

TEH 200 / TEH 300 / TEH 400

EN

OPERATING MANUAL
ELECTRIC HEATERS



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Notes regarding the operating manual

Symbols



Hazardous electric current!

Warns about hazards from electric current which can lead to injuries or even death.



Danger!

Warns of a hazard which can result in moderate to severe injuries.



Caution!

Warns of a hazard which can result in minor injuries or property damage.

TEH 200

The current version of the operating manual can be found at:

<http://download.trotec.com/?sku=1410000151&id=1>



TEH 300

The current version of the operating manual can be found at:

<http://download.trotec.com/?sku=1410000156&id=1>



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Warranty and liability

Damages caused by incorrect use by untrained people or start-up by unauthorised people are excluded from the warranty.

The device complies with the fundamental health and safety requirements of the applicable EU regulations and was tested at the factory for perfect functionality multiple times. However, if faults in the functionality occur and cannot be remedied with the measures in the chapter Errors and faults, please get in touch with your dealer or distributor. When making a warranty claim, supply the device number (see the rear of the device). When manufacturer's instructions or legal regulations have not been followed, or after unauthorised changes to the device are made, the manufacturer is not responsible for the resulting damages. Changes to the device or unauthorised replacement of individual parts can drastically impact the electrical safety of this product and leads to the forfeit of the warranty. Liability does not extend to damages to people or property caused by the device being used other than as described in the instructions in this operating manual. Subject to changes to technical design and model changes as part of constant development and product improvement without prior notice.

No liability is accepted for damages resulting from improper use. In such cases, entitlements to a warranty are then also forfeited.

Safety

Carefully read the operating manual before using the device and keep it within reach!



Danger!



Improper use of the electric heater can result in severe injuries due to burns, fire hazard or electric shocks.

- Do not use the device in potentially explosive rooms and do not install it there.
- Do not use the device in atmospheres containing oil, sulphur, chlorine or salt.
- This appliance is not a toy!
- Only put up the device in an upright, stable position on firm ground.
- Ensure that the air inlet and outlet are not obstructed.
- Ensure that the side of the device where the air inlet is found is kept free of dirt and loose objects.
- Never reach or put objects into the device.
- Do not cover or transport the device during operation.
- Do not use the device with wet or damp hands.
- Ensure that all electric cables outside of the device are protected from damage (e.g. from animals). Never use the device if the cable or power connection is damaged!
- Only use connecting cables which are appropriate to the device power consumption, the length of its cable and its use. Avoid electrical overload.
- Disconnect the device from the mains, if it is not in use.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Observe the storage and operating conditions (see chapter Technical data).
- Unplug the device from the mains before starting with maintenance, service or repair work.
- Only use original spare parts, for otherwise safe and functional operation cannot be ensured.

Intended use

Only use the electric heater TEH 200 / TEH 300 / TEH 400 for heating atmospheric air (intake temperature: -20 °C to max. +4 °C) whilst adhering to the technical data.

Improper use

The electric heater TEH 200 / TEH 300 / TEH 400 is not suited for installation in fluids or on flooded or boggy grounds. The device must not be used for sucking in fluids, e.g. from filled tanks or basins.

The devices must not be operated when stacked on top of one another for storage.

Any unauthorised changes, modifications or alterations to the device are forbidden.

Personnel qualifications

People who use this device must:

- be aware of the dangers that occur when working with electric heaters.
- have read and understood the operating manual, especially the Safety chapter.

Electrically skilled person

Electrically skilled personnel must be able to read and understand electric circuit diagrams, to put electrical systems into service and to maintain them, to wire control cabinets, to ensure the functionality of electrical components and to identify possible hazards from electrical and electronic systems.

Instructed person

Instructed persons have been informed of the tasks they were entrusted with as well as of potential hazards resulting from inappropriate behaviour. They are allowed to operate and transport the device and perform simple maintenance activities (changing the filter, opening the control box).

The device is to be maintained and looked after by instructed personnel.

Residual risks



Hazardous electric voltage!

Work on the electrical components must only be carried out by an authorised specialist company!



Hazardous electric voltage!

Before any work on the device, remove the mains plug from the mains socket!



Danger!

Improper handling entails a risk of burning. Only use the device as intended!



Danger!

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



Caution!

The air outlet grille becomes very hot during operation and cause burns if touched! Do not touch it and keep a distance.



Caution!

In order to avoid overheating, the heating unit must not be covered!



Caution!

To avoid damages to the device, never operate the device without an inserted air filter!

Behaviour in the event of an emergency

1. Immediately switch the device off via the main emergency stop switch or the emergency stop at the distributor.
2. Disconnect the device from the electric circuit.
3. Do not reconnect a defective device to the mains.

Information about the device

Description of the device

The electric heater was designed as a robust, mobile unit also to be positioned outdoors.

The device comes equipped with two lockable swivel castors (5) and two trestle rollers (7) each. Forklift pockets and crane lugs are attached to the housing as transport aids, enabling convenient transport and space-saving storage by stacking up to 3 devices on top of each other.

The housing is designed as welded frame construction and provided with partially removable steel sheet panels. The electrical control box made of steel is mounted in horizontal position, protected between the stacking handle bars on the housing, and contains all switching devices, operating elements, indicator lights, safety devices and the control unit. All steel and sheet metal parts are galvanized and powder-coated.

The device is designed ready-to-install and comes with all the electrical and mechanical components as well as safety installations required for safe and functional operation.

To ensure safe transport and operation, the device is also equipped with a shock protection frame.

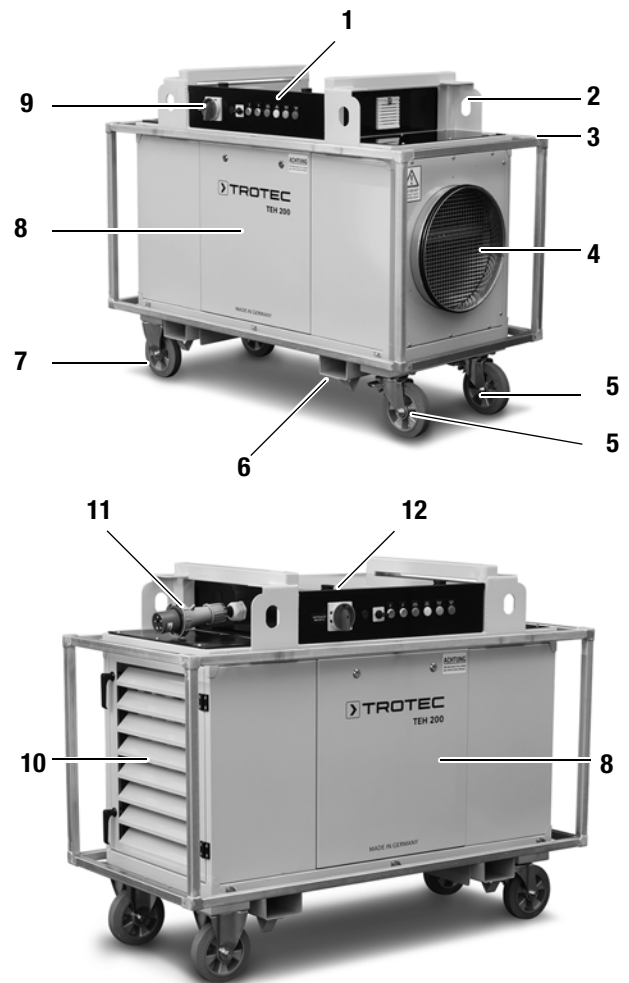
Functioning principle

The air is taken in by the fan via the integrated bag filter (10) and heated by means of the multi-stage electric heating. Four different temperature levels can be selected between 0 and 100%. These are kept constant by the integrated controller with the maximum outlet temperature being reduced to approx. 60 °C (± 5 °C).

Thanks to the two-stage fan operation a higher temperature increase can be achieved by selecting the lower stage (approx. 2/3 of the nominal air volume). The integrated, electronically controlled control unit with air volume flow measurement and automatic rotational speed control of the fan ensures nearly constant volumetric flow rates covering a wide load range (e.g. for variable hose lengths).

The temperature increase refers to the sucked in air temperature (usually the ambient temperature) and is increased according to the preselection. The temperature sensors at air inlet and outlet transmit the current temperature values to the control unit, which then, depending on the demand, keeps the preselected temperature increase constant by means of the control and operation of individual heating elements or the entire heater.

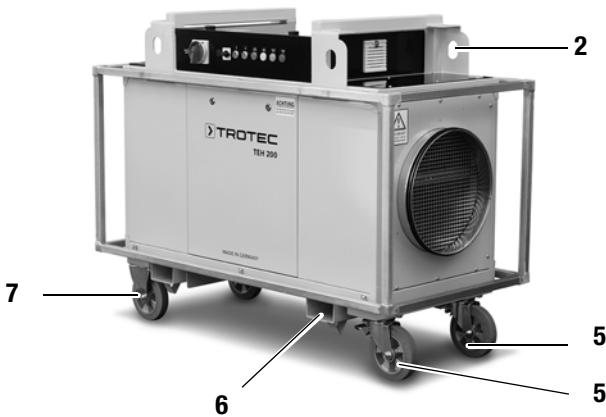
Device depiction



No.	Designation
1	Control panel with electrical control box
2	Transport lug
3	Shock protection frame
4	Air outlet with hose connection
5	Swivel castor (lockable)
6	Forklift pockets
7	Trestle rollers/ fixed castors
8	Lateral cover panel
9	Main switch with emergency stop function
10	Air inlet with weather protection grid and air filter access
11	Mains connection: CEE plug, 5-pin
12	Cover flap electrical control box

Transport and storage

- Remove all packing materials which serve to protect the device during transport.
- Should the electric heater be damaged, please contact the responsible dealer or manufacturer, where the purchase was made.
- The electric heater may only be lifted at the points provided with lifting gear (forklift pockets (6), transport lugs (2)) intended for handling. The carrying capacity of the lifting gear must be suitable for the weight of the electric heater (see Technical data).



- For simple transport to the respective operating site the devices are further equipped with partially steerable rollers.
 - Only wheel the device on firm, level ground.

The following should be observed **before** transporting the device using the **rollers**:

Caution! Trip hazard! Make sure that nobody is situated in the immediate proximity.

The following should be observed **before** transporting the device using **lifting gear**:

Danger! Risk of injury from suspended loads. Make sure that nobody is situated in the immediate proximity.

- Only instructed persons are allowed to perform the transport by use of lifting gear.
- Consider the centre of gravity when transporting the load.

The following should be observed **after** transporting the device:

- Lock the swivel castors (5)!

Storage

- Store the cleaned device in a dry location and protect it against dust.
- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Have the device checked once a year by an electrically skilled person at any rate.

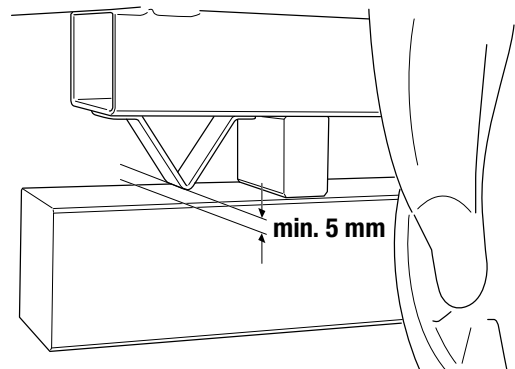
The device can be stacked for storage purposes. In doing so, observe the following:

- Only use suitable lifting gear.
- Make sure that the rollers of the device at the bottom are locked and the device cannot move. To protect the rollers and the frame, the bottommost device is to be jacked up as illustrated below.



Caution!

To prevent damage to the device, the bottom strut should not be allowed to rest on the support. A minimum distance of 5 mm to the bottom must be observed!



- Make sure that the wheels of the device to be stacked are pointing inwards as is indicated in the following figure.



- The maximum amount of devices to be stacked on top of one another is 3 (for transportation in a truck: max. 2 devices).
- Place the device at the bottom on firm, level ground.

Start-up

Installation of the device

- Position the device on firm, dry and level ground. Depending on the floor load capacity a panel for weight distribution is to be provided.
- When setting up the device, ensure a sufficient distance for air inlet and outlet as well as for operation (see Technical data).
- Lock the swivel castors and secure the device against rolling away.
- Ensure that extension cords are completely unrolled.
- When positioning the device outdoors, make sure that no water can enter the device through the air outlet. Connect an air hose to the air outlet to minimize the risk.

Inserting the air filter



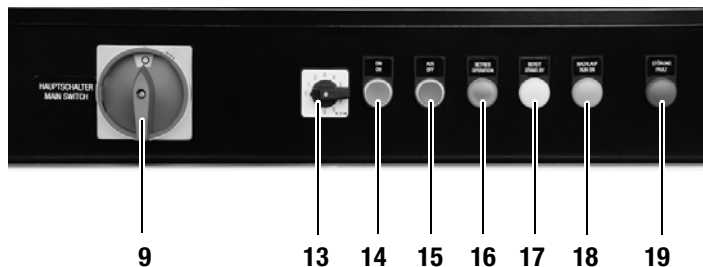
Caution!

To avoid damages to the device, never operate the device without an inserted air filter!

- Check whether the air filter is inserted before switching the device on.

Operation

Control panel



No.	Designation
9	Main switch with emergency stop function Position 0: Device is switched off. Position I: The device is switched on.
13	Selection step switch
14	Button EIN-ON
15	Button AUS-OFF
16	Lamp BETRIEB-OPERATION
17	Lamp BEREIT-STAND BY
18	Lamp NACHLAUF-RUN ON
19	Lamp STÖRUNG-FAULT

Note:

The main switch serves for switch-on and may **only** be used as emergency stop switch for disconnection from the mains **in case of an emergency**. For normal switch-off please use the AUS-OFF button, which initiates the rundown function (NACHLAUF-RUN ON lamp (18) illuminated). Only disconnect the device for transport or storage via the main switch **at the end of the rundown period**.

Switch-on of the device

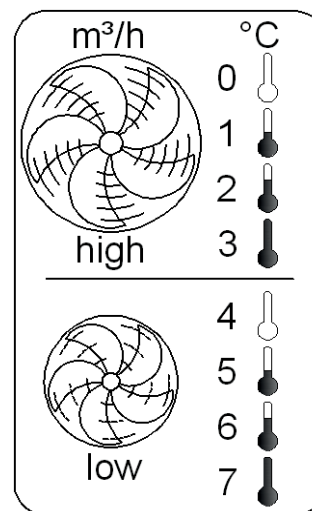
Requirements

- The side covers, the electrical control box and the weather protection grid are closed.
- The bag filter is built in correctly.
- Air inlet and air outlet are free from objects and/or obstructions.
- The device is secured against rolling away.

1. Insert the mains plug into a properly secured mains power socket. Observe the rotating field (clockwise rotation).
2. Rotate the mains switch (9) to position "I".
 - The control unit is activated.
 - The device is ready for operation.
 - The BEREIT-STAND BY lamp (17) lights up.
3. Select the desired temperature level via the selection step switch (13).

Note:

Selecting the temperature level does not limit the electric current consumption from the mains!



- 0 = 100 % air flow rate and no temperature increase
- 1 = 100 % air flow rate and low temperature increase ($\Delta T = \text{approx. } 15 \text{ } ^\circ\text{C}$)
- 2 = 100 % air flow rate and moderate temperature increase ($\Delta T = \text{approx. } 25 \text{ } ^\circ\text{C}$)
- 3 = 100 % air flow rate and maximum temperature increase ($\Delta T = \text{approx. } 40 \text{ } ^\circ\text{C}$)
- 4 = 66 % air flow rate and no temperature increase
- 5 = 66 % air flow rate and low temperature increase ($\Delta T = \text{approx. } 20 \text{ } ^\circ\text{C}$)
- 6 = 66 % air flow rate and moderate temperature increase ($\Delta T = \text{approx. } 40 \text{ } ^\circ\text{C}$)
- 7 = 66 % air flow rate and maximum temperature increase ($\Delta T = \text{approx. } 60 \text{ } ^\circ\text{C}$)

4. Actuate the green EIN-ON button (14).
 - The green BETRIEB-OPERATION lamp (16) will be illuminated while the BEREIT-STAND BY lamp (17) goes out.
 - The electric heater starts up in the selected temperature level.

Note:

The air outlet temperature is electronically limited to approx. $60 \text{ } ^\circ\text{C} (\pm 5 \text{ } ^\circ\text{C})$ regardless of the selection. In case of the standard models the levels 0 to 7 are engaged. In case of devices without air volume switching only the levels 0 to 3 are engaged. The levels 8 and upwards are reserved for special designs.

Switch-off

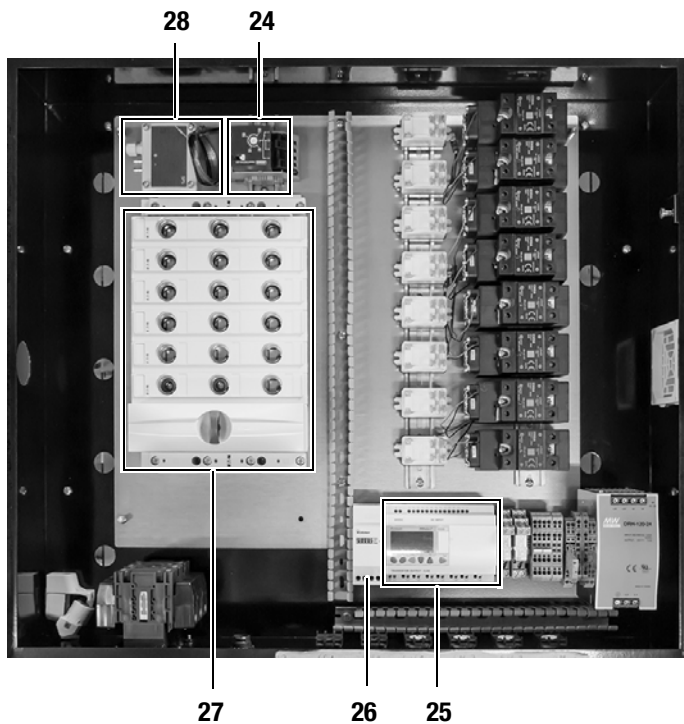
1. Press the red AUS-OFF button (15).
 - The heating switches off.
 - The fan operates in rundown mode, e.g. the fan runs on until the heating elements have cooled down to approx. 30 °C.
 - The BETRIEB-OPERATION lamp (16) goes out.
 - The NACHLAUF-RUN ON lamp (18) is illuminated.
 - The BEREIT-STAND BY lamp (17) is illuminated.
 - Restart can be carried out at any time.
2. Wait until rundown operation is completed.
 - The NACHLAUF-RUN ON lamp (18) goes out.
 - The device is again ready for operation or else ready for switch-off via the main emergency stop switch (9).

Shutdown

1. Proceed as described in section Switch-off.
2. Set the main emergency stop switch (9) to position "0".

Electrical control box

The following components are located in the control box:

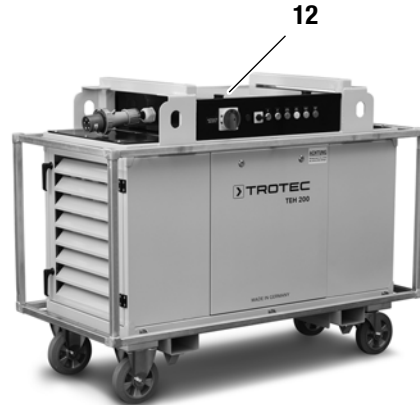


No.	Designation
24	Safety temperature limiter with reset switch
25	Control
26	Analogous operating hours counter
27	Fuses
28	Pressure sensor

Opening the electrical control box

The electrical control box may only be opened by instructed persons. Only a qualified electrician is allowed to perform repair work on the electrical system.

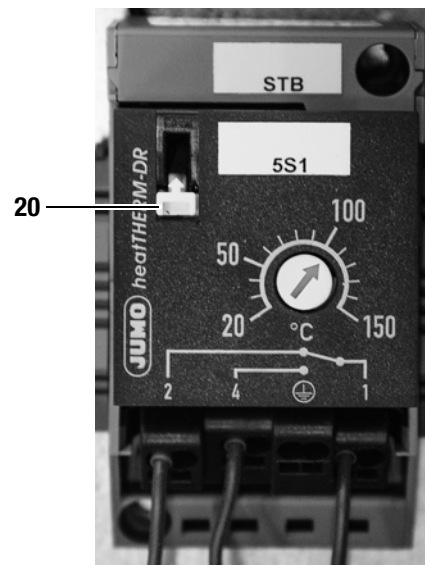
1. Open the cover flap at the electrical control box (12).



Overtemperature protection

For overheating protection the electric heater comes equipped with several safety elements:

- Disconnection of the electric heating from the mains when falling below the minimum air volume.
- Reduction of the maximum air outlet temperature at approx. 65 °C.
- Rundown operation of the fan after switch-off to dissipate the accumulated heat at the electric heating until the air outlet temperature has dropped to below approx. 30 °C.
- Switch-off of the device by means of a safety temperature limiter.
 - The safety temperature limiter (24) can only be set back by actuating the integrated reset switch (20). This switch is located on the left side of the electrical control box.



Control

The control unit is located inside the electrical control box. The control unit displays further information regarding the operating condition of the device. Next to it is the analogous operating hours counter (26).

The control unit ensures the constant regulation of the volumetric flow, even when connecting different hose lengths etc.

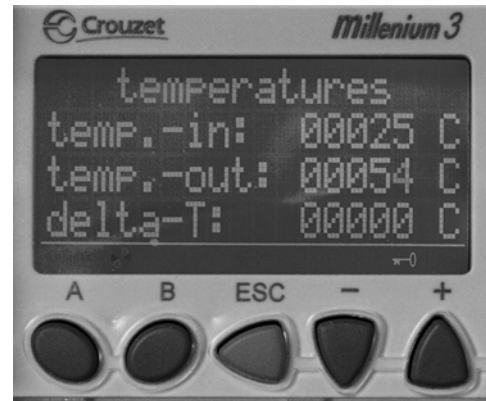
The control unit can also be used to display the current parameters for volume flow, pressure and temperature. Additionally, further faults are also indicated here.

For reading the control unit or operating hours counter first the electrical control box must be opened.

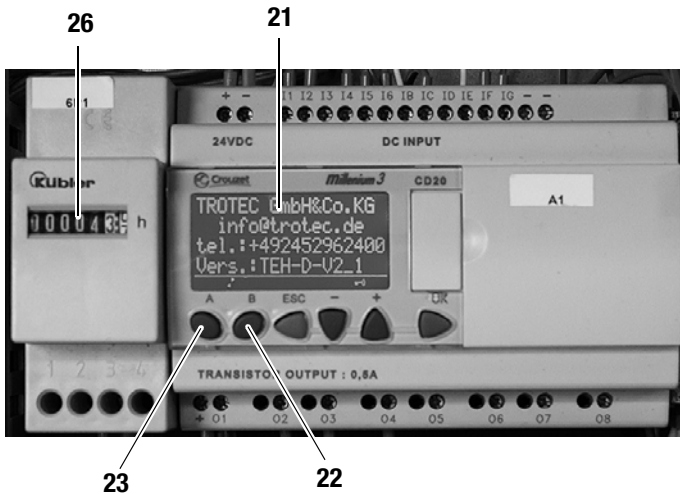
The current parameters and faults are indicated on the display (21).

From the start screen the buttons A (23) and B (22) can be used to browse through the menu.

- Input temperature in °C (temp.-in),
- Output temperature in °C (temp.-out),
- Output temperature in °C (delta-T):



- Digital operating hours display in h (run hours)



The following parameters can be called up:

- Volumetric flow in m³/h (airflow):



Errors and faults

The accurate functionality of the device was tested during production a number of times. If malfunctions occur nonetheless, check the device according to the following list:

The STÖRUNG-FAULT lamp (19) lights up directly after switch-on of the device:

- Aborted rundown from previous operation, which has led to tripping of the safety temperature limiter. Actuate the reset switch (20) of the safety temperature limiter and restart the device.
- Malfunction in the software of the control unit or the frequency converter (optional), which prevents the device from starting. Acknowledge the fault by means of the AUS-OFF button (15). If the STÖRUNG-FAULT lamp (19) continues to be lit, switch the device off via the main switch (9) and back on again after approx. 10 seconds.

The STÖRUNG-FAULT lamp (19) lights up during operation:

Fault	Cause	Remedy
Insufficient air flow rate	Blocked filter	Change filter.
	Air resistance in ensuing air line too high (length, bends, foreign objects etc.)	Reduce air resistance.
No sign of heating	Heating defective	Have the heating repaired by a qualified electrician.
	Insufficient air flow rate	See fault Insufficient air flow rate.
Thermostat tripped	Insufficient air flow rate	See fault Insufficient air flow rate.
	Defective thermostat.	Have the thermostat replaced by a qualified electrician.
	Error in the sensor circuit	Have the sensor circuit checked by a qualified electrician.
	Temporary mains voltage drop or power failure and consequent failure of the rundown	Actuate reset switch (20) of the thermostat and restart immediately. If no warmth is required, set the selection step switch to position 0.
Electric installation	Failure of one or more electrical components	Have the electric installation checked and, if required, defective parts replaced by a qualified electrician.
Pressure sensor tripped	Fallen below minimum air volume	See fault Insufficient air flow rate.

Faults control unit

For reading the fault messages at the control unit first the electrical control box must be opened.

The STÖRUNG-FAULT lamp (19) also serves as collective fault message for the control. The following faults will be displayed in detail on the screen of the control unit:

- Motor or fan fault.



- Fault in the air volume flow:
 - Pressure sensor has tripped.



- Critical overtemperature:
 - Safety temperature limiter has tripped.



Note:

In case of all faults the heating is switched off, but not disconnected from the mains. After elimination of the fault, it is to be acknowledged via the AUS-OFF button (15) (Reset).

Maintenance

Trotec electric heaters are designed for long hours of operation with minimum maintenance effort. Safe operation of the device requires all built-in components, especially the safety temperature limiter (STB), to be checked and cleaned after 6 months at the latest or after every 4000 operating hours as well as all damaged components to be replaced.

To clean the inside of the housing, the fan and further electrical components need to be protected from water ingress with the appropriate means!

Activities required before starting maintenance

- Do not touch the mains plug with wet or damp hands.
- Wait for the end of the rundown period if the device was in operation beforehand.
- Switch off the device at the main switch.
- Before any work, detach the mains plug!



Maintenance tasks and repair work may only be performed by qualified electricians or Trotec.



Cleaning the housing

Clean the device with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Do not use any sprays, solvents, aggressive cleaning agents or abrasive cleaners. Only use clean water to moisten the cloth.

Changing the filter

The filter change intervals depend on the degree of air pollution and the filter quality. Dirty filters impair the performance ability of the electric heater. Therefore, in case of heavily contaminated intake air, they are to be inspected at least once a week, otherwise at least monthly and replaced whenever necessary.

1. Open the weather protection grid by means of the two handles.



2. Remove the bag filter.



3. Install the new bag filter.
4. Then close the weather protection grid again.

Maintenance intervals

Maintenance and care interval	before every start-up	as needed	at least every 2 weeks	at least every 4 weeks	at least every 6 months	at least annually
Checking of air inlets and outlets for dirt and foreign objects and cleaning if necessary	X					
Cleaning the exterior		X				X
Visual inspection of the inside of the device for dirt		X		X		
Checking of air inlet grid and air filter for dirt and foreign objects and cleaning or replacement if necessary	X		X			
Air filter replacement					X	
Checking for damage	X					
Checking the safety temperature limiter					x	
Checking of attachment screws		X				X
Test run						X

Maintenance and care log

Device type:

Device number:

Maintenance and care interval	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Checking of air inlets and outlets for dirt and foreign objects and cleaning if necessary																
Cleaning the exterior																
Visual inspection of the inside of the device for dirt																
Checking of air inlet grid and air filter for dirt and foreign objects and cleaning or replacement if necessary																
Air filter replacement																
Checking for damage																
Checking of attachment screws																
Test run																
Remarks:																

1. Date:	2. Date:	3. Date:	4. Date:
Signature:	Signature:	Signature:	Signature:
5. Date:	6. Date:	7. Date:	8. Date:
Signature:	Signature:	Signature:	Signature:
9. Date:	10. Date:	11. Date:	12. Date:
Signature:	Signature:	Signature:	Signature:
13. Date:	14. Date:	15. Date:	16. Date:
Signature:	Signature:	Signature:	Signature:

Technical annex

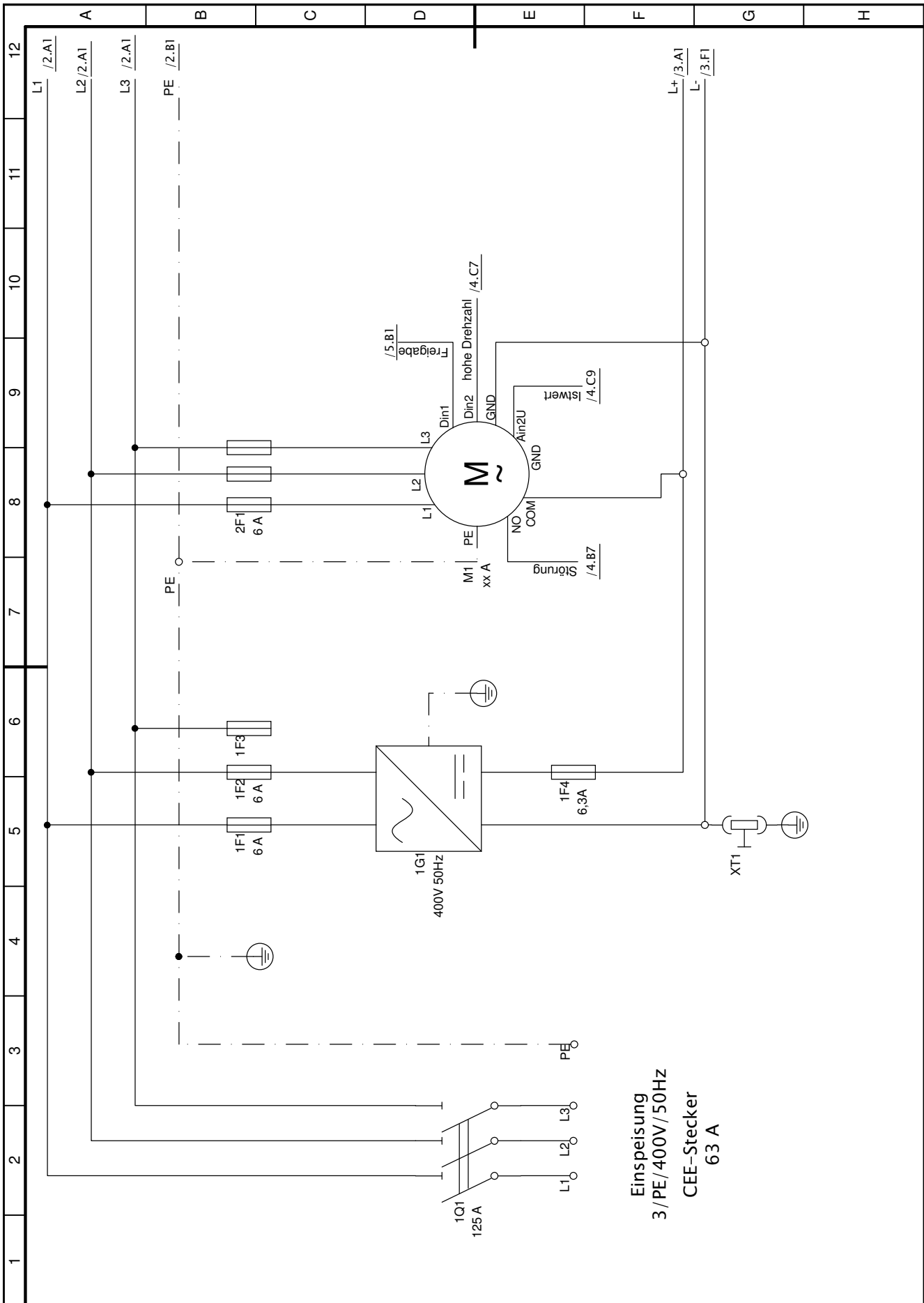
Technical data

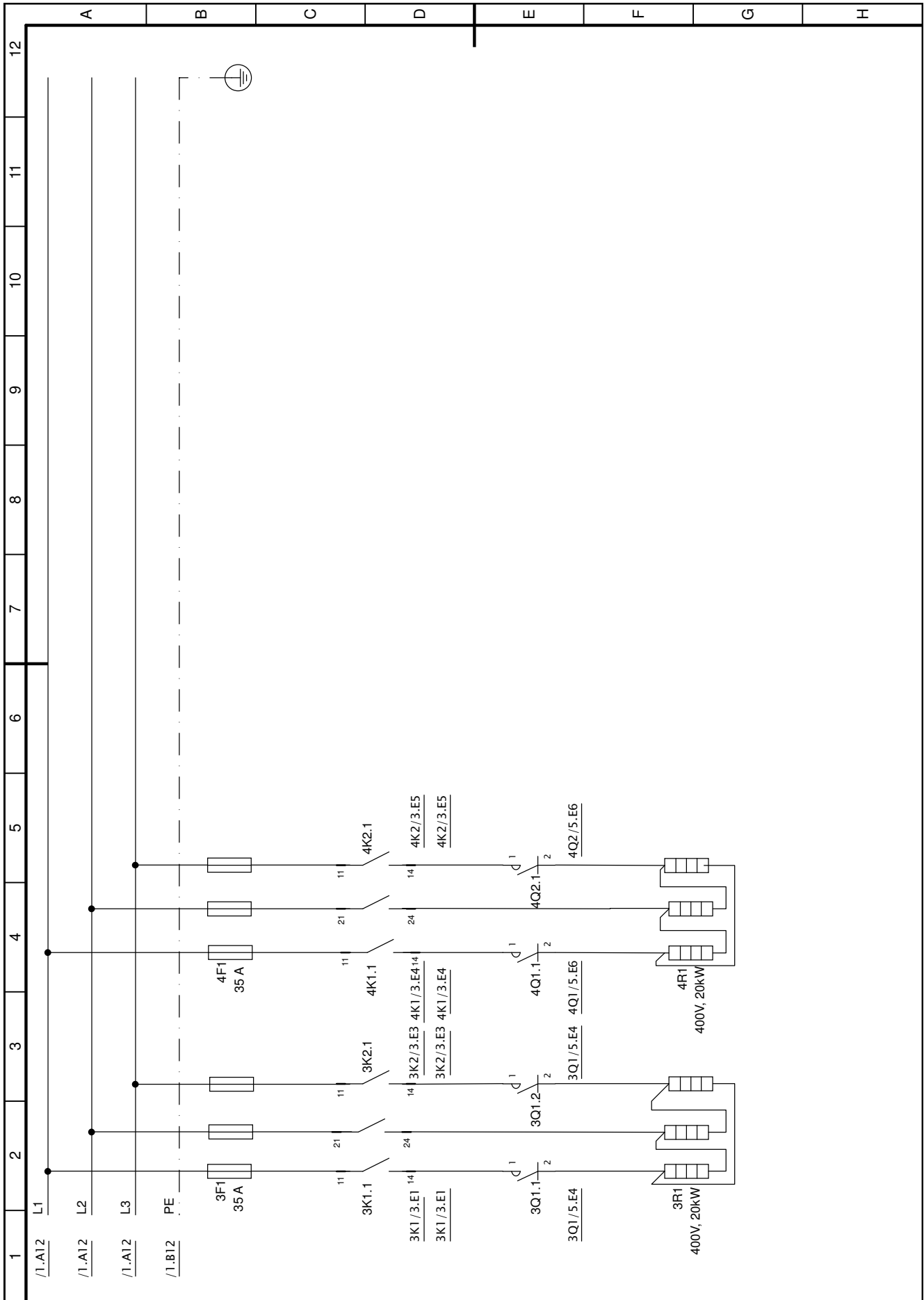
Parameter	Value			
	TEH 200	TEH 300	TEH 400	
Model (version 3.0)	TEH 200	TEH 300	TEH 400	
Article number	1.410.000.150	1.410.000.155	1.410.000.160	
Max. amount of air	3,000 m ³ /h	6,000 m ³ /h	9,000 m ³ /h	
Heating capacity	40 kW (34,394 kcal)	80 kW (68,788 kcal)	120 kW (103,181 kcal)	
Air pressure (max. compression)	600 Pa	600 Pa	600 Pa	
Max. air outlet temperature *	65 °C	65 °C	65 °C	
Max. temperature increase (ΔT)	60 °C	60 °C	60 °C	
Permissible intake temperature	-20 °C to max. +40 °C	-20 °C to max. +40 °C	-20 °C to max. +40 °C	
Control	8-step selection switch for air flow rate and temperature			
Step 0	Air flow rate	3,000 m ³ /h	6,000 m ³ /h	9,000 m ³ /h
	Temperature increase (ΔT)	-	-	-
Step 1	Air flow rate	3,000 m ³ /h	6,000 m ³ /h	9,000 m ³ /h
	Temperature increase (ΔT)	15 °C	15 °C	15 °C
Step 2	Air flow rate	3,000 m ³ /h	6,000 m ³ /h	9,000 m ³ /h
	Temperature increase (ΔT)	25 °C	25 °C	25 °C
Step 3	Air flow rate	3,000 m ³ /h	6,000 m ³ /h	9,000 m ³ /h
	Temperature increase (ΔT)	40 °C	40 °C	40 °C
Step 4	Air flow rate	2,000 m ³ /h	4,000 m ³ /h	6,000 m ³ /h
	Temperature increase (ΔT)	-	-	-
Step 5	Air flow rate	2,000 m ³ /h	4,000 m ³ /h	6,000 m ³ /h
	Temperature increase (ΔT)	20 °C	20 °C	20 °C
Step 6	Air flow rate	2,000 m ³ /h	4,000 m ³ /h	6,000 m ³ /h
	Temperature increase (ΔT)	40 °C	40 °C	40 °C
Step 7	Air flow rate	2,000 m ³ /h	4,000 m ³ /h	6,000 m ³ /h
	Temperature increase (ΔT)	60 °C	60 °C	60 °C
Input voltage	3~/PE - 400 V / 50-60 Hz	3~/PE - 400 V / 50-60 Hz	3~/PE - 400 V / 50-60 Hz	
Max. current consumption	61 A (41.5 kW)	123 A (84 kW)	182 A (125.5 kW)	
Fusing / mains connection	63 A / CEE 63 A, 5-pin	125 A / CEE 125 A, 5-pin	200 A termination	
Sound pressure level (3 m distance)	75 dB (A)	76 dB (A)	78 dB (A)	
Hose connector	Ø 450 mm	Ø 450 mm	Ø 600 mm	
Suitable for hose lengths to	100 m	100 m	100 m	
Mobility	wheeled / forklift / crane	wheeled / forklift / crane	wheeled / forklift / crane	
Dimensions (length x width x height)	1,625 x 800 x 1,270 (mm)	1,625 x 800 x 1,270 (mm)	2,000 x 1,300 x 1,450 (mm)	
Weight	230 kg	245 kg	540 kg	
Cable cross-section, min.	16 mm ²	50 mm ²	95 mm ²	
Overheating protection	yes	yes	yes	
Minimum distance to all sides during operation and maintenance	1 m	1 m	1 m	

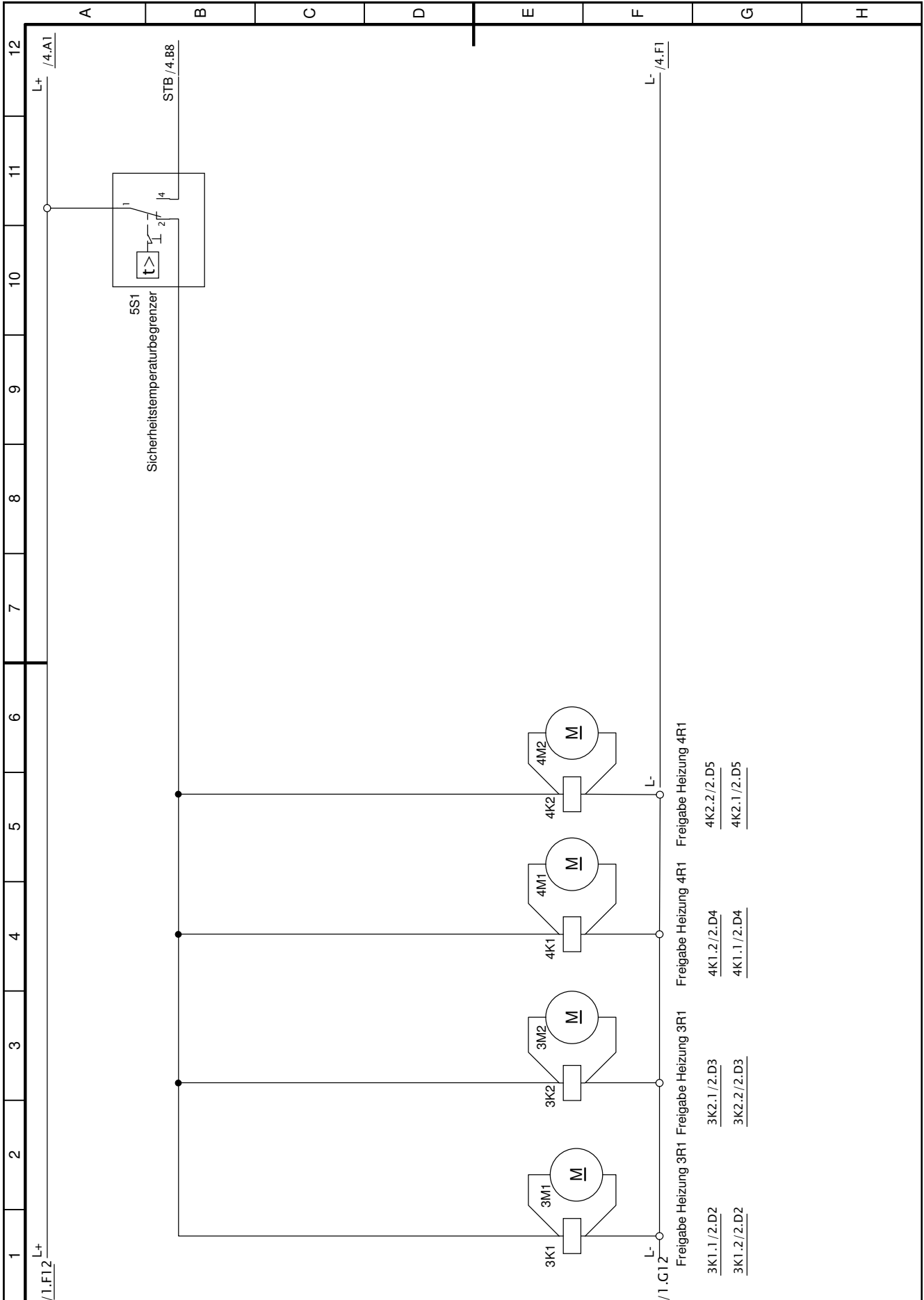
*The maximum air outlet temperature of the standard version is automatically electronically limited to 65 °C. Other versions with higher air outlet temperatures are optionally available on request.

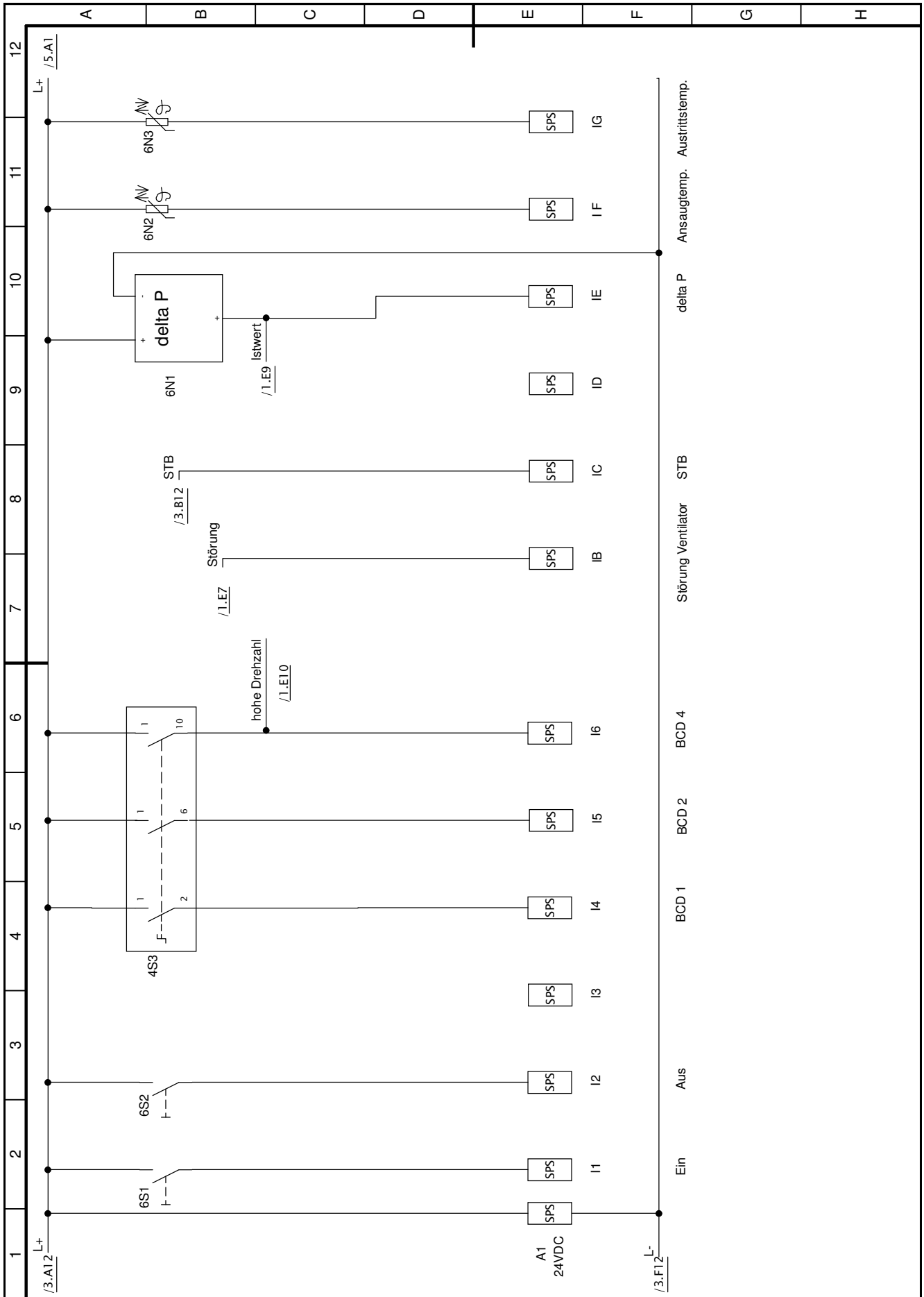
** All of the technical data +/- 10%.

Circuit diagram TEH 200

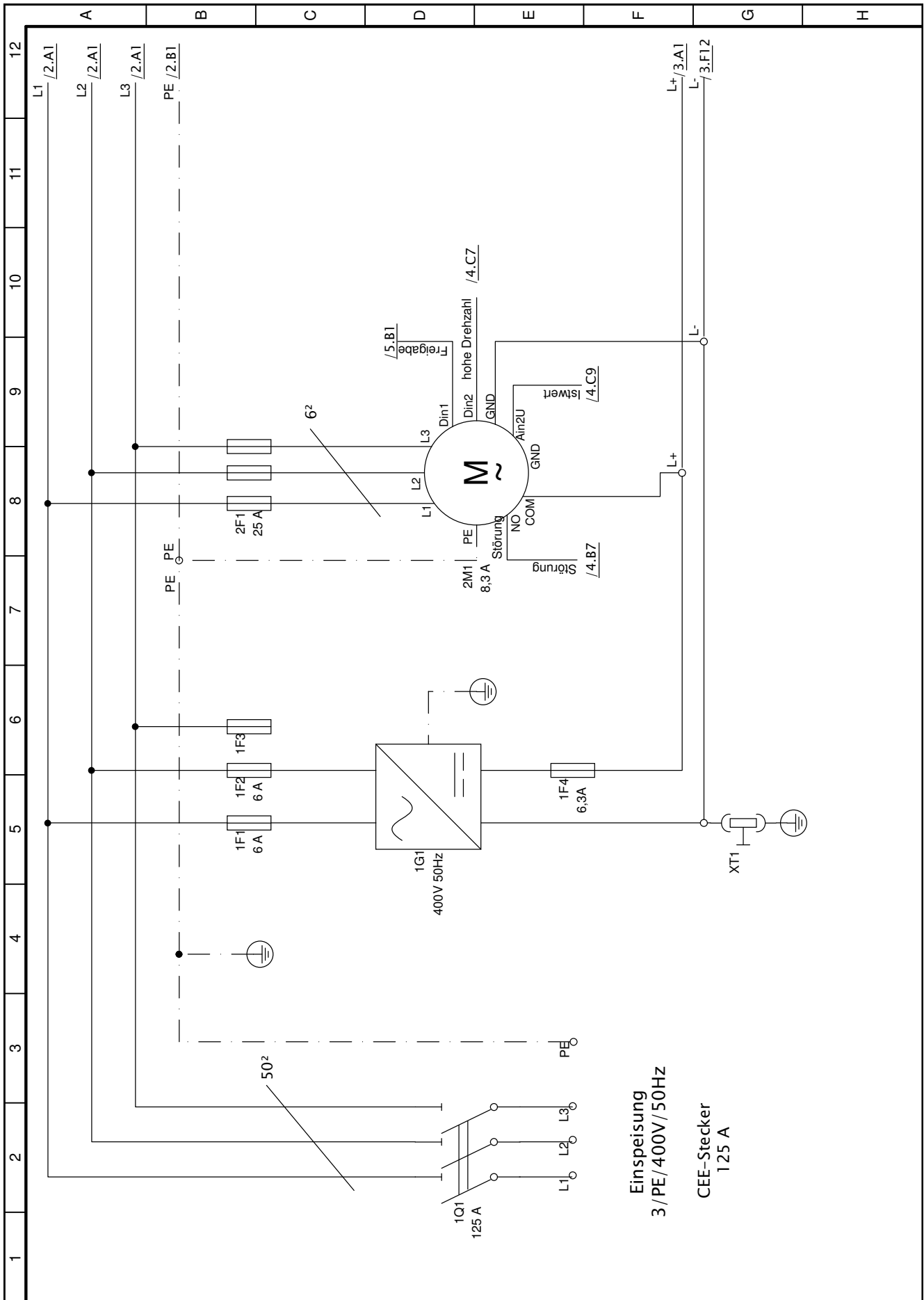


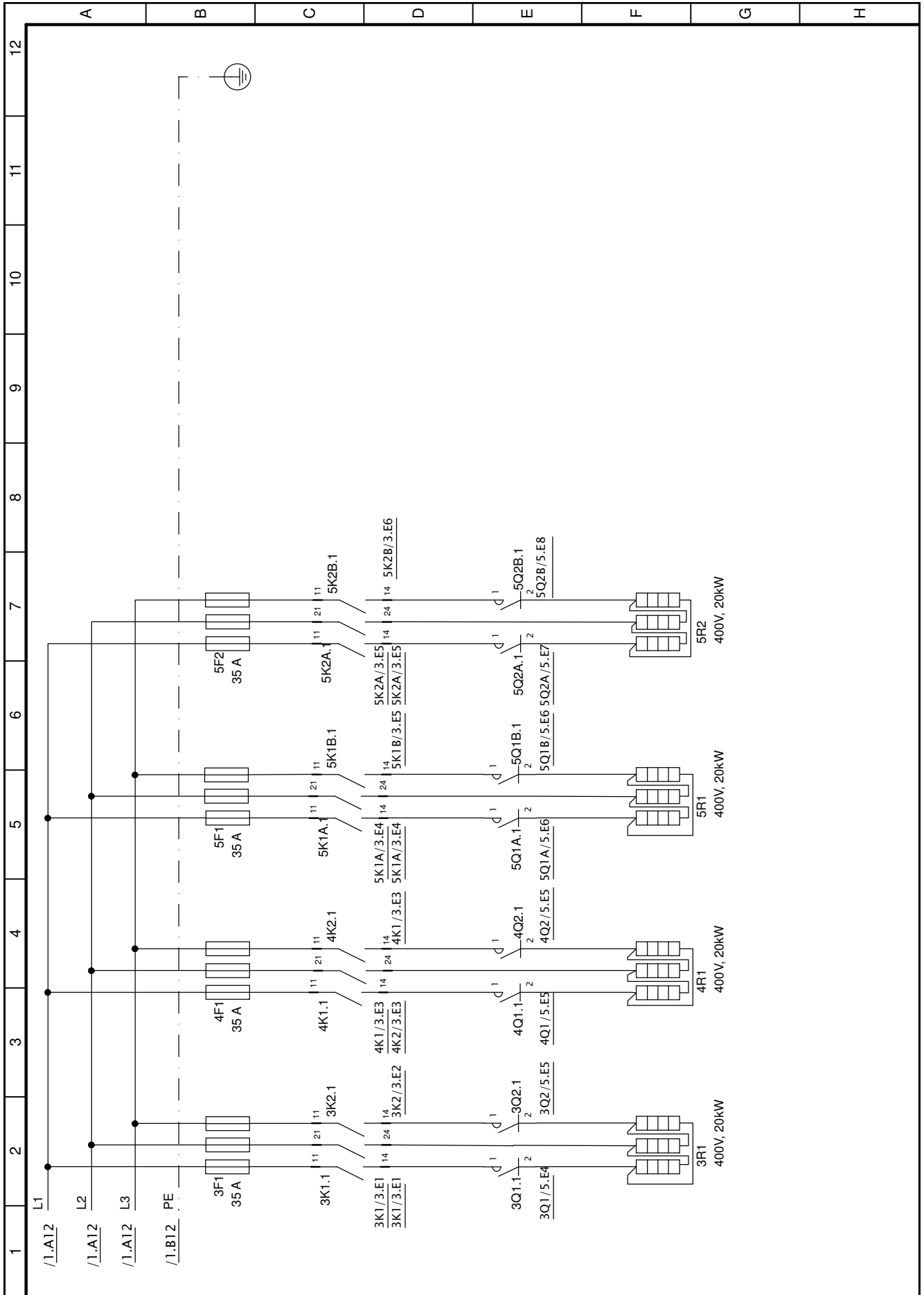


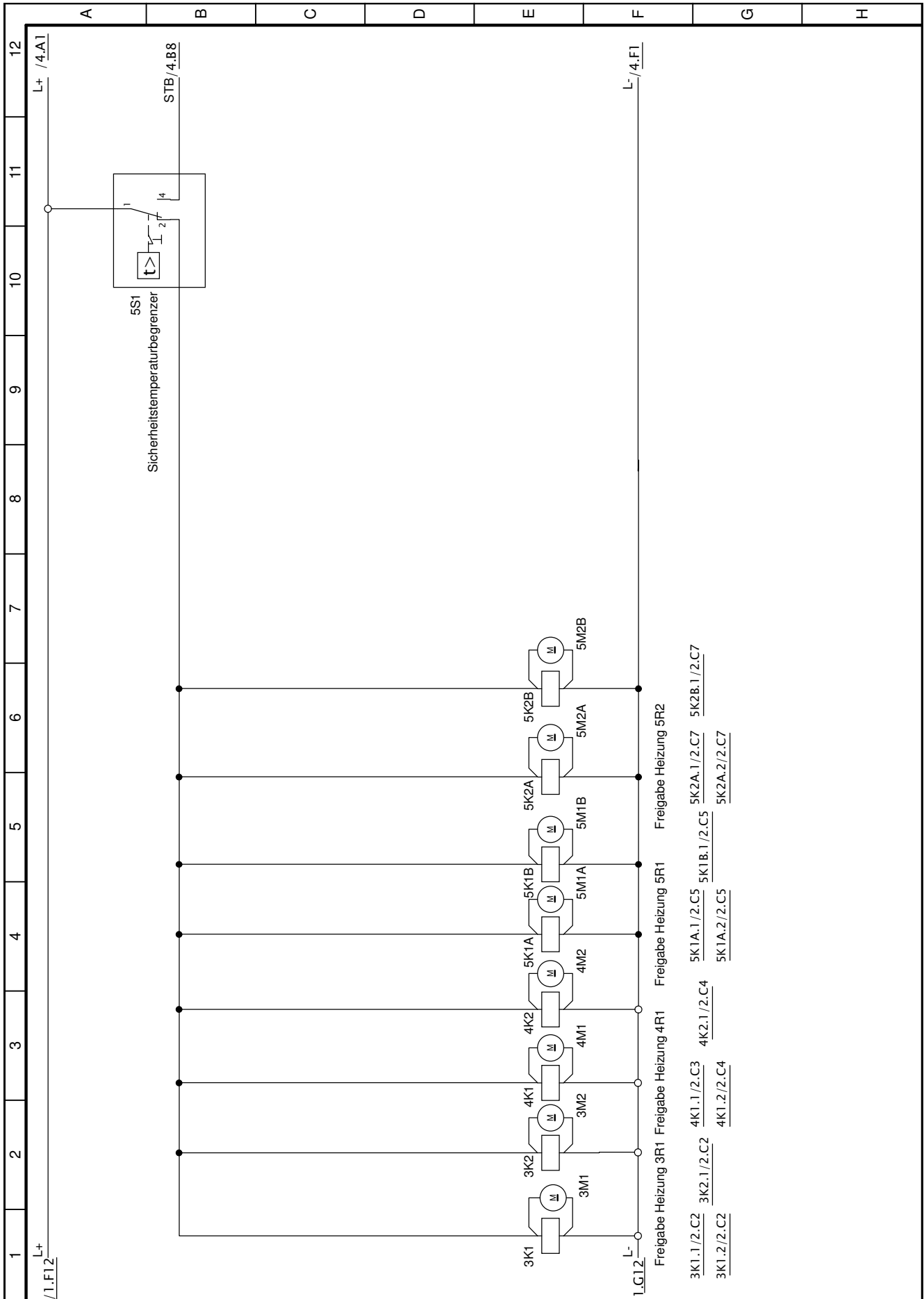


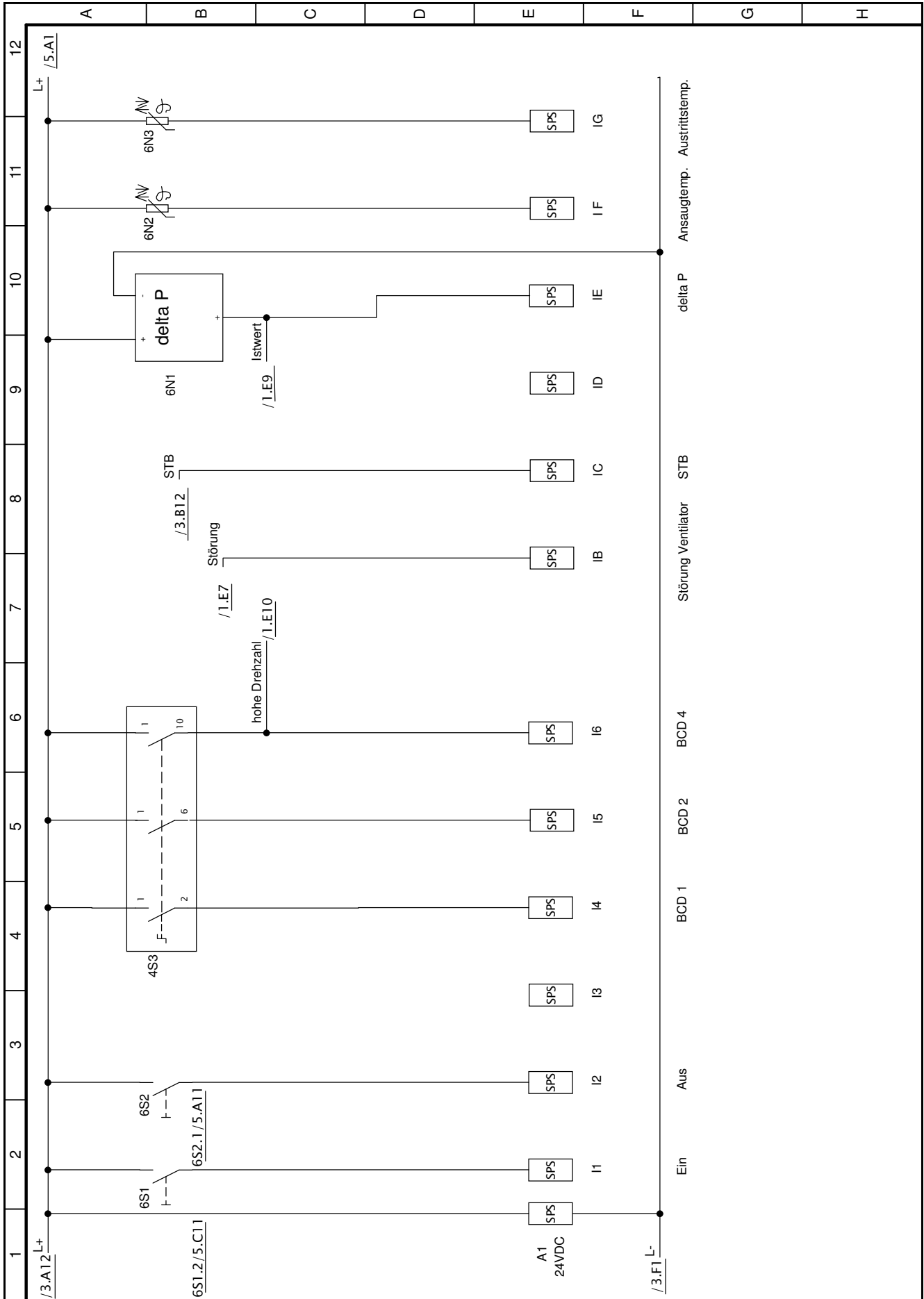


Circuit diagram TEH 300

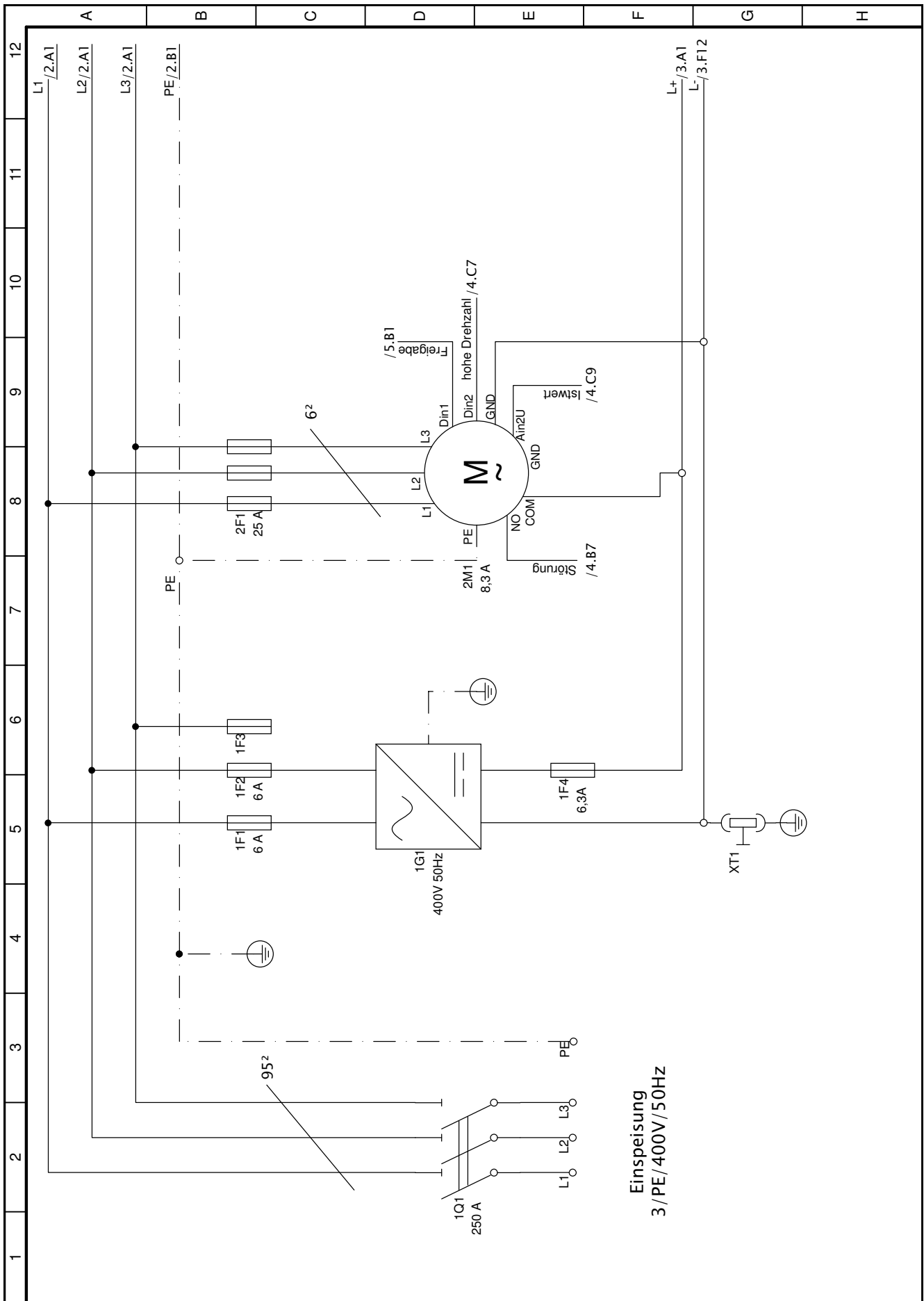


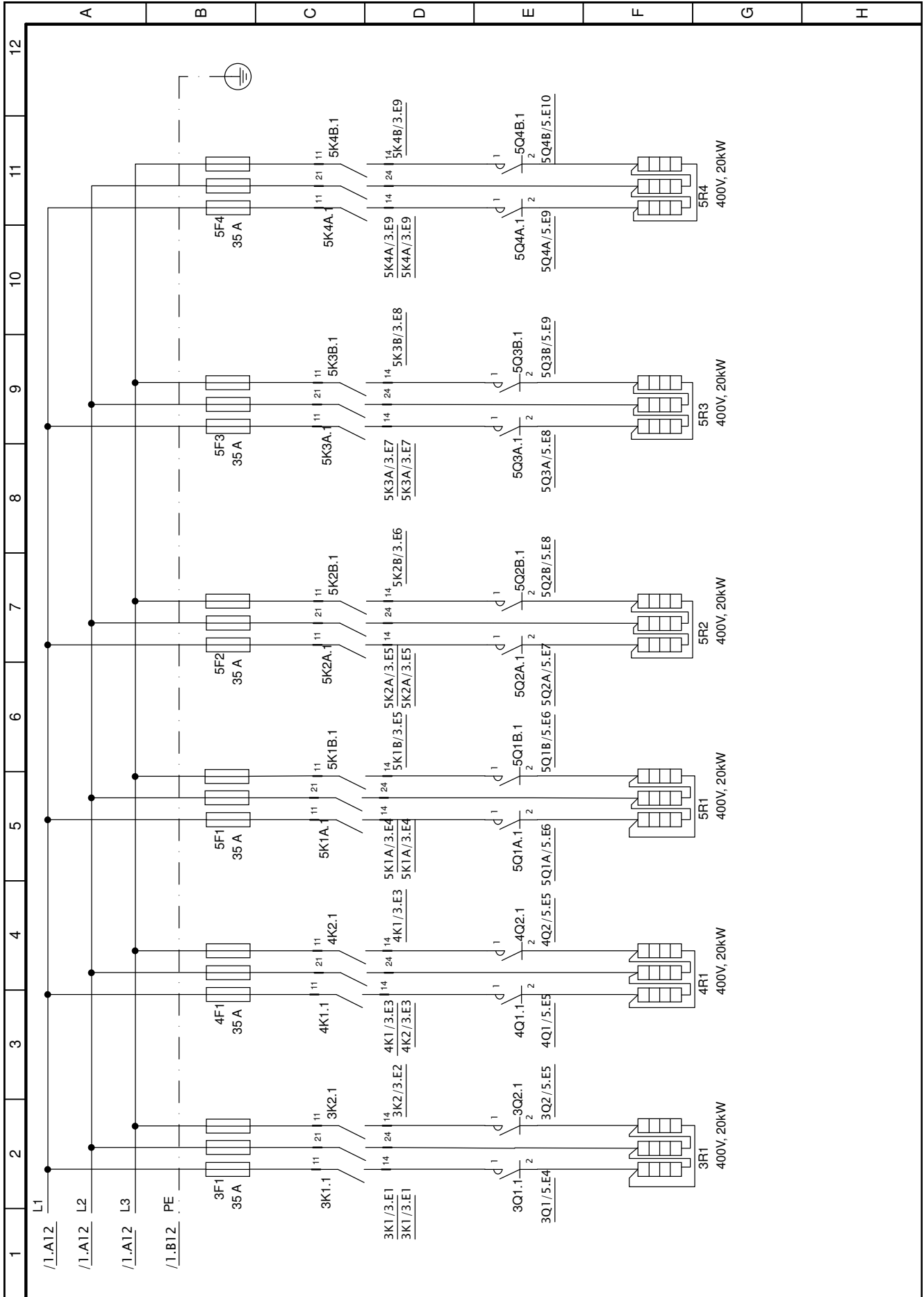


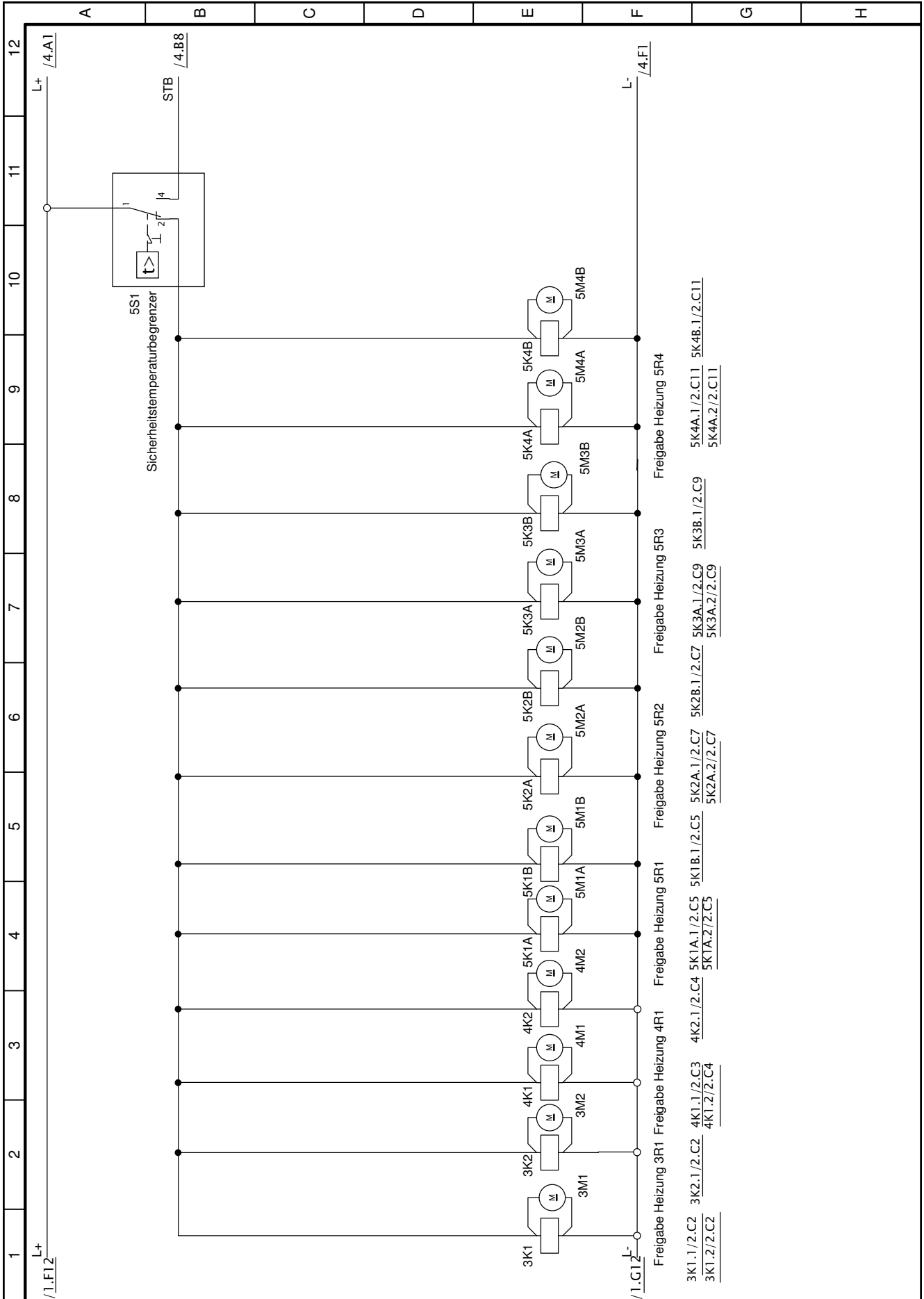


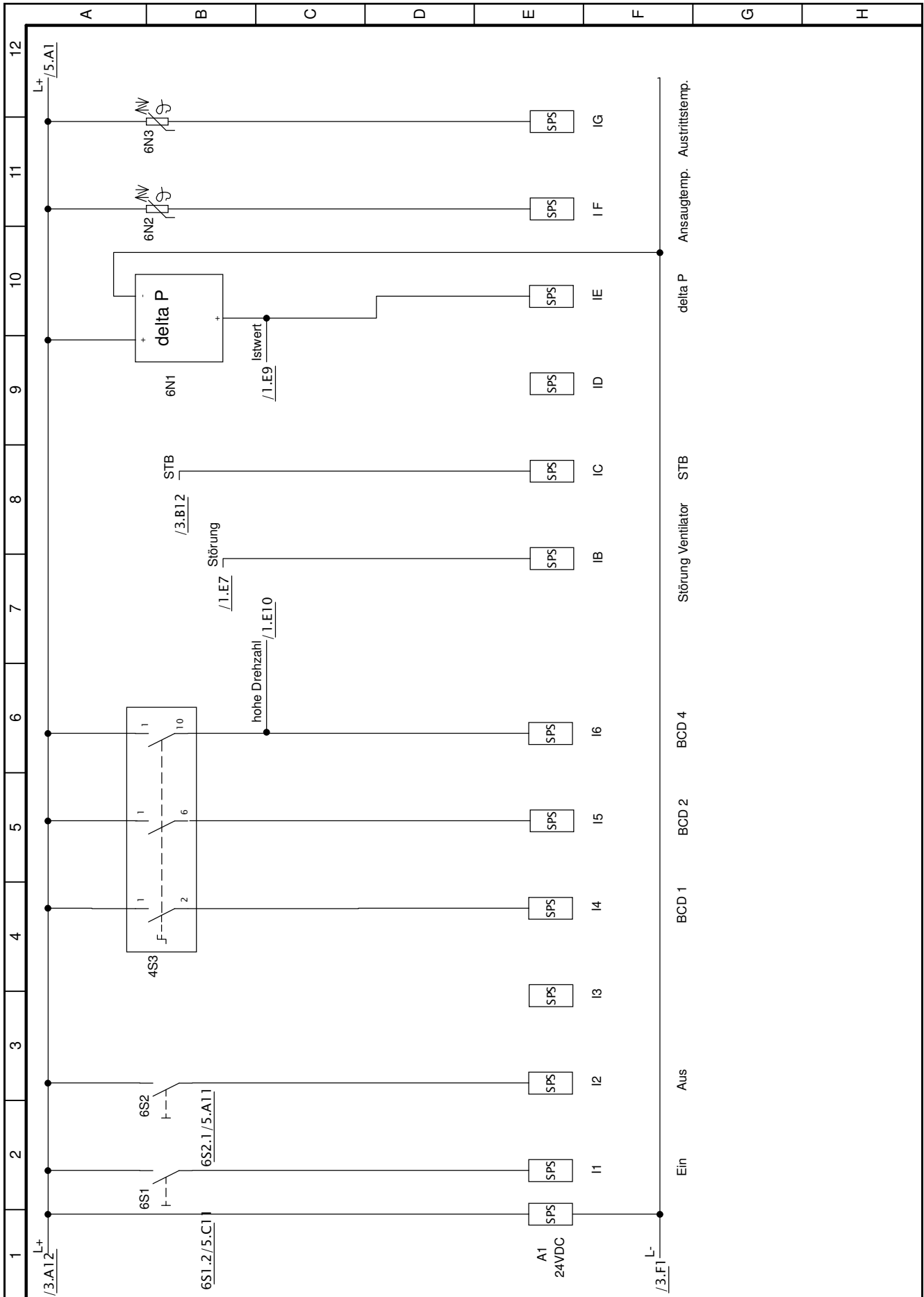


Circuit diagram TEH 400





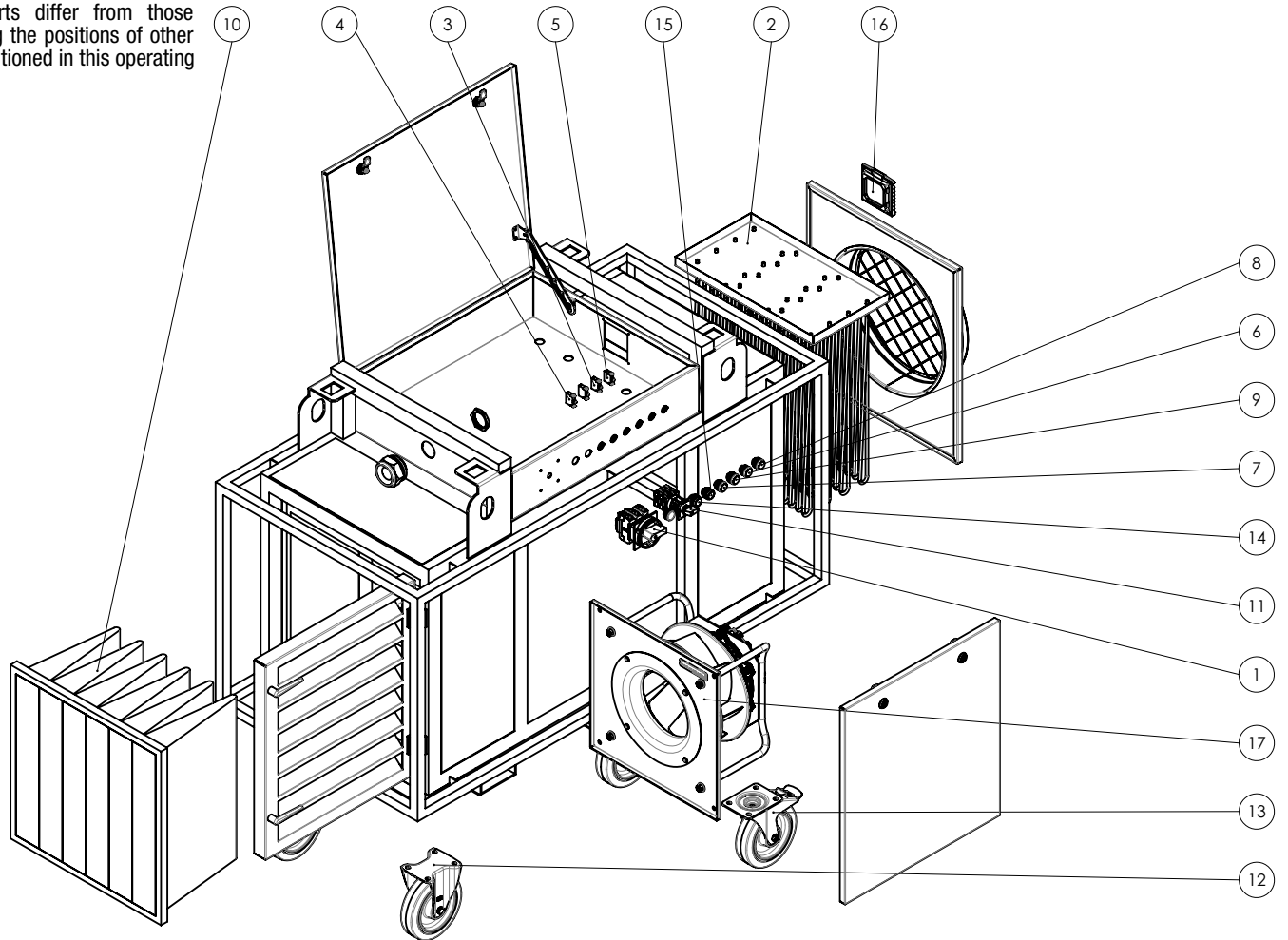




Exploded assembly drawing

Note!

The position numbers of the spare parts differ from those describing the positions of other parts mentioned in this operating manual.



List of spare parts

Pos. no.	TEH version 3.0	Trotec article numbers		
	Designation	TEH 200	TEH 300	TEH 400
1	Main switch	P 1000 1454	P 1000 1454	P 1000 1532
2	Heating element	P 1000 1905	P 1000 1905	P 1000 1905
3	LED element white 24V	P 1000 1447	P 1000 1447	P 1000 1447
4	LED element green 24V	P 1000 1445	P 1000 1445	P 1000 1445
5	LED element red 24V	P 1000 1446	P 1000 1446	P 1000 1446
6	Indicator light yellow	P 1000 1450	P 1000 1450	P 1000 1450
7	Indicator light green	P 1000 0244	P 1000 0244	P 1000 0244
8	Indicator light red	P 1000 1448	P 1000 1448	P 1000 1448
9	Indicator light white	P 1000 1449	P 1000 1449	P 1000 1449
10	Air filter	P 1000 1563	P 1000 1563	P 1000 1563/4
11	Cam switch	P 1000 1455	P 1000 1455	P 1000 1455
12	Trestle roller	P 1000 1394	P 1000 1394	P 1000 1394
13	Lockable swivel castor	P 1000 1393	P 1000 1393	P 1000 1393
14	Push button green	P 1000 1443	P 1000 1443	P 1000 1443
15	Push button red	P 1000 1444	P 1000 1444	P 1000 1444
16	Control cabinet filter TEH	P 1000 1392	P 1000 1392	P 1000 1392
17	Radial fan	P 1000 1383	P 1000 1994	P 1000 1384
18	Relay	P 1000 0350	P 1000 0350	P 1000 0350
19	Operating hours counter	P 1000 1477	P 1000 1477	P 1000 1477
20	Insulation	P 1000 1989	P 1000 1989	P 1000
21	Pressure sensor	P 1000 1388	P 1000 1388	P 1000 1388
22	Semi-conductor relay	P 1000 1431	P 1000 1431	P 1000 1431
23	Load relay 24V	P 1000 1238	P 1000 1238	P 1000 1238
24	Power supply unit	P 1000 1313	P 1000 1313	P 1000 1313
25	Safety temperature limiter	P 1000 1432	P 1000 1432	P 1000 1432
26	Fuse D01 6A	P 1000 1570	P 1000 1570	P 1000 1570
27	Fuse D02 20A	-----	P 1000 1583	P 1000 1583
28	Fuse D02 25A	-----	-----	P1000 1581
29	Fuse D02 35A	P 1000 1569	P 1000 1569	P 1000 1569
30	Temperature probe	P 1000 1430	P 1000 1430	P 1000 1430
31	Temperature probe	P 1000 1429	P 1000 1429	P 1000 1429
32	Isolating terminal	P 1000 1561	P 1000 1561	P 1000 1561

Disposal



In the European Union, electronic equipment must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2002/96/EC of the European Parliament and Council of 27th January 2003 concerning old electrical and electronic equipment. At the end of its life, please dispose of this instrument in a manner appropriate to the relevant legal requirements.

Declaration of conformity (Translation of the Original)



EC Declaration of Conformity in accordance with EC Machinery Directive 2006/42/EC

Trotec GmbH & Co. KG

Grebbener Straße 7
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herewith declares, that due to its design and construction, and in the version introduced by us, the following machinery conforms with the relevant fundamental requirements of the listed EC directives.

Important note:

In case of improper use, installation, maintenance etc. or unauthorized changes of the factory-supplied device version, this declaration loses its legal validity.

Device version:	Electric heater	
Models:	TEH 200 / TEH 300 / TEH 400	
Year of manufacture:	as of 2009	
Applicable regulations:	2006/42/EC 2004/108/EC 2011/65/EC	Machinery Directive EMC Directive RoHS
Applied harmonised standards:	EN 60335-2-30 EN 55014-1:2006 EN 13857:2008	EN 60204-1:2006 EN ISO 12100:2010

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Heinsberg, 13 August 2009

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