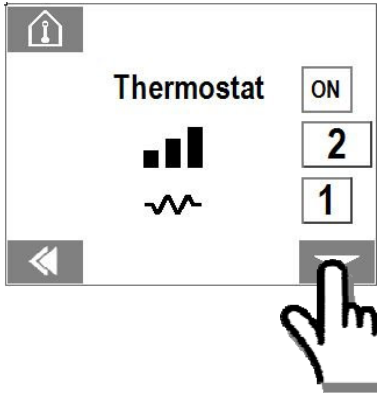
3.6 Room thermostat sub-menu

You can set the parameters for the internal room thermostat in this menu. When the room thermostat has been set to “ON”, the air curtain system is switched on as soon as it is too cold in the room (actual value is lower than the target value). The system then runs at the specified level for fan and heating.	
	Room thermostat: Press the box to set “ON” or “OFF”, thereby activating or deactivating the room thermostat function.
	Level/speed: Touching the numeric keypad (2 in this example) opens a numeric input box where you can enter the desired level (speed).
	Heating level: Press the heating level button to switch the levels up and down (the heating level can never be set higher than the fan level).
	Back button Pressing the “Back” button returns you to the Settings overview screen.

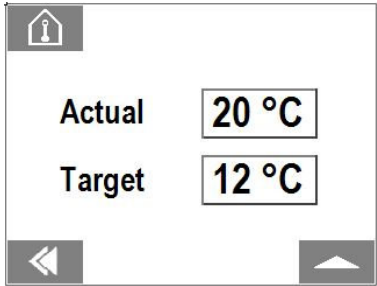


Scroll down button

When the Scroll button is pressed,



a screen appears showing the actual value and the specified target value.



The actual value display shows the current room temperature measured in the control element.

Touching the numeric keypad (12 °C in this example) opens a numeric keypad in which you can enter the desired target room temperature.



3.7 Error memory sub-menu

The last four error messages are displayed in this menu, together with information about when the respective fault occurred (H = hours, T = days, W = weeks).

	170 °C safety excess temperature thermostat (see Page 28)
	Back button Pressing the “Back” button returns you to the Settings overview screen.

4 Basic operating principle

The TMC 300 E has been designed to electronically control air curtain systems. Using the TMC 300 E, the speed of the fan motor for an air curtain can be pre-set in three levels (AC motor) or as a % (EC motor). The TMC 300 E control board (optional slave) is put into operation together with the TMC 300 E control element. The Bus interface additionally enables up to 8 TMC 300 E slaves to be operated with one TMC 300 E master.

4.1 Switching on

By applying supply voltage to the air curtain system, the device is put into standby mode and must then be switched on again. During initial operation, the default values are pre-set (see factory settings).

The TMC 300 E control element loads all information immediately when supply voltage is applied.

5 Operating modes

The safety functions are guaranteed at all times, irrespective of the operating status of the air curtain system.

5.1 Manual/auto operating mode

Manual operation:

In manual operating mode, the fans are permanently operated at the pre-set fan level/speed; this can be set using the TMC 300 E control element.

Auto operation:

In auto operating mode, the fans operate at the pre-set fan level/speed when the automatic contact (terminal X3 / 26 & 27), e.g. door contact, is closed.

Switching from manual to automatic operating mode takes place using the control element. The automatic function can be deactivated in the sub-menu (see Page 16).



6 Functions

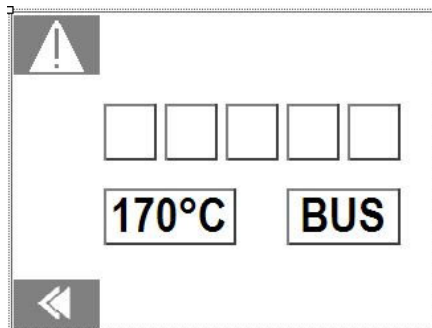
6.1 Fault statuses

The TMC 300 E has a time counter that records the entire current feed time of the system. This time record can be used to record the approximate time periods in hours/days/weeks since the last fault.

The various faults and types of fault are treated as follows.

Error messages are stored and can be retrieved at any time using the error memory sub-menu (see the error memory sub-menu chapter on Page 25).

When a fault occurs, the fault is displayed.



The symbol for the occurrence of a fault is faded into this screen (in the above example, both possible fault types for 170 °C excess temperature and Bus are illustrated). Once the fault has been rectified, the error message can be acknowledged by pressing the arrow key . The system then continues to operate in normal operating mode.

6.2 External automatic contact

With the TMC 300 E, an external contact (such as a door contact) can be connected to the controller to switch the air curtain system on automatically. The air curtain system is switched on when the contact is closed, as long as automatic operating mode has been set beforehand.

6.3 External enable

With the TMC 300 E, it is possible to switch the system off or allow operation using the external enable. When the contact is opened, the system is switched off, i.e. no enable is present.

6.4 Error memory

After a fault (170°C) during operation of the TMC 300 E has been acknowledged, it is stored in the internal error memory along with the time at which the fault occurred. The time difference between the current day and the day on which the fault occurred is displayed (see the error memory sub-menu chapter on Page 25).

6.5 Run-on function

When the external automatic contact (e.g. door contact) is opened, the fan motor on the air curtain system runs on. This function makes sense in a heavily frequented entrance such as the entrance to a department store. The run-on time (0-600 seconds) can be set using the TMC 300 E control element (see the manual/automatic mode sub-menu chapter on Page 16).

6.6 Key lock

By activating the key lock manually or automatically, the TMC 300 E can be locked to prevent unauthorised operation.

The key lock function can be activated manually or automatically. To activate or deactivate the key lock manually, press the key lock button  for 10 seconds.

To activate the key lock automatically, you must activate the function in the sub-menu (see Page 22). To deactivate, follow the steps for manual deactivation.

Using the symbol, the button shows you the current status. Lock closed = key lock active, lock open = key lock deactivated.

6.7 50 °C run-on

The 50°C run-on function occurs when there is still 50 °C residual heat in the device after it has been switched off or when fan level 0 has been selected. The fan then continues to run on at the lowest level until the temperature in the system has fallen below 50°C. This run-on function is displayed using the 50°C symbol in the Off menu. If there are additionally further slave devices in operation with a master device, all devices will run on when the fault is detected in any one device on the eBus network.

6.8 60 °C fault

The 60°C fault occurs when the temperature of the device exceeds 60°C. To automatically rectify this fault, the heating setting is reduced by one level every 60 seconds until the fault no longer exists, i.e. the temperature has fallen below 60°C. After a further 60 seconds, the system then starts running at the pre-set heating level again. This fault only occurs when the system is in normal operating mode. In the case of more than one TMC 300 E controllers and power circuit boards in one eBus network, the fault is rectified in all devices at the same time. During the 60°C fault, the heating level can be manually turned down but not turned up.



6.9 170 °C fault

The 170°C fault occurs when the temperature of the device exceeds 170°C. The system is switched off. The system does not restart automatically when the temperature drops. The device can be switched back on by actuating the reset button on the thermostat (which is situated in the air curtain) and then actuating the acknowledge button on the control element.

6.10 Passing on an operating message and error message

The operating status of the system is reported using unused units. In the case of an AC fan adjusted in steps, the operating status of the air curtain system is reported using the 0...10V output. At 0V (0...2.5V) the device is off, at 5V (2.5V...7.5V) there is a fault in the device, and at 10V (7.5V...10V) it is operating normally.

In the case of an EC fan with infinitely adjustable operation, the operating statuses are prescribed by the relay outputs of the operating levels. Protective extra low voltage cannot be controlled directly using the relays! If no relay has been switched, the system is turned off, when switched from terminal 51 to 55 the system is operating and when switched from terminal 51 to 54 there is a fault in the system. The contacts are isolated.

7 Switching the air curtain system on and off

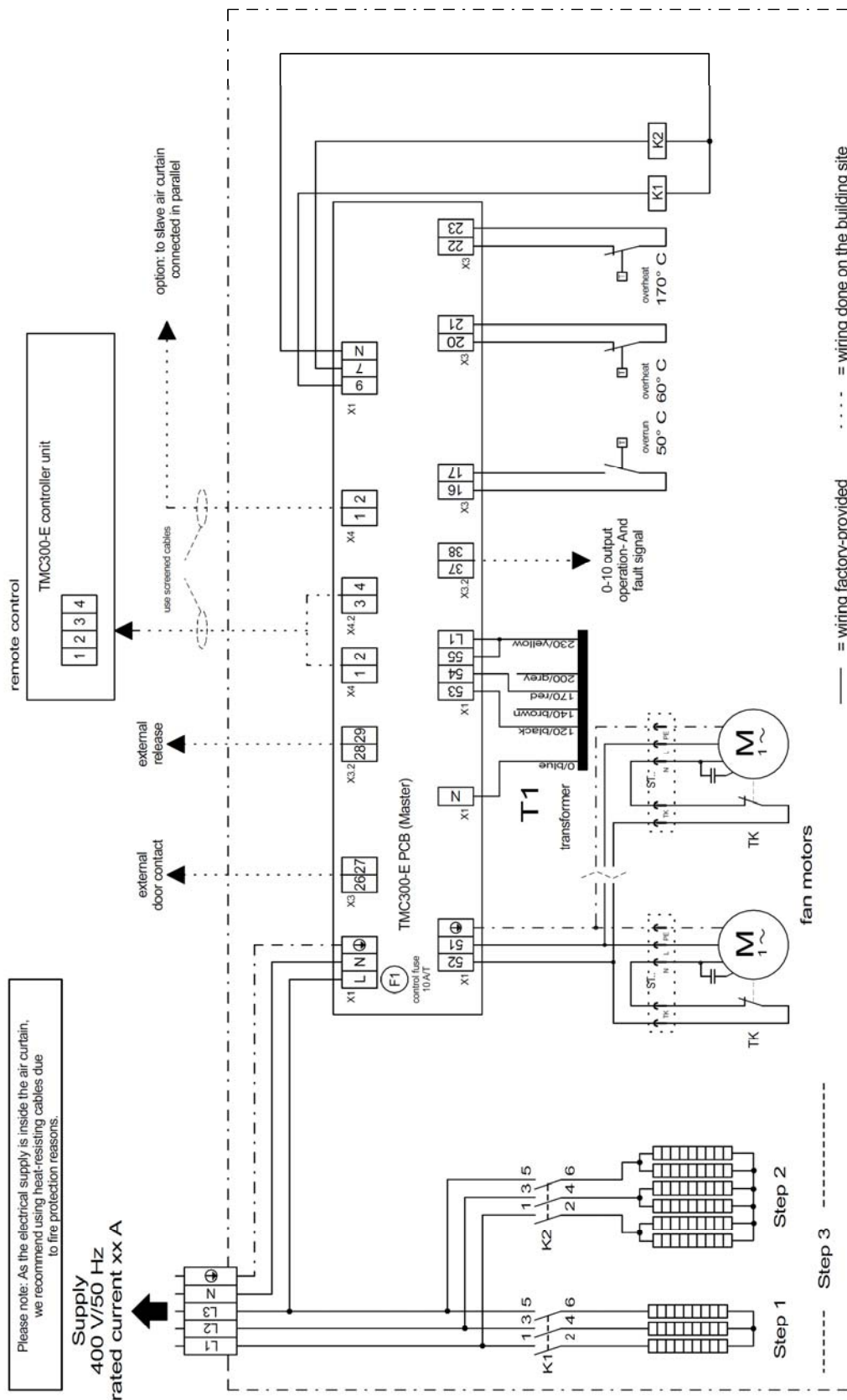
If the ON/OFF button  is pressed for one second, the system switches off or on, i.e. the fan motors and the electric heating are switched off or on.

8 Display of version numbers

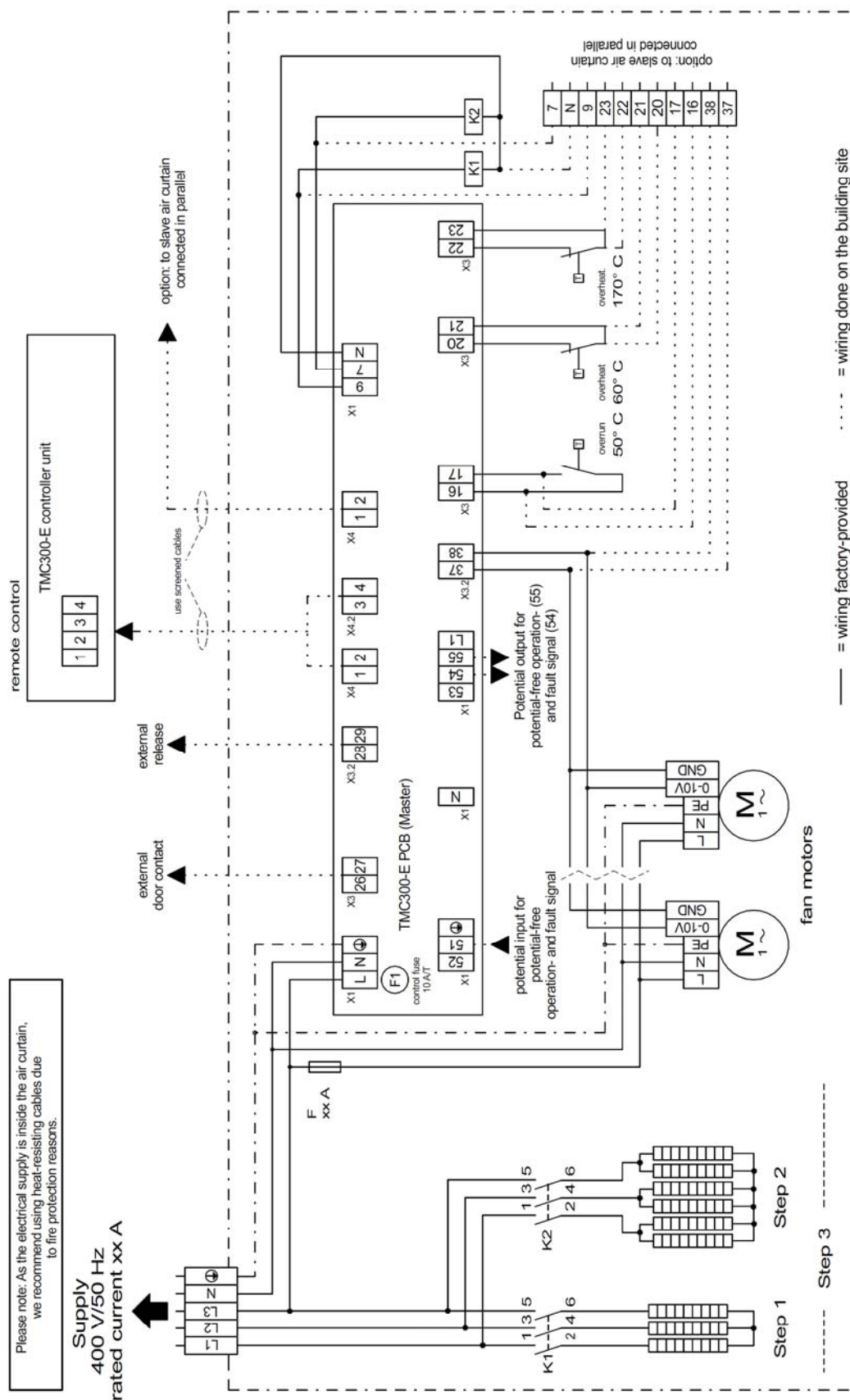
Information about the present version numbers (hardware and software version of the TMC 300 E) can be retrieved in the information sub-menu (see Chapter 3.5 on Page 17).

9 Cable plans and terminals

9.1 TMC 300 E master terminal diagram, AC motors



9.3 TMC 300 E master terminal diagram, EC motors



9.5 TMC 300 E master terminal description

Supply line

L1:	Mains voltage L-conductor
L2:	L-conductor
L3:	Mains voltage L-conductor
N:	Mains voltage N-conductor
PE:	Connection of the earth conductor.

Terminal X1

X1 / L:	Mains voltage L-conductor (230V / 50 Hz)
X1 / N:	Mains voltage N-conductor (230V / 50 Hz)
X1 / L1:	Fused L-connection for the autotransformer
X1 / L1:	Fused L- connection for the highest AC fan output
X1 / 32:	Switched L-connection for the autotransformer control contactor
X1 / N:	N-conductor of the autotransformer contactor
X1 / N:	N-conductor of the autotransformer
X1 / 52:	Connection of the motor neutral conductor
X1 / 51:	Connection of the motor phase or operating and error message with EC motors.
X1 / 55:	Connection of the transformer tapping with the highest voltage (e.g. 230 V) or operating and error message with EC motors.
X1 / 54:	Connection of the transformer tapping with the 2nd highest voltage (e.g. 180 V) or operating and error message with EC motors.
X1 / 53:	Connection of the transformer tapping with the lowest voltage (e.g. 100 V).
X1 / N:	N-conductor for the heating level contactor
X1 / 9:	Connection of the contactor for heating level 1.
X1 / 7:	Connection of the contactor for heating level 2.

Terminal X2

X2/PE:	Connection of the earth conductor.
--------	------------------------------------

Terminal X3

X3 / 16 & 17:	Input for the 50°floating thermal contacts to control the run-on.
X3 / 20 & 21:	Input for the 60°floating thermal contacts to reduce the heating level in the case of excess temperature.
X3 / 22 & 23:	Input for the 170°floating thermal contacts to switch the device off in the case of excess temperature.
X3 / 26 & 27:	Input for a floating, external contact.

Terminal X4

X4 / 1 & 2:	Bus connection for the control element or a slave with reverse polarity protection
X4 / 1 & 2:	Bus connection for the control element or a slave with reverse polarity protection

Terminal X4.2

X4.2 / 3 & 4	24V DC power supply for TMC300 E control element
--------------	--



Terminal X3.2

X3.2 / 28 & 29

Input for the floating external enabling contact.

X3.2 / 37 & 38

Output 0...10V to activate the EC motor or the operating and error message with AC motors

9.6 TMC 300 E slave terminal description

Supply line

L1:	Mains voltage L-conductor
L2:	Mains voltage L-conductor
L3:	Mains voltage L-conductor
N:	Mains voltage N-conductor
PE:	Connection of the earth conductor

Terminal X1

X1 / L:	Mains voltage L-conductor (230V / 50 Hz)
X1 / N:	Mains voltage N-conductor (230V / 50 Hz)
X1 / L1:	Fused L-connection for the autotransformer
X1 / L1:	Fused L-connection for the highest AC fan level
X1 / 32:	Switched L-connection for the autotransformer control contactor
X1 / N:	N-conductor of the autotransformer contactor
X1 / N:	N-conductor of the autotransformer
X1 / 52:	Connection of the motor neutral conductor
X1 / 51:	Connection of the motor phase.
X1 / 55:	Connection of the transformer tapping with the highest voltage (e.g. 230 V).
X1 / 54:	Connection of the transformer tapping with the 2nd highest voltage (e.g. 180 V).
X1 / 53:	Connection of the transformer tapping with the lowest voltage (e.g. 100 V).
X1 / N:	N-conductor for the heating level contactor
X1 / 9:	Connection of the contactor for heating level 1.
X1 / 7:	Connection of the contactor for heating level 2.

Terminal X2

X2/PE:	Connection of the earth conductor.
--------	------------------------------------

Terminal X3

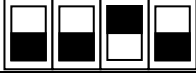
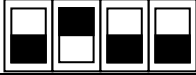
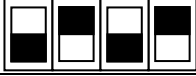
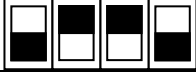
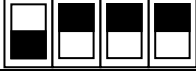
X3 / 16 & 17:	Input for the 50° floating thermal contacts to control the run-on.
X3 / 20 & 21:	Input for the 60° floating thermal contacts to reduce the heating level in the case of excess temperature.
X3 / 22 & 23:	Input for the 170° floating thermal contacts to switch the device off in the case of excess temperature.

Terminal X4

X4 / 1 & 2:	Bus connection for a master or slave with reverse polarity protection.
X4 / 1 & 2:	Bus connection for a master or slave with reverse polarity protection.

9.7 Setting the slave addresses

Slave devices can be clearly identified in the Bus network using an address. The address is set using the DIP switch on the power electronics.

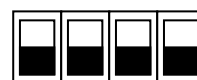
Address	Switch position
1	
2	
3	
4	
5	
6	
7	
8	

Switch position down:



On

Four position DIP switch:



Switch position up:



1 2 3 4

Before a new slave address can be assigned to a slave device, the device must be completely disconnected from the mains voltage and be free from current.

After changing the address of a slave device, all devices in the same network must likewise be restarted, because the correct operation of the system is otherwise not guaranteed.



Notes:

Notes:



Notes:

www.teddington.de

Teddington Luftschleieranlagen GmbH

Industriepark Nord 42 • D-53567 Buchholz (Mendt) • Tel.: + 49(2683)9694-0 •
Fax: + 49(2683)9694-50 • E-Mail: verkauf@teddington.de • www.teddington.de

