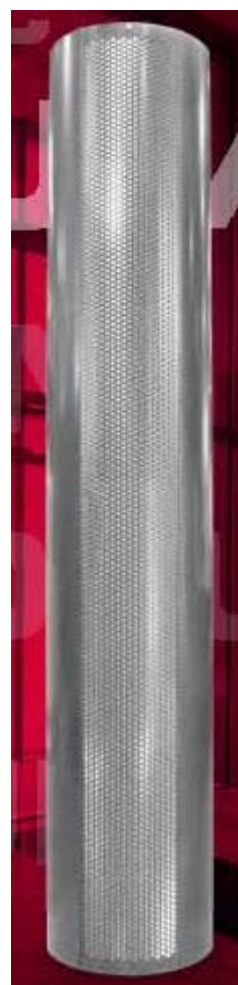
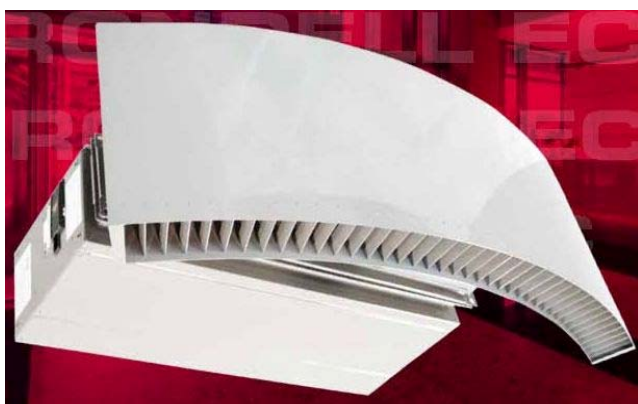


TECHNICAL DATA AIR CURTAIN WITH CONTROL DEVICE GTM II



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Manufacturer

BLASI GmbH
Carl-Benz-Str. 5-15
D-77972 Mahlberg

Distribution

BLASI GmbH
Carl-Benz-Str. 5-15
D-77972 Mahlberg

DATE OF THE DOOR SYSTEM

Project:	_____
Project-No.:	_____
Confirmation-No.:	_____
Doortype:	_____
Diameter of the door:	_____ mm
The passage width of the door:	_____ mm
Passage height of the door:	_____ mm
Air curtain type:	_____

TECHNICAL DATA THE AIR CURTAIN SYSTEM “Pump Warm Water PWW”

Air volume:	_____	m³/h
Max. sound level:	_____	db (A)
Heating medium:	PWW	°C
Power of Heating:	_____	kW
Water resistance:	_____	kPA
Water connection forward and backward:	_____	Custom outer thread
Motor current:	_____	A
Motor power:	_____	kW
Type of current:	230V, 1Ph., 50 Hz	
Measure in mm LxHxT:	_____	
Weight:	_____	kg

TECHNICAL DATA THE AIR CURTAIN SYSTEM „*ELECTRO*“

Air volume:	_____	m³/h
Air speed:	_____	m/s
Max. sound level:	_____	db (A)
Heating medium:	Electro	
Power of Heating:	_____	kW
Motor current:	_____	A
Motor power:	_____	kW
Art of current ventilator:	230V , 1Ph., 50 Hz	
Art of current Heating:	400V , 3Ph., 50 Hz	
Measure in mm LxHxT:	_____	
Weight:	_____	kg

User- and Operating manual **GTM II "Pump Warm Water PWW"**

Function of the keys



System ON

Press the **ON/OFF** key until the display is turned on.

System OFF

Press the **ON/OFF** key for 2 sec. (standby).

Display OFF

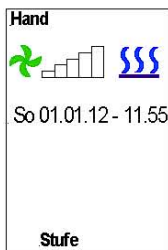
When the system is in Standby, press the **ON/OFF** key until the display is turned off.



122 x 70 x 35 mm



1. Manual



If the **step** option is displayed in the bottom line, you can set different fan settings by turning the multifunctional rotary knob. If you press the multifunctional rotary knob, the **heating** option will be displayed. Depending on the programming (see point 5 **Steo 0 MV**), the optional solenoid valve can be turned on or off by turning the multifunctional rotary knob.

Set the **Manual** operation (if required).

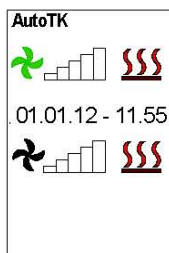
Press the **Mode** key (**PGM Mode** display). Select **manual** by using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection. **Hand** will be displayed on the top display line. Press the **MODE** key to activate the **Hand** operating mode.

Press the **Mode** key (**PGM Mode** display). Turn the multifunctional rotary knob to display the **step** setting in the bottom line. Press the multifunctional rotary knob to confirm. Next, turn the knob to select a fan setting and press the knob to confirm the selection. The heating can be set in advance using the same method (**ON** = symbol colour **red**).

Again press the **MODE** key to activate the selected operational mode.
(Default setting: **fan step 0**, **heating OFF** and symbol colour **blue**)



2. AutoTK (automatic operation with door contact control)



Press the **Mode** key (**PGM Mode** display). Select **AutoTK** using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection. **AutoTK** will be displayed in the top display line.

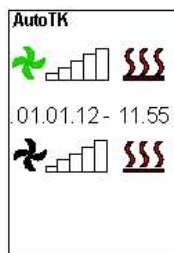
Select a fan setting by turning the multifunctional rotary knob to the right or left. Press the knob to confirm the selection (default setting: **fan step = 0** and **heating OFF**).

Again press the **MODE** key to activate the selected operational mode.

When the doors are opened, the fan setting set in advance will be activated through an optional door contact switch (external signal emitter).

The system must have been provided with a turning-off delay to prevent that the air curtain system is turned on or off every time the door is opened or closed. This **overrun** can be set in the **BASIC** menu to 10 – 300 sec. (default setting: **turning-off delay 60 sec**. See point 5.7).

3. AutoTK (automatic operation with door contact control and room thermostat)



Press the **Mode** key (**PGM Mode** display). Select **AutoTK** using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection. **AutoTK** will be displayed in the top display line.

Select a fan setting by turning the multifunctional rotary knob to the right or left. Press the knob to confirm the selection (default setting: **fan step = 0** and heating **OFF**).

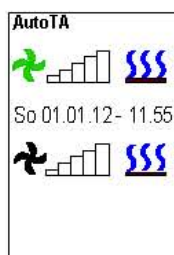
Again press the **MODE** key to activate the selected operational mode.

The required room temperature must be set through an optional room thermostat that is connected to the door contact in parallel.

The air curtain system will be turned on using the fan level set in advance after the door with the optional door contact (external signal emitter) and/or the room thermostat has been opened.

The system must have been provided with a turning-off delay to prevent that the air curtain system is turned on or off every time the door is opened or closed. This **overrun** can be set in the **BASIC** menu to 10 – 300 sec. (default setting: **turning-off delay 60 sec.**, see point 5.7).

4. AutoTA (automatic operation with cooling protection and door contact control)



Press the **Mode** key (**PGM Mode** display). Select **AutoTA** using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection. **AutoTA** will be displayed in the top display line.

Select a fan setting by turning the multifunctional rotary knob to the right or left. Press the knob to confirm the selection (default setting: **fan step = 0** and heating **OFF**).

Again press the **MODE** key to activate the selected operational mode.

The temperature of the cooling protection must be set on an optional room thermostat. If the temperature drops below the set value, the optional solenoid valve will be opened automatically and the fans will be turned on at setting 1 (the **AKS** display will flash red).

If the doors are opened, the system will switch to the fan level set in advance through an optional door contact switch (external signal emitter).

The system must have been provided with a turning-off delay to prevent that the air curtain system is turned on or off every time the door is opened or closed. This **overrun** can be set in the **BASIC** menu to 10 – 300 sec. (default setting: **turning-off delay 60 sec.**, see point 5.7).



5. Settings in the Basic menu

Press the **Mode** key (**PGM Mode** display). Select **Basic** by using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection.

A menu will be displayed with the different setting options.



5.1 Day / date / time

Press the multifunctional rotary knob and turn it to select and change the related data (24-hour notation).

5.2 Language

Press the multifunctional rotary knob and turn it to select and change the related data.

If required, you can switch from German to English (other languages will become available soon).

5.3 Factory set

Press the multifunctional rotary knob and turn it to select and change the related data.

The original data is restored.

5.4 Start up

Press the multifunctional rotary knob and turn it to select and change the related data.

After the air curtain has been switched on, the speed will switch to setting 1 during 3 seconds and, next, to setting 5 for another 3 seconds automatically. Next, the system will operate based on the set fan setting (default setting: **off**).

5.5 Memory

Press the multifunctional rotary knob and turn it to select and change the related data. The memory function ensures that all set values are kept saved in case of power outage. (Default setting: **memory on**).

5.6 Step 0 MV

Press the multifunctional rotary knob and turn it to select and change the related data.

step 0 MV off = optional solenoid valve is closed when the fans are not turning.

step 0 MV var = optional solenoid valve will be variable for the heating depending on the setting operated when the fans are not turning.
(Default setting: **step 0 MV off**).

5.7 Overrun (turning-off delay)

Press the multifunctional rotary knob and turn it to select and change the related data. The turning-off delay at door contact operation can be set between 10 and 300 sec. (Default setting: **turningoff delay 60 sec.**)

6. Error messages are displayed in orange

No enabled will be displayed when the building management system (DDC) does not release the air curtain system for use. The system cannot be put into service.

Cancel error message

The message will be cancelled automatically when the building management system has released the system.

7. Faults are shown in red

Frost alarm will be displayed when the temperature of the supplied air is lower than approximately 7° C on the optional frost protection thermostat. The fans will be turned off and the optional solenoid valve will be opened.

This function always has priority!

Cancel error message

When the freezing risk is no longer present, the error message will be cancelled automatically and the normal operation of the air curtain system will be resumed.

Motor overhear will be displayed when the optional temperature control is activated (fan motors). The relevant air curtain will be put out of service.

The system must be checked (contact a specialised installation company).

Cancel error message

Press the **Mode** key (**PGM Mode** display). Turn the multifunctional rotary knob to select the **confirmation** option and press the rotary knob to confirm the selection.

8. Details



At most 10 air curtain systems can be managed using one control panel with the GTM II control. Each printed circuit board is equipped with a coding switch for this purpose. The coding reads as follows:

0= MASTER, 1 - 9 = SLAVE.

NOTE: never use the same coding for two systems.

The error message will be generated as a collective fault in the MASTER system when a fault occurs. Only the faulty system will be put out of service in relation to **Motor overhear**.

When the system is turned on, first the slave systems must be supplied with power.

Potential-free messages

Function and fault messages are available on the printed circuit board in the form of change-over switches.

If input does not follow in the programming mode (**PRG Mode**) for more than 60 seconds, the mode will be terminated automatically.

Note

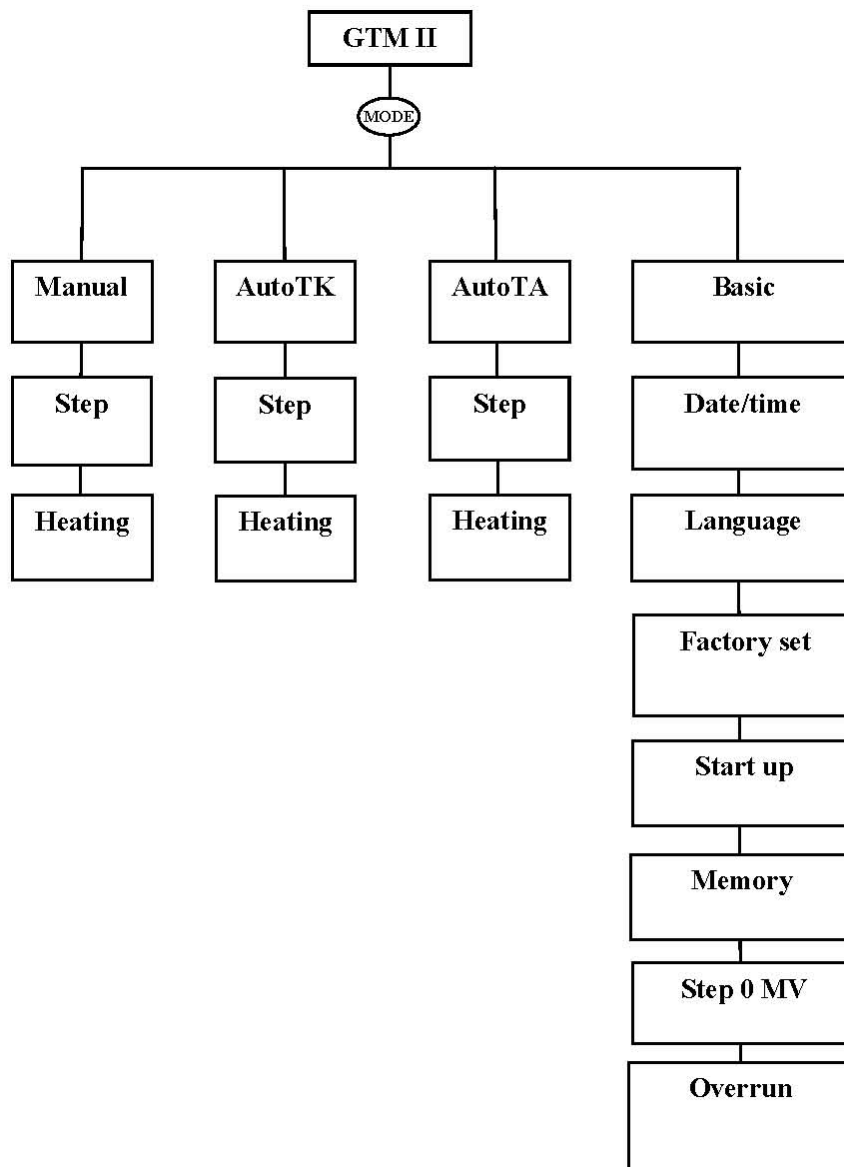
To prevent freezing of the warm water heater should air curtain can not be disconnected from the mains voltage. Furthermore, should the pump warm water circulation is not interrupted.

9. Troubleshooting

Error	Display	Possible causes	Solution
System is not working	Display off	No grid power supply Not turned on	Turn on the grid power supply Turn on the system
	Keine freigabe (no release)	Fault in DDC release	See point 6
	Frostalarm (frost protection)	Air supply temperature too low	Increase the air supply temperature
	Motortemperatur (motor temperature)	Fan faulty	Replace the fan (see point 7)
Insufficient airflow speed		Air supply filter dirty	Clean the filter
	com error (communication error)	Error in data transfer	Reset

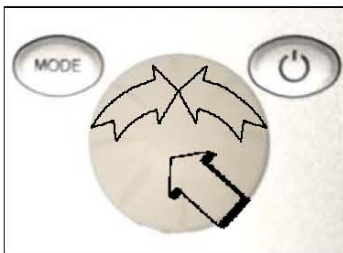
The air curtain system must be reset when a fault occurs. Disconnect the power supply from the whole system. Wait 10 seconds and again turn on the system (also see point 8).

10. Schedule



User- and Operating manual **GTM II E „ELECTRO“**

function of the keys



System ON

Press the ON/OFF key until the display an is turned on.

System OFF

Press the ON/OFF key for 2 sec. (standby).

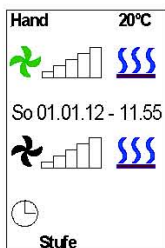
Display OFF

When the system is in Standby, press the ON/OFF key until the display is turned off.



122 x 70 x 35 mm

1. Manual



If the **Stufe (settings)** option is displayed in the bottom line, you can set different fan settings by turning the multifunctional rotary knob. If you press the multifunctional rotary knob, the **heating** option will be displayed. A heating setting from 1 – 3 can be turned on by using the multifunctional rotary knob depending on the set fan setting.

Fan step 1 - 2	Heating step 0 -1
Fan step 3	Heating step 0 - 2
Fan step 4 – 5	Heating step 0 - 3

Set the **Manual** operation (if required).

Press the **Mode** key (**PGM Mode** display). Select **manual** by using the multifunctional rotary knob

(the text colour will change from orange to black). Press the knob to confirm the selection. The **manual** option is displayed on the top line of the display in addition to the actual temperature. Press the multifunctional rotary knob to activate manual operation.

(Only for operation with a timer)

Turn the multifunctional rotary knob to set the **setting** in the bottom pre-selection line. Press the multifunctional rotary knob to confirm. Next, turn the knob to select a fan setting and press the knob to confirm the selection. Set heating settings 1 - 3 using the same method (depending on the set fan settings, see above).

Select the timer using the multifunctional rotary knob and set the related clock symbol.

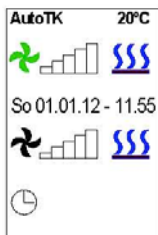
Clock symbol = timer OFF

Clock symbol orange = timer set in advance

Again press the **MODE** key to activate the selected operational mode (also see point 5).

(Default setting: **fan step = 0**, **heating step = 0** and symbol colour **blue**.)





2. AutoTK (automatic operation with door contact control)

Press the **Mode** key (**PGM Mode** display). Select **AutoTK** using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection. The **AutoTK** option is displayed on the top line of the display next to the actual temperature.

Next, you can set a fan setting, heating (depending on the selected fan setting, also see point 1) and/or the timer using the multifunctional rotary knob. Turn the knob to the left or right to do this and press the knob to confirm the selection. (Default setting: **fan step 0** and **heating step 0**.)

Clock symbol = timer OFF

Clock symbol orange = timer set in advance

Again press the **MODE** key to activate the selected operational mode.

The system must have been provided with a turning-off delay to prevent that the air curtain system is turned on or off every time the door is opened or closed. This **overrun** can be set in the **BASIC** menu to 10 – 300 sec. (default setting: **turning-off delay 60 sec.**, see point 6.7).

3. AutoTA (automatic operation with cooling protection)

Press the **Mode** key (**PGM Mode** display). Select **AutoTA** using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection. The **AutoTA** option is displayed on the top line of the display next to the actual temperature.

You can set the temperature for the cooling protection (AKS) between 11° and 30° C by using the multifunctional rotary knob. Turn the knob to the left or right to do this until the required temperature has been reached (default setting: **fan step = 0**, **heating setp = 0** and AKS temperature = **15° C**). Press the multifunctional rotary knob to confirm the selection.

The integrated timer can be set in advance (also see point 5).

Clock symbol = timer OFF

Clock symbol orange = timer set in advance

Again press the **MODE** key to activate the selected operational mode.

If the temperature drops below the set value, the system will switch to fan setting 1 and heating setting 1 (the **AKS** display will flash red).

If the system uses the timer, the cooling protection will always have priority.

3a. AutoTA (automatic operation with cooling protection and door contact)

(In addition to point 3.)

Press the **Mode** key (**PGM Mode** display). Select **AutoTA** using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection.

Next, you can set a fan setting (1-5) and heating by using the multifunctional rotary knob (depending on the selected fan setting, also see point 1). Turn the knob to the left or right to do this and press the knob to confirm the selection. (Default setting: **fan step = 0**, **heating step = 0** and AKS temperature = **15° C**.)

The integrated timer can be set in advance (also see point 5).

Clock symbol = timer OFF

Clock symbol orange = timer set in advance

Again press the **MODE** key to activate the selected operational mode.

The system must have been provided with a turning-off delay to prevent that the air curtain system is turned on or off every time the door is opened or closed. This **overrun** can be set in the **BASIC** menu to 10 – 300 sec. (default setting: **turning-off delay 60 sec.**, see point 6.7).

4. AutoRT (automatic operation with room temperature sensor)

Mode Press the **Mode** key (**PGM Mode** display). Select **AutoRT** using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection. The **AutoRT** option will be displayed on the top line next to the actual temperature.

Select the room temperature using the multifunctional rotary knob and press the knob to confirm the selection.

Next, you can set the required room temperature (**R-Temp**). Press the multifunctional rotary knob to confirm the selection.

(Default setting: **R-Temp 20° C**.)

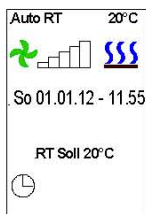
The integrated timer can be set in advance (also see point 5).

Clock symbol = timer OFF

Clock symbol orange = timer set in advance

Again press the **MODE** key to activate the selected operational mode.

The fan control will follow the set room temperature (preference temperature). Depending on the difference between the actual temperature and the set room temperature, the control will adjust the fan and heating setting.



Mo	08:10 - 12:00
	00:00 - 00:00
Di	00:00 - 00:00
	00:00 - 00:00
Mi	00:00 - 00:00
	00:00 - 00:00
Do	00:00 - 00:00
	00:00 - 00:00
Schaltzeiten	

5. Timer

Mode Press the **Mode** key (**PGM Mode** display). Select **Timer** using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection.

If the system must be turned on at **8:10 a.m.** and turned off at **noon** every Monday, program the following:

Turn the multifunctional rotary knob to select the week day **Mo (Monday)**.

Press the rotary knob to set the **08:10 - noon** times. You can program a second turning-on and -off time in the next line. You must confirm times that have not been programmed on **Mondays** by pressing the multifunctional rotary knob.

You can program the times for the other days in the same way.

Again press the **MODE** key to activate the selected times. Anzeige im Display

Display op display

Clock symbol = timer OFF

Clock symbol orange = timer set in advance (programmed next time of the day)

Clock symbol green = timer in operation (programmed next turning-off time of the day)

6. Settings in the Basic menu (basic settings)

AutoRT	21°C
PGM Mode	
Mo 01.01.12	11:55
Language	Ger
Werkseinst.	aus
Anlauf	aus
memory	aus
Nachlauf	060s
Filterzeit	950h
DatumZeit	

Press the **Mode** key (**PGM Mode** display). Select **Basic** by using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection.

A menu will be displayed with the different setting options.

6.1 Day / date / time

Press the multifunctional rotary knob and turn it to select and change the related data (24:00 hour notation).

6.2 Language

Press the multifunctional rotary knob and turn it to select and change the related data.

If required, you can switch from German to English (other languages will become available soon).

6.3 Factory set

Press the multifunctional rotary knob and turn it to select and change the related data.

The original data is restored.

6.4 Start up

Press the multifunctional rotary knob and turn it to select and change the related data.

After the air curtain has been switched on, the speed will switch to setting 1 during 3 seconds and, next, to setting 5 for another 3 seconds automatically. Next, the system will operate based on the set fan setting (default setting: **off**).

6.5 Memory

Press the multifunctional rotary knob and turn it to select and change the related data.

The memory function will ensure that all set values are saved if there is a power outage. (Default setting: **memory on**.)

6.6 Overrun

Press the multifunctional rotary knob and turn it to select and change the related data.

The turning-off delay at door contact operation can be set between 10 and 300 sec. (Default setting: **turning-off delay 60 sec.**)

6.7 Run time filter

Press the multifunctional rotary knob and turn it to select and change the related data.

The service life of the filter can be set between 0 - 990 hours (default setting: **950 hours**).

Again press the **MODE** key to activate the changed basic setting.

7. Error messages are displayed in orange

After the set service life has elapsed, **Change filter** will be displayed on the display. The integrated filter must be cleaned (essential). The filter can be vacuumed using a vacuum cleaner or can be washed with a mild soap solution.

NOTE! If the filter is cleaned by using water, wait until the filter has dried completely before you reinstall it.

Cancel error message

Press the **Mode** key (**PGM Mode** display). Select the **confirmation** option using the multifunctional rotary knob (the text colour will change from orange to black). Press the knob to confirm the selection.

Sensor defect and actual temperature display 01° C

The temperature sensor is faulty, not connected or the max. cable length has been exceeded.

Sensor defect and actual temperature display 55° C

Short-circuit in the temperature sensor.

Cancel error message

Once the fault in the temperature sensor has been resolved, the error message will be cancelled automatically and the normal operation of the air curtain system will be resumed.

9. Details



At most 10 air curtain systems can be managed with one control panel with the GTM II E control. Each printed circuit board is equipped with a coding switch for this purpose. The coding reads as follows:

0= MASTER, 1 - 9 = SLAVE.

NOTE: never use the same coding for two systems.

The error message will be generated as a collective fault in the MASTER system when a fault occurs.

Only the faulty system will be put out of service in relation to **Motor overheat**.

When the system is turned on, first the slave systems must be supplied with power.

Potential free messages

Function and fault messages are available on the printed circuit board in the form of change-over switches.

If input does not follow in the programming mode (**PRG Mode**) for more than 60 seconds, the mode will be terminated automatically.



Dimensions 70 x 70 x 27 mm

Temperature sensor:

The cable must be laid separately and must be as short as possible (at most 15 m) to ensure that the sensor is influenced as little as possible by electromagnetic radiation.

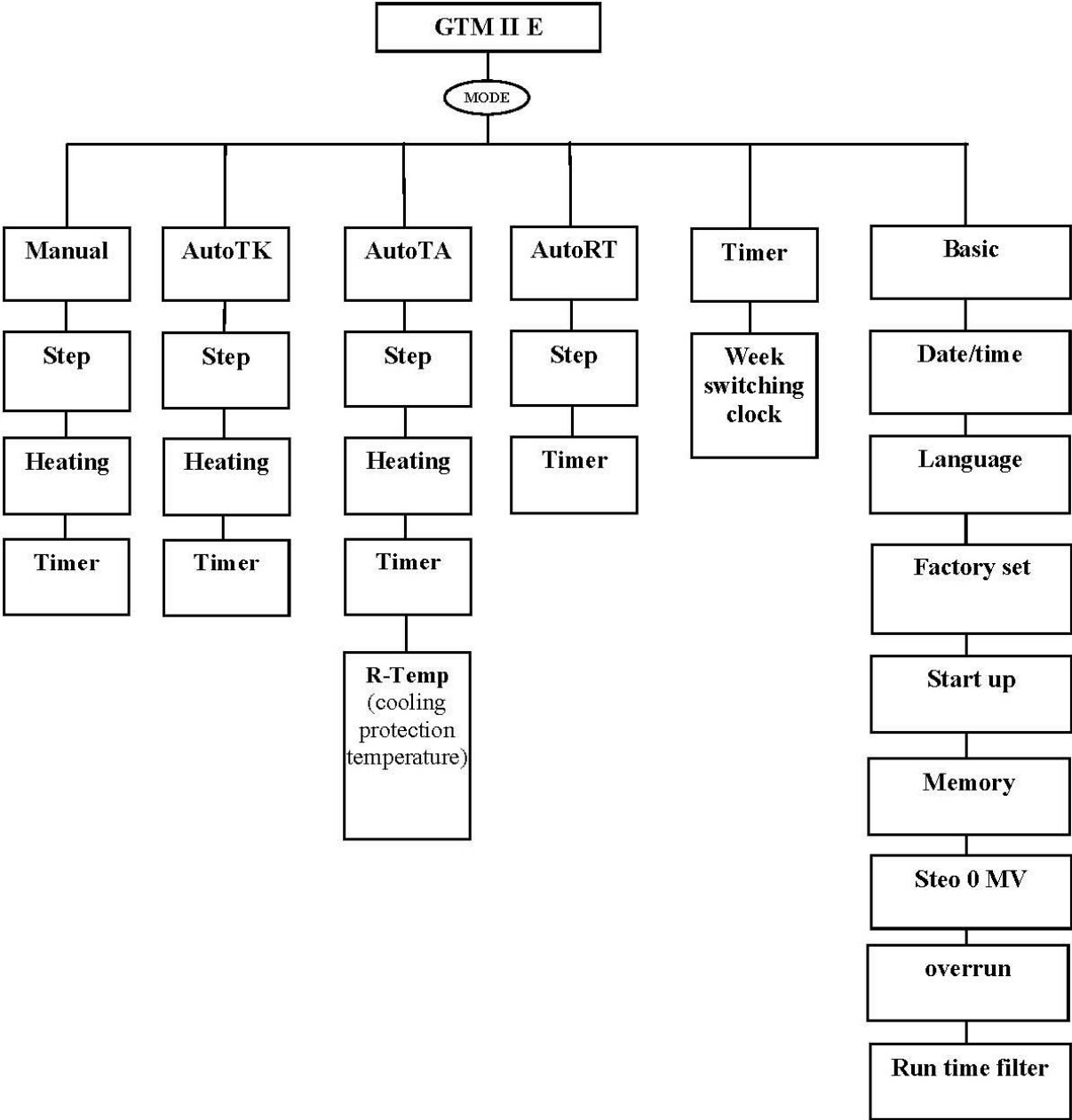
The sensor cable must be shielded in unfavourable situations or when the cable lengths are different (at most 20 m).

10. Troubleshooting

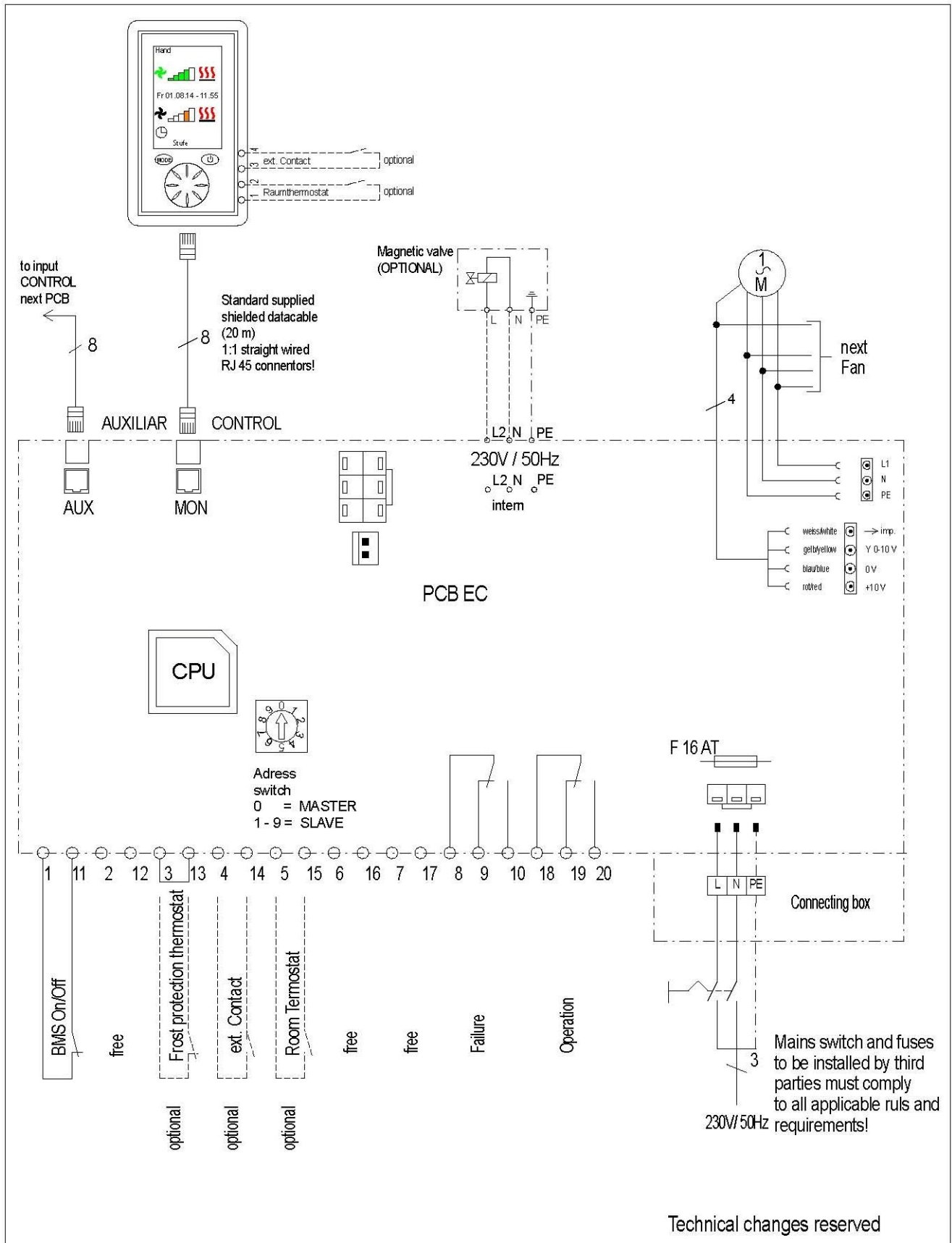
Error	Display	Possible causes	Solution
System is not working	Display off	No grid power supply Not turned on	Turn on the grid power supply Turn on the system
	Keine freigabe (no release)	Fault in DDC release	See point 6
	Frostalarm (frost protection)	Air supply temperature too low	Increase the air supply temperature
	Motortemperatur (motor temperature)	Fan faulty	Replace the fan (see point 7)
Insufficient airflow speed		Air supply filter dirty	Clean the filter
	com error (communication error)	Error in data transfer	Reset

The air curtain system must be reset when a fault occurs. Disconnect the power supply from the whole system. Wait 10 seconds and again turn on the system (also see point 9).

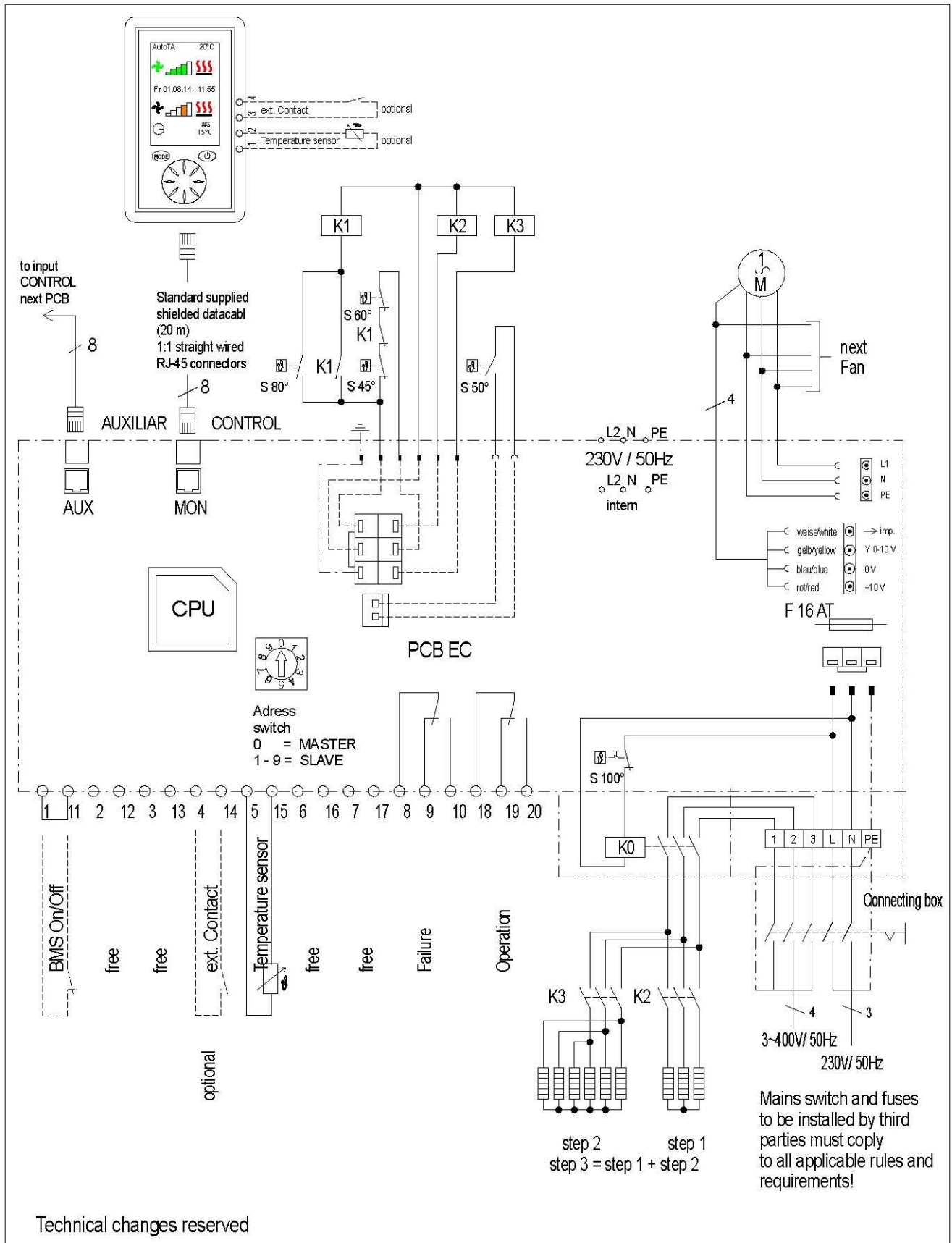
10. Schedule



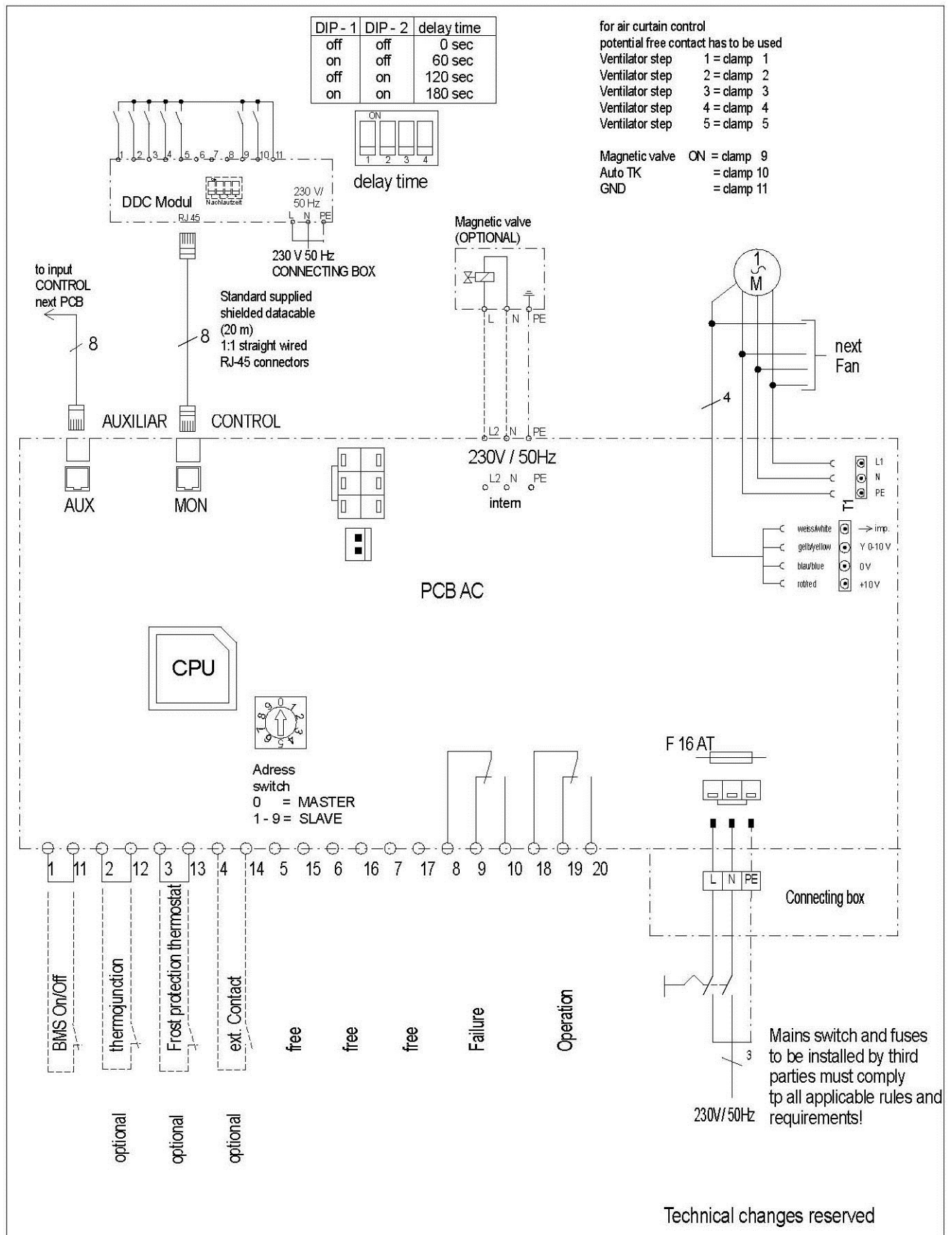
WIRING DIAGRAM AIR CURTAIN “PUMP-WARM WATER PWW”



WIRING DIAGRAM AIR CURTAIN "ELECTRO"



WIRING DIAGRAM AIR CURTAIN **"PUMP-WARM WATER PWW"** WITH DDC-MODUL



WIRING DIAGRAM AIR CURTAIN “ELECTRO” WITH DDC-MODUL

