

Operator Manual

Rotary lobe blower

BBC pr SIGMA CONTROL 2

Number: 902307 04 USE

Manufacturer:

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1 Regarding this Document

1.1 Using this document

This operating or installation manual is part of the machine. It describes the machine as it was at the time of first delivery after manufacture.

- Keep the operating manual in a safe place throughout the life of the machine.
- Pass the operating manual on to the next owner/user.
- Ensure that all amendments received are entered or inserted in the operating manual.
- Enter details from the machine nameplate and individual items of equipment in the tables in chapter 2.

1.2 Further documents

Included with this Operating Manual are additional documents intended to assist in the safe operation of the machine:

- Manufacturer's Declaration or Declaration of Conformity according to applicable directives.
- User Manual for SIGMA CONTROL 2.

Missing documents can be requested from KAESER.

- Ensure that all documents are complete and observe the instructions contained within them.
- Ensure that you provide the data from the nameplate when ordering documents.

1.3 Copyright

This operator manual is copyright protected. Queries regarding use or duplication of the documentation should be referred to KAESER. Correct use of information will be fully supported.

1.4 Symbols and labels

- Please note the symbols and labels used in this document.

1.4.1 Warnings

Warnings indicate danger potentially resulting in personal injury, if the measures specified are not taken.

Warnings indicate three levels of danger identified by the corresponding signal word:

Signal term	Meaning	Consequences of non-compliance
DANGER	Warns of imminent danger	Will very likely result in death or severe injury
WARNING	Warns of potentially imminent danger	May result in death or severe injury
CAUTION	Warns of a potentially dangerous situation	May result in moderate physical injury

Tab. 1 Danger levels and their definition (personal injury)

Warning notes may precede a chapter. They apply to the entire chapter including all sub-sections.

Example:

DANGER

The type and source of the imminent danger is shown here!

The possible consequences of ignoring a warning are shown here.

The word "DANGER" indicates that death or severe injury can very likely result from ignoring the warning.

➤ *The measures required to protect yourself from danger are shown here.*

Warning notes referring to a sub-section or the subsequent step are integrated into the procedure and numbered as a step.

Example:

1. **WARNING** *The type and source of the imminent danger is shown here!*

The possible consequences of ignoring a warning are shown here.

The word "WARNING" indicates that death or severe injury may result from ignoring the warning.

➤ *The measures required to protect yourself from danger are shown here.*

2. Always read and comply with warning instructions.

1.4.2 Potential damage warnings

Contrary to the warnings shown above, damage warnings do not indicate potential personal injury.

Damage warnings have only one danger level, identified by this signal word:

Signal term	Meaning	Consequences of non-compliance
NOTE	Warns of a potentially dangerous situation	Damage to property is possible

Tab. 2 Danger levels and their definition (damage to property)

Example:

NOTICE

The type and source of the imminent danger is shown here!

Potential effects when ignoring the warning are indicated here.

➤ *The protective measures against the damages are shown here.*

➤ Carefully read and fully comply with warnings against damages.

1.4.3 Other alert notes and their symbols



This symbol indicates particular important information.

Material	Here you will find details on special tools, operating materials or spare parts.
Precondition	Here you will find conditional requirements necessary to carry out the task. The conditional requirements relevant to safety shown here will help you to avoid dangerous situations.
Option H12	➤ This symbol is placed by lists of actions comprising one stage of a task. Operating instructions with several steps are numbered in the sequence of the operating steps. Information relating to one option only are marked with an option code (e.g., H12 indicates that this section applies only to machines with sound enclosure). Option codes used in this operating manual are explained in chapter 2.2.
	Information referring to potential problems are identified by a question mark. The cause is specified in the help text ... ➤ ... as is a solution.
	This symbol refers to important information or measures concerning environmental protection.
Further information	Further subjects are introduced here.

2 Technical Data

2.1 Nameplate

The machine's nameplate contains the model type and important technical information.

The nameplate is attached to the machine frame and on the left-hand side panel of the sound enclosure (Option H12).

The specified value for the full load current has been calculated including the associated lambda factor. This value can be found in chapter 2.10.2 (Option C34).

The information given on the nameplate relates to the standard inlet conditions of 14.7 psi and +68°F.

► Enter the data from the nameplate here as a reference:

Characteristic	Value
Rotary lobe blowers	
Material no.	
Serial no.	
Ambient temperature	
Rated power	
Max. gauge working pressure PS	
Rated motor speed	
Full load current	
Full load current, drive motor	
Electrical connection	
Wiring diagram	
Year of manufacture	

Tab. 3 Nameplate

2.2 Option codes

The table contains a list of possible options.

► Enter options here as a reference.

Option	Option code	Available?
Operating mode: Gauge pressure	B13	✓
Oil level switch	C5	—
Speed monitor	C10	
Unloaded start valve	C11	
Start-up pressure regulating valve	C18	
Under frequency control	C32	
START CONTROL (STC)	C33	

Installed: ✓
Not available: —

Option	Option code	Available?
OMEGA FREQUENCY CONTROL (OFC)	C34	
Oil temperature monitoring	C39	—
Communication module: PROFIBUS DP	C41	
Communication module: Modbus RTU	C42	
Communication module: DEVICENET	C43	
Communication module: Modbus TCP	C44	
Communication module: PROFINET IO	C45	
Check valve	G1	
Intake from pipe	H11	
Sound enclosure	H12	✓
Installed: ✓		
Not available: —		

Tab. 4 Option codes

2.3 Weight

The values shown are maximum values. The actual weight of individual machines depends on equipment fitted.

2.3.1 Option C33 START CONTROL (STC)

Rated power [hp]	Weight [lb]		—
	BB 69 C pr	BB 89 C pr	
5.0	871	882	—
7.5	893	904	—
10.0	915	926	—
15.0	948	959	—
20.0	959	970	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

Tab. 5 START CONTROL (STC) weight

2.3.2 Option C34 OMEGA FREQUENCY CONTROL (OFC)

Rated power [hp]	Weight [lb]		—
	BB 69 C pr	BB 89 C pr	
5.0	893	904	—
7.5	915	926	—
10.0	937	948	—
15.0	992	1003	—
20.0	1003	1027	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

Tab. 6 Weight OMEGA FREQUENCY CONTROL (OFC)

2.4 Recommended oil

The lubricant type to be used depends on the operating conditions.

OMEGA FLUID		
SB 220	FGB 220	
Description	Synthetic oil	Synthetic oil
Application	Suitable for all applications, except food processing.	Specifically for applications where the compressed air comes into contact with food products.

Tab. 7 Recommended oil

Further information An adhesive label identifying the used lubricating oil is attached to the blower block and the belt guard.

Information on ordering oil is found in chapter 11.2.

2.5 Lubricating oil charge

The block oil chambers are filled with oil at the factory.

Guide value

	Drive-end	Gear-end
Lubricating oil charge [qt]	0.16 ±15%	0.14 ±15%

Tab. 8 Lubricating oil charge

2.6 Temperature

	BB 69 C pr	BB 89 C pr	—
Maximum block discharge temperature [°F]	320	320	—
Maximum temperature differential [°F] *	115	115	—

*Discharge temperature minus inlet temperature

Tab. 9 Temperature

2.7 Ambient and inlet conditions

The following conditions must be maintained:

- Atmosphere in the immediate vicinity of the machine free of salt.
- The air must be free of chemicals or explosive substances.

	BB 69 C pr	BB 89 C pr	—
Permissible ambient temperature [°F]	32 – 104	32 – 104	—
Permissible inlet temperature [°F]	5 – 104	5 – 104	—
Relative humidity [%]	0 – 80	0 – 80	—

Tab. 10 Ambient and inlet conditions



Differing ambient and inlet conditions require recalculation of the performance data, and are permissible only upon agreement with the manufacturer.

Installation altitude



The maximum permissible installation altitude depends on the main frequency of the machine.

An installation altitude > 3280 ft [AMSL] leads to performance restriction of the machine, which has already been taken into account in the project planning data sheet in chapter 13.5.

Maximum installation altitude AMSL [ft]
6562

Tab. 11 Installation altitude

2.8 Sound pressure level/sound power level

Operating state LOAD under the following conditions:

- Nominal speed

- Nominal flow rate
- Nominal pressure

Measuring condition according to DIN EN ISO 2151 and basic standard ISO 9614-2:

- Measurement distance: 3 ft.
- Tolerance: ± 3 dB(A)
- Sound insulated pipeline

Further information

The sound pressure level and sound power level values for your machine are provided in the tables shown in chapter 13.3.

These values refer to the design condition. They do not apply to machines with a frequency converter.

2.9 Power Supply

Basic requirements

The machine is designed for an electrical supply according to National Electric Code (NEC), edition 2020, particularly article 670 and NFPA 79, edition 2021, particularly section 4.4. In the absence of any user-specified alternatives, the limits given in these standards must be adhered to. Consult manufacturer for any other specific power supply.

The incoming line within the control panel should be as short as possible.

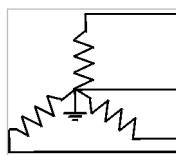
If external sensors or communication lines are to be connected to the machine, use shielded cables and insert the same through EMC fittings into the control panel.

Three-phase

Do **NOT** operate package on any unsymmetrical power supply. Also do **NOT** operate package on power supplies such as a three phase WYE system with center point not solidly grounded or three-phase (open) delta.

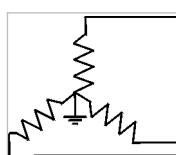
The machine requires a symmetrical three-phase power supply transformer with a WYE configuration output as shown in Figure 1 and Figure 2. In a symmetrical three phase supply the phase angles and voltages are all the same.

Other power supplies are not suitable.



03-S0235

Fig. 1 Three-phase star (wye); 4 wire; center point solidly grounded



03-S0236

Fig. 2 Three-phase star (wye); 3 wire; center point solidly grounded

Further information

Please contact an authorized KAESER service representative for options.

The electrical diagram 13.4 contains further specifications for electrical connection.

2.10 Power supply specifications

The following multi-strand copper core wires are given according to 2020 NEC 310.14, 310.15, 310.16 and table 310.16 adjusted for 40°C ambient temperature.

If other local conditions prevail, like for example high temperature, the cross section should be checked and adjusted according to 2020 NEC 110.14(C). 220.3. 310.14. 310.15. 310.16, 310.15(B)(1), table 310.15(C)(1). 430.6. 430.22. 430.24. 670.4(A) and other local codes.

Dual element time delay fuses are selected according to 2020 NEC 240.6. 430.52 and tables 430.52. 430.248 and 430.250.

We strongly suggest using a separate copper conductor for the equipment GROUNDING. 2020 NEC table 250.122 will point out the "minimum size", however, we recommend a ground conductor the same size as the power leads, if local codes allow.

2.10.1 Option C33 START CONTROL (STC)

Rated power supply: 208V±10% / 3 / 60Hz

Rated power [hp]	5.0	7.5	10.0	15.0	20.0	—	—	—	—
Backup fuse [A]	20.0	25.0	35.0	45.0	60.0	—	—	—	—
Supply line [AWG]	1x 4x12	1x 4x10	1x 4x8	1x 4x6	1x 4x4	—	—	—	—
Current consumption [A]	16.7	21.6	28.2	40.2	53.2	—	—	—	—

Tab. 12 Connection data 208V±10% / 3 / 60Hz

Rated power supply: 230V±10% / 3 / 60Hz

Rated power [hp]	5.0	7.5	10.0	15.0	20.0	—	—	—	—
Backup fuse [A]	20.0	25.0	35.0	50.0	70.0	—	—	—	—
Supply line [AWG]	1x 4x10	1x 4x10	1x 4x8	1x 4x6	1x 4x4	—	—	—	—
Current consumption [A]	17.2	22.3	28.9	42.3	55.9	—	—	—	—

Tab. 13 Connection data 230V±10% / 3 / 60Hz

Rated power supply: 460V±10% / 3 / 60Hz

Rated power [hp]	5.0	7.5	10.0	15.0	20.0	—	—	—	—
Backup fuse [A]	10.0	15.0	20.0	25.0	35.0	—	—	—	—
Supply line [AWG]	1x 4x14	1x 4x14	1x 4x12	1x 4x10	1x 4x8	—	—	—	—
Current consumption [A]	8.6	11.2	14.5	21.2	28.0	—	—	—	—

Tab. 14 Connection data 460V±10% / 3 / 60Hz

Rated power supply: 575V±10% / 3 / 60Hz

Rated power [hp]	5.0	7.5	10.0	15.0	20.0	—	—	—	—
Backup fuse [A]	10.0	10.0	12.0	20.0	25.0	—	—	—	—
Supply line [AWG]	1x 4x14	1x 4x14	1x 4x14	1x 4x12	1x 4x10	—	—	—	—
Current consumption [A]	6.1	8.2	10.4	15.3	20.4	—	—	—	—

Tab. 15 Connection data 575V±10% / 3 / 60Hz

2.10.2 Option C34 OMEGA FREQUENCY CONTROL (OFC)

Protective conductor requirements

Due to the leakage currents of ≥ 10 mA caused by the anti-interference capacitors in the frequency converter, a minimum diameter of 8 AWG is required for the protective conductor.

Use one of the following options if the protective conductor for the supply cable is smaller than 8 AWG:

- Multicore cable including protective conductor with a minimum cross-section of 8 AWG,
- a minimum cross-section of 8 AWG for the protective conductor alone,
- a second protective conductor with the same cross-section as the supply line,
- automatic deactivation of the power supply as soon as the protective conductor is interrupted.

Note on the lambda factor:

In addition to their fundamental oscillation, non-sinusoidal variables also contain harmonics for which no fixed phase shift angle ϕ (phi) can be specified. Instead, the power factor λ (lambda) must be used. In electrical engineering, the power factor λ denotes the ratio of the active power value P to the apparent power value S .

In the event of deviating network characteristics and therefore lambda value at the user-end, the full load current and supply cable cross-section may need to be reassessed.

Rated power supply: 460V / 3 / 60Hz

Rated power [hp]	5.0	7.5	10.0	15.0	20.0	—	—	—	—
Backup fuse [A]	12.0	15.0	20.0	30.0	35.0	—	—	—	—
Supply line [AWG]	1x 4x8	1x 4x8	1x 4x8	1x 4x8	1x 4x8	—	—	—	—
Current consumption [A]	10.3	13.4	17.4	23.6	29.8	—	—	—	—
Power factor [λ] (lambda)	0.720	0.730	0.736	0.769	0.820	—	—	—	—

Tab. 16 Connection data 460V/ 3 / 60Hz

2.11 Options

Technical data for the options available for your machine are given in the following.

**2.11.1 Option C10
Speed monitor**
Sensor

Feature	Data
Rated switching distance Sn [in.]	0.12–0.16
Installation conditions	Not flush
Output function	DC PNP/NPN
Enclosure protection	IP 67
Connection	M12
Working principle	Inductive

Tab. 17 Speed monitor (Option C10)

Sensor

Feature	Data
Rated voltage [V]	110 – 240 AC/DC (50 – 60 Hz) / 27 DC (typ. 24 DC)
Contact load capacity	6 A (250 V AC); B300, R300
Power consumption [VA]	5
Start override [s]	0 – 1000
Ambient temperature [°F]	-4 – +140
Degree of protection - enclosure/terminals	IP 50 / IP 20
Connection	up to 2.5 mm ² (AWG 14)

Tab. 18 Speed monitor sensor (Option C10)

Further information The electrical diagram in chapter 13.4 contains details of the power supply.

**2.11.2 Option C11
Unloaded start valve**

Type	AFM 5	AFE 15
Permissible pressure [psi] (a)	0 – 29	0 – 29
Maximum flow rate [cfm]	177	530
Inlet connection (DIN ISO 228-1)	G 2	G 2 A
Outlet connection (DIN ISO 228-1)	G 2	—
Voltage [V]	110, 1 ph, 50/60 Hz	—
	230, 1 ph, 50/60 Hz	—
Connecting socket	Type 2508 according to DIN EN 175301–803 Form A	—

Type	AFM 5	AFe 15
Enclosure protection	IP65	—

Tab. 19 Unloaded start valve (option C11)

2.11.3 Option C18
Unloaded start valve with regulating valve

Type	AFR 10	—
Permissible pressure [psi] (a)	0 – 29	—
Maximum flow rate [cfm]	353	—
Maximum pressure differential [psi]	13.8	—
Regulating range [psi]	2.9 – 13.8	—
Nominal width (DIN ISO 228-1)	G 2 A	—
Control line connection (DIN ISO 228-1)	R 1/8 A	—

Tab. 20 Unloaded start valve with regulating valve (Option C18)

2.11.4 Option G1
Check valve

Feature	Value
Max. pressure and back pressure [psig]	21.8

Tab. 21 Check valve (Option G1)

2.11.5 Option H11
Piped inlet

The dimensional drawings in chapter 13.2 include connection dimensions.

2.11.6 Option H12
Fan (sound enclosure)

Feature	Value
Maximum flow rate [cfm]	1177

Tab. 22 Fan flow rate

3 Safety and Responsibility

3.1 Basic instructions

The machine is manufactured to the latest engineering standards and acknowledged safety regulations. Nevertheless, dangers can arise through its operation:

- Danger to life and limb of the operator or third parties,
- Damages to the machine and other material assets.



Disregard of warning or safety instructions can cause serious injuries!

- Read the operating and installation manual carefully and take note of the contents for safe machine operation.
- Use this machine only if it is in a technically perfect condition and only for the purpose for which it is intended; observe all safety measures and the instructions in the service manual!
- Immediately rectify (have rectified) any faults that could be detrimental to safety!

3.2 Specified use

The machine is designed exclusively for the generation of pressure in a commercial or industrial environment where air (in the following "compressed air") as delivery medium is approved for use. Any other use is considered incorrect. The manufacturer is not liable for any damages that may result from incorrect use. The user alone is liable for any risks incurred.

- Comply with the instructions in this operating manual.
- Operate the machine only within its performance limits and under the permitted ambient conditions.
- Do not use compressed air for breathing purposes unless it is specifically treated.
- Do not use compressed air for any application that will bring it into direct contact with food products unless it is specifically treated.
- Operate the blower block only with inlet and outlet ports connected.

3.3 Improper use

Improper usage can cause damage to property and/or (severe) injuries.

- Only use the machine as intended.
- Never direct compressed air at persons or animals.
- Use hot cooling air for heating purposes only if there is no risk to the health of humans or animals. If necessary, hot cooling air should be treated by suitable means.
- Do not allow the machine to take in toxic, acidic, flammable, or explosive gases or vapors.
- Do not operate the machine in areas in which specific requirements with regard to explosion protection are in force.
- Intake of solid particles >0.004 inch is not permitted.

3.4 User's responsibilities

3.4.1 Observe statutory and universally accepted regulations

- Observe relevant statutory and accepted regulations during installation, operation and maintenance of the machine.

3.4.2 Determining personnel

Suitable personnel are experts who, by virtue of their training, knowledge, and experience, as well as their knowledge of relevant regulations, can assess the work to be done and recognize the possible dangers involved.

Authorized operators possess the following qualifications:

- are of legal age,
- are familiar with and adhere to the safety instructions and sections of the service manual relevant to operation,
- have received adequate training and authorization to operate electrical and compressed air devices.

Authorized installation and maintenance personnel have the following qualifications:

- are of legal age,
 - have read, are familiar with and adhere to the safety instructions and sections of the service manual applicable to installation and maintenance,
 - are fully familiar with the safety concepts and regulations of electrical and compressed air engineering,
 - are able to recognize the possible dangers of electrical and compressed air devices and take appropriate measures to safeguard persons and property,
 - have received adequate training in and authorization for the safe installation and maintenance of this machine.
- Ensure that personnel entrusted with operation, installation, and maintenance are qualified and authorized to carry out their tasks.

3.5 Dangers

Basic instructions

Information concerning the various forms of danger that can arise during machine operation are found here.

Basic safety instructions are found in this service manual at the beginning of each chapter in the section entitled 'Safety'.

Warning instructions are found before a potentially dangerous task.

3.5.1 Safely dealing with sources of danger

The following describes the various forms of danger that can occur during machine operation.

Electricity

Touching voltage carrying components can result in electric shocks, burns or death.

- All power supplies must be fitted with lockable power supply disconnecting devices by the user.
- Allow only qualified and authorized electricians or trained personnel under the supervision of a qualified and authorized electrician to carry out work on electrical equipment according to electrical engineering regulations.
- Before commissioning or recommissioning the machine, the user must ensure adequate protection against electric shock from direct or indirect contact.
- Before starting any work on electrical equipment:
Switch off and lock out the power supply disconnecting device and verify the absence of any voltage.
- Switch off any external power sources.
These may be connections to the electric machine heating for example.
- Use fuses corresponding to machine power.
- Regularly check that all electrical connections are tight and in proper condition.

Forces of compression

Compressed air is contained energy. Uncontrolled release of this energy can cause serious injury or death. The following information concerns work on components that could be under pressure.

- Close shut-off valves or otherwise isolate the machine from the distribution network to ensure that no compressed air can flow back into the machine.
- Depressurize all pressurized components and enclosures.
- Allow no person or thing to remain near the blow-off valve during machine operation. In the event of operating pressure being exceeded, hot gas is blown off at high velocity and the valve tension rod is blown upward with great force.
- Do not carry out welding, heat treatment or mechanical modifications on pressurized components, as this influences the components' resistance to pressure.
The safety of the machine is then no longer ensured.

Compressed air quality

The composition of the compressed air must be suitable for the actual application in order to preclude health and life-threatening dangers.

- Use appropriate systems for air treatment before using the compressed air from this machine as breathing air and/or for the processing of food products.
- Use food-grade lubricating oil whenever compressed air is to come into contact with food products.

Spring forces

Springs under tension or compression store energy. Uncontrolled release of this energy can cause serious injury or death.

Safety relief valve and unloaded-start valve are under powerful spring loading.

- Do not open or dismantle any valves.

Rotating components

Touching the fan wheel (sound enclosure) or the belt drive while the machine is running can result in serious injury.

- Do not remove separating protective installations when the machine is running.
- Switch off and lock out the power supply disconnecting device and verify the absence of any voltage.
- Wear close-fitting clothes and a hair net if necessary.
- Ensure that all covers and safety guards are in place and secured before restarting.

Temperature

High temperatures are generated during compression. Touching hot components may cause injuries.

- Avoid contact with hot components.
These include, for example, blower blocks, silencers, oil and compressed air lines, motors, and machine heaters.
- Wear protective clothing.
- If welding is carried out on or near the machine, take adequate measures to prevent sparks or heat from igniting oil vapors or parts of the machine.

Noise

The sound enclosure reduces the machine noise to a tolerable level. This function will be effective only if the sound enclosure is closed.

- Wear hearing protection if necessary.
The blowing off of the safety relief valve can be particularly loud.

Operating fluids/materials

The used operating fluids and materials can cause adverse health effects. Suitable safety measures must be taken in order to prevent injuries.

- Strictly forbid fire, open flame, and smoking.
- Follow safety regulations when dealing with oils, lubricants, and chemical substances.
- Avoid contact with skin and eyes.
- Do not inhale oil mist and vapors.
- Do not eat or drink while handling lubricants.
- Keep suitable fire extinguishing agents ready for use.
- Use only KAESER approved operating materials.

Unsuitable spare parts

Unsuitable spare parts compromise the safety of the machine.

- Use only spare parts approved by the manufacturer for use in this machine.
- Use only genuine KAESER replacement parts on pressure bearing parts.

Conversion or modification of the machine

Modifications, additions, or conversions of the machine can result in unpredictable dangers.

- Do not convert or modify the machine!
- Obtain written approval by the manufacturer prior to any technical modification or expansion of the machine, the controller, or the control programs.

Extending or modifying the compressor station

If dimensioned appropriately, safety relief valves reliably prevent an impermissible rise in pressure. New dangers may arise if you modify or extend the blower air station.

- If an air distribution network is to be extended or changed: Check the capacity of the blow-off valves before installing any new machines.
- Blow-off valves of insufficient capacity must be replaced by valves with higher capacity.

3.5.2 Safe machine operation

The following is information supporting you in the safe handling of the machine during individual product life phases.

Personal protective equipment

When working on the machine you may be exposed to dangers that can result in accidents with severe adverse health effects.

- Wear protective clothing as necessary.

Suitable protective clothing (examples):

- Safety work wear
- Protective gloves
- Safety boots
- Eye protection
- Ear protection

Transporting

The weight and size of the machine require safety measures during its transport to prevent accidents.

- Use suitable lifting gear that conforms to local safety regulations.
- Allow transportation only by personnel trained in the safe movement of loads.
- Attach lifting gear only to suitable lifting points.
- Be aware of the center of gravity to avoid potential tipping.
- Make sure the danger zone is clear of personnel.
- Do not step onto machine components to climb up the machine.

Assembly

- Make sure no power is applied when electrical connections are made.
- Use only electrical cables that are suitable and approved for the surroundings and electrical loads applied.
- Never dismantle compressed air pipes until they are fully vented.
- Only use pressure lines that are suitable and approved for the maximum working pressure and the intended medium.
- Do not allow connection pipes to be placed under mechanical stress.

3 Safety and Responsibility

3.5 Dangers

- Do not induce any forces into the machine via the connections, so that the compressive forces must be balanced by bracing.
- Do not step onto machine components to climb up the machine.

Positioning

A suitable installation location for the machine prevents the potential for accidents and faults.

- Install the machine in a suitable compressor room.
- Ensure sufficient and suitable lighting such that the display can be read and work carried out comfortably and safely.
- Ensure accessibility so that all work on the machine can be carried out without danger or hindrance.
- If installed outdoors, the machine must be protected from frost, direct sunlight, dust, rain and splashing water.
- Do not operate in areas in which specific requirements with regard to explosion protection are in force.
- Ensure adequate ventilation.
- Place the machine in such a manner that the working conditions in its environment are not impaired.
- Comply with limit values for ambient temperature and humidity.
- The intake air must not contain any damaging contaminants,
Damaging contaminants are for instance: explosive or chemically instable gases and vapors, acid or base forming substances such as ammonia, chlorine or hydrogen sulfide.
- Do not position the machine in the warm exhaust air flow from other machines.
- Keep suitable fire extinguishing agents ready for use.

Commissioning, operation and maintenance

During commissioning, operation and maintenance you may be exposed to dangers resulting from, e.g., electricity, pressure and temperature. Careless actions can cause accidents with severe adverse effects for your health.

- Allow maintenance work to be carried out only by authorized personnel.
- Wear close-fitting, flame-resistant clothing. Wear protective clothing as necessary.
- Switch off and lock out the power supply disconnecting device, and verify the absence of voltage.
- Check that there is no voltage on floating relay contacts.
- Close shut-off valves or otherwise isolate the machine from the distribution network to ensure that no compressed air can flow back into the machine.
- Depressurize all pressurized components and enclosures.
- Allow the machine to cool down.
- Do not open the sound enclosure while the machine is switched on.
- Do not open or dismantle any valves.
- Use only spare parts approved by KAESER for use in this machine.
- Carry out regular inspections:
for visible damages,
of safety installations,
of the EMERGENCY STOP push button,
of any components requiring monitoring.

3 Safety and Responsibility

3.6 Danger areas

- Pay particular attention to cleanliness during all maintenance and repair work. Cover components and openings with clean cloths, paper or tape to keep them clean.
- Do not leave any loose components, tools or cleaning rags on or in the machine.
- Components removed from the machine can still be dangerous.
Do not attempt to open or destroy any components taken from the machine.

Decommissioning, storage and disposal

Improper handling of old operating fluids and components represent a danger for the environment.

- Drain off fluids and dispose of them according to environmental regulations.
These include, for example, lubricating oil.
- Dispose of the machine in accordance with local environmental regulations.

3.5.3 Organizational measures

- Designate personnel and their responsibilities.
- Give clear instructions on reporting faults and damage to the machine.
- Give instructions on fire reporting and fire-fighting measures.

3.6 Danger areas

The table gives information on areas dangerous to personnel.

Only authorized personnel may enter these areas.

Function	Danger area	Authorized personnel
Transporting	Within a 10 ft radius of the machine.	Installation personnel for transporting preparation. No personnel during transporting.
	Beneath the lifted machine.	No personnel!
Installation	Within the machine. Within 3 ft radius of the machine and its power supply cables.	Installation personnel
Operation	Within a 3 ft radius of the machine.	Operating personnel
Maintenance	Within the machine. Within a 3 ft radius of the machine.	Maintenance personnel

Tab. 23 Danger areas

3.7 Safety devices

Various safety devices ensure safe working with the machine.

- Do not change, bypass or disable safety devices.
- Check safety devices for correct function regularly.
- Do not remove or obliterate labels and notices.
- Ensure that labels and notices are clearly legible.

Further information More information on safety devices is contained in chapter 4, section 4.6.

3.8 Working life of safety functions

Pursuant to ISO 13849-1:2015, Category and Performance Level (PL) of the machine's safety functions have been analyzed and assessed:

Safety function	Category	Performance Level
EMERGENCY STOP push button	1	c

Tab. 24 Category and Performance Level

The safety-relevant functions of the safety devices are designed for a working life of 20 years. The working life starts with the original machine commissioning, and is not extended by times during which the machine was not in use.

The following components are affected:

- EMERGENCY STOP push button
- Option C33, START CONTROL (STC):
Star-delta contactor combination
- Option C34, OMEGA FREQUENCY CONTROL (OFC):
Frequency converter

1. The functions of the safety devices must be replaced by KAESER SERVICE after a working life of 20 years.
2. Have an authorized KAESER service representative check the reliability of the safety functions.

3.9 Safety signs

The illustration shows the location of the safety signs on the machine. Table 25 lists the various safety signs used and their meanings.

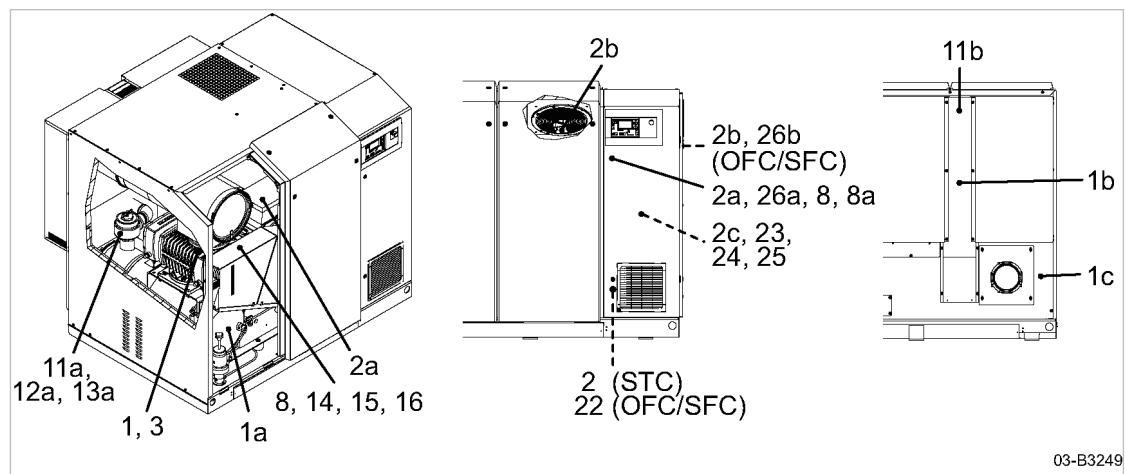


Fig. 3 Location of the safety signs on the machine

3 Safety and Responsibility

3.9 Safety signs

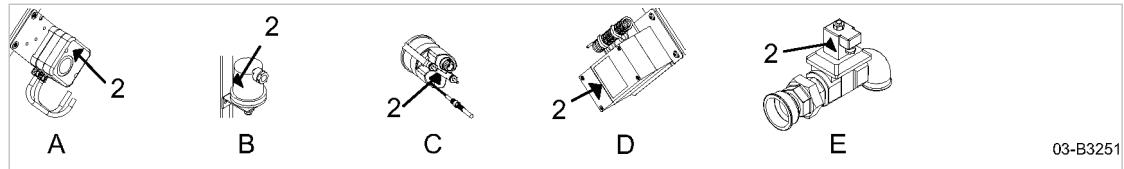


Fig. 4 Safety sign location, electronically actuated components

- | | | | |
|---|--|---|----------------------------|
| A | Filter differential pressure switch | D | Thermostat |
| B | Pressure switch | E | Unloaded start valve AFM 5 |
| C | Temperature display with switching point | | |

Location	Symbol	Meaning
1		Hot surface can cause burns!
1a		→ Let the machine cool down.
1b		
1c		→ Wear long-sleeved garments (not synthetics such as polyester) and protective gloves.
2		Danger of fatal injury from touching electrically live components!
2a		
2b		
2c		
3		Rotating rotors!
		Risk of serious lacerations or even severing of extremities (fingers) from rotating components.
		→ Operate the machine only when a connection is made to the inlet port.
		→ Switch off and lock out / tag out the power supply disconnecting device and verify the absence of any voltage before opening any machine enclosure or guard.
8		Personal injury or damage to the machine by incorrect operation!

3 Safety and Responsibility

3.9 Safety signs

Location	Symbol	Meaning
13a		Serious injury or death can result from loosening or opening component under pressure! ➢ Depressurize all pressurized components and enclosures. ➢ Ensure the machine remains depressurized. ➢ Check that machine is depressurized.
14		Severe injury could result from touching the v-belt drive while it is rotating! ➢ Switch off and lock out / tag out the power supply disconnecting device and check that no voltage is present.
15		Injury and/or contamination can result from breathing compressed air! Contamination of food can result from using untreated compressed air for food processing! ➢ Never breathe untreated compressed air. ➢ Air from this compressor must meet OSHA 29CFR1910.134 and FDA 21CFR178.3570 standards, if used for breathing or food processing. Use proper compressed air treatment.
16		Noise due to opened service panel of the sound enclosure (Option H12)! ➢ Hearing may be damaged. ➢ Wear hearing protection.
22		High protective conductor current! Touching electrically live components can cause serious injury or death. ➢ Switch off and lock out / tag out the power supply disconnecting device and check that no voltage is present. ➢ Wait at least 5 minutes. ➢ Verify the absence of any voltage.
23		Danger of fatal injury from touching electrically live components! ➢ Switch off and lock out / tag out the power supply disconnecting device and verify the absence of any voltage.
24		Risk of electric shock! ➢ If the interrupter has tripped current-carrying components of the controller should be examined and replaced if damaged to reduce the risk of fire or electric shock.
25		Risk of electric shock! ➢ To maintain high current short-circuit, and ground-fault protection, the manufacturer's instructions for setting the interrupter must be followed to reduce the risk of fire or electric shock.
26a 26b		Danger of fatal injury from electrical voltage and charged capacitors! ➢ Before starting any work on the electrical equipment: Switch off the power supply disconnecting device, lock out / tag out the device, verify the absence of any voltage. ➢ Following shutdown of the power supply disconnecting device, wait for 5 minutes before opening the control cabinet/connector box. ➢ Before starting work on the frequency converter or intermediate circuit capacitors, wait for at least 5 minutes.

Tab. 25 Safety signs

3.10 In emergency**3.10.1 Correct fire fighting**

Suitable extinguishing agents

- Foam
- Carbon dioxide
- Sand or dirt

Unsuitable or unsafe extinguishing agents

- Strong jet of water

1. Keep calm.
2. Give the alarm.
3. Switch off the power supply disconnecting device, if possible.
4. Move to safety.
 - Warn persons in danger.
 - Help incapacitated persons.
 - Close the doors.
5. Try to extinguish the fire if you have the skill to do so.

3.10.2 Remove lubricating oil from the skin.

- Eye contact:
Rinse eyes thoroughly with lukewarm water and seek medical assistance.
- Skin contact:
Wash off immediately.

3.11 Environmental protection

- Store and dispose of operating materials and replaced parts in accordance with local environmental protection regulations.
- Observe national regulations.
This applies particularly to parts contaminated with lubricating oil.
 - Do not allow lubricating oil to escape to the environment or into the sewage system.

3.12 Warranty

This operator manual contains no independent warranty commitment. Our general terms and conditions of business apply with regard to warranty.

A condition of our warranty is that the machine is used for the purpose for which it is intended under the conditions specified.

Due to the multitude applications for which the machine is suitable the obligation lies with the user to determine its suitability for his specific application.

In addition, we accept no warranty obligation for:

- the use of unsuitable parts or operating materials,
- unauthorized modifications,
- incorrect maintenance,
- incorrect repair.

Correct maintenance and repair includes the use of original spare parts and operating materials.

- Obtain confirmation from KAESER that your specific operating conditions are suitable.

4 Design and Function

4.1 Enclosure

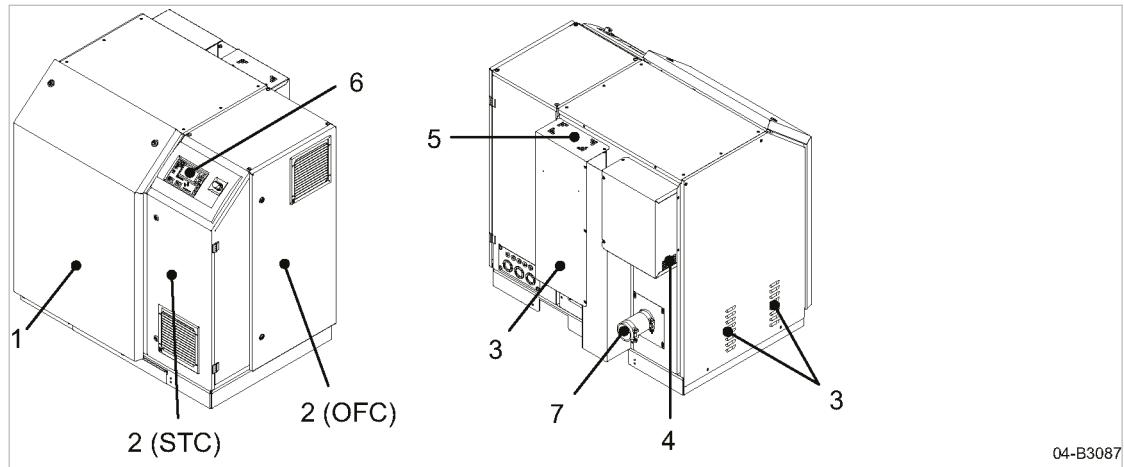


Fig. 5 Enclosure overview

- | | |
|--------------------------|--------------------------------|
| [1] Removable panel | [5] Cooling air outlet |
| [2] Control cabinet door | [6] Controller SIGMA CONTROL 2 |
| [3] Cooling air inlet | [7] Pressure line connection |
| [4] Intake air inlet | |

The drive motor fan draws cooling air through the inlet [3] into the sound enclosure to cool the drive motor and the machine.

Cooling air flow is supplemented by a fan within the sound enclosure. Warm air is blown out to protect the machine from overheating.

Air to be compressed is drawn in through the intake air inlet [4]. This ensures that only air at ambient temperature is compressed.

The sound enclosure has a removable panel [1].

The control cabinet door [2] can be swung open.

Latches are released by a key supplied with the machine.

The sound enclosure has several functions when it is closed:

- Sound Insulation
- Protection against contact with components
- Airflow control

The sound enclosure is not suitable for the following uses:

- Walking, standing, or sitting on the machine.
- As a resting place or storage of any kind of load.

4.2 SIGMA CONTROL 2 operating panel

4.2.1 Keys

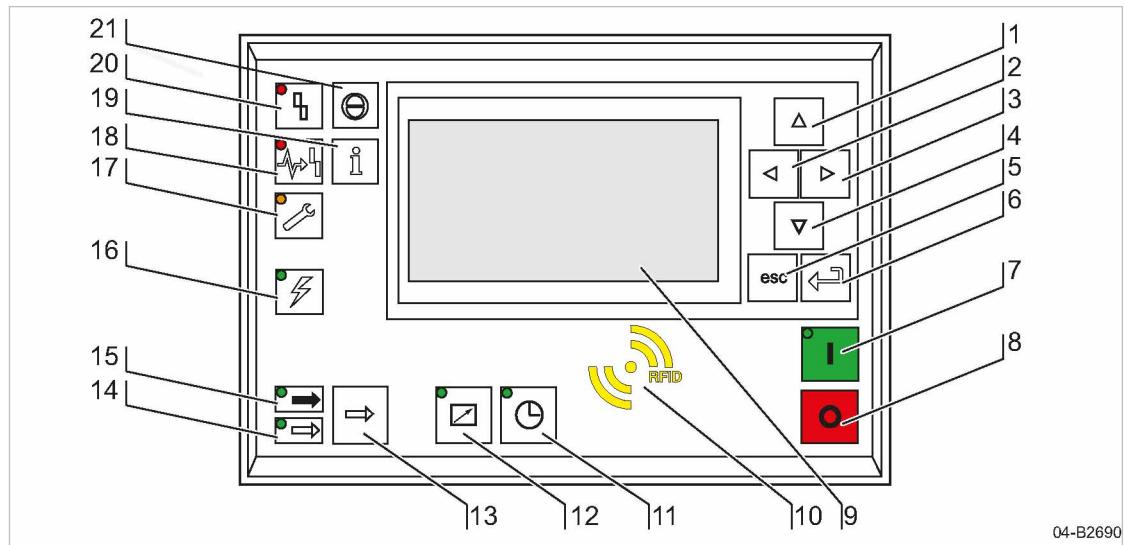


Fig. 6 Indicating and operating elements

Item	Name	Function
①	«Up»	Scrolls up the menu options. Increases a parameter value.
②	«Left»	Jumps to the left. Moves the cursor position to the next left field.
③	«Right»	Jumps to the right. Moves the cursor position to the next right field.
④	«Down»	Scrolls down the menu options. Reduces a parameter value.
⑤	«Escape»	Returns to the next higher menu option level. Exits the Edit mode without saving.
⑥	«Enter»	Jumps to the selected menu option. Exits the Edit mode and saves.
⑦	«ON»	Switches the machine on.
⑧	«OFF»	Switches the machine off.
⑩	RFID	RFID sensor field for user log-in with RFID Equipment Card.
⑪	«Timer control»	Switches timer control on and off.
⑫	«Remote control»	Switches remote control on and off.
⑬	«LOAD/IDLE»	Toggles between the LOAD and IDLE operating modes.
⑯	«Information & Events»	Displays the event memory.
㉑	«Reset»	Signifies recognition of alarms and warning messages. If permissible: Resets the fault counter (RESET).

Tab. 26 Controls

4.2.2 LEDs

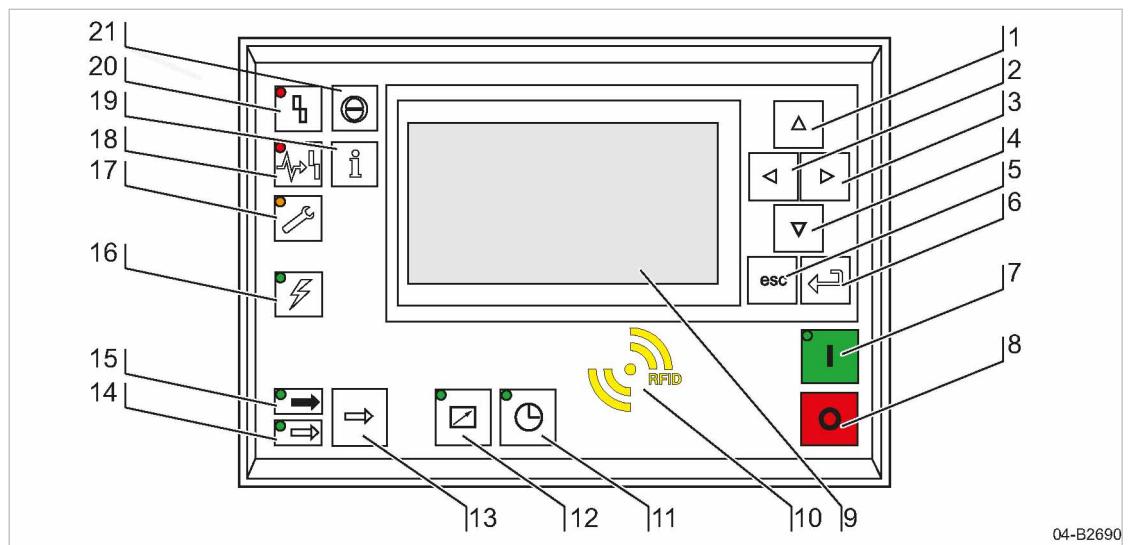


Fig. 7 Indicating and operating elements

Item	Name	Function
⑦	<i>ON</i>	Display illuminates green when the machine switched on.
⑨	<i>Display</i>	Graphic display with 8 lines and 30 characters per line.
⑪	<i>Timer control</i>	Continuous green light when the machine is controlled by the timer.
⑫	<i>Remote control</i>	Continuous green light when the machine is in remote control.
⑭	<i>IDLE</i>	Continuous green light when the machine is running in IDLE. Flashes when the «LOAD/IDLE» toggle key is pressed.
⑮	<i>LOAD</i>	Continuous green light when the machine is running in LOAD.
⑯	<i>Controller on</i>	Continuous green light when voltage is applied to the controller.
⑰	<i>Warning</i>	Flashes in yellow in the following events: ■ Maintenance necessary. ■ Warning message
⑱	<i>Communications error</i>	Continuous red light to indicate a faulty communication connection without machine shut-down.
⑳	<i>Fault</i>	Flashes red to indicate a machine fault. Continuous red light after acknowledgement.

Tab. 27 Display elements

4.2.3 RFID sensor field

RFID is the abbreviation for “Radio Frequency Identification” and enables the identification of persons or objects.

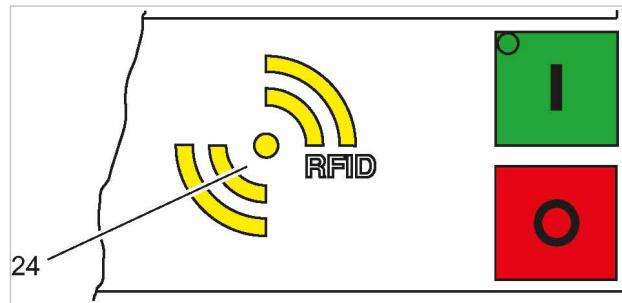
Placing a suitable transponder in front of the RFID sensor field of the controller will automatically activate the communication between transponder and SIGMA CONTROL 2.

A suitable transponder is the RFID Equipment Card. Two of them have been provided with the machine.

Typical application:

- Operators log on at the machine.
(Manual input of the password not required)

- The RFID Equipment Cards are carefully packed in a plastic sleeve.
This plastic sleeve is attached to the rear of the controller in the control cabinet.



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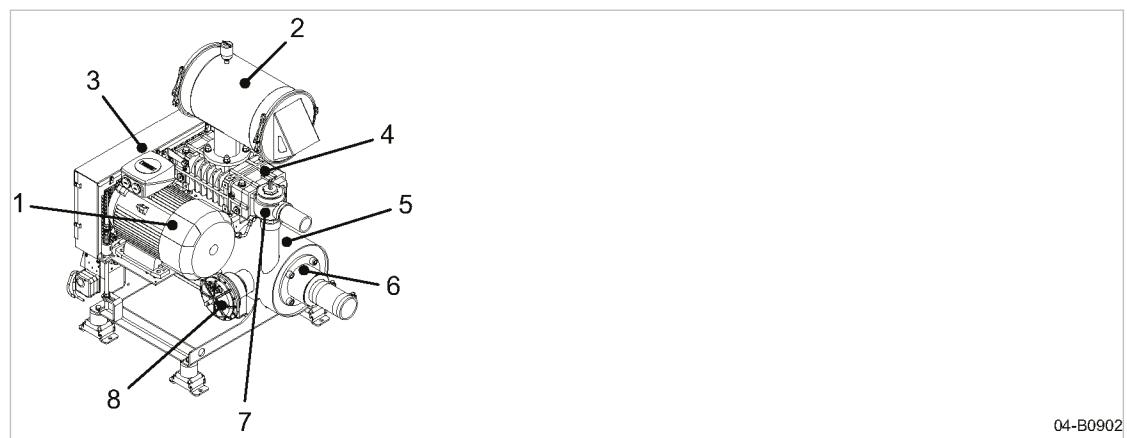
Fig. 8 RFID sensor field

Item	Name	Function
24	RFID	RFID sensor field for the communication with a RFID Equipment Card or RFID Key.

Tab. 28 RFID sensor field

Further information More information about the use of RFID technology is provided in the SIGMA CONTROL 2 operating manual.

4.3 Machine



04-B0902

Fig. 9 Machine

- | | | | |
|---|----------------|---|---|
| ① | Drive motor | ⑤ | Outlet silencer |
| ② | Inlet silencer | ⑥ | Check Plate (Option G1) |
| ③ | Belt guard | ⑦ | Safety relief valve |
| ④ | Blower block | ⑧ | Unloaded start valve or start-up pressure control valve (Option C11, C18) |

The drive motor ① drives the blower block ④ via a belt drive.

Air is drawn into the inlet silencer ② via an air filter where it is cleaned.

The air is then pushed from the blower block in a vertical direction into the outlet silencer (5), where the process forces pressure build-up.

4.4 Blower block

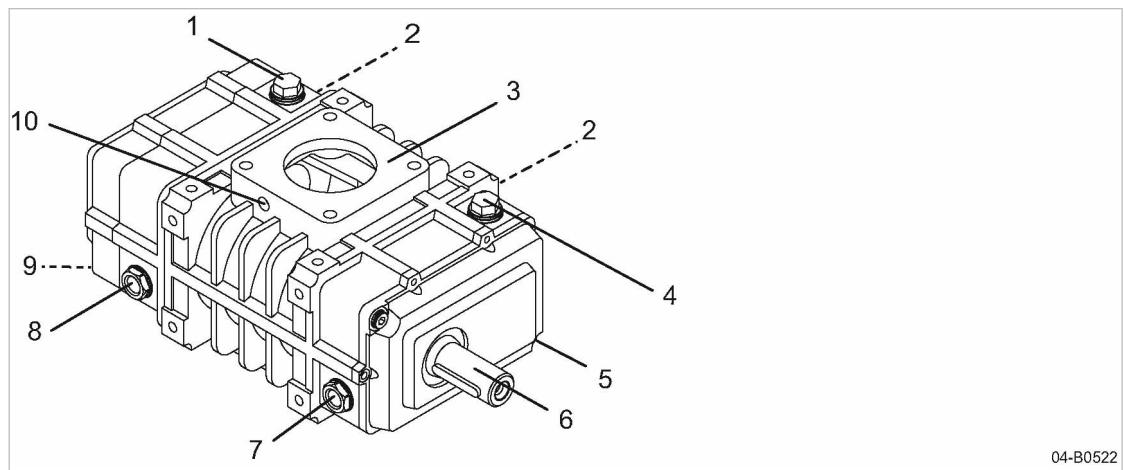


Fig. 10 Blower block

- | | | | |
|-----|--------------------------------|------|--|
| [1] | Gear-end oil inlet | [6] | Drive shaft |
| [2] | Side gas drainage (closed) | [7] | Drive-end oil sight glass |
| [3] | Flange connection (both sides) | [8] | Gear-end oil sight glass |
| [4] | Drive-end oil inlet | [9] | Gear-end oil drain |
| [5] | Drive-end oil drain | [10] | Connection for measuring instrument (both sides) |

A pair of rotors with intermeshing lobes turn in opposite directions within a casing. The rotors are synchronized by timing gears on one end. Air in the block inlet is trapped between the rotor lobes and the casing and moved round to the discharge port.

As there is no contact between the rotors themselves and the casing, oil film lubrication is not required.

4.5 Safety relief valve

The safety relief valve protects the system from excessive pressure. It is factory set.

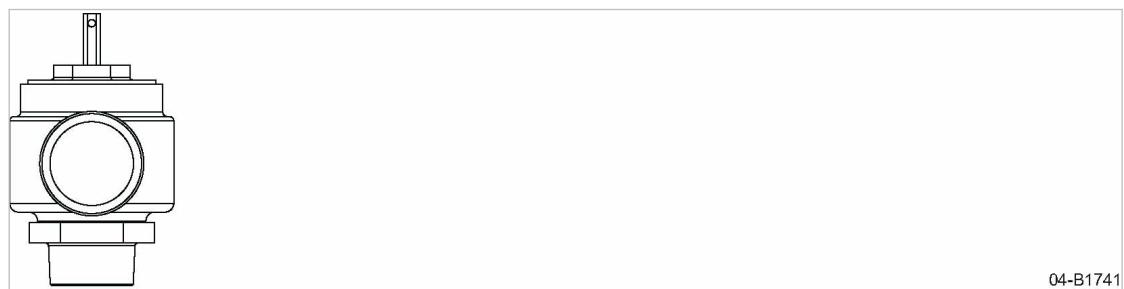


Fig. 11 Safety relief valve

4.6 Safety devices

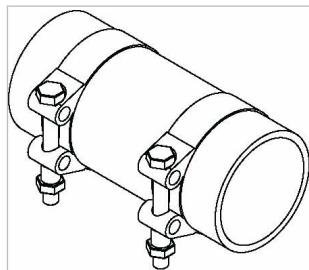
The following safety devices are provided and may not be modified in any way.

- Safety relief valve:
The safety relief valve protects the machine from excessive pressure build-up. It is factory set.
- Covers over moving parts and electrical connections:
These protect against accidental contact.

4.7 Compensator

The compensator functions as follows:

- Inlet and outlet connections to silencers and accessories,
- Isolates the machine vibrations from the air pipeline.



04-B0694

Fig. 12 Compensator

4.8 Automatic starting

Depending on the settings in the controller, the machine can automatically start after a power failure or external deactivation.

You must be logged in with the RFID Equipment Card in order to activate or deactivate this option.
Option deactivated (factory setting):

- Machine remains deactivated after a network power failure.

Option activated:

- Machine automatically restarts after the voltage supply has returned.

Further information Note the instructions in the operating manual supplied with SIGMA CONTROL 2 for activating and deactivating this function.

4.9 Floating relay contacts

Floating relay contacts are provided for the transfer of operational state (messages).
Information on location, loading capacity, and type of contact can be found in the electrical diagram.



If the floating relay contacts are connected to an external voltage source, voltage may be present even when the machine is isolated from the power supply.

4.10 Options

The options available for your machine are described below.

4.10.1 Option C10 Speed monitor

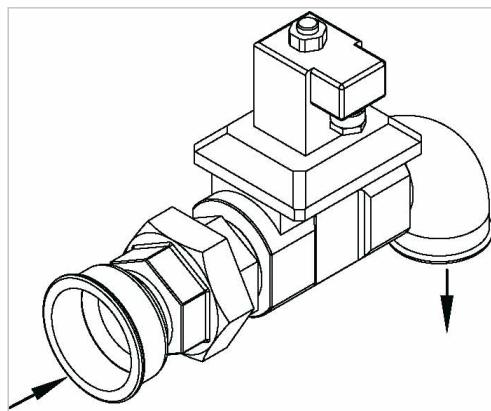
The speed monitor measures the rotational speed of the block rotors.

If the set minimum speed is not reached, the controller displays an alarm message and shuts down the machine.

4.10.2 Option C11 Unloaded start valve

4.10.2.1 AFM 5

AFM 5 opens the line from the discharge side of the machine to atmosphere during start-up.



04-B1805

Fig. 13 Unloaded start valve AFM 5

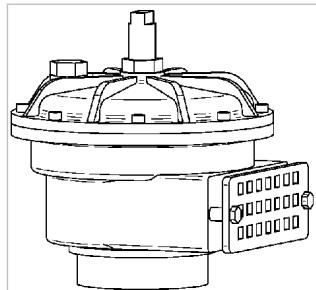
Function description

The unloaded start valve is closed when de-energized when the machine is switched off. When the machine is switched on and the motor is in the star phase, the unloaded start valve is energized and opens. Air discharged is blown through the blow-off aperture out into the atmosphere.

When the motor switches to delta, the unloaded start valve is de-energized and closes.

4.10.2.2 AFE 15

AFE 15 provides an unloaded start of the machine in the star-delta phase. The valve closes when the motor starter switches from star (Y) to delta (Δ).



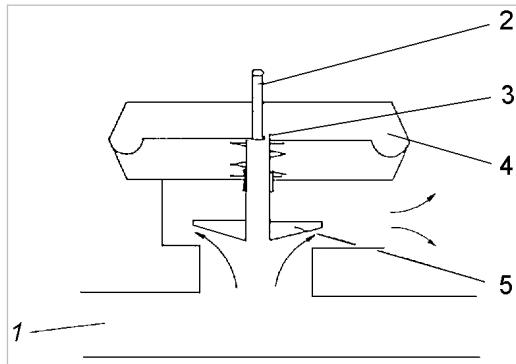
04-B0722

Fig. 14 Unloaded start valve AFE 15



The unloaded start valve is factory set.

Function description



04-B0724

Fig. 15 Diagram of the unloaded start valve AFE 15

- ① Air network
- ② Adjusting screw
- ③ Nozzle

- ④ Diaphragm chamber
- ⑤ Valve cone

When the machine is shut down the valve cone ⑤ is open.

When the machine is started, air passes through the blow-off aperture into the atmosphere.

Screwing in the adjusting screw ② reduces the gap between the valve cone ⑤ and its seating so that it closes at a lower flow rate.

(1.5 psig pressure is needed in the network to close the valve cone ⑤)

Back pressure enters through the nozzle ③ into the upper diaphragm chamber ④ to close the valve cone. The closing time can be influenced by changing the position of the valve cone with the adjusting screw ②.

Changing the closing time with the adjusting screw:

- Clockwise - shorter closing time
- Counterclockwise - longer closing time

4.10.3 Option C18

Unloaded start valve with regulating valve

The unloaded start valve with regulating valve is a medium-controlled valve with the following functions:

- Unloaded starting
- Pressure regulating during operation

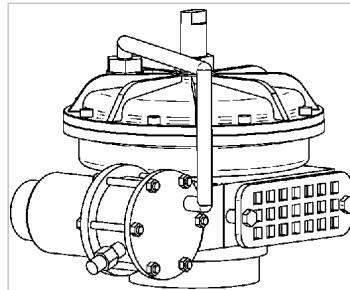


Fig. 16 Unloaded start valve with regulating valve

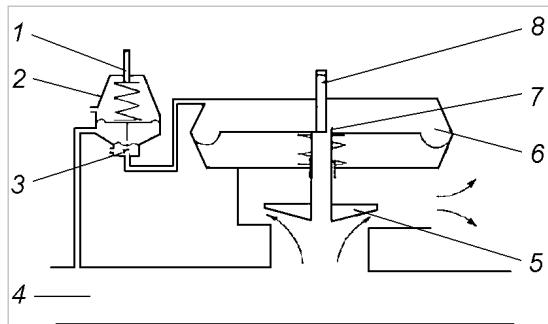


Fig. 17 Diagram of the unloaded start valve with regulating valve

①	Adjusting screw	⑤	Valve cone
②	Control air regulator	⑥	Diaphragm chamber
③	Valve cone	⑦	Nozzle
④	Air network	⑧	Adjusting screw

Unloaded starting

When the machine is stopped the valve cone (5) is open and valve cone (3) closed. When the machine is started, air flows over the valve cone (5) and is blown off to atmosphere. The pressure build-up in the air network (4) is transmitted through the hollow spindle and nozzle (7) into the upper diaphragm chamber (6). The resulting pressure on the diaphragm closes the valve cone (5).

Changing the closing time:

The valve closing time can be adjusted by changing the nozzle (7) and turning the adjusting screw (8).

- Clockwise: shorter closing time
- Counterclockwise: longer closing time

The unloaded start function only works if the pressure in the air network (4) reaches at least 1.45 psig.

Overflow regulation

The control air regulator is set to atmospheric pressure.

After starting, the network pressure and the pressure on the control air regulator ② rises. As soon as the set network pressure is reached the valve cone ③ opens. Pressure in the upper diaphragm chamber ⑥ bleeds off to atmosphere and the valve cone ⑤ opens.

The set network pressure is kept constant.

Changing the pressure setting:

Remove the rubber cap from the control regulator to change network pressure. Undo the locknut and adjust the screw with a screwdriver.

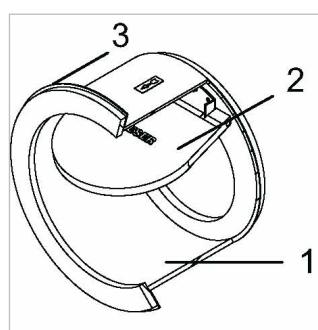
- Clockwise: lower pressure
- Counterclockwise: higher pressure

Lock the screw in position after adjusting and replace the rubber cap.

4.10.4 Option G1**Check valve**

The check valve prevents reversal of the normal air flow direction.

The valve is closed when the machine is at standstill.



04-B1743

Fig. 18 Check valve

- ① Housing
- ② Closing mechanism
- ③ Gasket

4.10.5 Option H11**Piped inlet**

Air is drawn into the block through the inlet silencer.

5 Installation and Operating Conditions

5.1 Ensuring safety

The conditions in which the machine is installed and operated have a decisive impact on safety. Warning instructions are located before a potentially dangerous task.



Disregard of warning instructions can cause serious injuries!

Complying with safety instructions

Disregard of safety warnings can cause unforeseeable dangers!

- Strictly forbid fire, open flame and smoking.
- If welding is carried out on or near the machine, take adequate measures to prevent sparks or heat from igniting oil vapors or parts of the machine.
- Do not store flammable material in the vicinity of the machine.
- The machine is not explosion-proof!
Do not operate in areas in which specific requirements with regard to explosion protection are in force.
- Ensure sufficient and suitable lighting such that the display can be read and work carried out comfortably and safely.
- Keep suitable fire extinguishing agents ready for use.
- Comply with the permissible ambient and intake conditions.
- Ensure the correct composition of the intake air:
 - Clean with no damaging contaminants (e.g., dust, fibers, fine sand).
 - Free of explosive or chemically unstable gases or vapors.
 - Free of acid/alkaline forming substances, particularly ammonia, chlorine or hydrogen sulfide.

Noise

The sound enclosure absorbs and reduces the machine noise to a comfortable level. This function will be effective only if the sound enclosure is closed.

- If necessary, wear hearing protection or take hearing protection measures on-site.

5.2 Installation conditions

5.2.1 Determining installation location and clearances

The machine is intended for installation in a suitable machine room. Information on wall clearances and ventilation is given below.



The clearances specified are recommended clearances and ensure unhindered access to all machine parts.

- Please consult KAESER if you cannot comply with these recommendations.

Precondition	The floor must be level, firm and capable of bearing the weight of the machine. No special foundations are necessary.
--------------	--

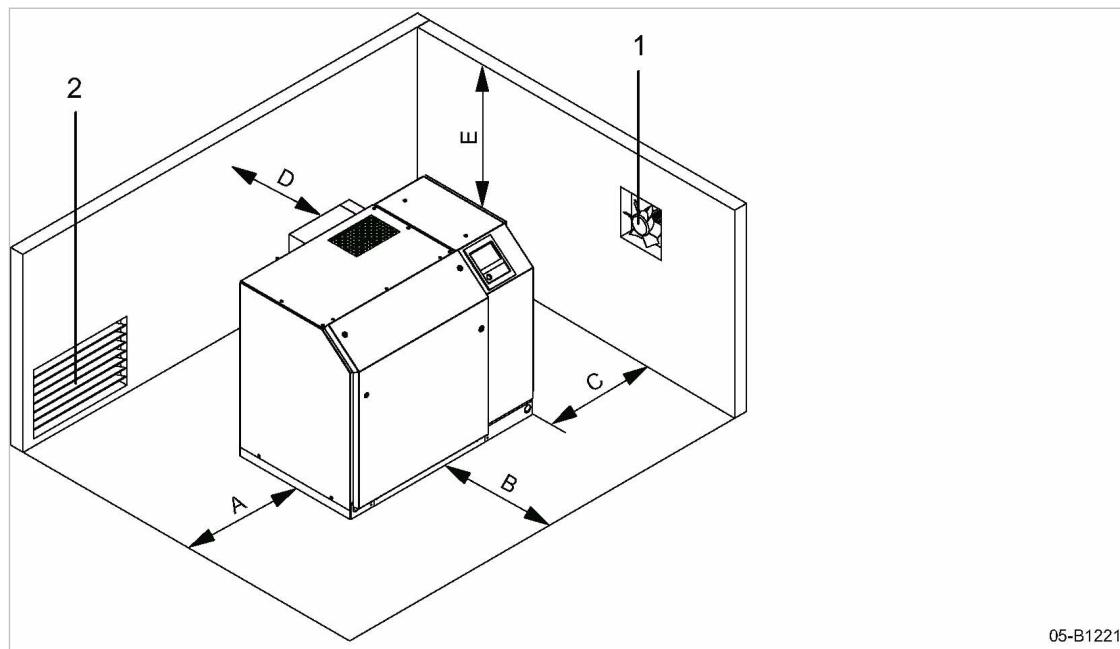


Fig. 19 Recommended positioning of the machine, minimum dimensions [in.]

- | | | | |
|----------------------------|--------------|----------------------------|-------------------------------|
| <input type="checkbox"/> A | See Table 29 | <input type="checkbox"/> E | 27.6 |
| <input type="checkbox"/> B | 35.4 | <input type="checkbox"/> 1 | Exhaust fan |
| <input type="checkbox"/> C | See Table 29 | <input type="checkbox"/> 2 | Ventilation inlet air opening |
| <input type="checkbox"/> D | 27.6 | | |

► Determine clearances A and C.

Characteristic, option	Recommended positioning of the machine, minimum dimensions
C33, START CONTROL (STC)	Distance <input type="checkbox"/> A or <input type="checkbox"/> C must be a minimum of 27.6 in.. Version 1: <input type="checkbox"/> A = 1.6 in. and <input type="checkbox"/> C = 27.6 in. Version 2: <input type="checkbox"/> A = 27.6 in. and <input type="checkbox"/> C = 1.6 in.
C34, OMEGA FREQUENCY CONTROL (OFC)	<input type="checkbox"/> A = 1.6 in. <input type="checkbox"/> C = 31.5 in.

Tab. 29 Recommended positioning of the machine, minimum dimensions

- If the ambient temperature is too low: Ensure that the compressor room is adequately heated.
- Ensure accessibility so that all work on the machine can be carried out hazard-free and without obstruction.
- Do not position the machine in the hot exhaust air flow from other machines.
- When installing multiple machines, ensure that all inlet and exhaust air openings are arranged on one side.
- Observe any additional clearances that may be specified in local occupational health & safety and building regulations, so that escape and rescue routes may safely be accessed, even when the machine enclosure is open.

5.2.2 Ensuring adequate ventilation

If the ventilation is insufficient, a partial vacuum can be created in the machine room.

- Ensure that the flow rate of inlet air is at least the same as the flow rate taken by the machine and exhaust fan from the machine room.
- Ensure that a sufficient amount of oxygen is available for any individuals entering the machine room.
- Ensure that the machine and exhaust fan can only be operated when the ventilation inlet air opening is open.
- Keep the inlet and exhaust openings free from obstructions so that the cooling air can flow freely through the machine room.

6 Installation

6.1 Ensuring safety

Follow these instructions to ensure safe installation.

Warning instructions are provided prior to any potentially dangerous task.



Disregard of warning instructions can result in life-threatening injuries!

Observe safety instructions

Non-observance of safety instructions can result in unforeseen dangers.

- Follow the instructions in chapter 3 “Safety and Responsibility”.
- Installation work must be carried out by authorized personnel only!
- Ensure that no personnel are working on the machine.
- Ensure that all cover panels are closed.

Working on live components

Touching live components can result in electric shocks, burns or death.

Dangerous voltages remain in the frequency converter and intermediate circuit capacitors for some time after the power has been disconnected.

When the frequency converter is open, live components are exposed.

- Work on electrical equipment may only be carried out by authorized and certified electricians.
- Switch off and lock out / tag out the power supply disconnecting device. Verify the absence of all voltage.
- Before starting work on the frequency converter or intermediate circuit capacitors, wait for at least 5 minutes.
- Check that any floating contacts are free from voltage.

Working on the pressure system

Compressed air is stored energy. Uncontrolled release of this energy can cause serious injury or death. The following safety instructions relate to any work on components that might be pressurized.

- Switch off the power supply disconnecting device, lock out / tag out the device, verify the absence of all voltage.
- Close shut-off valves or otherwise isolate the machine from the compressed air network so as to ensure that no compressed air can flow back into the machine.
- Fully vent all pressurized components and enclosures.
- Do not open or dismantle any valves.

Working on the drive system

Touching live components can result in electric shocks, burns or death.

Touching the fan wheel or the belt drive while the machine is running can result in serious injury.

- Switch off the power supply disconnecting device, lock out / tag out the device, verify the absence of all voltage.

- Do not open any of the cover panels while the machine is switched on.
- If full protection is only provided when the machine is completely installed, then in all other phases of the machine's life-cycle temporary protective devices (e.g. covers) must be fitted, in order to guarantee that parts of the body cannot reach or be caught/sucked in by the rotary lobes.

Further information Information regarding authorized personnel can be found in chapter 3.4.2.
Information regarding dangers and the avoidance thereof can be found in chapter 3.5.

6.2 Reporting transport damage

1. Check the machine for visible and hidden transport damage.
2. Inform the carrier and the manufacturer in writing of any damage without delay.

6.3 Anchoring the machine

The machine may be anchored to the floor.

The following anchoring elements are shipped with the machine:

Foundation bolts for machines without sound enclosure.

Foundation bolts and angle brackets for machines with sound enclosure.

- Use the anchoring elements to anchor the machine without stress.

Further information Details of the fixing holes are contained in the dimensional drawing in chapter 13.2.

6.4 Connecting the power supply

- Precondition The power supply disconnecting device is switched off, lock out and tag out the device, the absence of any voltage has been verified.
The tolerance limits of the power supply are within the tolerance limits of the rated machine voltage.
Option C34, OMEGA FREQUENCY CONTROL (OFC):
The voltage in the intermediate circuit capacitors of the frequency converter is reduced.
1. The power supply must only be connected by authorized installation personnel or authorized certified electricians.
 2. Carry out protection measures as stipulated in relevant regulations and in national accident prevention regulations. In addition, observe the regulations of the local electricity supplier.
 3. Select supply cable conductor cross-sections and fusing in accordance with local regulations and chapter 2.10.
 4. Test the overcurrent protective device to ensure that the time it takes to shut down in response to a fault is within the permitted limit.
 5. The user is required to fit the machine with a lockable power supply disconnecting device. This could be, for example, a load disconnect switch with fused input. If a circuit breaker is used it must be suitable for the motor starting characteristics.
 6. Check that the control transformer is connected according to the supply voltage.
If not, reconnect the control transformer to suit the power supply voltage.

6 Installation

6.5 Making the compressed air connection

7. **⚠ DANGER** *Danger of fatal injury from electric shock!*
 - *Switch off and lock out the power supply disconnecting device and verify the absence of voltage.*
8. Connect the machine to the power supply.
9. Properly close openings, cable glands, etc.

Further information The wiring diagram in chapter 13.4 contains further details of the power supply connection.

Connecting the control cabinet

The machine can be operated at full power at the rated voltage with a tolerance of $\pm 5\%$.

If the supply voltage deviates from the rated voltage, the control transformer's (component T11) cable bridge should be changed to correspond to the actual main power supply.

1. Select supply cable conductor cross-sections and fusing in accordance with local regulations and chapter 2.10.
2. Connect the control cabinet (note clockwise phase rotation!).

6.4.1 Option C32

Under frequency control



If the machine is delivered by KAESER including the frequency converter, the regulation behavior and operating mode of the frequency converter will be preset.

- Adapt and optimize the actual properties to the customer system on-site.
- Comply with the following provisions if you operate machines with a frequency converter:
 - Operate the machine only within its performance limits and under the permitted ambient conditions.
 - The speed change should be approx. 5 Hz per second. This value applies also for the starting ramp from standstill to reaching minimum frequency. Deviating settings, either slower or faster, may be possible after verification by an authorized KAESER SERVICE representative.
 - The frequency converter may be switched to a motor in standstill only, in order to avoid malfunctions.
 - The automatic restart of the machine is **not** preset for safety-relevant reasons.

6.5 Making the compressed air connection

Material Torque wrench

Precondition The machine is factory assembled up to the point of connection to the discharge silencer.
The compressed air system is at atmospheric pressure.

⚠ WARNING

Serious injury or death can result from loosening or opening components under pressure!

- *Depressurize all pressurized components and enclosures.*



If the system has a tendency for air/gas under pressure to flow back to the machine when it is stopped, a non-return device must be installed to allow for unloaded starting of the machine.

- Consult KAESER on a suitable check valve and expert installation.

6 Installation

6.6 Connecting the inlet pipe

1. Use a flexible connector to create the compressed air connection to the pipeline system or the consumer and install, complying with the torques specified below:

Connection to an customer's pipeline	Torque [lbf·ft]
Compressor with hose clamps	15
Compressor with screwed joint M20*	—

* Manually tighten screws equally, pretension crosswise at 37 lbf·ft and subsequently retighten crosswise with torque according to table.

Tab. 30 Compressor torques at pressure end

2. Support the weight of the piping and any other connecting components.

6.6 Option H11 Connecting the inlet pipe

If air is sucked in from the pipeline, the inlet silencer is connected using a compensator.

Material Torque wrench

Precondition The compressed air system is vented completely to atmospheric pressure.

1. Connect to the compressed air system using the following torques:

Connection to an customer's pipeline	Torque [lbf·ft]
Compressor with hose clamps	15
Compressor with screwed joint M20*	—

* Manually tighten screws equally, pretension crosswise at 37 lbf·ft and subsequently retighten crosswise with torque according to table.

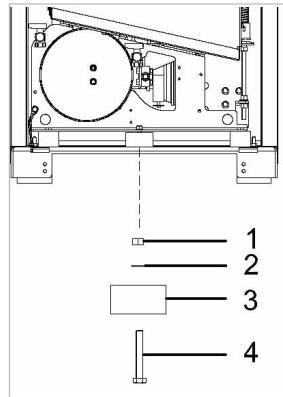
Tab. 31 Inlet compressor torques

2. Separately secure the inlet pipelines upstream of the compensator.

Further information The dimensional drawing in chapter 13.2 provides information regarding the connection of the pipeline.

6.7 Option H12

Sound enclosure: Remove transport securing devices



06-B1146

Fig. 20 Removing the transport securing devices

- | | | | |
|---|-------------|---|--------|
| ① | Hexagon nut | ③ | Spacer |
| ② | Washer | ④ | Screw |

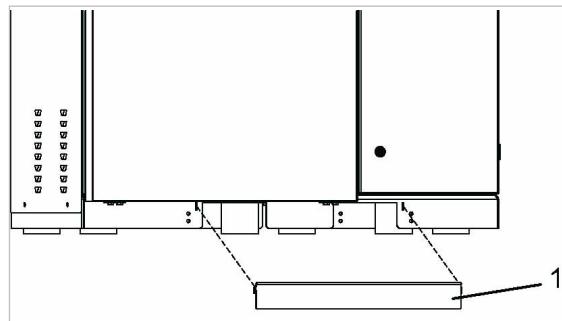
Remove the transport securing devices after the machine has been installed.

1. Remove the access panel of the sound enclosure.
2. Remove the transport securing device and store for future transports.

6.8 Option H12

Sound enclosure: Fitting the cover plate

A cover plate for the transport opening at the machine's base frame is included with the delivery. Install this cover plate after the machine is installed.



06-B0912

Fig. 21 Fitting the cover plate

- | | |
|---|-------------|
| ① | Cover plate |
|---|-------------|
- Screw the cover plate to the base frame.

7 Initial Start-up

7.1 Ensuring safety

This chapter provides instructions for safe commissioning of the machine.

Warning instructions are provided prior to any potentially dangerous task.



Disregard of warning instructions can result in life-threatening injuries!

Observe safety instructions

Non-observance of safety instructions can result in unforeseen dangers.

- Follow the instructions in chapter 3 "Safety and Responsibility".
- Commissioning tasks may only be carried out by authorized installation personnel!
- Ensure that no personnel are working on the machine.
- Ensure that all cover panels are closed.

Working on live components

Touching live components can result in electric shocks, burns or death.

Dangerous voltages remain in the frequency converter and intermediate circuit capacitors for some time after the power has been disconnected.

When the frequency converter is open, live components are exposed.

- Work on electrical equipment may only be carried out by authorized and certified electricians.
- Switch off the power supply disconnecting device, lock out / tag out the device, verify the absence of all voltage.
- Before starting work on the frequency converter or intermediate circuit capacitors, wait for at least 5 minutes.
- Check that any floating contacts are free from voltage.

Working on the pressure system

Compressed air is stored energy. Uncontrolled release of this energy can cause serious injury or death. The following safety instructions relate to any work on components that might be pressurized.

- Switch off the power supply disconnecting device, lock out / tag out the device, verify the absence of all voltage.
- Close shut-off valves or otherwise isolate the machine from the compressed air network so as to ensure that no compressed air can flow back into the machine.
- Fully vent all pressurized components and enclosures.
- Do not open or dismantle any valves.

Working on the drive system

Touching live components can result in electric shocks, burns or death.

Touching the fan wheel or the belt drive while the machine is running can result in serious injury.

- Switch off the power supply disconnecting device, lock out / tag out the device, verify the absence of all voltage.

7 Initial Start-up

7.2 Instructions to be observed before commissioning

- Do not open any of the cover panels while the machine is switched on.
- If full protection is only provided when the machine is completely installed, then in all other phases of the machine's life-cycle temporary protective devices (e.g. covers) must be fitted, in order to guarantee that parts of the body cannot reach or be caught/sucked in by the rotary lobes.

Further information Information regarding authorized personnel can be found in chapter 3.4.2.
Information regarding dangers and the avoidance thereof can be found in chapter 3.5.

7.2 Instructions to be observed before commissioning

Incorrect or improper commissioning can cause injury to persons and damage to the machine.

- Commissioning may be carried out only by authorized installation and service personnel who have been trained on this machine.

Special measures for recommissioning after storage/standstill

Storage period/ standstill longer than	Measure
12 months	<ul style="list-style-type: none"> ➤ Change the lubricating oil. ➤ Check the condition and tension of the drive belts. ➤ Have the frequency converter smoothing capacitors formed (refreshed) by an authorized KAESER service representative.
36 months	<ul style="list-style-type: none"> ➤ Have the overall technical condition checked by an authorized KAESER service representative.

Tab. 32 Recommissioning after storage/standstill

7.3 Checking installation and operating conditions

- Check and confirm all the items in the checklist before commissioning the machine.

To be checked	See chapter	Confirmed?
➤ Have all packing materials, tool and transport securing means been removed from the machine?	—	
➤ Are the operators completely familiar with safety regulations?	—	
➤ Have all the installation conditions been complied with?	5	
➤ Is the machine anchored to the floor without stress?	6.3	
➤ Are the tolerance limits of the power supply within the permissible tolerance limits of the rated machine voltage?	—	
➤ Are the power supply cable conductor cross-sections and fuse ratings adequate?	2.10	
➤ Is a user-supplied lockable power supply disconnecting device installed?	6.4	
➤ Has the control cabinet connection checked?	6.4	

To be checked	See chapter	Confirmed?
➤ Has a suitable non-return valve installed professionally?	6.5	
➤ Has the connection to the compressed air network been made with a flexible hose or compensator?	6.5	
➤ Has the drive motor direction of rotation been checked?	7.6	
➤ Have all electrical connections checked for tightness? (The check must be repeated after 50 operating hours.)	—	
➤ Is there adequate lubricating oil in the gear and drive-end of the blower block? (Level in the center of the oil sight glass)	10.6	
➤ Has the drive belt tension been checked?	10.5	
➤ Are the access doors and panels closed and latched? (Option H12)	4.1	

Tab. 33 Installation conditions check list

7.4 Configuring the controller

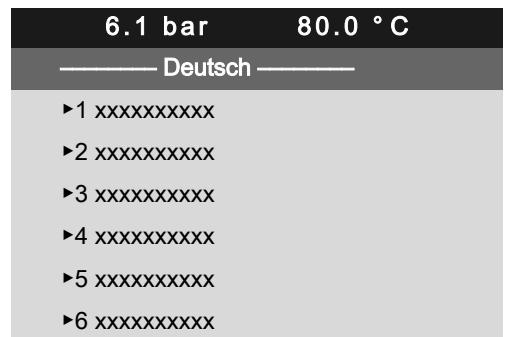
- Configure the controller as described in the SIGMA CONTROL 2 operating manual.

7.5 Setting the display language

The controller can display message text in several languages.

You can set the language for texts on the display. This setting will be retained even when the machine is switched off.

1. In operating mode, switch to the main menu with the «Enter» key.
2. Press the «UP» or «DOWN» keys until the current language is shown as active line:



Current language (active line)

Submenu

Submenu

Submenu

Submenu

Submenu

Submenu

3. Use the «Enter» key to switch to setting mode.

The language display flashes.

4. Move to the required language with «UP »or «DOWN».
5. Confirm the setting with the «Enter» key.

Result The display texts are now in the selected language.

Further information Detailed information can be found in the SIGMA CONTROL 2 operating manual.

7.6 Checking the direction of rotation for the drive motor

The machine is designed for a clockwise phase sequence.

An arrow showing the correct direction of rotation is indicated on the drive-side of the blower block and on the belt guard.

If the direction of rotation is incorrect, the flow direction will be reversed and air drawn in from the compressed air line.

A phase sequence relay is installed in the machine control cabinet, which only sends a release signal to the controller when a clockwise direction of rotation is detected.

The controller will report a fault if the direction of rotation is counterclockwise. In this case, exchange phases L1 and L2 of the supply line(s). The fault can then be acknowledged.

Material Phase sequence indicator

NOTICE

Incorrect direction of rotation!

This may result in damage to the machine from intake of foreign articles or excessive vacuum.

- *Ensure the correct direction of rotation.*

1. Remove the filter maintenance cover from the inlet silencer or inlet filter and/or remove the check plate on the inlet side.
2. Verify the direction of rotation using a phase sequence indicator on the machine supply lines.
3. If the direction of rotation is incorrect, exchange phases L1 and L2 of the supply lines.



If you do not have access to a phase sequence indicator:

- Arrange for the phase sequence to be checked by an authorized KAESER service representative.

7.7 Option C33

START CONTROL (STC): Setting the overload protection cut-out

The electrical diagram 13.4 gives the location of the overload protection cut-out.

With star-delta starting, the phase current is fed via the overload protection relay. This phase current is 0.58-times the rated drive motor current.

To prevent the overload relay being triggered by voltage fluctuations, temperature influences or component tolerances, the setting can be higher than the arithmetical phase current.

- Check the overload protection relay setting.



The overload protection relay shuts the machine down despite being correctly set?

- Contact an authorized KAESER service representative.

7.8 Starting the machine for the first time

Precondition No personnel is working on the machine.

The control cabinet door is closed and locked.

All enclosure panels are in place and secured.

1. Allow the machine to cool down to ambient temperature before switching on for the first time to avoid the build up of condensation.

2. Switch on the power supply disconnecting device.

After the controller has carried out a self-test, the green *Controller on* LED is lit continuously.

3. If required:

Change the display language as described in chapter 7.5.

4. Press the «ON» key.

The green *IDLE* LED lights continuously.

The drive motor runs up.



- Watch for any faults occurring in the first hours of operation.
- After the first 50 operating hours, check all electrical connections and tighten where necessary.

8 Operation

8.1 Switching on and off

Always switch the machine on with the «ON» key and off with the «OFF» key.

A power supply disconnecting device has been installed by the user.

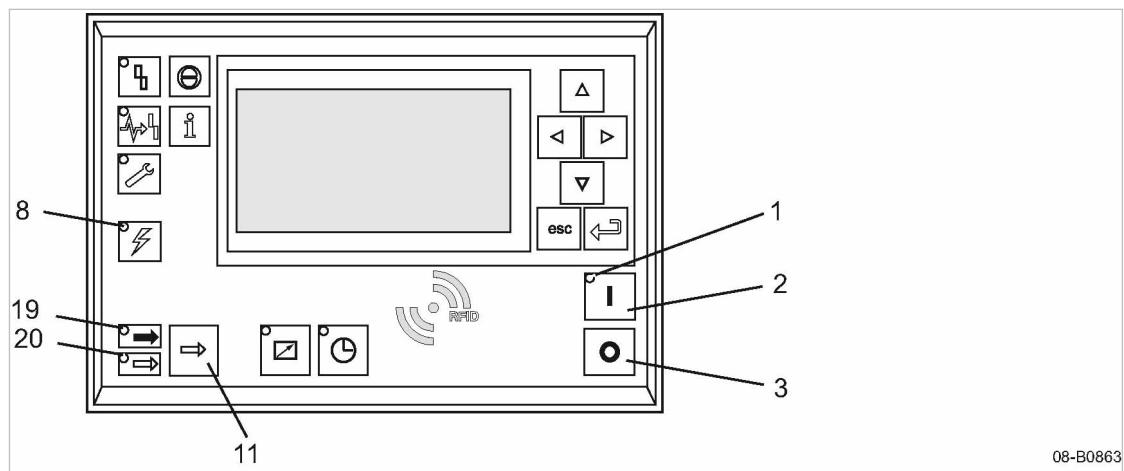


Fig. 22 Switching on and off

- | | | | |
|---|-----------------------------------|---|------------------------|
| ① | Machine ON LED | ⑪ | «LOAD/IDLE» toggle key |
| ② | «ON» key | ⑯ | LOAD LED |
| ③ | «OFF» key | ⑰ | IDLE LED |
| ⑧ | Voltage applied to controller LED | | |

8.1.1 Switching on

Precondition No personnel are working on the machine.

No personnel inside the machine.

The removable panel of the sound enclosure and other panels are inserted and locked.

1. Switch on the power supply disconnecting device.
The *Voltage applied to controller* LED lights green.
2. Press the «ON» key.
The *ON* LED lights green.

Starting frequency

Characteristic, option	Maximum frequency of motor starts per hour
C33, START CONTROL (STC)	■ 6 times
C34, OMEGA FREQUENCY CONTROL (OFC)	■ any

Tab. 34 Starting frequency

- Adhere to maximum frequency of motor starts per hour.

Automatic restart

If a power failure occurs, the machine is **not** prevented from re-starting automatically when power is resumed.

It can re-start automatically as soon as power is restored.

- Note the instructions in the user manual supplied with SIGMA CONTROL 2 for activating and deactivating this function.

8.1.2 Switching off

1. Press the «OFF» key.

When the machine switches to IDLE (as per configuration), and during the fan run-on time, the *Machine ON* LED flashes. The *Machine ON* LED extinguishes as soon as the automatic shut-off action is completed.

2. Switch off and lock out and tag out the power supply disconnecting device.

Result The *Voltage applied to controller* LED extinguishes. The machine is switched off and disconnected from the power supply.

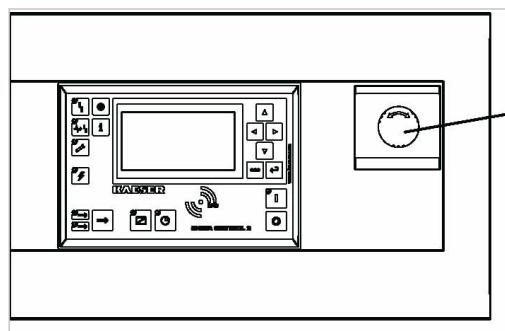


In rare cases, you may want to shut down the machine immediately and cannot wait until the automatic shut-down process is finished.

- Press «OFF» once again.

8.2 Switching off in an emergency and switching on again

The EMERGENCY STOP push -button is located to the right of the control panel.



08-B0865

Fig. 23 Switching off in an emergency

⑨ EMERGENCY-STOP push button

Switching off

- Press the EMERGENCY STOP push button.

Result The EMERGENCY STOP button remains latched after actuation.
The machine is secured against an automatic restart.

Switching on

Precondition The fault has been rectified

1. Turn the EMERGENCY STOP push button in the direction of the arrow to unlatch it.
2. Acknowledge any existing alarm messages.

Result The machine can now be started again.

8.3 Switching on and off from a remote control center

Precondition A link to the remote control center exists.

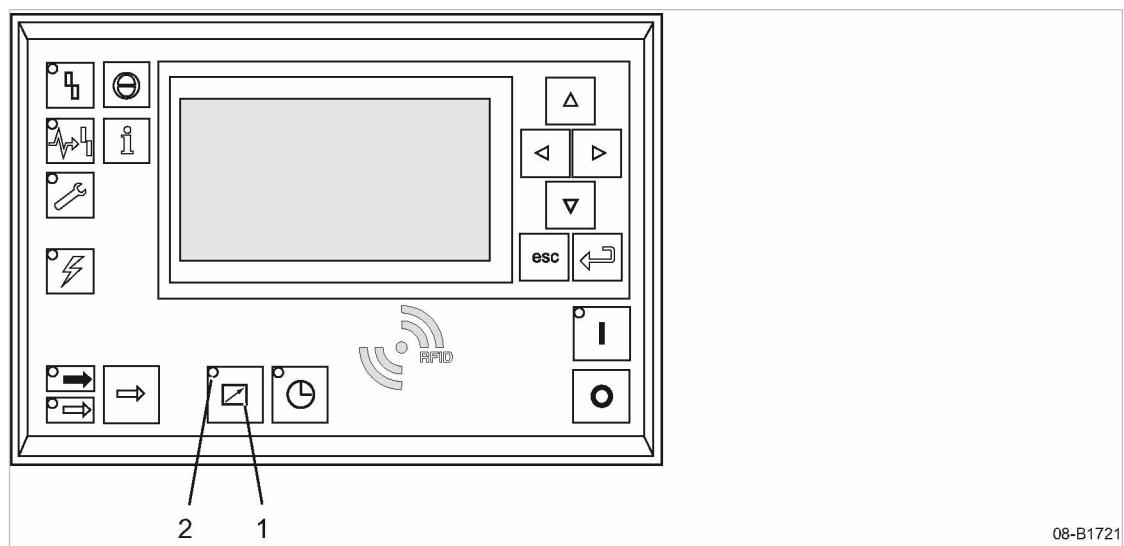


Fig. 24 Switching on and off from a remote control center

- ① «Remote control» key
- ② *Remote control*/LED

1. Attach an easily seen notice to the machine that warns of remote operation.

⚠ WARNING

Remote control: Risk of injury caused by unexpected starting!

- Make sure that the power supply disconnecting device is switched off before commencing any work on the machine.

Tab. 35 Machine identification

2. Label the starting device in the remote control center as follows:

⚠ WARNING

Remote control: Risk of injury caused by unexpected starting!

- Before starting, make sure that no one is working on the machine and that it can be safely started.

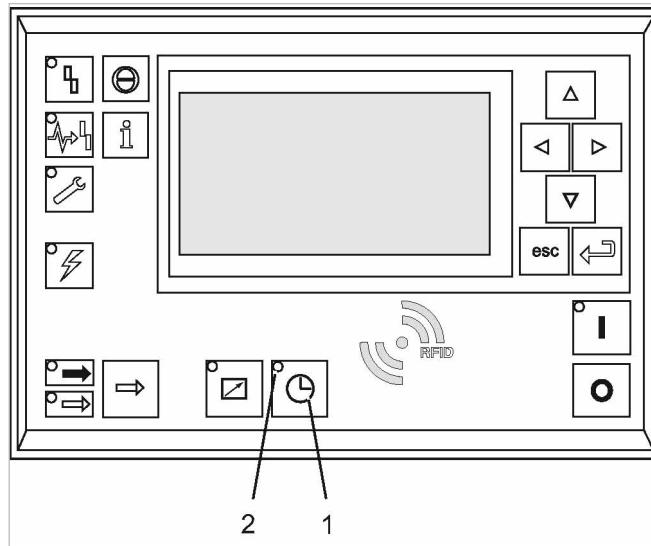
Tab. 36 Remote control identification

3. Press the «Remote control» key.

Result The *Remote control*/LED lights. The machine can be remotely controlled.

8.4 Switching on and off with the clock (timer)

Precondition The clock is programmed.



08-B1722

Fig. 25 Switching on and off with the clock (timer)

- ① «Timer control» key
- ② Timer control LED

1. Attach an easily seen notice warning of time-controlled operation:

⚠ WARNING

Time control: Risk of injury caused by unexpected starting!

- Make sure that the power supply disconnecting device is switched off before commencing any work on the machine.

Tab. 37 Machine identification

2. Press «Timer control».

Result The *Timer control*/LED lights. The machine is switched on and off by the clock (timer).

8.5 Option H12**Checking the ventilator fan function (sound enclosure)****NOTICE**

Overheating inside the sound enclosure!

A standstill of the ventilator fan can result in a breakdown of the blower block or other components.

- *If the ventilator stops, immediately provide an alternative flow of cooling air through the sound enclosure.*

- Check that air is actually being blown out of the enclosure cooling air outlet, e.g. by holding a sheet of paper in front of the outlet.

Further information KAESER SERVICE can advise on suitable measures.

8.6 Interpreting operation messages

The controller will automatically display operation messages informing you about the current operational state of the machine.

Operating messages are identified with the letter B.

Further information Detailed information can be found in the SIGMA CONTROL 2 operating manual.

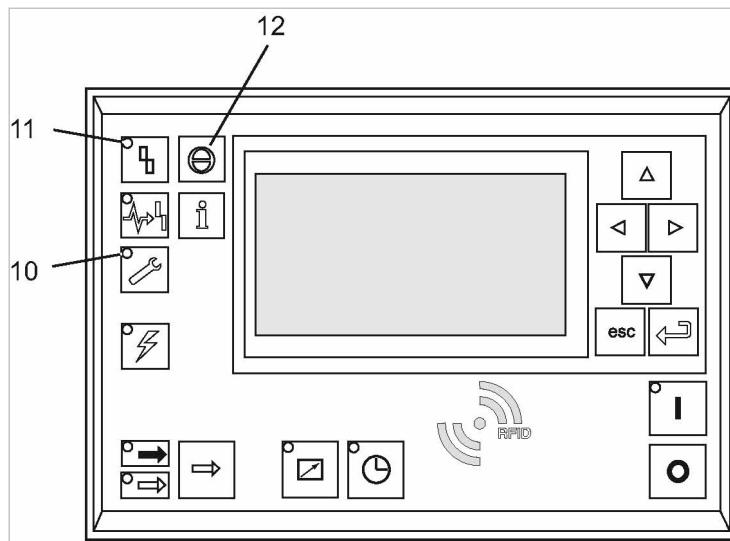
8.7 Acknowledging alarm and warning messages

Messages are displayed on the "new value" principle:

- Message coming: LED flashes
- Message acknowledged: LED illuminates
- Message going: LED off

or

- Message coming: LED flashes
- Message going: LED flashes
- Message acknowledged: LED off



08-B0864

Fig. 26 Acknowledging messages

- [10] *Warning LED (yellow)*
- [11] *Alarm LED (red)*
- [12] «Acknowledge» key

Alarm message

An alarm shuts the machine down automatically. The red *Alarm* LED flashes.

The system displays the appropriate message.

Precondition The fault has been rectified.

- Acknowledge the message with the «Acknowledge» key.
The *Alarm* LED extinguishes.
The machine is again ready for operation.



If the machine was switched off with the EMERGENCY STOP button:

- Unlatch the EMERGENCY STOP button (turn in direction of the arrow) before acknowledging the alarm message.

Further information Please refer to the SIGMA CONTROL 2 operating manual for a list of possible fault messages during operation.

Warning message

If maintenance work is to be carried out or if the warning is displayed before an alarm, the yellow *Warning* LED flashes.

The system displays the appropriate message.

Precondition The danger of an alarm is passed,
maintenance has been carried out.

- Acknowledge the message with the «Acknowledge» key.
The *Warning* LED extinguishes.

Further information Please refer to the SIGMA CONTROL 2 operating manual for a list of possible warning messages during operation.

9 Fault Recognition and Rectification

9.1 Basic instructions

Fault messages are classified in various categories:

- Warning:
 - Warning messages *W*
- Fault (with indication):
 - Alarm messages *S*
 - System messages *Y*
 - Diagnostic messages *D*
- Other faults (without indication): See chapter 9.2

The messages valid for your machine are dependent on how the individual machine is equipped.

1. Do not attempt fault rectification measures other than those given in this manual!
2. In all other cases:
Have the fault rectified by an authorized KAESER SERVICE representative.

Further information See the operating manual of SIGMA CONTROL 2 for details regarding the various messages.

9.2 Other faults

Alarm	Possible cause	Remedy
Unusual noise when running.	Too much backlash in the timing gears.	Contact KAESER Service.
	Too much clearance in the rotor bearings.	Contact KAESER Service.
	Rotors not synchronized.	Maintain the pressure differential and speed shown in the specification. Contact KAESER Service.
Blower block runs too hot.	Pressure differential too great.	Check and correct pressure differential.
	Clogged inlet filter reducing air intake volume.	Clean the inlet filter.
	Rotor clearance too large.	Contact KAESER Service.
	Leakage due to incorrect installation of pressure-bearing components.	Contact KAESER Service.
Oil leaks from the gas drain.	Lubricating oil level too high.	Drain off lubricating oil until the correct level is reached.
Oil leaking from around the drive shaft.	Shaft seal defective.	Contact KAESER Service.
Low intake flow volume.	Rotor clearance too large because of wear.	Contact KAESER Service.
	Intake resistance too high.	Clean the inlet filter.

Alarm	Possible cause	Remedy
Black film on the oil sight glasses.	Oil not changed at the correct interval.	Change the lubricating oil. Clean or renew the sight glass.
	Insufficient lubricating oil.	Change the lubricating oil. Clean or replace the sight glass.
	Oil overheated. Block overloaded.	Contact KAESER Service. Contact KAESER Service.
Water in the oil.	Condensate build-up by prolonged storage and high humidity.	Change the lubricating oil.
Safety relief valve activates.	Inadmissible operating state, operating pressure too high.	Bring the machine to a permissible operational state or shut down.

Tab. 38 Other faults and remedies

9.3 Option H12 Sound enclosure faults

Alarm	Possible cause	Remedy
Overheating inside the sound enclosure!	Fan defective or turning in the wrong direction.	Check connection. Contact an authorized KAESER service representative.
	Flow of cooling air blocked.	Check and clean cooling air apertures. Check the cooling air inlet temperature.
	Drive motor overloaded.	Check operating conditions.
	Leakage due to incorrect installation of pressure-bearing components.	Contact an authorized KAESER service representative.

Tab. 39 Faults and remedies (option H12)

10 Maintenance

10.1 Ensuring safety

Follow the safety instructions below to ensure safe maintenance of the machine.

Warning instructions are provided prior to any potentially dangerous task.



Disregard of warning instructions can result in life-threatening injuries!

Observe safety instructions

Non-observance of safety instructions can result in unforeseen dangers.

- Follow the instructions in chapter 3 “Safety and Responsibility”.
- Maintenance work must be performed by authorized personnel only.
- Ensure that no personnel are working on the machine.
- Ensure that all cover panels are closed.

Working on live components

Touching live components can result in electric shocks, burns or death.

Dangerous voltages remain in the frequency converter and intermediate circuit capacitors for some time after the power has been disconnected.

When the frequency converter is open, live components are exposed.

- Work on electrical equipment may only be carried out by authorized and certified electricians.
- Switch off the power supply disconnecting device, lock out / tag out the device, verify the absence of all voltage.
- Before starting work on the frequency converter or intermediate circuit capacitors, wait for at least 5 minutes.
- Check that any floating contacts are free from voltage.

Working on the pressure system

Compressed air is stored energy. Uncontrolled release of this energy can cause serious injury or death. The following safety instructions relate to any work on components that might be pressurized.

- Switch off the power supply disconnecting device, lock out / tag out the device, verify the absence of all voltage.
- Close shut-off valves or otherwise isolate the machine from the compressed air network so as to ensure that no compressed air can flow back into the machine.
- Fully vent all pressurized components and enclosures.
- Do not open or dismantle any valves.

Working on the drive system

Touching live components can result in electric shocks, burns or death.

Touching the fan wheel or the belt drive while the machine is running can result in serious injury.

- Switch off the power supply disconnecting device, lock out / tag out the device, verify the absence of all voltage.

- Do not open any of the cover panels while the machine is switched on.
- If full protection is only provided when the machine is completely installed, then in all other phases of the machine's life-cycle temporary protective devices (e.g. covers) must be fitted, in order to guarantee that parts of the body cannot reach or be caught/sucked in by the rotary lobes.

Further information Information regarding authorized personnel can be found in chapter 3.4.2.
Information regarding dangers and the avoidance thereof can be found in chapter 3.5.

10.2 Maintenance schedule

10.2.1 Logging maintenance work



The maintenance intervals given are those recommended for average operating conditions.

- Maintenance tasks should be carried out more frequently where operating conditions are unfavorable (e.g. dusty atmosphere) or when the equipment is in constant use.
- Adjust the maintenance intervals with regard to local installation and operating conditions.
- Keep a log of all maintenance and service work.
This enables the frequency of individual maintenance tasks and deviations from our recommendations to be determined.

Further information A prepared list is provided in chapter 10.15.

10.2.2 Resetting maintenance interval counters

Depending on the way a machine is equipped, sensors and/or maintenance interval counters monitor the operational state of important functional devices. Required maintenance work is shown on the SIGMA CONTROL 2.

Precondition Maintenance performed and,
Maintenance message acknowledged.

- Reset the maintenance interval counter as described in the SIGMA CONTROL 2 operating manual.

10.2.3 Regular maintenance tasks

The table below lists the required maintenance tasks.



If operating conditions are unfavorable (e.g. dusty ambient) or if the equipment is in constant use, maintenance tasks must be carried out more frequently (shorter intervals).

- Carry out maintenance tasks in a timely manner, taking the ambient and operating conditions into consideration:

Interval	Maintenance task	See chapter
At least 24 hours after initial commissioning	Check drive belt tension.	10.5
At least 50 hours after initial commissioning	Check that all electrical connections are secure and properly attach if necessary.	–
Weekly	Control cabinet: Check the filter mat.	10.3
500 h after initial commissioning*	Change the lubricating oil.	10.8
Up to 500 h Or monthly	Check the oil level. Check drive belt tension. Check the air filter. Control cabinet: Clean the filter mat.	10.6 10.5 10.9 10.3
Up to 1000 h	Clean the machine.	10.11
Up to 3000 h At least once a year	Change the FGB 220 lubricating oil.	10.8
Up to 3000 h, At least once a year	Change the air filter. Control cabinet: Replace the filter mat.	10.9 10.3
Annually	Check the safety relief valve. Check the EMERGENCY STOP push button. Check that all electrical connections are secure and properly attach if necessary.	10.13 10.14 –
Up to 3000 h, At least every 2 years	Change the SB 220 lubricating oil.	10.8
Up to 12000 h, At least every 4 years	Replace the drive belt.	10.5

h = operating hours

* Not applicable in the case of initial commissioning by an authorized KAESER service representative.

Tab. 40 Regular maintenance tasks

10.2.4 Regular service tasks

The table below lists necessary service tasks.

- Only an authorized KAESER service representative should carry out maintenance work.

- Have service tasks carried out in a timely manner, taking the ambient and operating conditions into account:

Interval	Service task
Up to 12000 h	(Option C11) Unloaded start valve with solenoid valve: Maintain the solenoid valve
Up to 12000 h, At least every 4 years	Permanently greased drive motor bearings: Replace the motor bearings.
Up to 36000 h	Blower block: Replace the radial shaft sealing ring. Fan frequency converter: Replace the fan. Fan control cabinet: Replace the fan. Fan sound enclosure: Replace the fan. (Option C11) Maintain the unloaded start valve. (Option C18) Maintain the start pressure control valve.
Up to 36000 h, At least every 8 years	(Option G1) Maintain the non-return flap. Replace the compensators
At least every 20 years	Replace safety-relevant components of the safety functions.

h = operating hours

Tab. 41 Regular service tasks

10.3 Control cabinet: Clean or replace the filter mats



The control cabinet is fitted with filter mats only if operation at the frequency converter is intended.

A filter mat is placed behind every ventilation grill. Filter mats protect the control cabinet from ingress of dirt. If the filter mats are clogged, adequate cooling of the components is no longer ensured. In such a case, clean or replace the filter mats.

Material Warm water with household detergent
 Spare part (as required)

Precondition The power supply disconnecting device is switched off,
lockout and tagout the device,
verify the absence of any voltage.



Fig. 27 Control cabinet ventilation

- ① Ventilation grill
- ② Filter mat

1. Carefully remove the ventilation grill and take out the filter mat.
2. Beat the mat or use a vacuum cleaner to remove loose dirt. If necessary, wash with lukewarm water and household detergent.
3. Replace the filter mat if cleaning is not possible or if the change interval has expired.
4. Lay the filter mat in the frame and latch in the ventilation grille.

10.4 Option H12 Sound enclosure

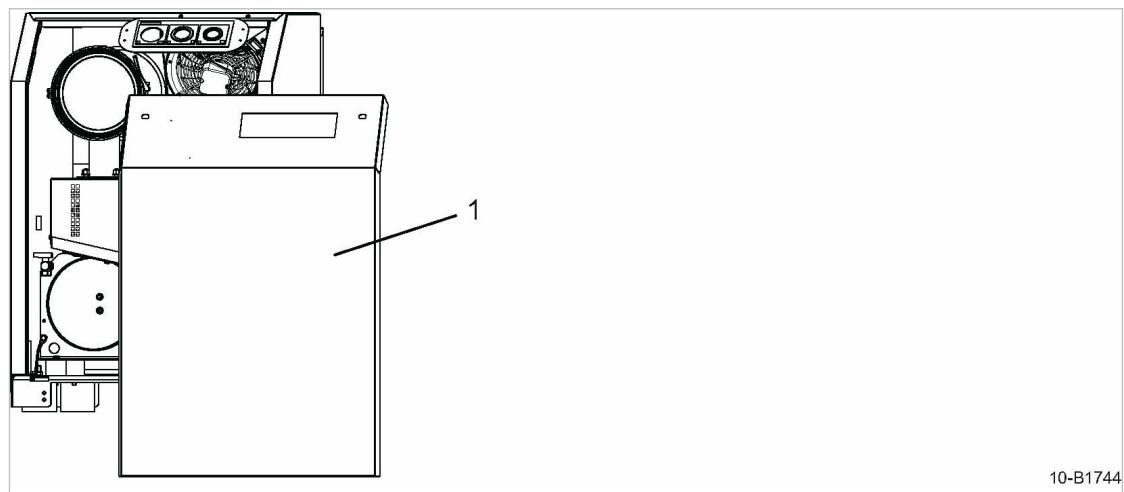


Fig. 28 Sound enclosure

- ① Removable panel

- Remove the panel (1) for maintenance work.
Latches are released by a key supplied with the machine.

10.5 Drive belt maintenance

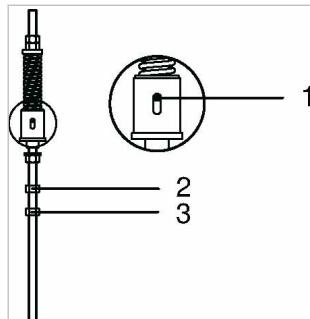
Material Spare parts (if required)

Precondition The power supply disconnecting device is switched off, lock out and tag out the device, the absence of any voltage has been verified.
The machine has cooled down.

⚠ WARNING

Touching the moving drive belt may result in severe bruising or even loss of limb or extremities.

- *Switch off and lock out/tag out the power supply disconnecting device and verify the absence of voltage.*



10-B0718

Fig. 29 Drive belt maintenance

- [1] Marker pin (shown as: belt tensioning required)
- [2] Locking nut
- [3] Adjusting nut

Checking belt tension and adjustment

The tensioning device uses spring force to apply correct tension to the belt.

Adjust the tension before the marker pin reaches the **top** end of the elongated hole.

1. Loosen the locking nut [2].
2. Use the adjusting nut [3] to adjust spring tension until the marker pin reaches the lower end of the elongated hole.
3. Tighten the locking nut [2].

Visually check for damages.

1. **⚠ CAUTION** *Danger of pinching between belt and pulley!*
 - *Work carefully.*
2. Turn the pulley by hand so that the entire belt can be inspected for damage.
3. In case of damage: Replace the drive belt immediately.



When individual belts fail in multiple-groove drives, all belts must be replaced.

Changing the belt.

1. Remove the belt guard.
2. Loosen the locking nut ②.
3. Turn the adjusting nut ③ to loosen the tension on the belts until they can be removed from the pulley.
4. Install the new set of belts and use the adjusting nut ③ to adjust the tension until the marker pin reaches the lower end of the elongated hole.
5. Tighten the locking nut ②.
6. Replace the belt guard.
7. Check the tension after the new belt has been in operation for 50 hours.

10.6 Checking the oil level

The true oil level can be seen in the oil sight glass only when the machine is stopped.

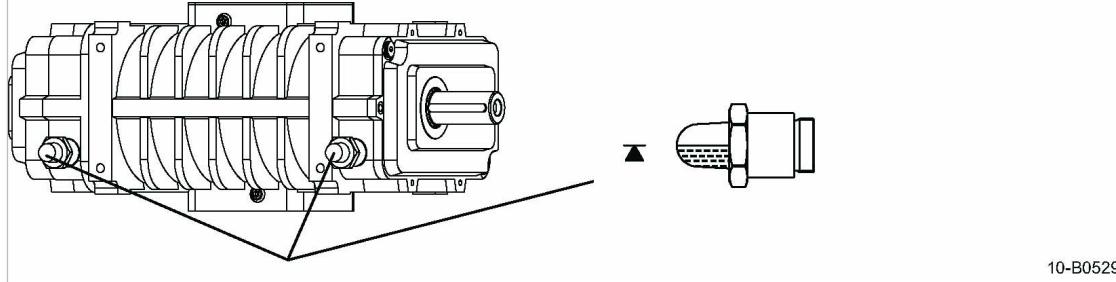


The gear-end and drive-end oil chambers are not connected.

**WARNING**

Danger of burns from hot components!

► *Wear long-sleeved clothing and protective gloves.*



10-B0529

Fig. 30 Checking the oil level

1. Check the oil level in the sight glasses on both ends of the block.
2. Replenish as soon as the level falls 0.2 in. below the center of the sight glass.

10.7 Replenishing lubricating oil

Labels giving the oil type for topping off are to be found on the blower block and belt guard.



The machine must be isolated from the compressed air network and completely vented before undertaking any work on the pressure system.

Precondition The power supply disconnecting device is switched off,
the disconnecting device is locked in the off position,
the oil level has settled.

⚠ WARNING

Danger of burns from hot components and oil!

- Wear long-sleeved clothing and protective gloves.

NOTICE

Unsuitable oil can damage the block!

- Never mix different types of oil.
- Never top off with a different type of oil to that already used in the block.

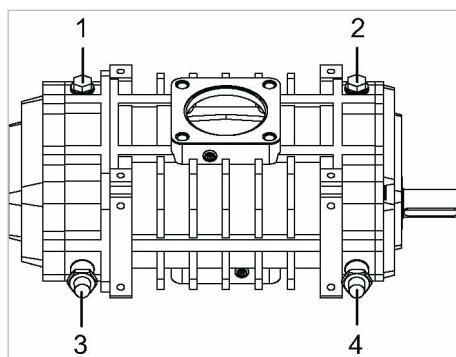


Fig. 31 Replenishing lubricating oil

- | | |
|--|-----------------------------|
| ① Plug
(gear-end oil filling port) | ③ Gear-end oil sight glass |
| ② Plug
(drive-end oil filling port) | ④ Drive-end oil sight glass |

1. Slowly remove the plug ① and/or ②.
2. Top off until the level is at the marking on the sight glass ③ and/or ④.
3. Screw in the plugs.
4. Visually check for leaks.

10.8 Changing the oil



The machine must be isolated from the compressed air network and completely vented before undertaking any work on the pressure system.

The oil should be changed with the block temperature at 130°F to ensure the oil flows freely.

Drain the oil thoroughly from the blower block:

- Gear-end
- Drive-end

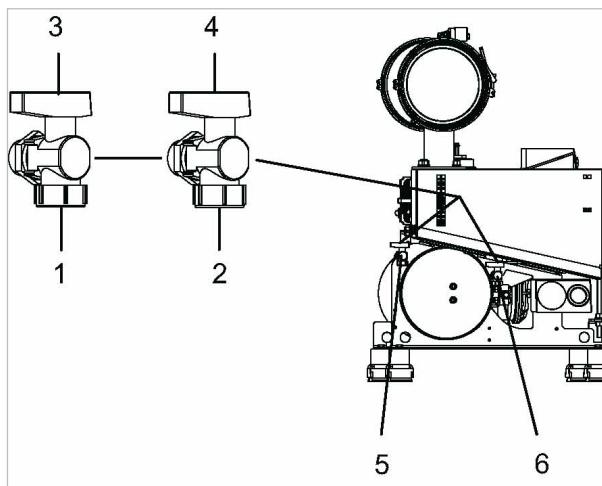
Material Lubricating oil
Oil receptacle

Precondition The power supply device is switched off,
The device is locked off,
A check has been made that no voltage is present.

⚠ WARNING

Danger of burns from hot components and oil!

► Wear long-sleeved clothing and protective gloves.



10-B1745

Fig. 32 Changing the oil

- | | |
|-----------------|-----------------|
| ① Cap | ④ Oil drain tap |
| ② Cap | ⑤ Drive end |
| ③ Oil drain tap | ⑥ Control end |

Draining the oil

1. Prepare an oil receptacle.
2. Take out the filler plugs at the oil inlet of the blower block ① and ② (Fig. 31).
3. Take off the caps ① and ② and open the oil drain taps ③ and ④.
4. Drain the lubricating oil.



Dispose of the old oil in accordance with local environmental protection regulations.

Filling with fresh oil

1. Fill with fresh oil.
2. Allow the oil drain taps to remain open until fresh oil begins to run out (bleeding the oil drain lines).
3. Close the oil drain taps ③ and ④.
4. Check the oil level in both sight glasses (Fig. 31) and top off as necessary.
5. Screw on the caps ① and ②.
6. Replace and tighten the plugs of the oil inlets at the blower block.
7. Visually check for leaks.

10.9 Air filter maintenance

The air filter protects the supplied pressure system from dirt entering.

NOTICE

Machine damage caused by unsuitable air filter!

The use of an unsuitable air filter can permit dirt to enter the pressure system and cause damage to the machine.

- *Use a suitable air filter.*



The air filter cannot be cleaned.

10.10 Changing the air filter



The machine must be isolated from the compressed air network and completely vented before undertaking any work on the pressure system.

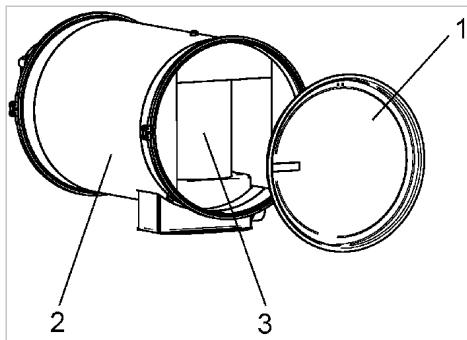
Material Spare part

Precondition The power supply disconnecting device is switched off,
the device is locked off,
the absence of any voltage has been verified,
the machine has cooled down.

⚠ WARNING

Danger of burns from hot components!

- *Wear long-sleeved clothing and protective gloves.*



10-B0750

Fig. 33 Changing the air filter

- ① Cover
- ② Inlet silencer
- ③ Air filter

1. Open the snap fastener on the inlet silencer cover ② .
2. Remove the cover ①.
3. Loosen the hook and loop tape and remove the air filter ③.
4. Clean all parts and sealing surfaces.
5. Place the new filter around the perforated inlet port and secure with the hook and loop tape.
6. Attach the cover to the inlet silencer.

10.11 Machine cleaning

Regularly clean the machine. This ensures reliable cooling of the machine. The frequency is mainly dependent on local operating conditions.



Clogged machines are indicative of unfavorable ambient conditions. Such ambient conditions clog the cooling air ducts in the machine's interior and the motors resulting in increased wear and tear.

Material Brush and/or compressed air

Protective gloves

Face mask and safety goggles (if required)

Vacuum cleaner

Precondition The power supply disconnecting device is switched off,
the device is locked off,
the absence of any voltage has been verified.

The machine has cooled down.

1. Open the sound enclosure (Option H12).
Dismantle panels in order to clean the cooling air ducts of the drive motor.
2. Dry brush the machine or blow off with compressed air.
3. Vacuum off dirt.
4. Close sound enclosure (Option H12).
Replace and lock panels.



The machine cannot be cleaned?

➤ Have severe clogging removed by an authorized KAESER service representative.

10.12 Motor maintenance

10.12.1 Permanently lubricated drive motor bearings

The motor bearings are permanently lubricated. No regreasing is necessary.

➤ The motor bearings must be replaced in the course of regular maintenance by an authorized KAESER service representative.

10.12.2 Option H12

Fan motor (sound enclosure)

The motor bearings are permanently lubricated. No regreasing is necessary.

➤ The fan must be replaced during the course of regular maintenance by an authorized KAESER service representative.

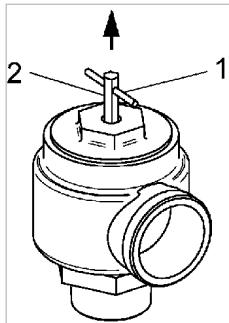
10.13 Testing the safety relief valve

The free movement of the safety relief valve's tension rod can be checked by hand or with a lifting device.

10 Maintenance

10.14 Testing the EMERGENCY STOP push button

Precondition The machine is switched off.
The machine is fully vented to atmosphere.



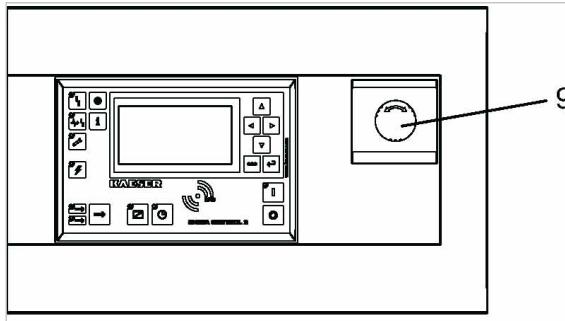
10-B0720

Fig. 34 Testing the safety relief valve

- ① Opening lever
- ② Tension rod

- Check for free movement of the tension rod ② by pulling vertically at the opening lever ①. The valve opens as soon as maximum working pressure is exceeded.
- Never operate the machine without a correctly functioning safety relief valve.
- Do **not** adjust the safety relief valve.
- Immediately replace a defective safety relief valve.

10.14 Testing the EMERGENCY STOP push button



08-B0865

Fig. 35 Testing the EMERGENCY STOP push button

- ⑨ EMERGENCY STOP push button

Precondition The drive motor is running.

1. Press the EMERGENCY STOP push button.

The drive motor stops, the pressure system is vented and the machine is prevented from automatic restarting.



The drive motor does not stop?

The safety function of the EMERGENCY STOP push button is no longer ensured.

- Immediately shut down the machine and contact an authorized KAESER service representative.

2. Turn the EMERGENCY STOP push button in the direction of the arrow to unlatch it.

3. Acknowledge the fault message.

10.15 Documenting maintenance and service work

Machine equipment number:

- Enter any maintenance and service work carried out in the table below.

Tab. 42 Logged maintenance tasks

11 Spares, Operating Materials, Service

11.1 Note the nameplate

The nameplate contains all information to identify your machine. This information is essential to us in order to provide you with optimal service.

- Please give the information from the nameplate with every inquiry and order for spares.

11.2 Ordering spares and operating fluids/materials

KAESER consumable parts and operating fluids/materials operating materials are original KAESER products. They are specifically selected for use in KAESER machines.

WARNING

There is risk of personal injury or damage to the machine resulting from the use of unsuitable spare parts or operating fluids/materials.

Non-Kaeser parts and operating fluids/materials may be unsuitable or of poor quality and can damage the machine or impair its proper function.

Damage to the machine can also result in personal injury.

- *Use only original KAESER parts and operating fluids/materials.*
- *Have authorized KAESER SERVICE representative carry out regular repair and maintenance.*

Machine

Name	Number
Drive belt	1800
Filter mat (control cabinet)	1150
Air filter	1250
Lubricating oil	1600

Tab. 43 Consumable parts

11.3 Replacement parts for service and repair

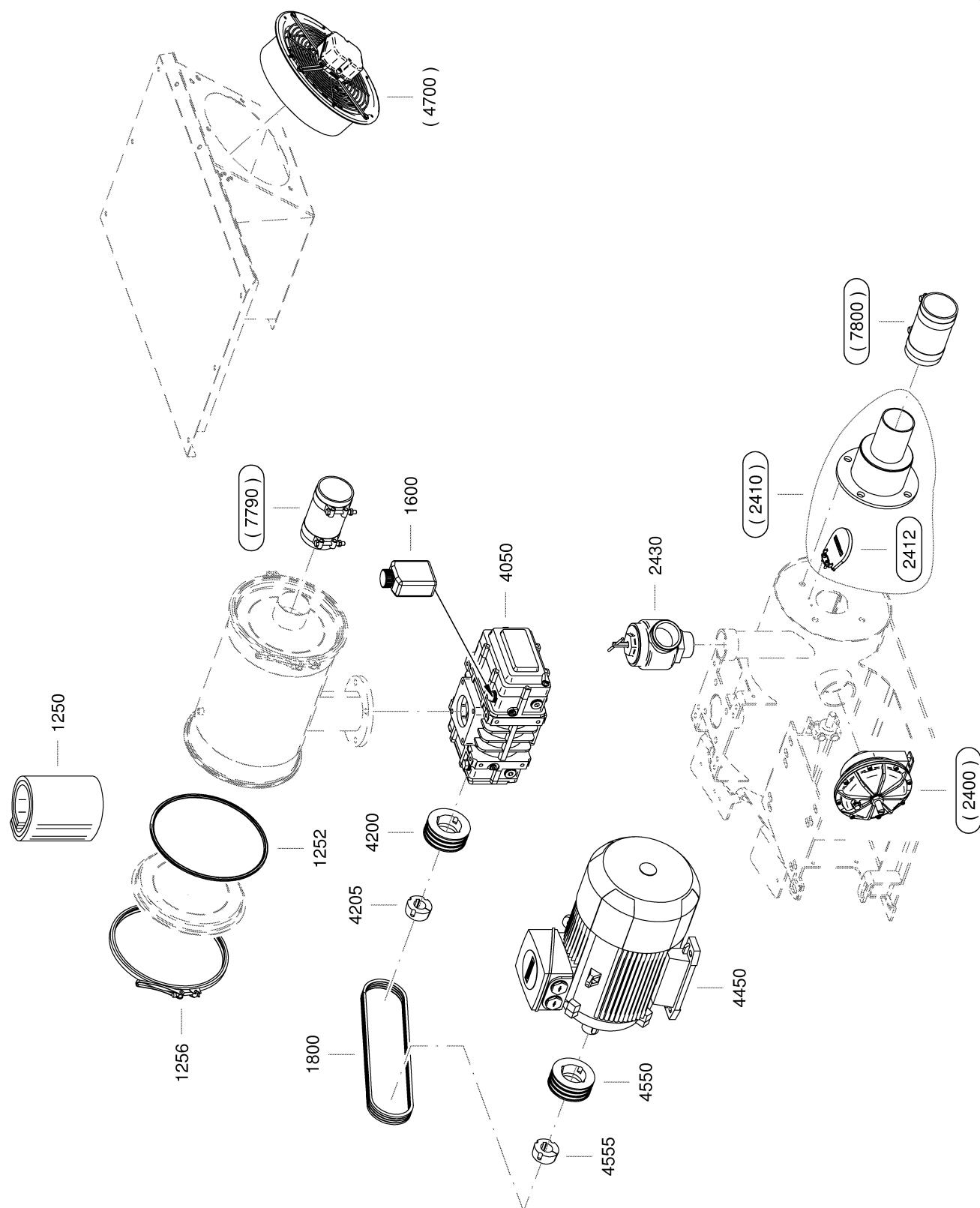
Use these spare parts lists to plan your material requirement according to operating conditions and to order the required spare parts.



- Make sure that any service or repair tasks not described in this manual are carried out by an authorized KAESER service representative.

11.3.1 Option C33, START CONTROL (STC)

Service-Kit
(Option)



SEG-5470_01

	Legend	KAESER
	BBC.2 pr	SEL-3900_01 E

Item	Description	Option
1250	Air filter insert	
1252	Inlet silencer gasket	
1256	Canopy fastener	
1600	OMEGA FLUID	
1800	Drive belt	
2400	Start control valve	X
2410	Check valve	X
2412	Overhaul kit, check valve	X
2430	Pressure limiting valve	
4050	OMEGA blower block	
4200	Airend pulley	
4205	Tapered bushing, airend	
4450	Drive motor	
4550	Drive motor pulley	
4555	Tapered bushing, drive motor	
4700	Fan unit	X
7790	Compensator, air inlet	X
7800	Compensator, air outlet	X

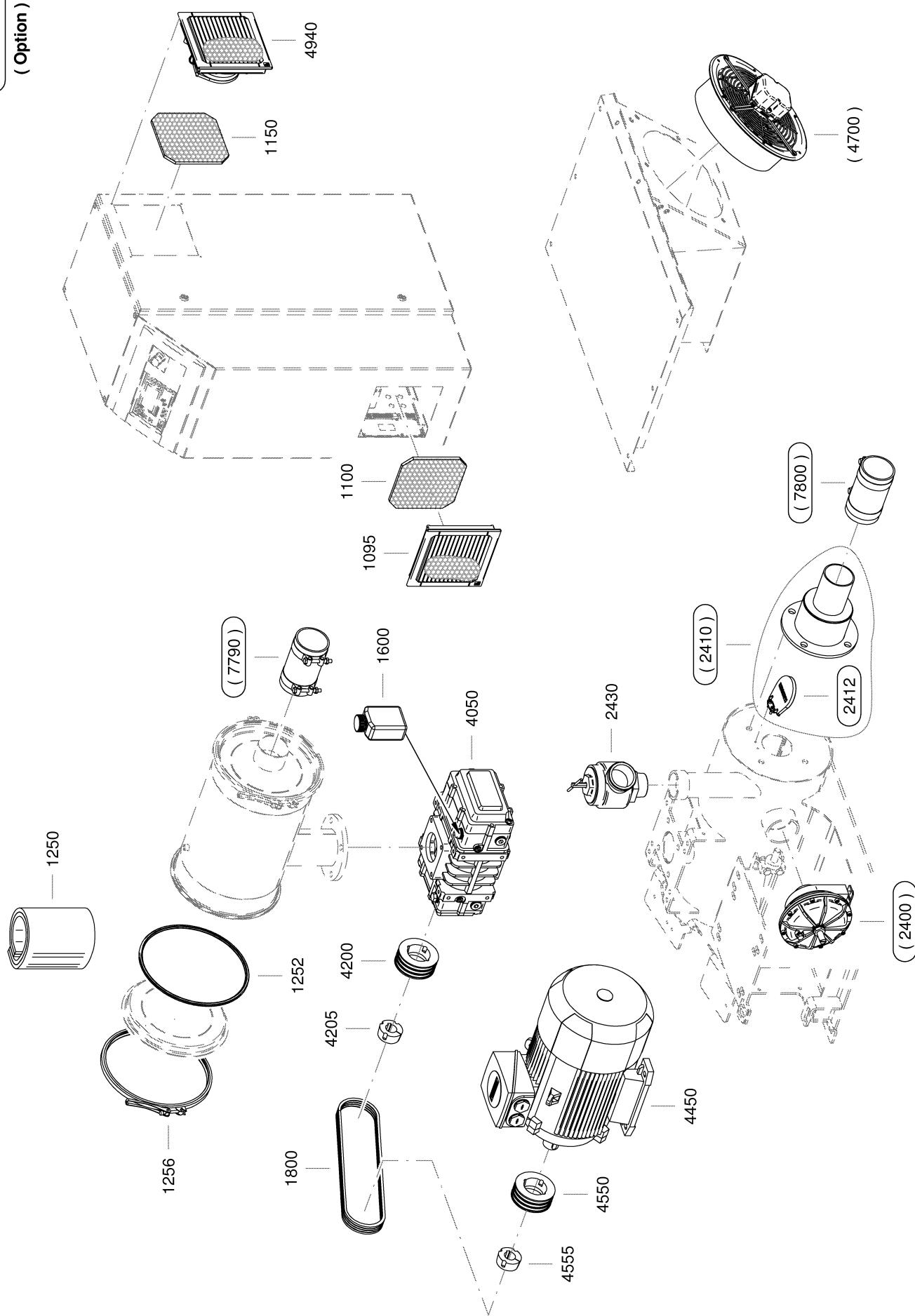
Please quote the part number and serial number of the machine together with the item number and the description of the part when ordering.

Before and during all work, be sure to read and follow the safety and service instructions in the machine's service manual!

*) see cooling oil recommendations

11.3.2 Option C34, OMEGA FREQUENCY CONTROL (OFC)

Service-Kit
(Option)



Legend		KAESER
BBC.2 OFC pr		SEL-3922_01 E
Item	Description	Option
1095	Control cabinet breather	
1100	Filter mat, control cabinet	
1150	Filter mat, converter cabinet	
1250	Air filter insert	
1252	Inlet silencer gasket	
1256	Canopy fastener	
1600	OMEGA FLUID	
1800	Drive belt	
2400	Start control valve	X
2410	Check valve	X
2412	Overhaul kit, check valve	X
2430	Pressure limiting valve	
4050	OMEGA blower block	
4200	Airend pulley	
4205	Tapered bushing, airend	
4450	Drive motor	
4550	Drive motor pulley	
4555	Tapered bushing, drive motor	
4700	Fan unit	X
4940	Control cabinet fan SFC	
7790	Compensator, air inlet	X
7800	Compensator, air outlet	X

Please quote the part number and serial number of the machine together with the item number and the description of the part when ordering.

Before and during all work, be sure to read and follow the safety and service instructions in the machine's service manual!

*) see cooling oil recommendations

11.4 KAESER AIR SERVICE

KAESER AIR SERVICE offers:

- authorized KAESER service representatives with KAESER factory training,
- increased operational reliability ensured by preventive maintenance,
- energy savings achieved by avoidance of pressure losses,
- optimum conditions for operation of the compressed air system,
- the security of genuine KAESER spare parts,
- increased legal certainty as all regulations are kept to.

► Why not sign a KAESER AIR SERVICE maintenance agreement!

Result Your advantage:
lower costs and higher compressed air availability.

11.5 Completing the contamination declaration

Every company (user) is responsible for the health and safety of its employees. This extends to personnel who carry out servicing work at the user or service contractor.

A Declaration of Contamination must be completed and signed whenever maintenance or repair work is to be carried out on the machine.

1. Contact KAESER SERVICE and request the contamination declaration form.
2. Attach a copy of the Declaration of Contamination to the **outside** of the packing.

12 Decommissioning, Storage and Transport

12.1 Decommissioning

Decommissioning is required under circumstances such as the following:

- The machine is (temporarily) not required.
- The machine is to be transported to another location.
- The machine is to be scrapped.

Temporary decommissioning

Precondition The machine can be started at regular intervals.

- Run the machine once per week, or once per day under unfavorable weather conditions, for a minimum of 30 minutes at operating temperature in order to ensure adequate corrosion protection.

Long-term decommissioning



Long-term decommissioning leads to corrosion damage to the machine and should be avoided.

KAESER will be glad to assist you regarding any questions concerning correct storage and decommissioning.

Precondition The power supply disconnecting device is switched off,
lock out / tag out the device,
the absence of all voltage has been verified.

The machine is fully vented.

1. Allow the machine to cool down completely.
2. Disconnect all connecting lines and the power supply.
3. Release the tension from the drive belt.
4. Spray the machine inside and out with a preserving agent to protect from corrosion.
5. Store the machine in a dry, frost-proof room.

Further information For information on preservative oils, see chapter 12.4.

12.2 Packing

A wooden crate is required for overland transport to protect the machine from mechanical damage. Other measures must be taken for the transport of machines by sea or air. Please contact an authorized KAESER SERVICE for more information.

Material Protective plastic sheeting
Wooden transport crate

Precondition The machine is decommissioned.
The machine is dry and cooled down.

1. Wrap the machine fully in plastic sheeting.
2. Protect the machine in a wooden crate against mechanical damages.

12.3 Transport

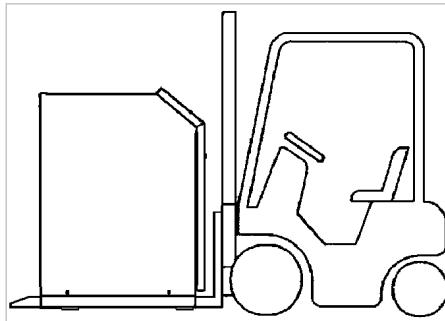
12.3.1 Safety

Weight and center of gravity determine the most suitable method of transportation. Both are specified in the dimensional drawings in chapter 13.2.

Precondition Transport only by pallet truck, forklift truck or lifting gear by personnel trained in the safe transportation of loads.

- Ensure the danger area is clear of personnel.

12.3.2 Transport machine with a pallet truck or forklift truck



12-B0905

Fig. 36 Transport

1. Remove the cover plate from the sound enclosure's frame (see chapter 6.8).
2. Take note of the center of gravity.
3. Drive the pallet truck fully or forklift truck beneath the entire machine and transport with care.

12.4 Storage

Moisture can lead to corrosion, particularly on the surfaces of the blower block. The storage temperature must not fall below -22°F.



Should you have any questions concerning the correct storage and recommissioning procedure, KAESER will be glad to assist you.

⚠ CAUTION

Rotating lobes!

Risk of injury from crushing or severing of limbs.

- *Do not reach into the interior of the blower block.*
- *If full protection is only provided when the machine is completely installed, then in all other phases of the machine's life-cycle temporary protective devices (e.g. covers) must be fitted, in order to guarantee that parts of the body cannot reach or be caught/sucked in by the rotary lobes.*

NOTICE

Moisture and frost can damage the machine.

- Prevent the ingress of moisture and formation of condensation.

- Store the machine in a dry, frost-proof room.
- Seal off the inlet and discharge ports to prevent the ingress of dirt.

Following long-term storage

Longer downtimes lead to corrosion damage and should be avoided.

- Observe the procedures for assembly and initial commissioning.

12.5 Disposal

When disposing of a machine, drain out all liquids and remove old filters.

Precondition The machine is decommissioned.

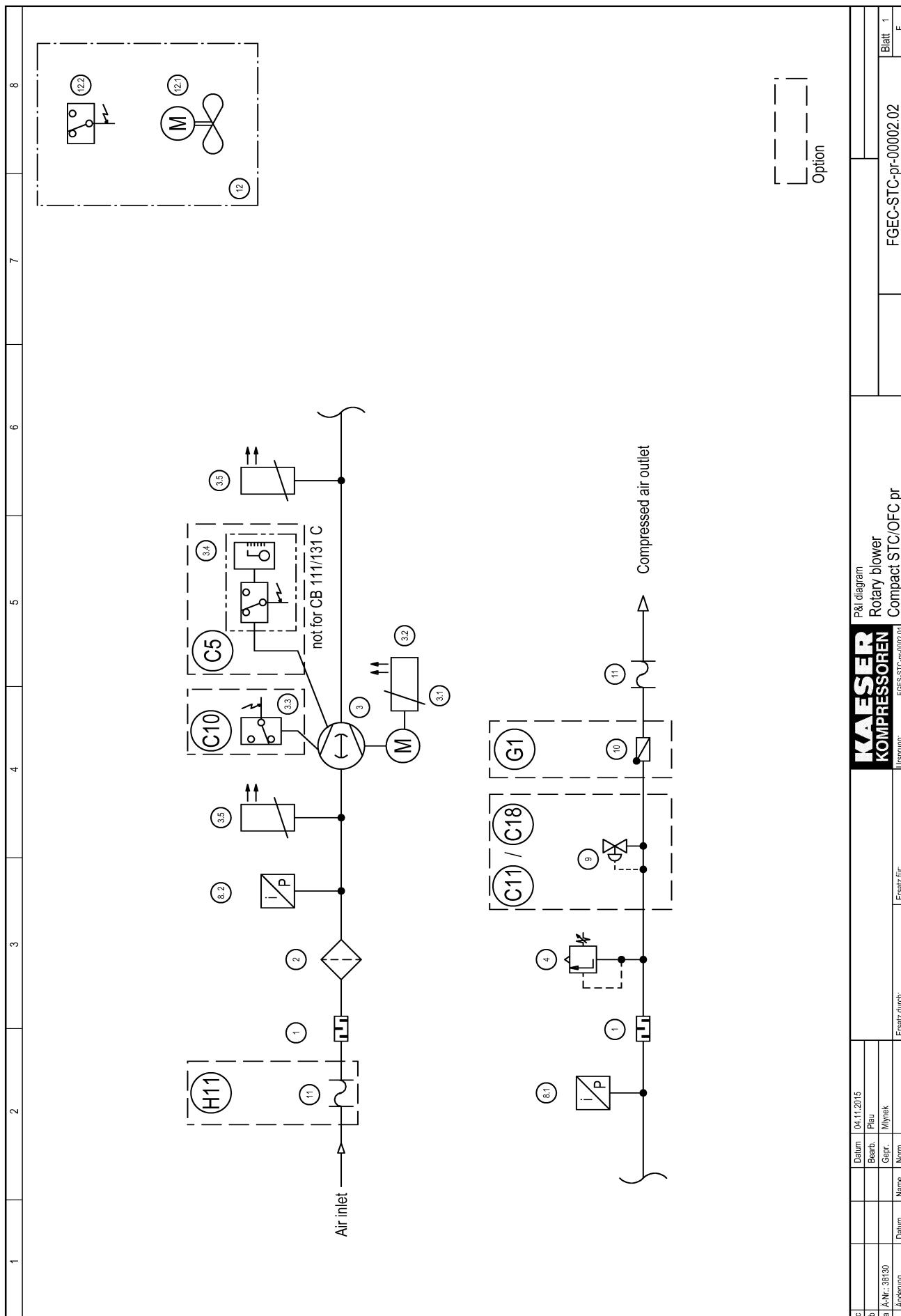
1. Completely drain the oil from the machine.
2. Remove old filters.
3. Hand the machine over to an authorized disposal expert.



- Components contaminated with oil must be disposed of in accordance with local environmental protection regulations.

13 Annex

13.1 Pipeline and instrument flow diagram (P+I diagram)



1	Silencer	11	Compensator
2	Air filter	12	Sound enclosure
3	Blower block	12.1	Fan motor
3.1	Drive motor	12.2	Thermostat
3.2	PTC-sensor		
3.3	Speed monitor		
3.4	Oil-level sensor (switching)	Option	
3.5	Pt100 sensor	C5	Oil level monitoring (not for CB 111/131 C)
4	Pressure relief valve	C10	Speed monitor
8.1	Pressure transducer - Network pressure	C11	Unloaded start valve
8.2	Pressure transducer - Inlet pressure	C18	Start-up pressure control valve
9	Unloaded start valve or start-up pressure control valve	G1	Check plate
10	Check plate	H11	Piped inlet

c		Datum	04.11.2015	Bearb.	Piau			
b				Gepr.	Mlynek			
a	Anforderung	Datum	Name	Norm	Ersatz durch:	Ersatz für:		

FGE-C-STC-pr-00002.02

FGEC-STC-pr-0002.01

Blatt 2

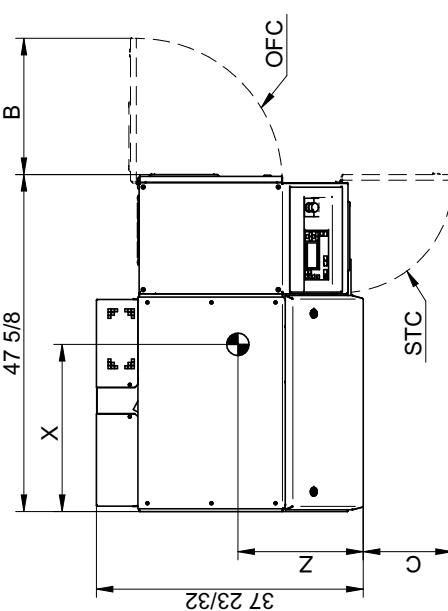
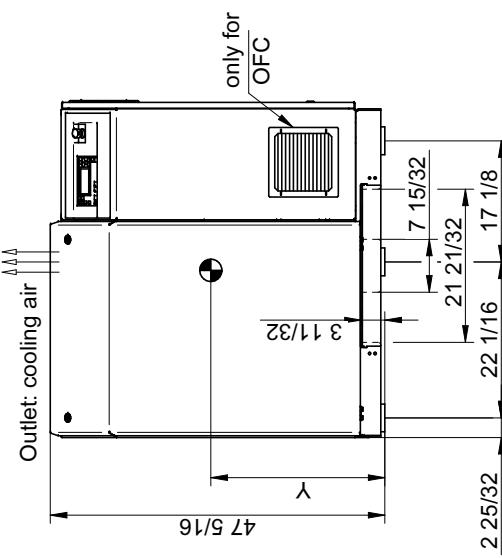
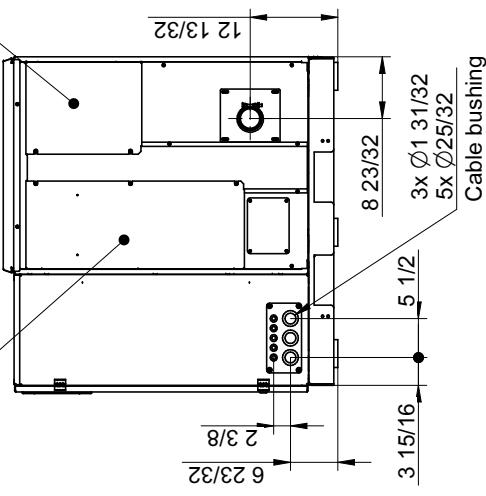
E

13.2 Dimensional drawing

: Center of gravity

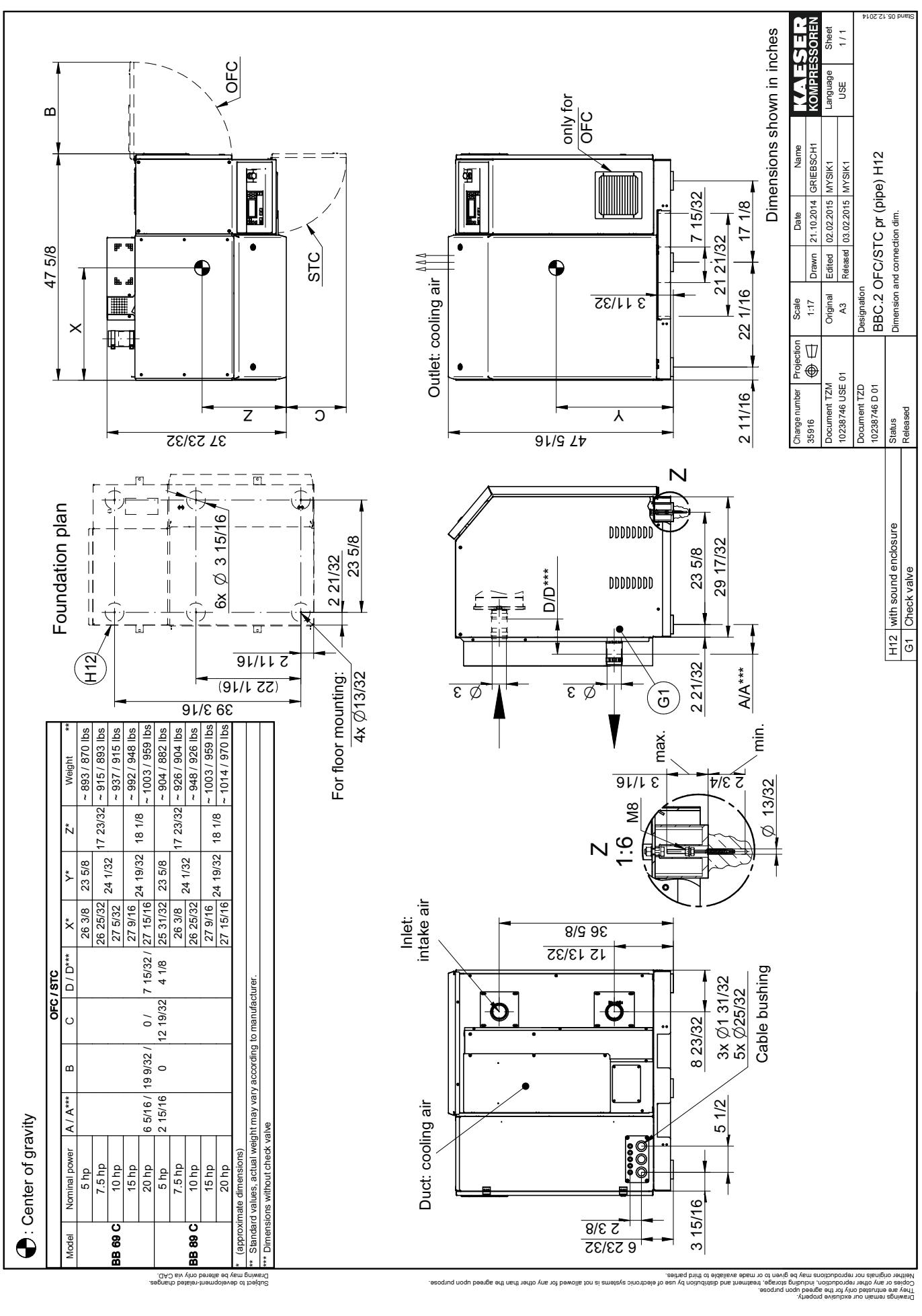
Model	Nominal power	OFC / STC			Weight ***
		A/A**	B	C	
BB 69 C	5 hp	26 3/8	23 5/8	Z*	- 893 / 870 lbs
	7.5 hp	26 25/32	24 1/32	17 23/32	- 915 / 893 lbs
	10 hp	27 5/32	24 1/32	- 937 / 915 lbs	
	15 hp	27 9/16	24 19/32	18 1/8	- 992 / 948 lbs
	20 hp	27 15/16	24 19/32	18 1/8	- 1003 / 959 lbs
	25 hp	0 / 12 19/32	25 31/32	23 5/8	- 904 / 882 lbs
BB 89 C	5 hp	26 3/8	24 1/32	17 23/32	- 926 / 904 lbs
	7.5 hp	26 25/32	24 1/32	- 948 / 926 lbs	
	10 hp	27 9/16	24 19/32	18 1/8	- 1003 / 959 lbs
	15 hp	27 15/16	24 19/32	18 1/8	- 1014 / 970 lbs
	20 hp				

* Standard values, actual weight may vary according to manufacturer.
 ** Dimensions without check valve
 *** Approximate dimensions

Foundation plan

For floor mounting:
4x Ø13/32
Duct: intake air

Dimensions shown in inches

Change number	Projection	Scale	Date	Name
35916		1:17	20.10.2014	GRIEB SCH1
Document TZM				
10237881 USE 01	Original	A3	02.02.2015	MYSIK1
Document TZD	Edited		03.02.2015	MYSIK1
10237881 D 01	Released			Designation
				BBC.2 OFC/STC pr H12
				Dimension and connection dim.
H12 with sound enclosure	Status			
G1 Check valve	Released			

Dimensions remain valid for the original purpose.
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 Neither originals nor reproductions may be given to third parties.
 Subject to development-related changes.
 Drawing may be altered at any time.



13.3 Sound emission

The values for sound pressure levels and sound power levels are provided in the tables below:
Each table discusses one type.

The values applicable to the machine result from the combination of the blower block speed and the differential pressure.

If the texts of the tables are not provided in the chosen language, a translation can be found here.

Table legend	
a)	Model
b)	Without sound enclosure
c)	With sound enclosure
d)	Blower block speed
e)	Pressure differential
f)	Sound pressure level
g)	Sound power level

Tab. 44 Sound emission - legend

a) BB69C			b) without sound enclosure		c) with sound enclosure	
d) block speed [min ⁻¹]	e) pressure differential [mbar] [psi]		f) sound level [dB(A)]	g) sound power level [dB(A)]	f) sound level [dB(A)]	g) sound power level [dB(A)]
			± 3 dB(A)	± 3 dB(A)	± 3 dB(A)	± 3 dB(A)
2600	200	3	79	94	69	84
2600	300	4	79	94	69	84
2600	400	6	79	94	69	84
2600	500	7	79	94	69	84
2600	600	9	82	96	69	84
2600	700	10	82	97	69	84
2600	790	11	82	97	69	85
2750	200	3	79	94	69	84
2750	300	4	79	94	69	84
2750	400	6	79	94	69	84
2750	500	7	79	94	69	84
2750	600	9	82	97	69	84
2750	700	10	82	97	69	84
2750	790	11	82	97	69	84
3260	200	3	79	94	69	84
3260	300	4	79	94	69	84
3260	400	6	79	94	69	84
3260	500	7	79	94	69	84
3260	600	9	82	97	69	84
3260	700	10	82	97	69	84
3260	800	12	82	97	69	84
3260	890	13	82	97	69	84
3430	200	3	79	94	69	84
3430	300	4	79	94	69	84
3430	400	6	79	94	69	84
3430	500	7	79	94	69	84
3430	600	9	82	97	69	84
3430	700	10	82	97	69	84
3430	800	12	82	97	69	84
3430	890	13	82	97	69	84
3630	200	3	80	94	69	84
3630	300	4	80	94	69	84
3630	400	6	80	94	69	84
3630	500	7	80	94	69	84
3630	600	9	82	97	69	84
3630	700	10	82	97	69	84
3630	800	12	82	97	69	84
3630	900	13	82	97	69	84
3840	200	3	80	94	69	84
3840	300	4	80	94	69	84
3840	400	6	80	94	69	84
3840	500	7	80	94	69	84
3840	600	9	83	97	69	84
3840	700	10	83	97	69	84
3840	800	12	83	97	69	84
3840	900	13	83	97	69	84
3840	950	14	83	97	69	84
4050	200	3	80	95	69	84
4050	300	4	80	95	69	84
4050	400	6	80	95	69	84
4050	500	7	80	95	69	84
4050	600	9	83	98	69	84
4050	700	10	83	98	69	84
4050	800	12	83	98	69	84
4050	900	13	83	98	69	84
4050	950	14	83	98	69	84
4270	200	3	80	95	69	84
4270	300	4	80	95	69	84
4270	400	6	80	95	69	84
4270	500	7	80	95	69	84

a) BB69C			b) without sound enclosure		c) with sound enclosure	
d) block speed [min ⁻¹]	e) pressure differential [mbar] [psi]		f) sound level [dB(A)]	g) sound power level [dB(A)]	f) sound level [dB(A)]	g) sound power level [dB(A)]
			± 3 dB(A)	± 3 dB(A)	± 3 dB(A)	± 3 dB(A)
4270	600	9	83	98	69	84
4270	700	10	83	98	69	84
4270	800	12	83	98	69	84
4270	900	13	83	98	69	84
4270	950	14	83	98	69	84
4530	200	3	81	95	69	84
4530	300	4	81	95	69	84
4530	400	6	81	95	69	84
4530	500	7	81	95	69	84
4530	600	9	84	98	69	84
4530	700	10	84	99	69	84
4530	800	12	84	99	69	84
4530	900	13	84	99	69	84
4530	990	14	84	99	69	84
4850	200	3	81	96	69	84
4850	300	4	81	96	69	84
4850	400	6	81	96	69	84
4850	500	7	81	96	69	84
4850	600	9	84	99	69	84
4850	700	10	85	100	69	84
4850	800	12	85	100	69	85
4850	900	13	85	100	69	85
4850	1000	15	85	100	69	85
5180	200	3	82	97	69	85
5180	300	4	82	97	69	85
5180	400	6	82	97	69	85
5180	500	7	82	97	69	85
5180	600	9	85	99	69	85
5180	700	10	86	101	69	85
5180	800	12	86	101	70	85
5180	900	13	86	101	70	85
5180	1000	15	86	101	70	85
5480	200	3	83	97	70	85
5480	300	4	83	97	70	85
5480	400	6	83	97	70	85
5480	500	7	83	97	70	85
5480	600	9	85	100	70	85
5480	700	10	87	102	70	85
5480	800	12	87	102	70	85
5480	900	13	87	102	70	85
5480	1000	15	87	102	70	85
5800	200	3	83	98	70	85
5800	300	4	83	98	70	85
5800	400	6	83	98	70	85
5800	500	7	83	98	70	85
5800	600	9	86	101	70	85
5800	700	10	88	103	72	87
5800	800	12	88	103	72	87
5800	900	13	88	103	72	87
5800	1000	15	89	103	72	87

a) BB89C			b) without sound enclosure		c) with sound enclosure	
d) block speed [min ⁻¹]	e) pressure differential [mbar] [psi]		f) sound level [dB(A)]	g) sound power level [dB(A)]	f) sound level [dB(A)]	g) sound power level [dB(A)]
			± 3 dB(A)	± 3 dB(A)	± 3 dB(A)	± 3 dB(A)
2600	200	3	80	95	69	84
2600	300	4	80	95	69	84
2600	400	6	80	95	69	84
2600	500	7	80	95	69	84
2600	600	9	82	96	69	84
2600	700	10	83	98	69	84
2600	800	12	83	98	70	85
2750	200	3	80	95	69	84
2750	300	4	80	95	69	84
2750	400	6	80	95	69	84
2750	500	7	80	95	69	84
2750	600	9	82	97	69	84
2750	700	10	83	98	69	84
2750	800	12	83	98	70	85
3260	200	3	79	94	69	84
3260	300	4	79	94	69	84
3260	400	6	79	94	69	84
3260	500	7	79	94	69	84
3260	600	9	83	97	69	84
3260	700	10	83	98	69	84
3260	800	12	83	98	69	84
3260	890	13	83	98	69	84
3430	200	3	79	94	69	84
3430	300	4	79	94	69	84
3430	400	6	79	94	69	84
3430	500	7	79	94	69	84
3430	600	9	83	98	69	84
3430	700	10	83	98	69	84
3430	800	12	83	98	69	84
3430	900	13	83	98	69	84
3430	950	14	81	95	69	84
3630	200	3	79	94	69	84
3630	300	4	79	94	69	84
3630	400	6	79	94	69	84
3630	500	7	79	94	69	84
3630	600	9	83	98	69	84
3630	700	10	83	98	69	84
3630	800	12	83	98	69	84
3630	900	13	83	98	69	84
3630	950	14	81	96	69	84
3840	200	3	79	94	69	84
3840	300	4	79	94	69	84
3840	400	6	79	94	69	84
3840	500	7	79	94	69	84
3840	600	9	83	98	69	84
3840	700	10	83	98	69	84
3840	800	12	83	98	69	84
3840	900	13	83	98	69	84
3840	990	14	82	96	69	84
4050	200	3	79	94	69	84
4050	300	4	79	94	69	84
4050	400	6	79	94	69	84
4050	500	7	79	94	69	84
4050	600	9	84	98	69	84
4050	700	10	84	98	69	84
4050	800	12	84	98	69	84
4050	900	13	84	98	69	84
4050	1000	15	82	97	69	84
4270	200	3	80	94	69	84
4270	300	4	80	94	69	84

a) BB89C			b) without sound enclosure		c) with sound enclosure	
d) block speed [min ⁻¹]	e) pressure differential [mbar]	[psi]	f) sound level [dB(A)]	g) sound power level [dB(A)]	f) sound level [dB(A)]	g) sound power level [dB(A)]
			± 3 dB(A)	± 3 dB(A)	± 3 dB(A)	± 3 dB(A)
4270	400	6	80	94	69	84
4270	500	7	80	94	69	84
4270	600	9	84	99	69	84
4270	700	10	84	99	69	84
4270	800	12	84	99	69	84
4270	900	13	84	99	69	84
4270	1000	15	83	98	69	84
4530	200	3	80	95	69	84
4530	300	4	80	95	69	84
4530	400	6	80	95	69	84
4530	500	7	80	95	69	84
4530	600	9	84	99	69	84
4530	700	10	84	99	69	84
4530	800	12	84	99	69	84
4530	900	13	84	99	69	84
4530	1000	15	84	98	69	84
4850	200	3	81	95	69	84
4850	300	4	81	95	69	84
4850	400	6	81	95	69	84
4850	500	7	81	95	69	84
4850	600	9	84	99	69	84
4850	700	10	85	100	69	84
4850	800	12	85	100	69	84
4850	900	13	85	100	69	84
4850	1000	15	85	99	69	84
5180	200	3	81	96	69	84
5180	300	4	81	96	69	84
5180	400	6	81	96	69	84
5180	500	7	81	96	69	84
5180	600	9	85	99	69	84
5180	700	10	86	101	69	84
5180	800	12	86	101	69	85
5180	900	13	86	101	69	85
5180	950	14	86	100	69	84
5480	200	3	82	97	69	84
5480	300	4	82	97	69	84
5480	400	6	82	97	69	84
5480	500	7	82	97	69	84
5480	600	9	85	100	69	84
5480	700	10	87	102	69	84
5480	800	12	87	102	70	85
5480	900	13	87	102	70	85
5800	200	3	84	98	69	84
5800	300	4	84	98	69	84
5800	400	6	84	98	69	84
5800	500	7	84	98	69	84
5800	600	9	85	100	69	84
5800	700	10	88	103	69	84
5800	800	12	88	103	70	85

13.4 Electrical diagrams**13.4.1 Option C33, START CONTROL (STC)**

8

Wiring Diagram

Blower with wye-delta start

+ SIGMA CONTROL 2 (SC2)

230V ±10% 3ph 60Hz 5hp-40hp (4kW-30kW)
 460V ±10% 3ph 60Hz 5hp-175hp (4kW-132kW)
 575V ±10% 3ph 60Hz 5hp-175hp (4kW-132kW)

Power supply:

WYE system with center point solidly grounded

ATTENTION !!!
The document gives collective information on power supply voltages and frequencies for all machines. The voltage and frequency and local conditions under which any particular machine may be used are given on the nameplate of the machine and in the accompanying service manual.

KAESER KOMPRESSOREN SE
Postfach 2143
96410 Coburg

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KOMPRESSOREN

cover page
Blower STC+SC2

Änderung	Datum	Name	Datum	Name	05.02.2018	USE
		Bearbeiter		Geprüft	M.Zeeh	
					M.Zeeh	
						Ersatz durch:
						Ersatz für:

Ursprung: SXB-STC-U3010.02

DXB, STC-U3020.04

=
+
page 1
1 Bl.

Lfd. Nr. No.	Benennung Name	Zeichnungsnr. (Kunde) Drawing No. (customer)	Zeichnungsnr. (Hersteller) Drawing No. (manufacturer)	Blatt Page	Anlagenkennzeichen Unit designation
1	cover page		DXESTC-U3020.04	1	
2	list of contents		ZXB-STC-U3020.04	1	
3	list of contents		ZXB-STC-U3020.04	2	
4	block diagram	instructions + option	ZXB-STC-U3020.04	1	
5	block diagram	component legend	UXESTC-U3020.04	2	
6	electrical component parts list	Common parts	UXESTC-U3020.04	3	
7	electrical component parts list	Common parts	UXESTC-U3020.04	4	
8	electrical component parts list	option	UXESTC-U3020.04	5	
9	electrical component parts list	option	UXESTC-U3020.04	6	
10	electrical component parts list	performance-related components	UXESTC-U3020.04	7	
11	electrical component parts list	performance-related components	UXESTC-U3020.04	8	
12	electrical component parts list	performance-related components	UXESTC-U3020.04	9	
13	electrical component parts list	performance-related components	UXESTC-U3020.04	10	
14	electrical component parts list	performance-related components	UXESTC-U3020.04	11	
15	electrical component parts list	performance-related components	UXESTC-U3020.04	12	
16	electrical component parts list	performance-related components	UXESTC-U3020.04	13	
17	electrical component parts list	performance-related components	UXESTC-U3020.04	14	
18	electrical component parts list	performance-related components	UXESTC-U3020.04	15	
19	electrical component parts list	performance-related components	UXESTC-U3020.04	16	
20	electrical component parts list	performance-related components	UXESTC-U3020.04	17	
21	electrical component parts list	performance-related components	UXESTC-U3020.04	18	
22	electrical component parts list	performance-related components	UXESTC-U3020.04	19	
23	electrical component parts list	performance-related components	UXESTC-U3020.04	20	
24	electrical component parts list	performance-related components	UXESTC-U3020.04	21	
25	electrical component parts list	performance-related components	UXESTC-U3020.04	22	
26	electrical component parts list	performance-related components	UXESTC-U3020.04	23	
27	electrical component parts list	performance-related components	UXESTC-U3020.04	24	
28	electrical component parts list	performance-related components	UXESTC-U3020.04	25	
29	electrical component parts list	performance-related components	UXESTC-U3020.04	26	
30	electrical component parts list	performance-related components	UXESTC-U3020.04	27	
31	electrical component parts list	performance-related components	UXESTC-U3020.04	28	
32	wiring diagram	power unit vent	SXB-STC-U3020.04	1	
33	wiring diagram	control voltage	SXB-STC-U3020.04	2	
34	wiring diagram	Gear housing ventilation + venting valve	SXB-STC-U3020.04	3	
35	wiring diagram	type speed supervisory module	SXB-STC-U3020.04	4	
36	wiring diagram	Oil return + SC2 + IOM	SXB-STC-U3020.04	5	
37	wiring diagram	IOM-configuration	SXB-STC-U3020.04	6	
38	wiring diagram	digital inputs IOM	SXB-STC-U3020.04	7	
39	wiring diagram	analog inputs IOM	SXB-STC-U3020.04	8	
40	wiring diagram	Relay-outputs	SXB-STC-U3020.04	9	
41	wiring diagram	Handling terminals	SXB-STC-U3020.04	10	
42	wiring diagram	Feed line connection	SXB-STC-U3020.04	11	
43	wiring diagram	Feed line connection	SXB-STC-U3020.04	12	
44	wiring diagram	-X0-X11-X12	KXB-STC-U3020.04	13	
45	terminal connection			1	

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lfd. Nr. No.	Benennung Name	Zeichnungsnummer (Kunde) Drawing No. (customer)	Zeichnungsnummer (Hersteller) Drawing No. (manufacturer)	Blatt Page	Anlagenkennzeichen Unit designation
46	terminal connection	-X15.-X16.-X21.-X22.-X100 control panel BBxx	KXB STC-U3020.04	2	
47	lay-out		AXB STC-U3020.04	1	
48	lay-out	control panel CBBB xxx	AXB STC-U3020.04	2	
49	lay-out	control panel EBxx	AXB STC-U3020.04	3	
50	lay-out	control panel FBxx	AXB STC-U3020.04	4	

c		Datum	05.02.2018	=
b		Bearbeiter	M.Zeeh	+
a		Geprägt	M.Zeeh	
B Änderung	Datum	Name	Ersatz durch:	Ersatz für: Ursprung
		Norm		ZXB STC-U3020.04
				Page 2 2 Bl

1	2	3	4	5	6	7	8
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general instructions

ATTENTION !!!

Install supplies, grounding and shock protection

to local safety regulations.

Control circuits are single-end-grounded, if they are floating
they may only be used together with insulation monitoring.

Do not make or break
live plug-in connectors.

control cabinet wiring for non-designated conductors

with multi-standard stranded conductors

primary circuits:

control voltage AC 115V;

control voltage AC 115V grounded;

control voltage DC 24V;

control voltage DC 24V grounded;

external voltage:

ground conductor:

black 2,5mm² H07V-K, 14AWG UL-Style 1015, CSA-TEW
red 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
white 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
blue 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
blue/white 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
orange 1,5mm² H07V-K, 16AWG UL-Style 1015, CSA-TEW
green/yellow H07V-K, UL-Style 1015, CSA-TEW

type model-dependent components

B13 = mode of operation overpressure

B14 = mode of operation Vacuum

C5 = option oil level monitoring (-B80/-B81) (standard by Screw blowers)

C10 = option Speed monitoring (-K26+sensor -B90)

C11 = option Unloaded start valve

C33 = START CONTROL

C39 = option oil temperature monitoring (-B55) (standard by Screw blowers)

XXX = Gear housing ventilation+Oil return (only EBS/FBS)

c			Datum	05/02/2018			=
b			Bearbeiter	M.Zeeh			+
a			Geprüft	M.Zeeh			
C Änderung	Datum	Name	Ersatz für:		Ersetzt durch:	UXT STC-U3020.04	page 1
		Norm					28 Bl.

1	2	3	4	5	6	7	8				
-B1/-B4 pressure transducer (4...20mA) differential pressure switch filter clogging overload relay motor Blower -B21 overload relay vent motor soundproofing casing temperature probe Blower (PT100) temperature probe PT100 (option) thermal overload releasing relay theristor, compressor motor temperature probe soundproofing casing oil level switch speed sensors -B90	-T11 control transformer 230V-AC auto-transformer 575V/460V control voltage supply 24V-DC isolating amplifier	-T11 control transformer 230V-AC auto-transformer 575V/460V control voltage supply 24V-DC isolating amplifier	-X0 terminal strip, power supply -X11 terminal strip, control SC2-IOM digital outputs	-X0 terminal strip, power supply -X11 terminal strip, control SC2-IOM digital outputs	-X11 terminal strip, control SC2-IOM digital outputs	-X15 SC2-IOM digital inputs -X16 analog signals (extermal) -X21 control voltage 24V-DC not used -X100 EMERGENCY STOP (external/customer)	-X0 terminal strip, power supply -X11 terminal strip, control SC2-IOM digital outputs				
-B40/-B43 -2FU -3FU -9FU -10FU -12FU -29FU	-K20 <i>Main Control System SC2 MCS</i>	-K20 <i>Main Control System SC2 MCS</i>	-X1 Ethernet -X2 IO-BUS -X3 RS485-FC (USS-Bus) -X4 communication module -X5 SD card slot -X6 ground connection	-X1 Ethernet -X2 IO-BUS -X3 RS485-FC (USS-Bus) -X4 communication module -X5 SD card slot -X6 ground connection	-X1 Ethernet -X2 IO-BUS -X3 RS485-FC (USS-Bus) -X4 communication module -X5 SD card slot -X6 ground connection	-X1 /O-Modul SC2 IOM-1 <i>inside</i> -X1 /O-Bus input -X2 /O-Bus output	-K21 <i>/O-Modul SC2 IOM-1</i> <i>inside</i> -X1 /O-Bus input -X2 /O-Bus output				
-K1 solenoid valve -K10 solenoid valve Oil return -K20 SIGMA CONTROL 2 (SC2) (MCS) -K21 SIGMA CONTROL 2 (SC2) (IOM-Modul) -K26 speed supervisory module -K29 phase sequence relay -K52 coupling relay solenoid valve -K53 coupling relay start unloading ball valve (-M23/-M24) -K55 coupling relay Oil return -K60 contactor EMERGENCY STOP (external/customer)	-X3 digital inputs -X4 power supply unit and Transistor outputs -X5,-X9 Relay outputs -X6 analog input 0-20mA -X7 analog input PT100 -X8 digital inputs -X11...-X13 analog inputs 0-20mA -X14...-X17 analog inputs PT100 -X18...-X29 digital inputs -X30...-X32 digital outputs	-X3 digital inputs -X4 power supply unit and Transistor outputs -X5,-X9 Relay outputs -X6 analog input 0-20mA -X7 analog input PT100 -X8 digital inputs -X11...-X13 analog inputs 0-20mA -X14...-X17 analog inputs PT100 -X18...-X29 digital inputs -X30...-X32 digital outputs	-X3 digital inputs -X4 power supply unit and Transistor outputs -X5,-X9 Relay outputs -X6 analog input 0-20mA -X7 analog input PT100 -X8 digital inputs -X11...-X13 analog inputs 0-20mA -X14...-X17 analog inputs PT100 -X18...-X29 digital inputs -X30...-X32 digital outputs	-X3 digital inputs -X4 power supply unit and Transistor outputs -X5,-X9 Relay outputs -X6 analog input 0-20mA -X7 analog input PT100 -X8 digital inputs -X11...-X13 analog inputs 0-20mA -X14...-X17 analog inputs PT100 -X18...-X29 digital inputs -X30...-X32 digital outputs	-X3 digital inputs -X4 power supply unit and Transistor outputs -X5,-X9 Relay outputs -X6 analog input 0-20mA -X7 analog input PT100 -X8 digital inputs -X11...-X13 analog inputs 0-20mA -X14...-X17 analog inputs PT100 -X18...-X29 digital inputs -X30...-X32 digital outputs	-M1 motor Blower -M4 ventilator soundproofing casing -M10 vacuum pump Gear housing ventilation -M23 motor start unloading ball valve -M24 motor start unloading ball valve	-M1 motor Blower -M4 ventilator soundproofing casing -M10 vacuum pump Gear housing ventilation -M23 motor start unloading ball valve -M24 motor start unloading ball valve	-Q1 main contactor -Q2 delta contactor -Q3 wye contactor -Q4 contactor ventilator soundproofing casing	-Q1 main contactor -Q2 delta contactor -Q3 wye contactor -Q4 contactor ventilator soundproofing casing	-S1 EMERGENCY STOP pushbutton -S9 REMOTE reset fault message	-S1 EMERGENCY STOP pushbutton -S9 REMOTE reset fault message

c	Datum	05.02.2018	=
b	Bearbeiter	M.Zeeh	+
a	Gefürt	M.Zeeh	
C Änderung	Datum	Ersatz durch:	Page 2 28 Bl.
			UXB-STC-U3020.04
			Ursprung

model	Common parts				page 3 28 Bl.
	5 - 20 hp	5 - 20 hp	5 - 175 hp	5 - 175 hp	
machine power supply	208 V ±10 %, 60 Hz (4-15 kW)	230 V ±10 %, 60 Hz (4-15 kW)	460 V ±10 %, 60 Hz (4-132 kW)	575 V ±10 %, 60 Hz (4-132 kW)	
pressure transducer Huba Control	-B1 894786.0 0.-1200mbar	894786.0 0.-1200mbar	894786.0 0.-1200mbar	894786.0 0.-1200mbar	" +
pressure transducer Huba Control	-B4 894787.0 0.1200mbar	894787.0 0.1200mbar	894787.0 0.1200mbar	894787.0 0.1200mbar	
differential pressure switch Dungs	-B5 893307.00010 setting: 14,1 in.W.C.	893307.00010 setting: 14,1 in.W.C.	893307.00010 setting: 14,1 in.W.C.	893307.00010 setting: 14,1 in.W.C.	
temperature probe WIKA	-B40/-B43 895251.10010 (BB/CB/DB) 895251.10040 (EB-C/FB) 895603.00040 (EB-S) Pt100	895251.10010 (BB/CB/DB) 895251.10040 (EB-C/FB) 895603.00040 (EB-S) Pt100	895251.10010 (BB/CB/DB) 895251.10040 (EB-C/FB) 895603.00040 (EB-S) Pt100	895251.10010 (BB/CB/DB) 895251.10040 (EB-C/FB) 895603.00040 (EB-S) Pt100	
temperature probe	-B55 895251.10100 895603.00100 (EB-S) Pt100	895251.10100 895603.00100 (EB-S) Pt100	895251.10100 895603.00100 (EB-S) Pt100	895251.10100 895603.00100 (EB-S) Pt100	
thermal overload releasing relay-B59 Ziehl	7.2711.00040 MS220K 24 V UC	7.2711.00040 MS220K 24 V UC	7.2711.00040 MS220K 24 V UC	7.2711.00040 MS220K 24 V UC	
temperature probe	-B70 Wieland	7.7631.0-P21 Pt100	7.7631.0-P21 Pt100	7.7631.0-P21 Pt100	7.7631.0-P21 Pt100
fuse	-1FU Gould	(3x) - 7.3161.00190 ATQR 8 A - 600 V - class CC	(3x) - 7.3161.00190 ATQR 8 A - 600 V - class CC	(3x) - 7.3161.00190 ATQR 8 A - 600 V - class CC	(3x) - 7.3161.00190 ATQR 8 A - 600 V - class CC
fuse	-2FU Gould	(2x) - 7.3161.00160 ATQR 5 A - 600 V - class CC	(2x) - 7.3161.00141 ATQR 4 A - 600 V - class CC	(2x) - 7.3317.1 ATQR 3 A - 600 V - class CC	(2x) - 7.3317.1 ATQR 3 A - 600 V - class CC
fuse	-3FU Gould	(1x) - 7.3161.00160 ATQR 5 A - 600 V - class CC	(1x) - 7.3161.00160 ATQR 5 A - 600 V - class CC	(1x) - 7.3161.00160 ATQR 5 A - 600 V - class CC	(1x) - 7.3161.00160 ATQR 5 A - 600 V - class CC
fuse	-29FU Gould	(3x) - 7.3161.00360 ATDR 1 A - 600 V - class CC	(3x) - 7.3161.00360 ATDR 1 A - 600 V - class CC	(3x) - 7.3161.00360 ATDR 1 A - 600 V - class CC	(3x) - 7.3161.00360 ATDR 1 A - 600 V - class CC
fuse socket	-1FU/-29FU -2FU -3FU Wöhner	3-pole (2x) - 7.3320.00060 2-pole (1x) - 7.3320.00070 1-pole (1x) - 7.3320.00050 class CC - Ambus Easy Switch	3-pole (2x) - 7.3320.00060 2-pole (1x) - 7.3320.00070 1-pole (1x) - 7.3320.00050 class CC - Ambus Easy Switch	3-pole (2x) - 7.3320.00060 2-pole (1x) - 7.3320.00070 1-pole (1x) - 7.3320.00050 class CC - Ambus Easy Switch	3-pole (2x) - 7.3320.00060 2-pole (1x) - 7.3320.00070 1-pole (1x) - 7.3320.00050 class CC - Ambus Easy Switch
fuse	-10FU	895637.0 5x20 0,315 A-T 250 VAC			
solenoid valve	-K10 bürkert	895601.0 24V-DC 8W	895601.0 24V-DC 8W	895601.0 24V-DC 8W	895601.0 24V-DC 8W
Blower control	-K20 Prodrive	7.7601.0 SC2MCS	7.7601.0 SC2MCS	7.7601.0 SC2MCS	7.7601.0 SC2MCS
Blower control	-K21 Prodrive	7.7602.1 SC2IOM-1	7.7602.1 SC2IOM-1	7.7602.1 SC2IOM-1	7.7602.1 SC2IOM-1
phase sequence relay	-K29 Siemens	7.7830.00600 3UG4615	7.7830.00600 3UG4615	7.7830.00600 3UG4615	7.7830.00600 3UG4615
coupling relay	-K55 Siemens	7.8740.04210 3RH2122-1JB40 DC 17-30 V AC-15: 230 V/10 A			
vacuum pump	-M10 Schwarzer	895612.00100 24V-AC 60 Hz, 4W			
contactor	-Q4 Siemens	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61
interference suppressor	Siemens	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00

Fortsetzung: nächstes Blatt

a	Datum	Bearbeiter	05.02.2018
			M/Zeeh
b	Datum	Gefürt	M/Zeeh
c			
c	Datum	Name	Norm
b			
a	Datum	Name	Norm
c			
c	Datum	Name	Norm
b			

KAESER
KOMPRESSOREN

Common parts

Blower STC+SC2

electrical component parts list

Usprung:

Ersatz für:

Ersatz durch:

model	Common parts				#	+ -	Page 4 28 Bl.
	5 - 20 hp	5 - 20 hp	5 - 175 hp	5 - 175 hp			
machine power supply	208 V ±10 %, 60 Hz (4-15 kW)	230 V ±10 %, 60 Hz (4-15 kW)	460 V ±10 %, 60 Hz (4-132 kW)	575 V ±10 %, 60 Hz (4-132 kW)			
Not-Halt	-S1 834424.0 subassembly complete	834424.0 subassembly complete	834424.0 subassembly complete	834424.0 subassembly complete			
control transformer	-T11 7.2238.10090 USTE630 - 630 VA Block 208-600 V/2x 115 V+ 24 V	7.2238.10090 USTE630 - 630 VA 208-600 V/2x 115 V+ 24 V	7.2238.10090 USTE630 - 630 VA 208-600 V/2x 115 V+ 24 V	7.2238.10090 USTE630 - 630 VA 208-600 V/2x 115 V+ 24 V			
power supply	-T21 7.7605P0 PSDC24/2.5 Prodrive 100-240 V-AC/24 V-DC 2,5 A	7.7605P0 PSDC24/2.5 100-240 V-AC/24 V-DC 2,5 A	7.7605P0 PSDC24/2.5 100-240 V-AC/24 V-DC 2,5 A	7.7605P0 PSDC24/2.5 100-240 V-AC/24 V-DC 2,5 A			
isolating amplifier	-T45 Phoenix 7.2892.00040 MCR-C-I/I-00-DC	7.2892.00040 MCR-C-I/I-00-DC	7.2892.00040 MCR-C-I/I-00-DC	7.2892.00040 MCR-C-I/I-00-DC			
control line terminal	-X. 11/12/15/16/21/22/100 Handling	895635.0 Wieland WTP fig. 1, Sht. 11					
					KAESER KOMPRESSOREN electric component parts list Blower STC+SC2 Common parts		
					c	Datum	05.02.2018
					b	Bearbeiter	M.Zeeh
					a	Geprägt	M.Zeeh
					c	Ersatz für:	
					d	Ersatz durch:	
					e	Ursprung:	
					f		
					g		
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					hh		
					ii		
					jj		
					kk		
					ll		
					mm		
					nn		
					oo		

model	option BB BB BB BB				
machine power supply	208 V / 60 Hz		230 V / 60 Hz	460 V / 60 Hz	575 V / 60 Hz
option C5/C39: oil function monitors					
oil level switch (option C5)	-B80/-B81 Elobau	---	---	---	---
oil temperature (option C39)	-B55 Wika	---	---	---	---
option C10: Speed monitoring					
supervisory module	-K26 ifm	895323.0 FR1 - DD2503	895323.0 FR1 - DD2503	895323.0 FR1 - DD2503	895323.0 FR1 - DD2503
speed sensor	-B90 ifm	895039.0 IFC201	895039.0 IFC201	895039.0 IFC201	895039.0 IFC201
option C11: Unloaded start valve 24 V-DC (electromagnetic)					
solenoid valve	-K1 Riegler	---	---	---	---
option C11: Unloaded start valve 115 V-AC (electromagnetic)					
solenoid valve	-K1 bürkert	893584.00010 115V/60 Hz (1PH/N/GRD)	893584.00010 115V/60 Hz (1PH/N/GRD)	893584.00010 115V/60 Hz (1PH/N/GRD)	893584.00010 115V/60 Hz (1PH/N/GRD)
coupling relay	-K52 Wieland	7.3149.00660 FLARE 24 V-DC 1W-250 V/6 A			
option C11: Unloaded start valve 115 V-AC (ball valve)					
coupling relay	-K53 Siemens	---	---	---	---
actuator drive	-M23 / (-M24) Sun Yeh	---	---	---	---
fuse	-9FU Gould	---	---	---	---

model	option CB-DB-EB CB-DB-EB CB-DB-EB CB-DB-EB FB						" + UXB STC-U3020.04	Page 6 28 Bl.
machine power supply	208 V / 60 Hz	230 V / 60 Hz	460 V / 60 Hz	575 V / 60 Hz	460 V+ 575 V / 60 Hz			
option C5/C39: oil function monitors								
oil level switch (option C5) Elobau	-B80/-B81 -B80/-B81 Elobau	894631.00010	894631.00010	894631.00010	894631.00010	894631.00010		
oil temperature (option C39) Wika	-B55 -B55 Wika	895251.10100 (xB-C) 895603.00100 (EB-S) Pt100	895251.10100 (xB-C) 895603.00100 (EB-S) Pt100	895251.10100 (xB-C) 895603.00100 (EB-S) Pt100	895251.10100 (xB-C) 895603.00100 (EB-S) Pt100	895251.10100 Pt100		
option C10: Speed monitoring								
supervisory module ifm	-K26 -K26 ifm	895323.0 FR1 - DD2503						
speed sensor ifm	-B90 -B90 ifm	895039.0 IFC201	895039.0 IFC201	895039.0 IFC201	895039.0 IFC201	895039.0 IFC201		
option C11: Unloaded start valve 24 V-DC (electromagnetic) (only EBS+ FBS)								
solenoid valve Riegler	-K1 -K1	894204.00020 24V - DC						
option C11: Unloaded start valve 115 V-AC (ball valve) (only EBS)								
coupling relay Siemens	-K53 -K53 Siemens	7.8740.04210 3RH2122-1JB40 DC 17-30 V AC-15: 240 V/10 A						
actuator drive Sun Yeh	-M23 / (-M24) -M23 / (-M24) Sun Yeh	895449.00010 OM-1 110 V						
fuse Gould	-9FU -9FU	7.3304.00010 ATDR 2 A - 600 V class CC	7.3304.00010 ATDR 2 A - 600 V class CC	7.3304.00010 ATDR 2 A - 600 V class CC	7.3304.00010 ATDR 2 A - 600 V class CC	7.3304.00010 ATDR 2 A - 600 V class CC		
fuse socket Wöhner	-9FU -9FU	1-pole - 7.3320.00050 cl. CC Ambus Easy Switch						

KAESER
KOMPRESSOREN
 electrical component parts list
 Blower STC+SC2
 option

KAESER
KOMPRESSOREN
 Ursprung:

c	Datum	05.02.2018
b	Bearbeiter	M.Zeeh
a	Geprägt	M.Zeeh
C Änderung	Datum	Name
		Norm

model	performance-related components				KAESER KOMPRESSOREN	electrical component parts list 208V BB+CB+DB	page 7 28 Bl.
	5 hp BB (4 kW)	7,5 hp BB+ CB+DB (5,5 kW)	10 hp BB+ CB+DB (7,5 kW)	15 hp BB+ CB+DB (11 kW)			
machine power supply	208 V ±10 %, 60 Hz	208 V ±10 %, 60 Hz	208 V ±10 %, 60 Hz	208 V ±10 %, 60 Hz			
overload relay	-B21 Siemens	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 7,2 A NEC 430.32(C) incremental setting: 8,1 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 9,8 A NEC 430.32(C) incremental setting: 11,0 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 13,3 A NEC 430.32(C) incremental setting: 15,0 A	7.8741.00080 3RB3026-1PB0 10-40 A / S0 setting: 19,7 A NEC 430.32(C) incremental setting: 22,2 A		
overload relay	-B24 Siemens	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A		
Blower motor	-M1 Siemens	894989.0 208V-DD/60 Hz 13,5 A, 3600U	894990.0 208V-DD/60 Hz 18,4 A, 3600U	894991.0 208V-DD/60 Hz 25,0 A, 3600U	894992.0 208V-DD/60 Hz 37,0 A, 3600U		
vent motor	-M4 ebm	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD) 175W 1,55 A					
contactor	-Q1 / -Q2	7.8740.00350 3RT2024-1AK60	7.8740.00360 3RT2025-1AK60	7.8740.00370 3RT2026-1AK60	7.8740.00380 3RT2027-1AK60		
auxiliary switch							
auxiliary switch							
interference suppressor		7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00		
terminal		7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB		
Phase rail		7.6861.0 Siemens 3RV1915-1AB	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB		
contactor	-Q3	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61	7.8740.00320 3RT2017-1AK61	7.8740.00370 3RT2026-1AK60		
auxiliary switch		7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11			
auxiliary switch							
interference suppressor		7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05140 3RT2926-1CC00		
wye bridge		7.3140.05030 Siemens 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	7.3140.02070 3RT1926-4BA31		
motor cable	-W19.1/19.2	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x12 AWG / 4G4 mm ² 600 V - 90°C	4x10 AWG / 4G6 mm ² 600 V - 90°C		
connection	-W11 -W13 -W14	10 AWG / 6 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	10 AWG / 6 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	8 AWG / 10 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	8 AWG / 10 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C		
supply terminals	-X0: U1/V1/W1/GRD	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12		
Handling Supply	Stripped length X connection						

model		performance-related components					Page 28 B. + II	Page 8 UJB-STC-U3020.04
		20 hp BB+ CB+DB (15 kW)	25 hp CB+ DB (18,5 kW)	30 hp CB+ DB (22 kW)	40 hp CB (30 kW)	40 hp DB (30 kW)		
machine power supply		208 V ±10 %, 60 Hz	208 V ±10 %, 60 Hz	208 V ±10 %, 60 Hz	208 V ±10 %, 60 Hz	208 V ±10 %, 60 Hz		
overload relay	-B21 Siemens	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 26,6 A NEC 430.32(C) incremental setting: 30,0 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 31,9 A NEC 430.32(C) incremental setting: 36,0 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 38,2 A NEC 430.32(C) incremental setting: 43,2 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 52,1 A NEC 430.32(C) incremental setting: 58,8 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 54,2 A NEC 430.32(C) incremental setting: 61,2 A		
		7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A		
		895049.0 208V-DD/60 Hz 50,0 A, 3600U	894994.0 208V-DD/60 Hz 60 A, 3600U	894995.0 208V-DD/60 Hz 72 A, 3600U	894996.1 (CB) 208V-DD/60 Hz 98 A, 3600U (CB)	894997.1 (DB) 208V-DD/60 Hz 102 A, 3600U (DB)		
vent motor soundproofing casing	-M4 ebm	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD) 175W 1,55 A		
		7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00420 3RT2037-1AK60	7.8740.00430 3RT2038-1AK60	7.8740.00430 3RT2038-1AK60		
		7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00		
interference suppressor terminal Phase rail	-Q1 / -Q2 Siemens	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E		
		7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00		
		7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60		
contactor auxiliary switch auxiliary switch	-Q3 Siemens	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00		
		7.3140.01170 3RT1936-4BA31	7.3140.02070 3RT1926-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31		
		7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60		
contactor auxiliary switch auxiliary switch	-Q3 Siemens	7.8740.05150 3RT2936-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00		
		7.3140.01170 3RT1936-4BA31	7.3140.02070 3RT1926-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31		
		7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60		
motor cable	-W19.1/19.2	4x8 AWG / 4G10 mm² 600 V - 90°C	4x6 AWG / 4G16 mm² 600 V - 90°C	4x6 AWG / 4G16 mm² 600 V - 90°C	4x4 AWG / 4G25 mm² 600 V - 90°C	4x4 AWG / 4G25 mm² 600 V - 90°C		
connection	-W11	4 AWG / 25 mm²	4 AWG / 25 mm²	2 AWG / 35 mm²	1 AWG / 50 mm²	1 AWG / 50 mm²		
	-W13	Phase rail	Phase rail	Phase rail	Phase rail	Phase rail		
	-W14	Phase rail 600 V - 90°C	Phase rail 600 V - 90°C	Phase rail 600 V - 90°C	Phase rail 600 V - 90°C	Phase rail 600 V - 90°C		
supply terminals Handling Stripped length X supply	-X0: U1/V1/W1/GRD	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm² Wago fig. 3, Sht. 11 36 mm fig. 2, Sht. 12	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm² Wago fig. 3, Sht. 11 36 mm fig. 2, Sht. 12		
	Datum	05.02.2018						
	Bezeichner	M.Zeh						
	Beispiel	✓						
	Ersatz durch:							
	Ersatz durch:							
	Andeutung							
	Name	Norm						
	Datum							
	Zeichner							
	Zeichnung							

13.4 Electrical diagrams

model	performance-related components			page 9 28 Bl.																		
	25 hp EB (18,5 kW)	30 hp EB (22 kW)	40 hp EB (30 kW)																			
machine power supply	208 V ±10 %, 60 Hz	208 V ±10 %, 60 Hz	208 V ±10 %, 60 Hz																			
overload relay Siemens	-B21 7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 31,9 A NEC 430.32(C) incremental setting: 36,0 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 38,2 A NEC 430.32(C) incremental setting: 43,2 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 60,0 A NEC 430.32(C) incremental setting: 67,9 A																			
overload relay soundproofing casing Siemens	-B24 7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,98 A NEC 430.32(C) incremental setting: 1,10 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,98 A NEC 430.32(C) incremental setting: 1,10 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,98 A NEC 430.32(C) incremental setting: 1,10 A																			
Blower motor Siemens	-M1 894994.0 208V-DD/60 Hz 60 A, 3600U	894995.0 208V-DD/60 Hz 72 A, 3600U	894997.1 208V-DD/60 Hz 102 A, 3600U																			
vent motor soundproofing casing Sodeca	-M4 895040.00020 HC-31-2T / H-I-E 208 V-D/60 Hz (3PH/GRD) 180W 1,06 A	895040.00020 HC-31-2T / H-I-E 208 V-D/60 Hz (3PH/GRD) 180W 1,06 A	895040.00020 HC-31-2T / H-I-E 208 V-D/60 Hz (3PH/GRD) 180W 1,06 A																			
contactor auxiliary switch auxiliary switch interference suppressor terminal Phase rail Siemens	-Q1 / -Q2 7.8740.00400 3RT2035-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.05270 3RA2933-3FA00	7.8740.00420 3RT2037-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.05270 3RA2933-3FA00	7.8740.00430 3RT2038-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.05270 3RA2933-3FA00																			
contactor auxiliary switch auxiliary switch interference suppressor wye bridge Siemens	-Q3 7.8740.00400 3RT2035-1AK60 7.8740.05150 3RT2936-1CC00 7.3140.01170 3RT1936-4BA31	7.8740.00400 3RT2035-1AK60 7.8740.05150 3RT2936-1CC00 7.3140.01170 3RT1936-4BA31	7.8740.00400 3RT2035-1AK60 7.8740.05150 3RT2936-1CC00 7.3140.01170 3RT1936-4BA31																			
motor cable connection	-W19.1/19.2 4x6 AWG / 4G16 mm ² 600 V - 90°C	4x6 AWG / 4G16 mm ² 600 V - 90°C	4x4 AWG / 4G25 mm ² 600 V - 90°C																			
connection -W11 -W13 -W14 supply terminals U1/V1/W1/GRD Handling Stripped length X connection	4 AWG / 25 mm ² Phase rail Phase rail 600 V - 90°C	2 AWG / 35 mm ² Phase rail Phase rail 600 V - 90°C	1 AWG / 50 mm ² Phase rail Phase rail 600 V - 90°C																			
supply connection	-X0: 3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm ² Wago fig. 3, Sht. 11 36 mm fig. 2, Sht. 12																			
				<table border="1"> <tr> <td>c</td><td>Datum</td><td>05.02.2018</td> </tr> <tr> <td>b</td><td>Bearbeiter</td><td>M/Zeeh</td> </tr> <tr> <td>a</td><td>Gefürt</td><td>M/Zeeh</td> </tr> <tr> <td></td><td>Ersatz für:</td><td></td> </tr> <tr> <td>C Änderung</td><td>Datum</td><td>Name</td> </tr> <tr> <td></td><td>Norm</td><td></td> </tr> </table>	c	Datum	05.02.2018	b	Bearbeiter	M/Zeeh	a	Gefürt	M/Zeeh		Ersatz für:		C Änderung	Datum	Name		Norm	
c	Datum	05.02.2018																				
b	Bearbeiter	M/Zeeh																				
a	Gefürt	M/Zeeh																				
	Ersatz für:																					
C Änderung	Datum	Name																				
	Norm																					

model		performance-related components				page 10 + 28 B.
		5 hp BB (4 kW)	7,5 hp BB+ CB+DB (5,5 kW)	10 hp BB+ CB+DB (7,5 kW)	15 hp BB+ CB+DB (11 kW)	
machine power supply		230 V ±10 %, 60 Hz	230 V ±10 %, 60 Hz	230 V ±10 %, 60 Hz	230 V ±10 %, 60 Hz	
overload relay	-B21	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 6,5 A NEC 430.32(C) incremental setting: 7,3 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 9,3 A NEC 430.32(C) incremental setting: 10,6 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 12,2 A NEC 430.32(C) incremental setting: 13,8 A	7.8741.00080 3RB3026-1VB0 10-40 A / S0 setting: 18,5 A NEC 430.32(C) incremental setting: 21,0 A	"
	Siemens					
overload relay soundproofing casing	-B24	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	
	Siemens					
Blower motor	-M1	894989.0 230V-DD/60 Hz 12,2 A, 3600U	894990.0 230V-DD/60 Hz 17,6 A, 3600U	894991.0 230V-DD/60 Hz 23,0 3600U	894992.0 230V-DD/60 Hz 35,0 A, 3600U	
vent motor soundproofing casing	-M4	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD)				
	ebm	175W 1,55 A	175W 1,55 A	175W 1,55 A	175W 1,55 A	
contactor	-Q1 / -Q2	7.8740.00350 3RT2024-1AK60	7.8740.00370 3RT2026-1AK60	7.8740.00370 3RT2026-1AK60	7.8740.00390 3RT2028-1AK60	
auxiliary switch						
auxiliary switch						
interference suppressor		7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	
terminal		7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	
Phase rail		7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB	
Siemens						
contactor	-Q3	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61	7.8740.00330 3RT2018-1AK61	7.8740.00370 3RT2026-1AK60	
auxiliary switch		7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11		
auxiliary switch						
interference suppressor		7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05140 3RT2926-1CC00	
wye bridge		7.3140.05030 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	7.3140.02070 3RT1926-4BA31	
Siemens						
motor cable	-W19.1/19.2	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x12 AWG / 4G4 mm ² 600 V - 90°C	4x10 AWG / 4G6 mm ² 600 V - 90°C	
connection	-W11 -W13 -W14	10 AWG / 6 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	10 AWG / 6 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	8 AWG / 10 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	8 AWG / 10 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	
supply terminals	-X0: U1/V1/W1/GRD	894864.00010	894864.00010	894864.00010	894864.00010	
Handling		14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11	14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11	14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11	14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11	
Stripped length X		16 mm	16 mm	16 mm	16 mm	
supply	connection	fig. 1, Sht. 12	fig. 1, Sht. 12	fig. 1, Sht. 12	fig. 1, Sht. 12	

13.4 Electrical diagrams

model		performance-related components					page 11 + UXB, STC-U3020.04
		20 hp BB+ CB+DB (15 kW)	25 hp CB+ DB (18,5 kW)	30 hp CB+ DB (22 kW)	40 hp CB (30 kW)	40 hp DB (30 kW)	
machine power supply		230 V ±10 %, 60 Hz	230 V ±10 %, 60 Hz	230 V ±10 %, 60 Hz	230 V ±10 %, 60 Hz	230 V ±10 %, 60 Hz	
overload relay	-B21	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 25,5 A NEC 430.32(C) incremental setting: 28,8 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 29,7 A NEC 430.32(C) incremental setting: 33,6 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 35,5 A NEC 430.32(C) incremental setting: 40,2 A	7.8741.00140 3RB3046-1EB0 32-115 A / S3 setting: 54,2 A NEC 430.32(C) incremental setting: 61,2 A	7.8741.00140 3RB3046-1EB0 32-115 A / S3 setting: 55,2 A NEC 430.32(C) incremental setting: 62,4 A	
overload relay	-B24	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	
Blower motor	-M1	895049,0 230V-DD/60 Hz Siemens 48 A, 3600U	894994,0 230V-DD/60 Hz 56 A, 3600U	894995,0 230V-DD/60 Hz 67 A, 3600U	894996,1 (CB) 230V-DD/60 Hz 102 A, 3600U	894997,1 (DB) 230V-DD/60 Hz 104 A, 3600U	
vent motor	-M4	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD)	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD)	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD)	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD)	895260.00010 W2D250 115 V/60 Hz (1PH/N/GRD)	
soundproofing casing		ebm 175W 1,55 A	ebm 175W 1,55 A	ebm 175W 1,55 A	ebm 175W 1,55 A	ebm 175W 1,55 A	
contactor	-Q1 / -Q2	7.8740.00410 3RT2036-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00430 3RT2038-1AK60	7.8740.00440 3RT2045-1AK60	7.8740.00440 3RT2045-1AK60	
auxiliary switch							
auxiliary switch							
interference suppressor		7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05170 3RT2946-1CC00	7.8740.05170 3RT2946-1CC00	
terminal		7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	3x 7.3140.02100 3x 3RA1943-3L	3x 7.3140.02100 3x 3RA1943-3L	
Phase rail		7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05370 3RA2943-3FA00	7.3140.05370 3RA2943-3FA00	
Siemens							
contactor	-Q3	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	
auxiliary switch							
auxiliary switch							
interference suppressor		7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	
wye bridge		7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	
Siemens							
motor cable	-W19.1/19.2	4x8 AWG / 4G10 mm ² 600 V - 90°C	4x6 AWG / 4G16 mm ² 600 V - 90°C	4x6 AWG / 4G16 mm ² 600 V - 90°C	4x4 AWG / 4G25 mm ² 600 V - 90°C	4x4 AWG / 4G25 mm ² 600 V - 90°C	
connection	-W11 -W13 -W14	6 AWG / 16 mm ² Phase rail Phase rail 600 V - 90°C	4 AWG / 25 mm ² Phase rail Phase rail 600 V - 90°C	2 AWG / 35 mm ² Phase rail Phase rail 600 V - 90°C	1 AWG / 50 mm ² 4 AWG / 25 mm ² 8 AWG / 10 mm ² 600 V - 90°C	1 AWG / 50 mm ² 4 AWG / 25 mm ² 8 AWG / 10 mm ² 600 V - 90°C	
supply terminals	-X0: U1/V1/W1/GRD	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago Handling Stripped length X	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm ² Wago fig. 3, Sht. 11 30 mm	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm ² Wago fig. 3, Sht. 11 36 mm	
supply	connection	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12	

model		performance-related components				
		25 hp EB (18,5 kW)	30 hp EB (22 kW)	40 hp EB (30 kW)		
machine power supply		230 V ±10 %, 60 Hz	230 V ±10 %, 60 Hz	230 V ±10 %, 60 Hz		
overload relay	-B21	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 29,7 A NEC 430.32(C) incremental setting: 33,6 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 35,6 A NEC 430.32(C) incremental setting: 40,2 A	7.8741.00140 3RB3046-1EB0 32-115 A / S3 setting: 55,2 A NEC 430.32(C) incremental setting: 62,4 A		
overload relay	-B24	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,01 A NEC 430.32(C) incremental setting: 1,14 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,01 A NEC 430.32(C) incremental setting: 1,14 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,01 A NEC 430.32(C) incremental setting: 1,14 A		
Blower motor	-M1	894994.0 230V-DD/60 Hz Siemens 56 A, 3600U	894995.0 230V-DD/60 Hz 67 A, 3600U	894997.1 230V-DD/60 Hz 104 A, 3600U		
vent motor	-M4	895040.00040 HC-31-2T / H-I-E 230 V-D/60 Hz (3PH/GRD) Sodeca 210W 1,10 A	895040.00040 HC-31-2T / H-I-E 230 V-D/60 Hz (3PH/GRD) 210W 1,10 A	895040.00040 HC-31-2T / H-I-E 230 V-D/60 Hz (3PH/GRD) 210W 1,10 A		
contactor	-Q1 / -Q2	7.8740.00400 3RT2035-1AK60	7.8740.00430 3RT2038-1AK60	7.8740.00440 3RT2045-1AK60		
auxiliary switch	.	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20			
auxiliary switch	.					
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05170 3RT2946-1CC00		
terminal	.	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	3x 7.3140.02100 3x 3RA1943-3L		
Phase rail	.	7.3140.05270 Siemens 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05370 3RA2943-3FA00		
contactor	-Q3	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00410 3RT2036-1AK60		
auxiliary switch	.					
auxiliary switch	.					
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00		
wye bridge	.	7.3140.01170 Siemens 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31		
motor cable	-W19.1/19.2	4x6 AWG / 4G16 mm ² 600 V - 90°C	4x6 AWG / 4G16 mm ² 600 V - 90°C	4x4 AWG / 4G25 mm ² 600 V - 90°C		
connection	-W11 -W13 -W14	4 AWG / 25 mm ² Phase rail Phase rail 600 V - 90°C	2 AWG / 35 mm ² Phase rail Phase rail 600 V - 90°C	1 AWG / 50 mm ² 4 AWG / 25 mm ² 8 AWG / 10 mm ² 600 V - 90°C		
supply terminals	-X0: U1/V1/W1/GRD	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 Stripped length X connection	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm ² Wago fig. 3, Sht. 11 36 mm fig. 2, Sht. 12		

13.4 Electrical diagrams

model	performance-related components					page 13 28 Bl.
	5 hp BB (4 kW)	7,5 hp BB+ CB+DB (5,5 kW)	10 hp BB+ CB+DB (7,5 kW)	15 hp BB+ CB+DB (11 kW)	20 hp BB+ CB+DB (15 kW)	
machine power supply	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	" +
overload relay	-B21 Siemens	7.8741.00060 3RB3026-1SB0 3-12 A / S0 setting: 3,2 A NEC 430.32(C) incremental setting: 3,7 A	7.8741.00060 3RB3026-1SB0 3-12 A / S0 setting: 4,7 A NEC 430.32(C) incremental setting: 5,3 A	7.8741.00060 3RB3026-1QB0 6-25 A / S0 setting: 6,1 A NEC 430.32(C) incremental setting: 6,9 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 9,3 A NEC 430.32(C) incremental setting: 10,6 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 12,7 A NEC 430.32(C) incremental setting: 14,4 A
overload relay	-B24 Siemens	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A
Blower motor	-M1 Siemens	894989.0 460 V-D/60 Hz 6,1 A, 3600U	894990.0 460 V-D/60 Hz 8,8 A, 3600U	894991.0 460 V-D/60 Hz 11,5 A, 3600U	894992.0 460 V-D/60 Hz 17,6 A, 3600U	895049.0 460 V-D/60 Hz 24 A, 3600U
vent motor	-M4 ebm	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A
contactor	-Q1 / -Q2	7.8740.00340 3RT2023-1AK60	7.8740.00340 3RT2023-1AK60	7.8740.00350 3RT2024-1AK60	7.8740.00370 3RT2026-1AK60	7.8740.00390 3RT2028-1AK60
auxiliary switch	.	.	.	.	.	.
auxiliary switch	.	.	.	.	.	.
interference suppressor	.	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00
terminal	.	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB
Phase rail	.	7.6861.0 Siemens	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB
contactor	-Q3	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61	7.8740.00320 3RT2017-1AK61	7.8740.00370 3RT2026-1AK60
auxiliary switch	.	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	.
auxiliary switch	.	.	.	.	.	.
interference suppressor	.	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05140 3RT2926-1CC00
wye bridge	.	7.3140.05030 Siemens	7.3140.05030 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	7.3140.02070 3RT1926-4BA31
motor cable	-W19.1/19.2	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x12 AWG / 4G4 mm ² 600 V - 90°C	4x10 AWG / 4G6 mm ² 600 V - 90°C
connection	-W11 -W13 -W14	14 AWG / 2,5 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	14 AWG / 2,5 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	14 AWG / 2,5 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	10 AWG / 6 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	8 AWG / 10 mm ² Phase rail Phase rail 600 V - 90°C
supply terminals	-X0: U1/V1/W1/GRD	894864.00010 Handling Stripped length X connection	894864.00010 fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12

KAESER	KOMPRESSOREN	
electrical component parts list	460V BB+CB+DB	
performance-related components	ursprung:	
	Ersatz für:	
	Ersatz durch:	
c	Datum	05/02/2018
b	Bearbeiter	M/Zeeh
a	Gerüft	M/Zeeh
	Name	Norm
C Änderung	Datum	

model	performance-related components					" +	page 14 28 Bl.
	25 hp CB+ DB (18,5 kW)	30 hp CB+ DB (22 kW)	40 hp CB+ DB (30 kW)	50 hp DB (37 kW)	60 hp DB (45 kW)		
machine power supply	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	" +	
overload relay Siemens	7.8741.00080 3RB3026-1VB0 10-40 A / S0 setting: 14,9 A NEC 430.32(C) incremental setting: 16,8 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 17,8 A NEC 430.32(C) incremental setting: 20,1 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 27,1 A (CB) setting: 27,6 A (DB) NEC 430.32(C) incremental setting: 30,6 A (CB) setting: 31,2 A (DB)	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 33,5 A NEC 430.32(C) incremental setting: 37,8 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 41,4 A NEC 430.32(C) incremental setting: 46,8 A	" +	UXB/STC-U3020.04
overload relay soundproofing casing Siemens	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	" +	UXB/STC-U3020.04
Blower motor Siemens	894994.0 460 V-D/60 Hz 28 A, 3600U	894995.0 460 V-D/60 Hz 33,5 A, 3600U	894996.1 (CB) 894997.1 (DB) 460 V-D/60 Hz 51 A/52 A (CB/DB) 3600U	894978.1 460 V-D/60 Hz 63 A, 3600U	894979.1 460 V-D/60 Hz 78 A, 3600U	" +	UXB/STC-U3020.04
vent motor soundproofing casing ebm	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	" +	UXB/STC-U3020.04
contactor auxiliary switch	-Q1 / -Q2 7.8740.00380 3RT2027-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00410 3RT2036-1AK60	7.8740.00430 3RT2038-1AK60	" +	UXB/STC-U3020.04
auxiliary switch	.	.	.	.	.	" +	UXB/STC-U3020.04
interference suppressor terminal	7.8740.05140 3RT2926-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	" +	UXB/STC-U3020.04
Phase rail Siemens	7.6861.0 3RV1915-1AB	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	" +	UXB/STC-U3020.04
contactor auxiliary switch	-Q3 7.8740.00370 3RT2026-1AK60	7.8740.00370 3RT2026-1AK60	7.8740.00380 3RT2027-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	" +	UXB/STC-U3020.04
auxiliary switch	.	.	.	.	.	" +	UXB/STC-U3020.04
interference suppressor wye bridge	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	" +	UXB/STC-U3020.04
wye bridge Siemens	7.3140.02070 3RT1926-4BA31	7.3140.02070 3RT1926-4BA31	7.3140.02070 3RT1926-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	" +	UXB/STC-U3020.04
motor cable	-W19.1/19.2 4x10 AWG / 4G6 mm² 600 V - 90°C	4x10 AWG / 4G6 mm² 600 V - 90°C	4x8 AWG / 4G10 mm² 600 V - 90°C	4x6 AWG / 4G16 mm² 600 V - 90°C	4x6 AWG / 4G16 mm² 600 V - 90°C	" +	UXB/STC-U3020.04
connection -W11 -W13 -W14	8 AWG / 10 mm² Phase rail Phase rail 600 V - 90°C	8 AWG / 10 mm² Phase rail 14 AWG / 2,5 mm² 600 V - 90°C	6 AWG / 16 mm² Phase rail 10 AWG / 6 mm² 600 V - 90°C	4 AWG / 25 mm² Phase rail Phase rail 600 V - 90°C	2 AWG / 35 mm² Phase rail Phase rail 600 V - 90°C	" +	UXB/STC-U3020.04
supply terminals U1/V1/W1/GRD	894864.00010	894864.00010	3x 895314.0 3x 895314.00010 4x 895314.00040	3x 895314.0 3x 895314.00010 4x 895314.00040	3x 895314.0 3x 895314.00010 4x 895314.00040	" +	UXB/STC-U3020.04
Handling Stripped length X supply connection	14-4 AWG / 2,5-16 mm² Wieland fig. 2, Sht. 11	14-4 AWG / 2,5-16 mm² Wieland fig. 2, Sht. 11	8-1 AWG / 10-50 mm² Wago fig. 3, Sht. 11	8-1 AWG / 10-50 mm² Wago fig. 3, Sht. 11	8-1 AWG / 10-50 mm² Wago fig. 3, Sht. 11	" +	UXB/STC-U3020.04
Ersatz für: Ersatz durch: C Änderung						" +	UXB/STC-U3020.04

13.4 Electrical diagrams

model		performance-related components				page 15 28 Bl.
		25 hp EB (18,5 kW)	30 hp EB (22 kW)	40 hp EB+ FB-C (30 kW)	40 hp FB-S (30 kW)	
machine power supply		460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	
overload relay	-B21 Siemens	7.8741.00080 3RB3026-1VB0 10-40 A / S0 setting: 14,9 A NEC 430.32(C) incremental setting: 16,8 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 17,8 A NEC 430.32(C) incremental setting: 20,1 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 27,6 A NEC 430.32(C) incremental setting: 31,2 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 27,6 A NEC 430.32(C) incremental setting: 31,2 A	
		overload relay soundproofing casing Siemens	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	
Blower motor	-M1 Siemens	894994.0 460V-D/60 Hz 28 A, 3600U	894995.0 460V-D/60 Hz 33,5 A, 3600U	894997.1 460V-D/60 Hz 52 A, 3600U	894997.1 460V-D/60 Hz 52 A, 3600U	
vent motor soundproofing casing	-M4 Sodeca/ebm	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A	
contactor	-Q1 / -Q2	7.8740.00380 3RT2027-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	
auxiliary switch	.	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	
auxiliary switch	.					
interference suppressor	.	7.8740.05140 3RT2926-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	
terminal	.	7.3140.05080 3RV2925-5EB	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	
Phase rail	.	7.6861.0 Siemens	7.3140.05270 3RV1915-1AB	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	
contactor	-Q3	7.8740.00370 3RT2026-1AK60	7.8740.00380 3RT2027-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	
auxiliary switch	.					
auxiliary switch	.					
interference suppressor	.	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	
wye bridge	.	7.3140.02070 Siemens	7.3140.02070 3RT1926-4BA31	7.3140.01170 3RT1926-4BA31	7.3140.01170 3RT1926-4BA31	
motor cable	-W19.1/19.2	4x10 AWG / 4G6 mm ² 600 V - 90°C	4x10 AWG / 4G6 mm ² 600 V - 90°C	4x8 AWWG / 4G10 mm ² 600 V - 90°C	4x8 AWWG / 4G10 mm ² 600 V - 90°C	
connection	-W11 -W13 -W14	8 AWG / 10 mm ² Phase rail Phase rail 600 V - 90°C	8 AWG / 10 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	6 AWG / 16 mm ² Phase rail Phase rail 600 V - 90°C	6 AWG / 16 mm ² Phase rail Phase rail 600 V - 90°C	
supply terminals	-X0: U1/V1/W1/GRD	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	
supply	Handling Stripped length X connection					

model		performance-related components				" "	+ +	Page 16 28 Bl.
		50 hp EB+ FB-C (37 kW)	50 hp FB-S (37 kW)	60 hp EB+ FB-C (45 kW)	60 hp FB-S (45 kW)			
machine power supply		460 V ±10 %, 60 Hz		460 V ±10 %, 60 Hz		460 V ±10 %, 60 Hz		460 V ±10 %, 60 Hz
overload relay	-B21 Siemens	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 33,5 A NEC 430.32(C) incremental setting: 37,8 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 33,5 A NEC 430.32(C) incremental setting: 37,8 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 41,4 A NEC 430.32(C) incremental setting: 46,8 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 41,4 A NEC 430.32(C) incremental setting: 46,8 A			
		7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A			
		894978.1 460V-D/60 Hz 63 A, 3600U	894978.1 460V-D/60 Hz 63 A, 3600U	894979.1 460V-D/60 Hz 78 A, 3600U	894979.1 460V-D/60 Hz 78 A, 3600U			
		895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A			
contactor	-Q1 / -Q2	7.8740.00410 3RT2036-1AK60	7.8740.00410 3RT2036-1AK60	7.8740.00430 3RT2038-1AK60	7.8740.00430 3RT2038-1AK60			
auxiliary switch	.	7.8740.05030	7.8740.05030	7.8740.05030	7.8740.05030			
auxiliary switch	.	3RH2911-1HA20	3RH2911-1HA20	3RH2911-1HA20	3RH2911-1HA20			
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00			
terminal	.	7.3140.05070	7.3140.05070	7.3140.05070	7.3140.05070			
Phase rail	.	3RV2935-5E 7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00			
Siemens								
contactor	-Q3	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60			
auxiliary switch	.							
auxiliary switch	.							
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00			
wye bridge	.	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31			
Siemens								
motor cable	-W19.1/19.2	4x6 AWWG / 4G16 mm² 600 V - 90°C	4x6 AWWG / 4G16 mm² 600 V - 90°C	4x6 AWWG / 4G16 mm² 600 V - 90°C	4x6 AWWG / 4G16 mm² 600 V - 90°C			
connection	-W11 -W13 -W14	4 AWG / 25 mm² Phase rail Phase rail 600 V - 90°C	4 AWG / 25 mm² Phase rail Phase rail 600 V - 90°C	2 AWG / 35 mm² Phase rail Phase rail 600 V - 90°C	2 AWG / 35 mm² Phase rail Phase rail 600 V - 90°C			
supply terminals	-X0: U1/V1/W1/GRD	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago fig. 3, Sht. 11 30 mm Stripped length X connection	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12			
supply	Handling Stripped length X connection							

13.4 Electrical diagrams

model	performance-related components					page 17 28 Bl.
	75 hp EB+ FB-C (55 kW)	75 hp FB-S (55 kW)	100 hp EB (75 kW)	100 hp FB-C (75 kW)	100 hp FB-S (75 kW)	
machine power supply	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	" +
overload relay	-B21 Siemens	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 48,9 A NEC 430.32(C) incremental setting: 55,2 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 48,9 A NEC 430.32(C) incremental setting: 55,2 A	7.8741.00140 3RB3046-1EB0 32-115 A / S3 setting: 66,4 A NEC 430.32(C) incremental setting: 75,1 A	7.8741.00140 3RB3046-1EB0 32-115 A / S3 setting: 66,4 A NEC 430.32(C) incremental setting: 75,1 A	7.8741.00140 3RB3046-1EB0 32-115 A / S3 setting: 66,4 A NEC 430.32(C) incremental setting: 75,1 A
overload relay	-B24 Siemens	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A
Blower motor	-M1 Siemens	894717.1 460V-D/60 Hz 92 A, 3600U	894717.1 460V-D/60 Hz 92 A, 3600U	894719.1 460V-D/60 Hz 125 A, 3600U	894719.1 460V-D/60 Hz 125 A, 3600U	894719.1 460V-D/60 Hz 125 A, 3600U
vent motor	-M4 Sodeca/ebm	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A
contactor	-Q1 / -Q2	7.8740.00410 3RT2036-1AK60	7.8740.00410 3RT2036-1AK60	7.8740.00440 3RT2045-1AK60	7.8740.00440 3RT2045-1AK60	7.8740.00440 3RT2045-1AK60
auxiliary switch	.	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20
auxiliary switch	.	.	.	.	.	.
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05170 3RT2946-1CC00	7.8740.05170 3RT2946-1CC00	7.8740.05170 3RT2946-1CC00
terminal	.	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	---	---	---
Phase rail	.	7.3140.05270 Siemens	7.3140.05270 3RA2933-3FA00	---	---	---
contactor	-Q3	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00420 3RT2037-1AK60	7.8740.00420 3RT2037-1AK60	7.8740.00420 3RT2037-1AK60
auxiliary switch	.	.	.	.	.	.
auxiliary switch	.	.	.	.	.	.
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00
wye bridge	.	7.3140.01170 Siemens	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31
motor cable	-W19.1/19.2	4x4 AWG / 4G25 mm ² 600 V - 90°C	4x4 AWG / 4G25 mm ² 600 V - 90°C	4x2 AWG / 4G35 mm ² 600 V - 90°C	4x2 AWG / 4G35 mm ² 600 V - 90°C	4x2 AWG / 4G35 mm ² 600 V - 90°C
connection	-W11 -W13 -W14	1 AWG / 50 mm ² Phase rail Phase rail 600 V - 90°C	1 AWG / 50 mm ² Phase rail Phase rail 600 V - 90°C	2 AWG / 35 mm ² 2 AWG / 35 mm ² 8 AWG / 10 mm ² 600 V - 90°C	2 AWG / 35 mm ² 2 AWG / 35 mm ² 8 AWG / 10 mm ² 600 V - 90°C	2 AWG / 35 mm ² 2 AWG / 35 mm ² 8 AWG / 10 mm ² 600 V - 90°C
supply terminals	-X0: U1/V1/W1/PE	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 Stripped length X 36 mm	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm
PE-rail	-X0:PE Torque Stripped length X	---	---	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins
supply	-connection	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 3, Sht. 13	fig. 3, Sht. 13	fig. 3, Sht. 13

KAESER		electrical component parts list		460V EB+FB		performance-related components
a	b	Datum	Name	Gefürt	Norm	Ersatz für:
c	b	Datum	Name	Gefürt	Norm	Ersatz durch:
c	b	Datum	Name	Gefürt	Norm	
c	b	Datum	Name	Gefürt	Norm	

model	performance-related components					KAESER KOMPRESSOREN	electrical component parts list 460V FB performance-related components	UXTB-STC-U3020.04	Page 18 28 Bl.
	125 hp FB-C (90 kW)	125 hp FB-S (90 kW)	150 hp FB-C (110 kW)	150 hp FB-S (110 kW)	175 hp FB (132 kW)				
machine power supply	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	"	"	"	"
overload relay Siemens	-B21 7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 83,9 A NEC 430.32(C) incremental setting: 94,9 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 79,1 A NEC 430.32(C) incremental setting: 89,5 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 101,5 A NEC 430.32(C) incremental setting: 114,7 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 98,3 A NEC 430.32(C) incremental setting: 111,1 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 119,5 A NEC 430.32(C) incremental setting: 135,1 A	"	"	"	"
overload relay soundproofing casing Siemens	-B24 7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	"	"	"	"
Blower motor Siemens	-M1 894723.1 460V-D/60 Hz 158 A, 1800U	894722.1 460V-D/60 Hz 149 A, 3600U	895025.1 460V-D/60 Hz 191 A, 1800U	894724.1 460V-D/60 Hz 185 A, 3600U	894726.1 460V-D/60 Hz 225 A, 1800U	"	"	"	"
vent motor soundproofing casing Sodeca/ebm	-M4 895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz 210W 0,62 A	"	"	"	"
contactor auxiliary switch auxiliary switch interference suppressor terminal Phase rail Siemens	-Q1 / -Q2 7.3140.02140 3RT1054-1AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- --- --- -Q3 7.8740.00440 3RT2045-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	7.3140.02140 3RT1054-1AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- --- --- 7.8740.00440 3RT2045-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	7.3140.02140 3RT1054-1AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- --- --- 7.8740.00450 3RT2046-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	7.3140.02140 3RT1054-1AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- --- --- 7.8740.00450 3RT2046-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	7.3140.02160 3RT1056-1AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- --- --- 7.8740.00440 3RT2045-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	"	"	"	"
contactor auxiliary switch auxiliary switch interference suppressor wye bridge Siemens	-Q3 7.8740.00440 3RT2045-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	7.8740.00440 3RT2045-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	7.8740.00450 3RT2046-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	7.8740.00450 3RT2046-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	7.8740.00440 3RT2045-1AK60 --- --- --- 7.8740.05170 3RT2946-1CC00 7.3140.00940 3RT1946-4BA31	"	"	"	"
motor cable connection -W11 -W13 -W14	-W19.1/19.2 4x1 AWG / 4G50 mm ² 600 V - 90°C	4x1 AWG / 4G50 mm ² 600 V - 90°C	4x2/0 AWG / 4G70 mm ² 600 V - 90°C	4x2/0 AWG / 4G70 mm ² 600 V - 90°C	4x3/0 AWG / 4G95 mm ² 600 V - 90°C	"	"	"	"
connection -W11 -W13 -W14	-W11 1 AWG / 50 mm ² 1 AWG / 50 mm ² 4 AWG / 25 mm ² 600 V - 90°C	1 AWG / 50 mm ² 1 AWG / 50 mm ² 4 AWG / 25 mm ² 600 V - 90°C	2/0 AWG / 70 mm ² 2/0 AWG / 70 mm ² 2 AWG / 35 mm ² 600 V - 90°C	2/0 AWG / 70 mm ² 2/0 AWG / 70 mm ² 2 AWG / 35 mm ² 600 V - 90°C	3/0 AWG / 95 mm ² 3/0 AWG / 95 mm ² 2 AWG / 35 mm ² 600 V - 90°C	"	"	"	"
supply terminals Handling Stripped length X	-X0: U1/V1/W1 fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	Ersatz durch:			
PE-rail Torque Stripped length X	-X0:PE fig. 3, Sht. 11 36 mm	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins				
supply	-connection	fig. 3, Sht. 13							
						c	Datum	05/02/2018	
						b	Bearbeiter	M.Zeeh	
							Gefürt		
							Norm		
						C Änderung	Datum		

13.4 Electrical diagrams

model		performance-related components					page 19 + 28 Bl.
		5 hp BB (4 kW)	7,5 hp BB+CB+DB (5,5 kW)	10 hp BB+CB+DB (7,5 kW)	15 hp BB+CB+DB (11 kW)	20 hp BB+CB+DB (15 kW)	
machine power supply		575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	
overload relay	-B21	7.8741.00120 3RB3026-1PB0 1-4 A / S0 setting: 2,6 A NEC 430.32(C) incremental setting: 2,9 A	7.8741.00060 3RB3026-1SB0 3-12 A / S0 setting: 3,7 A NEC 430.32(C) incremental setting: 4,2 A	7.8741.00060 3RB3026-1SB0 3-12 A / S0 setting: 4,9 A NEC 430.32(C) incremental setting: 5,5 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 7,5 A NEC 430.32(C) incremental setting: 8,5 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 10,2 A NEC 430.32(C) incremental setting: 11,5 A	
overload relay	-B24	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	
Blower motor	-M1	894969.00500 Siemens 575 V-D/60 Hz 4,9 A, 3600U	894970.00500 575 V-D/60 Hz 7,0 A, 3600U	894971.00500 575 V-D/60 Hz 9,2 A, 3600U	894972.00500 575 V-D/60 Hz 14,1 A, 3600U	894973.00500 575 V-D/60 Hz 19,2 A, 3600U	
vent motor	-M4	895260.00010 W2D250 (1PH/N/GRD) ebm 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	
contactor	-Q1 / -Q2	7.8740.00340 3RT2023-1AK60	7.8740.00340 3RT2023-1AK60	7.8740.00350 3RT2024-1AK60	7.8740.00360 3RT2025-1AK60	7.8740.00380 3RT2027-1AK60	
auxiliary switch		7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	
auxiliary switch							
interference suppressor		7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	
terminal		7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	7.3140.05080 3RV2925-5EB	
Phase rail		7.6861.0 Siemens 3RV1915-1AB	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB	7.6861.0 3RV1915-1AB	
contactor	-Q3	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61	7.8740.00310 3RT2016-1AK61	7.8740.00360 3RT2025-1AK60	
auxiliary switch		7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	
auxiliary switch							
interference suppressor		7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05140 3RT2926-1CC00	
wye bridge		7.3140.05030 Siemens 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	7.3140.05030 3RT1916-4BA31	
motor cable	-W19.1/19.2	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x14 AWG / 4G2,5 mm ² 600 V - 90°C	4x12 AWG / 4G4 mm ² 600 V - 90°C	
connection	-W11 -W13 -W14	14 AWG / 2,5 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	14 AWG / 2,5 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	14 AWG / 2,5 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	10 AWG / 6 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	10 AWG / 6 mm ² Phase rail Phase rail 600 V - 90°C	
supply terminals	-X0: U1/V1/W1/GRD	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm connection	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm Stripped length X	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	

model		performance-related components					page 20 28 Ri
		25 hp CB+ DB (18,5 kW)	30 hp CB+ DB (22 kW)	40 hp CB+ DB (30 kW)	50 hp DB (37 kW)	60 hp DB (45 kW)	
machine power supply		575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	" +
overload relay	-B21	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 11,9 A NEC 430.32(C) incremental setting: 13,5 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 14,2 A NEC 430.32(C) incremental setting: 16,1 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 21,8 A NEC 430.32(C) incremental setting: 24,6 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 26,6 A NEC 430.32(C) incremental setting: 30 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 32,9 A NEC 430.32(C) incremental setting: 37,2 A	
overload relay soundproofing casing	-B24	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	
Blower motor	-M1	8949743.00500 460 V-D/60 Hz 22,4 A, 3600U	894975.00500 460 V-D/60 Hz 26,8 A, 3600U	894976.10500 (CB) 894977.10500 (DB) 460 V-D/60 Hz 41 A/41,5 A (CB/DB) 3600U	894978.10500 460 V-D/60 Hz 50 A, 3600U	894979.10500 460 V-D/60 Hz 62 A, 3600U	
vent motor soundproofing casing	-M4 ebm	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	895260.00010 W2D250 (1PH/N/GRD) 115 V/60 Hz, 175W 1,55 A	
contactor	-Q1 / -Q2	7.8740.00380 3RT2027-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00410 3RT2036-1AK60	
auxiliary switch	.	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	
auxiliary switch	.						
interference suppressor	.	7.8740.05140 3RT2926-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	
terminal	.	7.3140.05080 3RV2925-5EB	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	
Phase rail	.	7.6861.0 Siemens	7.3140.02120 3RV1915-1AB	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	
contactor	-Q3	7.8740.00360 3RT2025-1AK60	7.8740.00370 3RT2026-1AK60	7.8740.00380 3RT2027-1AK60	7.8740.00390 3RT2028-1AK60	7.8740.00400 3RT2035-1AK60	
auxiliary switch	.						
auxiliary switch	.						
interference suppressor	.	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05150 3RT2936-1CC00	
wye bridge	.	7.3140.02070 Siemens	7.3140.02070 3RT1926-4BA31	7.3140.02070 3RT1926-4BA31	7.3140.02070 3RT1926-4BA31	7.3140.02070 3RT1926-4BA31	
motor cable	-W19.1/19.2	4x12 AWG / 4G4 mm ² 600 V - 90°C	4x10 AWG / 4G6 mm ² 600 V - 90°C	4x8 AWG / 4G10 mm ² 600 V - 90°C	4x8 AWG / 4G10 mm ² 600 V - 90°C	4x6 AWG / 4G16 mm ² 600 V - 90°C	
connection	-W11 -W13 -W14	10 AWG / 6 mm ² Phase rail Phase rail 600 V - 90°C	8 AWG / 10 mm ² Phase rail 10 AWG / 6 mm ² 600 V - 90°C	8 AWG / 10 mm ² Phase rail 10 AWG / 6 mm ² 600 V - 90°C	6 AWG / 16 mm ² Phase rail 10 AWG / 6 mm ² 600 V - 90°C	4 AWG / 25 mm ² Phase rail Phase rail 600 V - 90°C	
supply terminals	-X0: U1/V1/W1/GRD	894864.00010	894864.00010	894864.00010	3x 895314.0 3x 895314.00010 4x 895314.00040	3x 895314.0 3x 895314.00010 4x 895314.00040	
Handling		14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11	14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11	14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11	8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11	8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11	
Stripped length X		16 mm	16 mm	16 mm	30 mm	30 mm	
supply connection		fig. 1, Sht. 12	fig. 1, Sht. 12	fig. 1, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12	

model	performance-related components				page 21 28 Bl.
	25 hp EB (18,5 kW)	30 hp EB (22 kW)	40 hp EB+ FB-C (30 kW)	40 hp FB-S (30 kW)	
machine power supply	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	
overload relay	-B21 Siemens	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 11,9 A NEC 430.32(C) incremental setting: 13,5 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 14,2 A NEC 430.32(C) incremental setting: 16,1 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 22,0 A NEC 430.32(C) incremental setting: 24,9 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 22,0 A NEC 430.32(C) incremental setting: 24,9 A
overload relay	-B24 Siemens	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A
Blower motor	-M1 Siemens	8949743.00500 460V-D/60 Hz 22,4 A, 3600U	894975.00500 460V-D/60 Hz 26,8 A, 3600U	894977.10500 460V-D/60 Hz 41,5 A, 3600U	894977.10500 460V-D/60 Hz 41,5 A, 3600U
vent motor	-M4 Sodeca/ebm	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A
auto-transformer	-T12 Block	---	---	---	7.5452.00340 AT3/x 558 VA 575 V/460 V
fuse	-12FU Gould	---	---	---	(3x) - 7.3161.00390 ATQR 1 A - 600 V - class CC
fuse socket	-12FU Wöhner	---	---	---	3-pole - 7.3320.00060 class CC-Ambus Easy Switch
contactor	-Q1 / -Q2	7.8740.00380 3RT2027-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60
auxiliary switch	.	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20
auxiliary switch	.				
interference suppressor	.	7.8740.05140 3RT2926-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00
terminal	.	7.3140.05080 3RV2925-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E
Phase rail	.	7.6861.0 Siemens	7.3140.05270 3RV1915-1AB	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00
contactor	-Q3	7.8740.00360 3RT2025-1AK60	7.8740.00370 3RT2026-1AK60	7.8740.00380 3RT2027-1AK60	7.8740.00380 3RT2027-1AK60
auxiliary switch	.				
auxiliary switch	.				
interference suppressor	.	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00	7.8740.05140 3RT2926-1CC00
wye bridge	.	7.3140.02070 Siemens	7.3140.02070 3RT1926-4BA31	7.3140.02070 3RT1926-4BA31	7.3140.02070 3RT1926-4BA31
motor cable	-W19.1/19.2	4x12 AWG / 4G4 mm ² 600 V - 90°C	4x10 AWG / 4G6 mm ² 600 V - 90°C	4x8 AWWG / 4G10 mm ² 600 V - 90°C	4x8 AWWG / 4G10 mm ² 600 V - 90°C
connection	-W11 -W13 -W14	10 AWG / 6 mm ² Phase rail Phase rail 600 V - 90°C	8 AWG / 10 mm ² Phase rail 14 AWG / 2,5 mm ² 600 V - 90°C	6 AWG / 16 mm ² Phase rail 10 AWG / 6 mm ² 600 V - 90°C	6 AWG / 16 mm ² Phase rail 10 AWG / 6 mm ² 600 V - 90°C
Fortsetzung: nächstes Blatt					

KAESER
KOMPRESSOREN

electrical component parts list
575V EB+FB
performance-related components

KAESER
KOMPRESSOREN

Usprung:
Ersatz durch:

a	b	c					
Datum	Bearbeiter	Datum					
M/Zeeh	M/Zeeh			Gerüft		Norm	
Gerüft							
Norm							

model	performance-related components				#	+ -	page 22 28 Bl.
	25 hp EB (18,5 kW)	30 hp EB (22 kW)	40 hp EB+ FB-C (30 kW)	40 hp FB-S (30 kW)			
machine power supply	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz			
supply terminals U1/V1/W1/GND Handling Stripped length X connection	-X0: 894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm ² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12			UXB/STC-U30/20.04
							electrical component parts list 575V EB+FB performance-related components
							KAESER KOMPRESSOREN Ursprung:
	c		Datum	05.02.2018			
	b		Bearbeiter	M.Zeeh			
	a		Geprägt	M.Zeeh			
C Änderung		Datum	Name	Norm	Ersatz für:		

model	performance-related components				page 23 28 Bl.
	50 hp EB+ FB-C (37 kW)	50 hp FB-S (37 kW)	60 hp EB+ FB-C (45 kW)	60 hp FB-S (45 kW)	
machine power supply	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	
overload relay	-B21 Siemens	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 26,6 A NEC 430.32(C) incremental setting: 30 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 26,6 A NEC 430.32(C) incremental setting: 30 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 32,9 A NEC 430.32(C) incremental setting: 37,2 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 32,9 A NEC 430.32(C) incremental setting: 37,2 A
overload relay	-B24 Siemens	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A
Blower motor	-M1 Siemens	894978.10500 460V-D/60 Hz 50 A, 3600U	894978.10500 460V-D/60 Hz 50 A, 3600U	894979.10500 460V-D/60 Hz 62 A, 3600U	894979.10500 460V-D/60 Hz 62 A, 3600U
vent motor	-M4 Sodeca/ebm	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A
auto-transformer	-T12 Block	---	7.5452.00340 AT3/x 558 VA 575 V/460 V	---	7.5452.00340 AT3/x 558 VA 575 V/460 V
fuse	-12FU Gould	---	(3x) - 7.3161.00390 ATQR 1 A - 600 V - class CC	---	(3x) - 7.3161.00390 ATQR 1 A - 600 V - class CC
fuse socket	-12FU Wöhner	---	3-pole - 7.3320.00060 class CC-Ambus Easy Switch	---	3-pole - 7.3320.00060 class CC-Ambus Easy Switch
contactor	-Q1 / -Q2	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00410 3RT2036-1AK60	7.8740.00410 3RT2036-1AK60
auxiliary switch	.	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20	7.8740.05030 3RH2911-1HA20
auxiliary switch	.				
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00
terminal	.	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E
Phase rail	.	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00
Siemens					
contactor	-Q3	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60
auxiliary switch	.				
auxiliary switch	.				
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00
wye bridge	.	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31
Siemens					
motor cable	-W19.1/19.2	4x8 AWWG / 4G10 mm ² 600 V - 90°C	4x8 AWWG / 4G10 mm ² 600 V - 90°C	4x8 AWWG / 4G10 mm ² 600 V - 90°C	4x8 AWWG / 4G10 mm ² 600 V - 90°C
connection	-W11 -W13 -W14	6 AWG / 16 mm ² Phase rail Phase rail 600 V - 90°C	6 AWG / 16 mm ² Phase rail Phase rail 600 V - 90°C	4 AWG / 25 mm ² Phase rail Phase rail 600 V - 90°C	4 AWG / 25 mm ² Phase rail Phase rail 600 V - 90°C
Fortsetzung: nächstes Blatt					

KAESER
KOMPRESSOREN

electrical component parts list
575V EB+FB
performance-related components

Usprung:
Ersatz für:
Ersatz durch:

c	Datum	b	M/Zeeh
a	Bearbeiter		
b			M/Zeeh
c			
a	Gerüft		
b			
c			
a	Name		
b			
c			
a	Datum		
b			
c			
a	Änderung		
b			
c			

model	performance-related components				
	50 hp EB+ FB-C (37 kW)	50 hp FB-S (37 kW)	60 hp EB+ FB-C (45 kW)	60 hp FB-S (45 kW)	
machine power supply	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	" + "
supply terminals	-X0: U1/V1/W1/GRD	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago Handling Stripped length X connection	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 30 mm fig. 2, Sht. 12
					UXB-STC-U3020.04
					Page 24 28 Bl.

model	performance-related components					page 25 28 Bl.
	75 hp EB+ FB-C (55 kW)	75 hp FB-S (55 kW)	100 hp EB-C (75 kW)	100 hp FB-C (75 kW)	100 hp FB-S (75 kW)	
machine power supply	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	" +
overload relay	-B21 Siemens	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 39,1 A NEC 430.32(C) incremental setting: 44,2 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 39,1 A NEC 430.32(C) incremental setting: 44,2 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 53,6 A NEC 430.32(C) incremental setting: 60,6 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 53,6 A NEC 430.32(C) incremental setting: 60,6 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 53,6 A NEC 430.32(C) incremental setting: 60,6 A
overload relay	-B24 Siemens	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A
Blower motor	-M1 Siemens	894717.10500 575V-D/60 Hz 73,6 A, 3600U	894717.10500 575V-D/60 Hz 73,6 A, 3600U	894719.10500 575V-D/60 Hz 101 A, 3600U	894719.10500 575V-D/60 Hz 101 A, 3600U	894719.10500 575V-D/60 Hz 101 A, 3600U
vent motor	-M4 Sodeca/ebm	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A
auto-transformer	-T12 Block	---	7.5452.00340 AT3/x 558 VA 575 V/460 V	---	---	7.5452.00340 AT3/x 558 VA 575 V/460 V
fuse	-12FU Gould	---	(3x) - 7.3161.00390 ATQR 1 A - 600 V - class CC	---	---	(3x) - 7.3161.00390 ATQR 1 A - 600 V - class C
fuse socket	-12FU Wöhner	---	3-pole - 7.3320.00060 class CC-Ambus Easy Switch	---	---	3-pole - 7.3320.00060 class CC-Ambus Easy Switch
contactor	-Q1 / -Q2	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00430 3RT2038-1AK60	7.8740.00430 3RT2038-1AK60	7.8740.00430 3RT2038-1AK60
auxiliary switch	.	7.8740.05030	7.8740.05030	7.8740.05030	7.8740.05030	7.8740.05030
auxiliary switch	.	3RH2911-1HA20	3RH2911-1HA20	3RH2911-1HA20	3RH2911-1HA20	3RH2911-1HA20
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00
terminal	.	7.3140.05070	7.3140.05070	7.3140.05070	7.3140.05070	7.3140.05070
Phase rail	.	3RV2935-5E 7.3140.05270	3RV2935-5E 7.3140.05270	3RV2935-5E 7.3140.05270	3RV2935-5E 7.3140.05270	3RV2935-5E 7.3140.05270
	Siemens	3RA2933-3FA00	3RA2933-3FA00	3RA2933-3FA00	3RA2933-3FA00	3RA2933-3FA00
contactor	-Q3	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60
auxiliary switch	.					
auxiliary switch	.					
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00
wye bridge	.	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31
motor cable	-W19.1/19.2	4x6 AWWG / 4G16 mm² 600 V - 90°C	4x6 AWWG / 4G16 mm² 600 V - 90°C	4x4 AWG / 4G25 mm² 600 V - 90°C	4x4 AWG / 4G25 mm² 600 V - 90°C	4x4 AWG / 4G25 mm² 600 V - 90°C
connection	-W11 -W13 -W14	2 AWG / 35 mm² Phase rail Phase rail 600 V - 90°C	2 AWG / 35 mm² Phase rail Phase rail 600 V - 90°C	1 AWG/50 mm² Phase rail Phase rail 600 V - 90°C	1 AWG/50 mm² Phase rail Phase rail 600 V - 90°C	1 AWG/50 mm² Phase rail Phase rail 600 V - 90°C

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KOMPRESSOREN

electrical component parts list
575V EB+FB
performance-related components

Ursprung:

Ersatz für:
Ersetzt durch:

c	Datum	b	M/Zeeh
a	Bearbeiter		
b	Gefürt		
c	Name	Norm	
a	Datum		
b			
c			

Fortsetzung: nächstes Blatt

model	performance-related components					" "	+ +	page 26 28 Bl.
	75 hp EB+ FB-C (55 kW)	75 hp FB-S (55 kW)	100 hp EB-C (75 kW)	100 hp FB-C (75 kW)	100 hp FB-S (75 kW)			
machine power supply	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz			
supply terminals -X0: U1/V1/W1/PE	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 --- 30 mm	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm ² Wago fig. 3, Sht. 11 --- 30 mm	6x 894385.0 (Wago) 3x 894385.00030 3x 894385.00040 4-4/0 AWG / 25-95 mm ² Wago fig. 3, Sht. 11 --- 36 mm	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm ² Wago fig. 3, Sht. 11 --- 36 mm	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm ² Wago fig. 3, Sht. 11 --- 36 mm			
PE-rail Torque Stripped length X	---	---	832489.00010 (PE) 133lb-in 25 mm + Conductor crimp pins fig. 3, Sht. 13	---	---			
supply connection	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 3, Sht. 13	fig. 2, Sht. 12	fig. 2, Sht. 12			

KAESER
KOMPRESSOREN
 electrical component parts list
 575V EB+FB
 performance-related components

KAESER
KOMPRESSOREN
 Ursprung:

c		Datum	05.02.2018					
b		Bearbeiter	M.Zeeh					
a		Geprägt	M.Zeeh					
C Änderung	Datum	Name	Norm	Ersatz durch:	Ersatz für:			

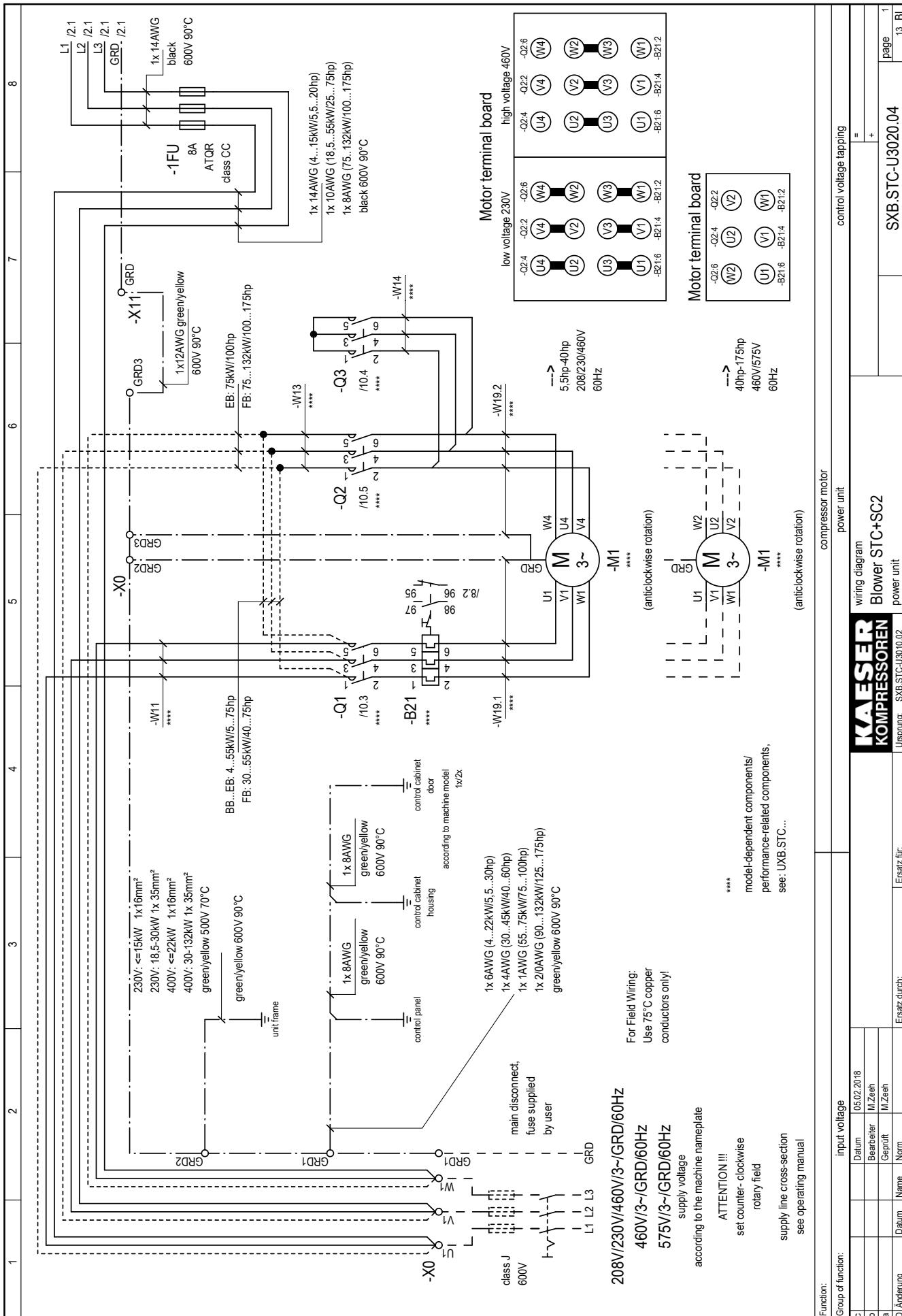
13.4 Electrical diagrams

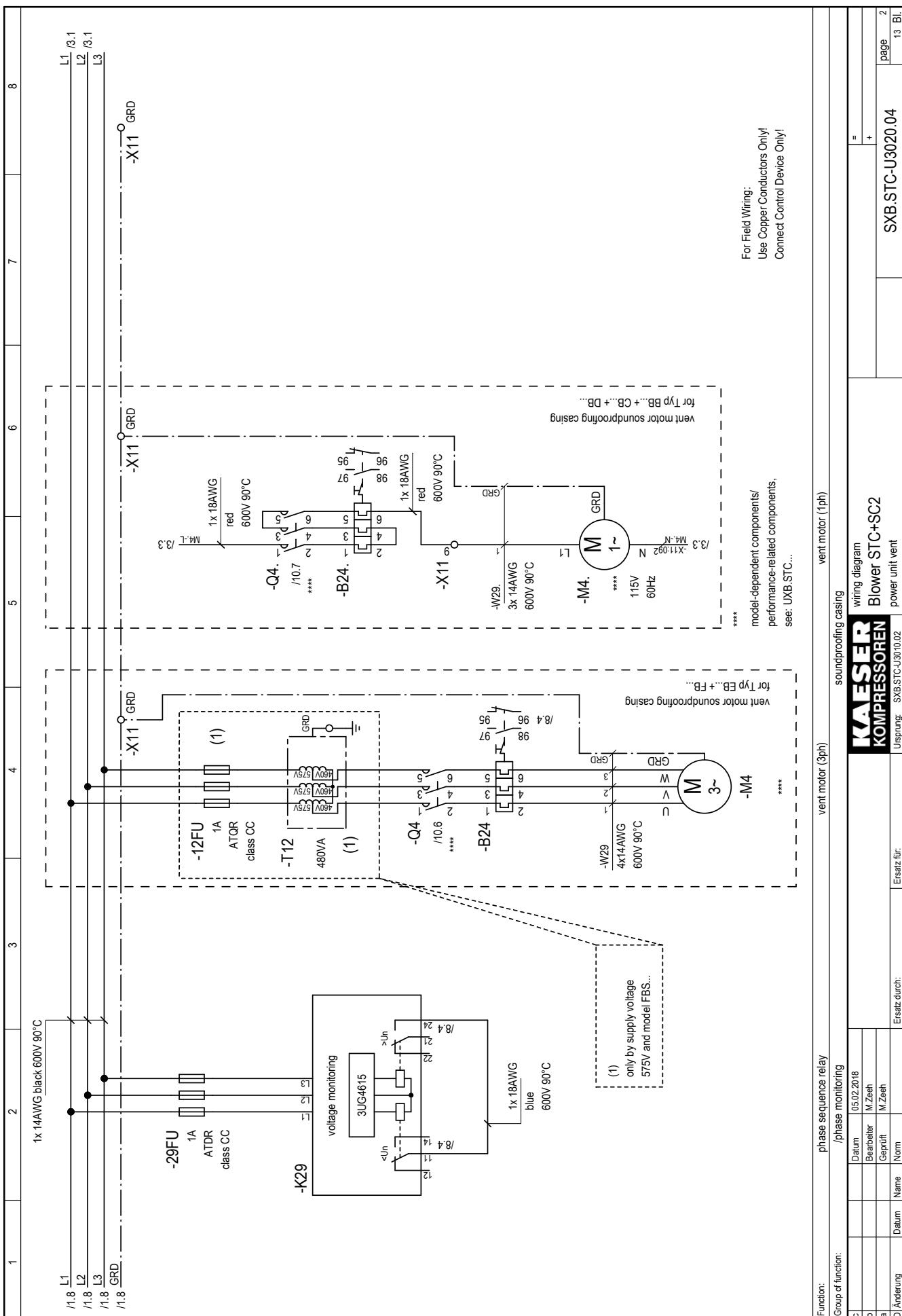
model	performance-related components					II + UXB STC-U3020.04	page 27 28 Bl.
	125 hp FB-C (90 kW)	125 hp FB-S (90 kW)	150 hp FB-C (110 kW)	150 hp FB-S (110 kW)	175 hp FB (132 kW)		
machine power supply	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz		
overload relay	-B21 Siemens	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 67,1 A NEC 430.32(C) incremental setting: 75,9 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 63,3 A NEC 430.32(C) incremental setting: 71,6 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 79,7 A NEC 430.32(C) incremental setting: 90,1 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 78,6 A NEC 430.32(C) incremental setting: 88,9 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 95,6 A NEC 430.32(C) incremental setting: 108,1 A	
overload relay	-B24 Siemens	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental setting: 0,41 A	
Blower motor	-M1 Siemens	894723.10500 575V-D/60 Hz 126,4 A, 1800U	894722.10500 575V-D/60 Hz 119,2 A, 3600U	895025.10500 575V-D/60 Hz 150 A, 1800U	894724.10500 575V-D/60 Hz 148 A, 3600U	894726.10500 575V-D/60 Hz 180 A, 1800U	
vent motor	-M4 Sodeca/ebm	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz 180W 0,39 A	
auto-transformer	-T12 Block	---	7.5452.00340 AT3/x 558 VA 575 V/460 V	---	7.5452.00340 AT3/x 558 VA 575 V/460 V	---	
fuse	-12FU Gould	---	(3x) - 7.3161.00390 ATQR 1 A - 600 V - class CC	---	(3x) - 7.3161.00390 ATQR 1 A - 600 V - class CC	---	
fuse socket	-12FU Wöhner	---	3-pole (2x) - 7.3320.00060 class CC-Ambus Easy Switch	---	3-pole (2x) - 7.3320.00060 class CC-Ambus Easy Switch	---	
contactor	-Q1 / -Q2	7.3140.02140 3RT1054-1AF36	7.3140.02140 3RT1054-1AF36	7.3140.02140 3RT1054-1AF36	7.3140.02140 3RT1054-1AF36	7.3140.02140 3RT1054-1AF36	
auxiliary switch	.	7.3140.01690 3RH1921-1CA10	7.3140.01690 3RH1921-1CA10	7.3140.01690 3RH1921-1CA10	7.3140.01690 3RH1921-1CA10	7.3140.01690 3RH1921-1CA10	
auxiliary switch	.	7.3140.02030 3RH1921-1CA01	7.3140.02030 3RH1921-1CA01	7.3140.02030 3RH1921-1CA01	7.3140.02030 3RH1921-1CA01	7.3140.02030 3RH1921-1CA01	
interference suppressor	.	7.3140.02020 3RT1956-1CC00	7.3140.02020 3RT1956-1CC00	7.3140.02020 3RT1956-1CC00	7.3140.02020 3RT1956-1CC00	7.3140.02020 3RT1956-1CC00	
terminal	.	---	---	---	---	---	
Phase rail	.	---	---	---	---	---	
	Siemens	---	---	---	---	---	
contactor	-Q3	7.8740.00410 3RT2036-1AK60	7.8740.00410 3RT2036-1AK60	7.8740.00440 3RT2045-1AK60	7.8740.00440 3RT2045-1AK60	7.8740.00440 3RT2045-1AK60	
auxiliary switch	.	---	---	---	---	---	
auxiliary switch	.	---	---	---	---	---	
interference suppressor	.	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05170 3RT2946-1CC00	7.8740.05170 3RT2946-1CC00	7.8740.05170 3RT2946-1CC00	
wye bridge	.	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.00940 3RT1946-4BA31	7.3140.00940 3RT1946-4BA31	7.3140.00940 3RT1946-4BA31	
motor cable	-W19.1/19.2	4x2 AWG / 4G35 mm² 600 V - 90°C	4x2 AWG / 4G35 mm² 600 V - 90°C	4x1 AWG / 4G50 mm² 600 V - 90°C	4x1 AWG / 4G50 mm² 600 V - 90°C	4x2/0 AWG / 4G70 mm² 600 V - 90°C	
connection	-W11 -W13 -W14	2 AWG / 35 mm² 2 AWG / 35 mm² 8 AWG / 10 mm² 600 V - 90°C	2 AWG / 35 mm² 2 AWG / 35 mm² 8 AWG / 10 mm² 600 V - 90°C	1 AWG / 50 mm² 1 AWG / 50 mm² 6 AWG / 16 mm² 600 V - 90°C	1 AWG / 50 mm² 1 AWG / 50 mm² 6 AWG / 16 mm² 600 V - 90°C	1 AWG / 50 mm² 1 AWG / 50 mm² 4 AWG / 25 mm² 600 V - 90°C	
Fortsetzung: nächstes Blatt							

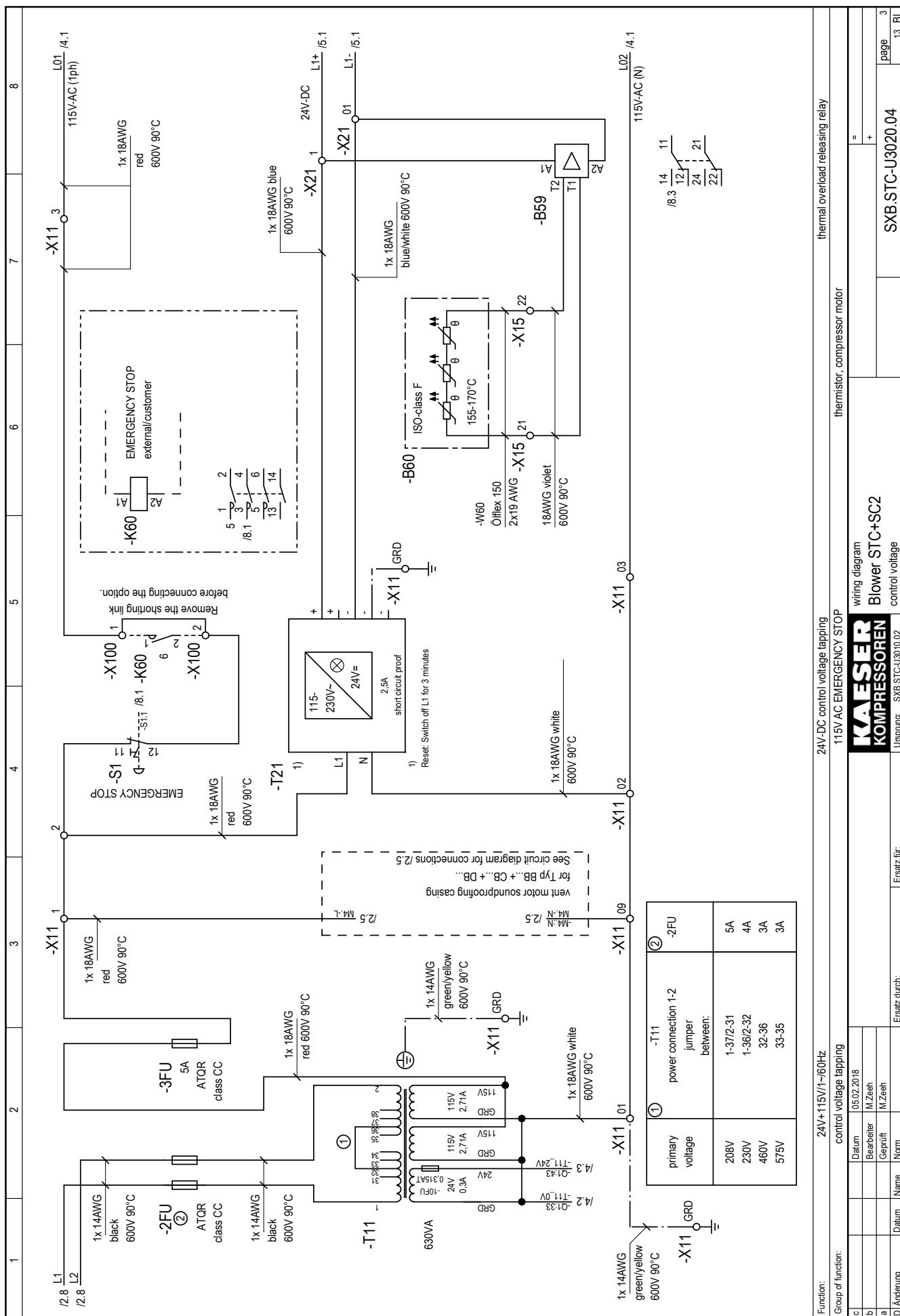
KAESER
KOMPRESSOREN
electrical component parts list
575V FB
performance-related components
KAESER
KOMPRESSOREN
Ersatz für:
Ursprung:

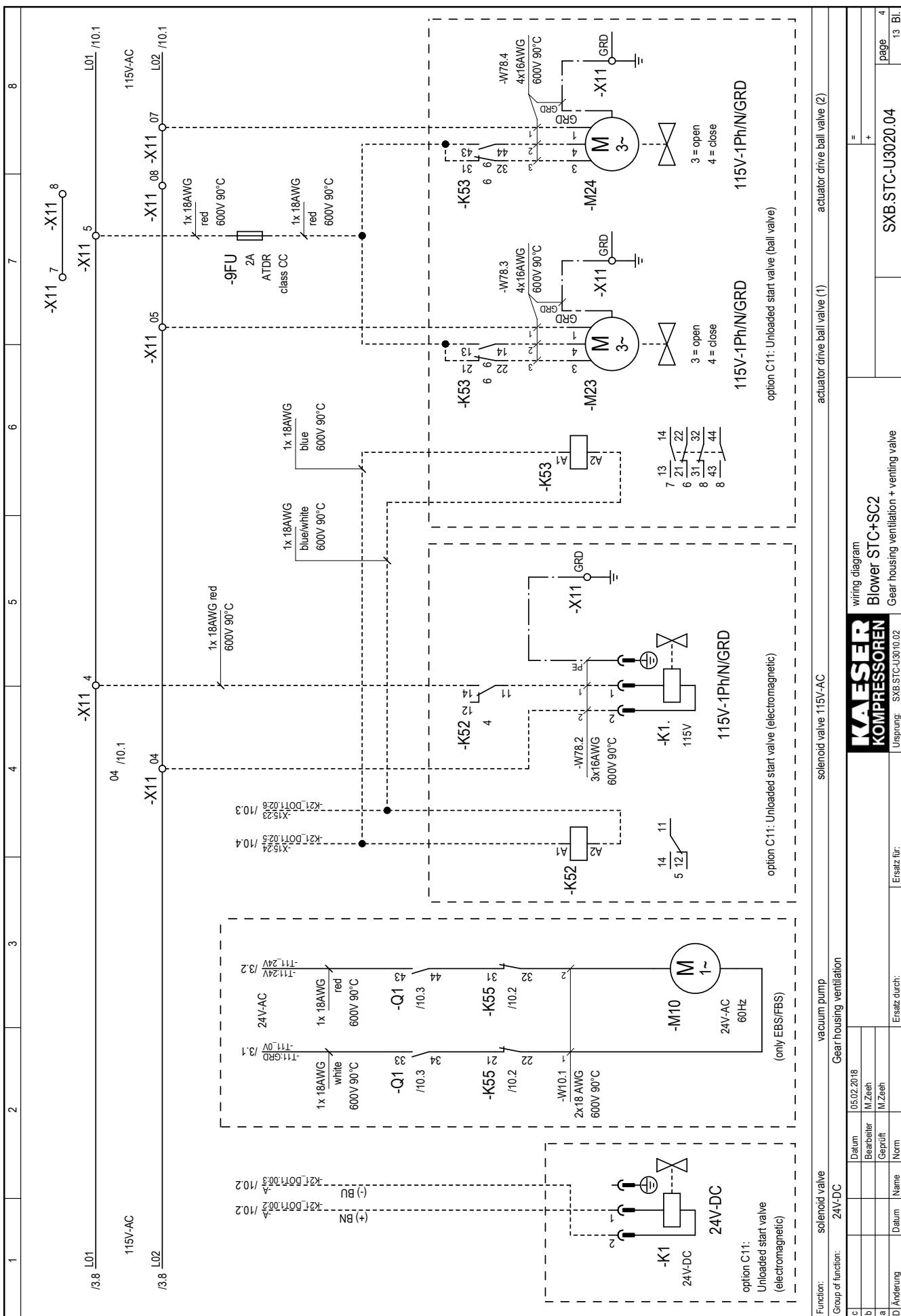
c	b	a	C Änderung
		Datum	Norm
		Bearbeiter	Gefürt
		M/Zeeh	M/Zeeh

model	performance-related components					" +	page 28 Bl.
	125 hp FB-C (90 kW)	125 hp FB-S (90 kW)	150 hp FB-C (110 kW)	150 hp FB-S (110 kW)	175 hp FB (132 kW)		
machine power supply	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz		
supply terminals Handling Stripped length X	-X0: U1/V1/W1 6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm ² fig. 3, Sht. 11 36 mm		UXB-STC-U3020.04
PE-rail Torque Stripped length X	-X0:PE 832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins		
supply -connection	fig. 3, Sht. 13	fig. 3, Sht. 13	fig. 3, Sht. 13	fig. 3, Sht. 13	fig. 3, Sht. 13		
						KAESER KOMPRESSOREN electrical component parts list 575V FB performance-related components	Ursprung:
c		Datum	05.02.2018				
b		Bearbeiter	M.Zeeh				
a		Geprüft	M.Zeeh				
C Änderung	Datum	Name	Norm	Ersatz durch:	Ersatz für:		



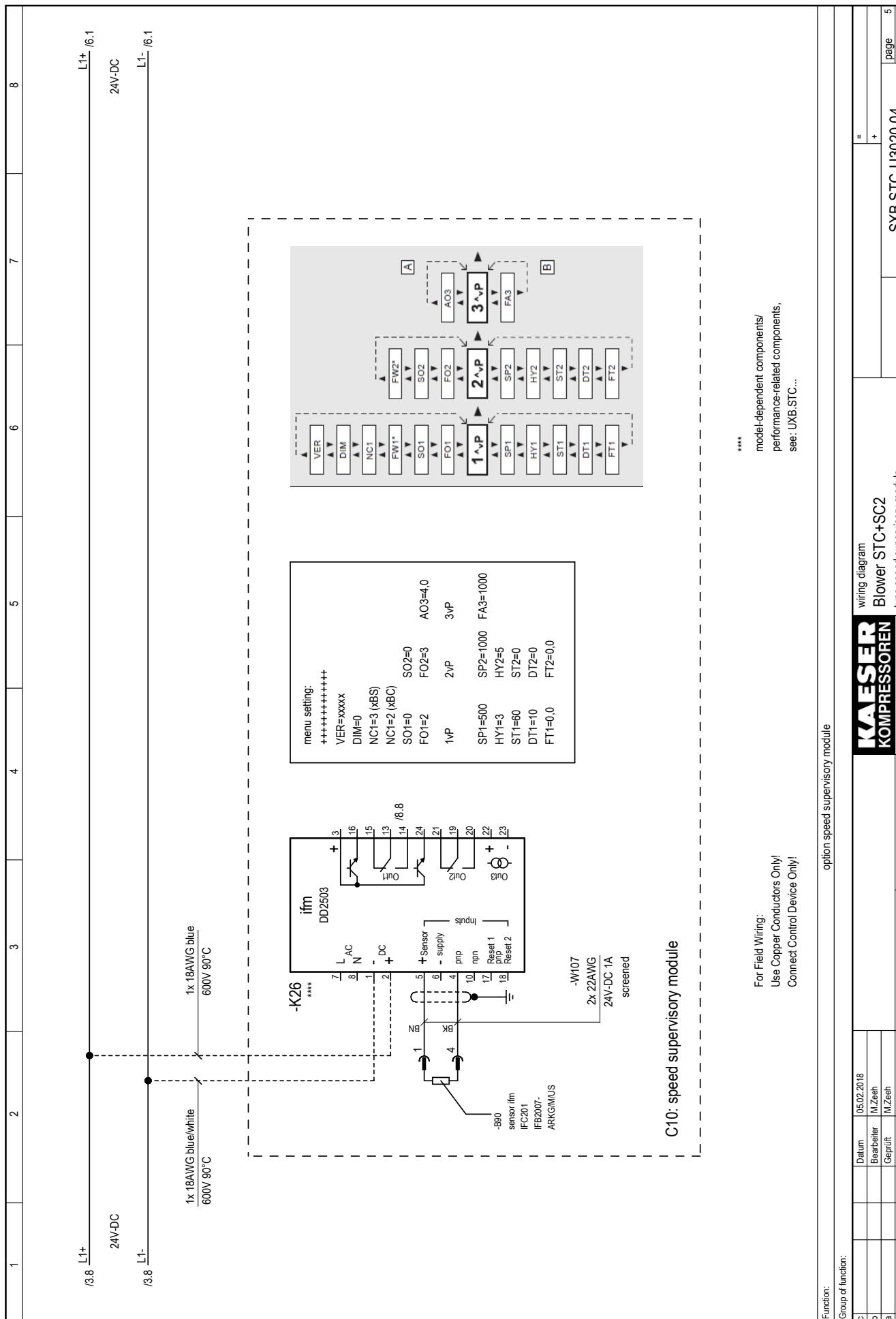


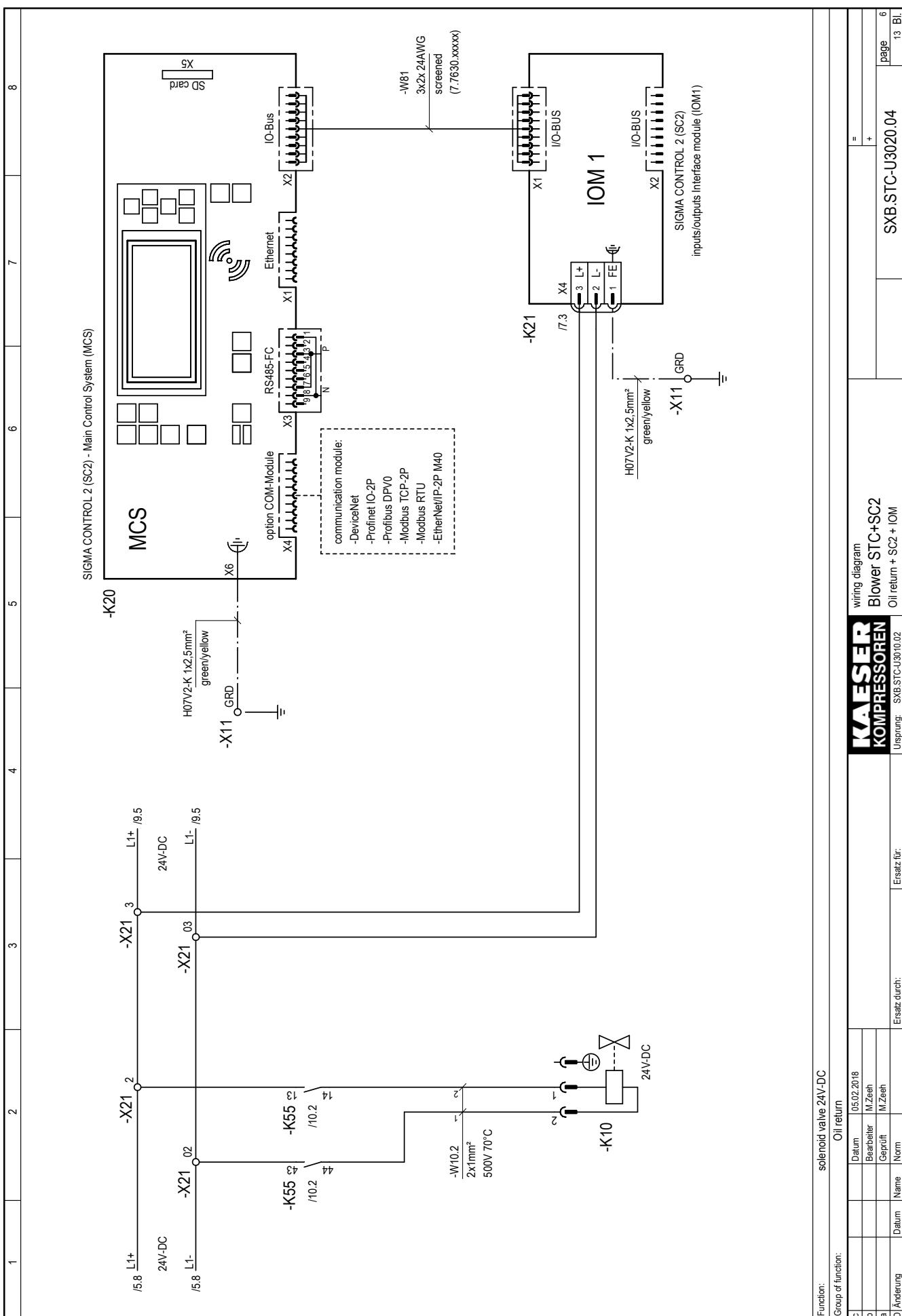


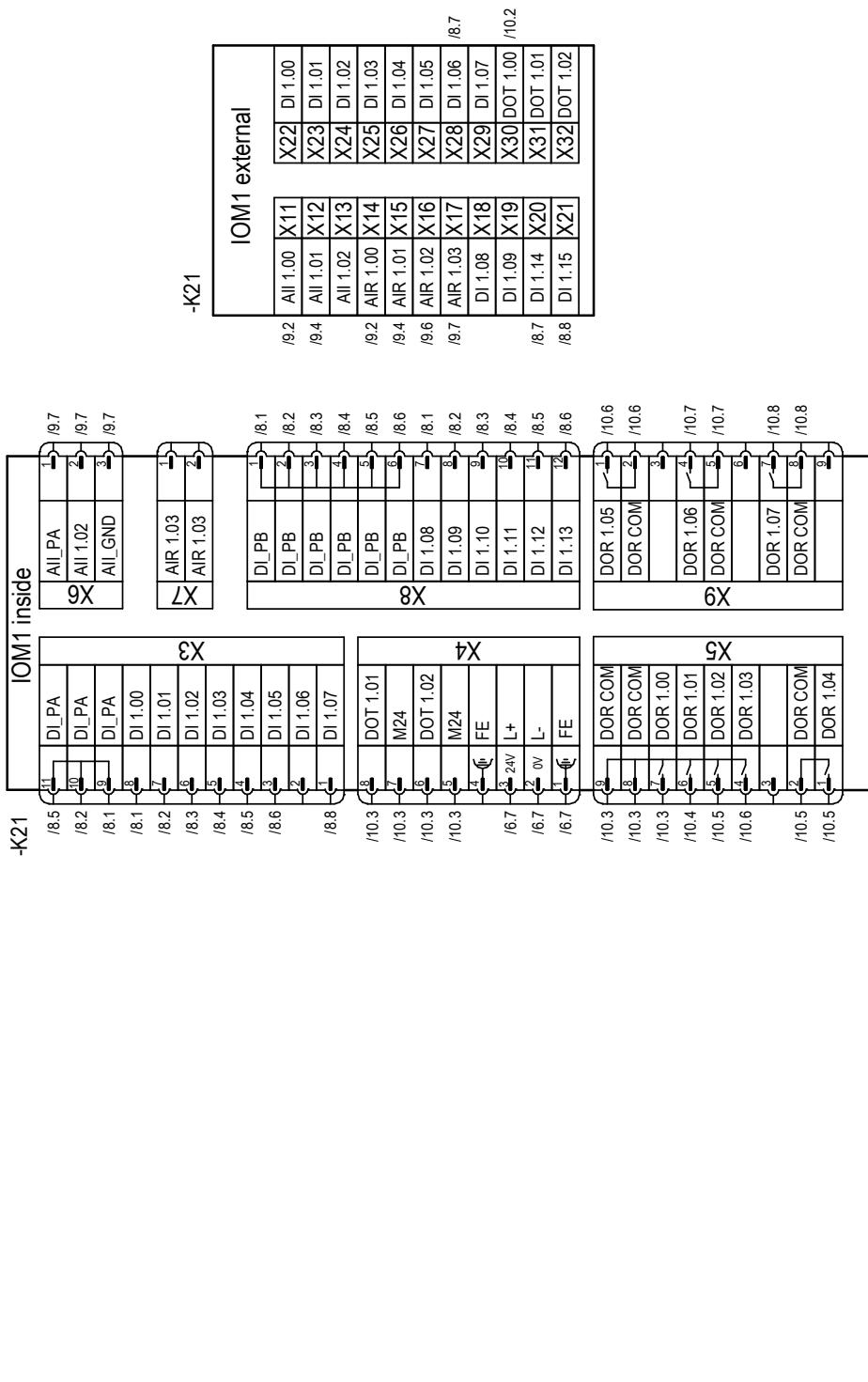


Function:	solenoid valve	vacuum pump	Gear housing ventilation	solenoid valve 115V/AC	actuator drive ball valve (1)	actuator drive ball valve (2)
Group of function:	24V-DC					
c			Datum	05.02.2018		=
b			Bearbeiter	M.Zeeh		+
a			Geprüft	M.Zeeh		
D Änderung	Datum	Name	Ersatz durch:	SXB STC-U3010.02	SXB STC-U3020.04	page 4 13 Bl.

KAESER
KOMPRESSOREN
Ursprung: SXB STC-U3010.02
Gear housing ventilation + venting valve

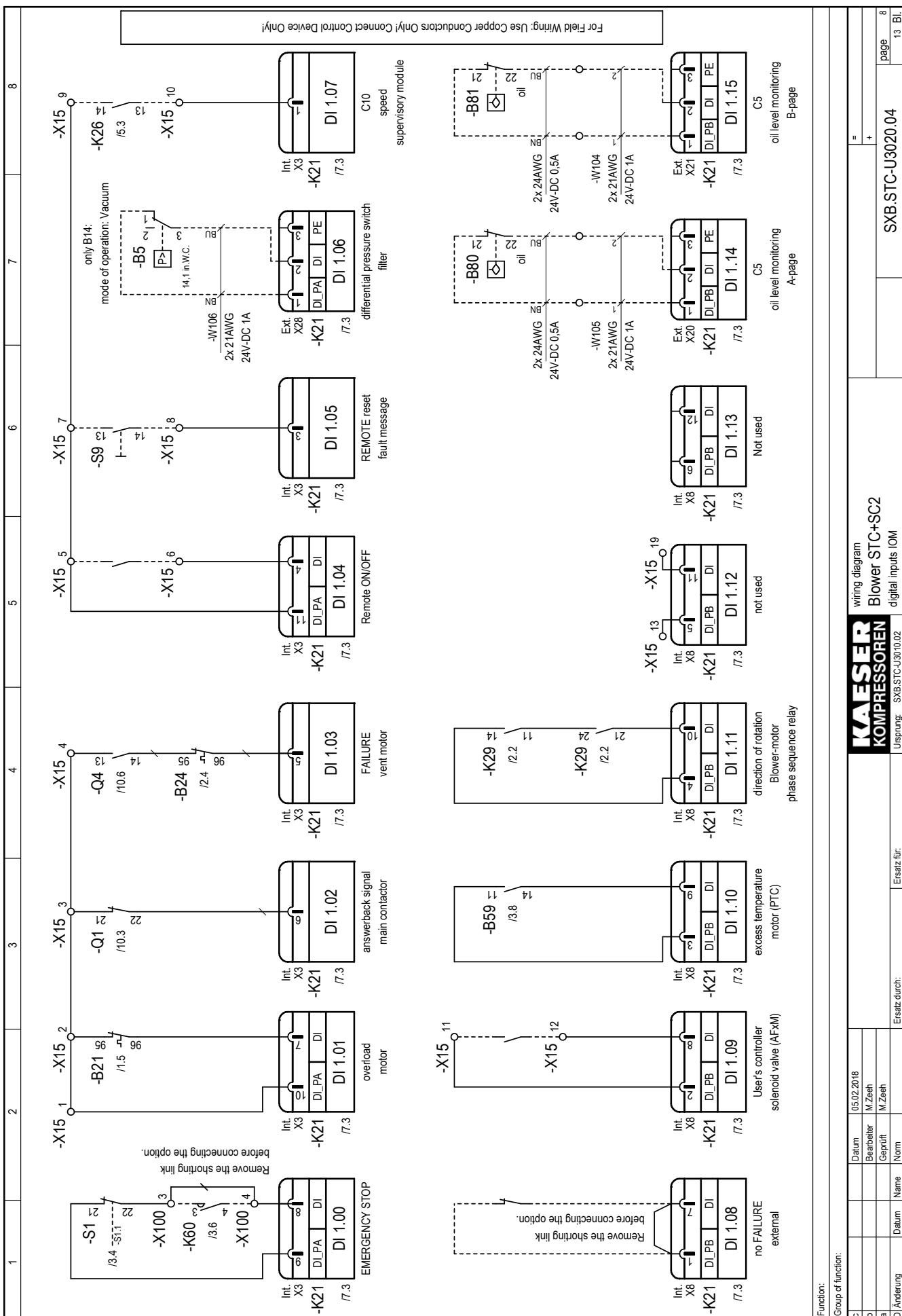


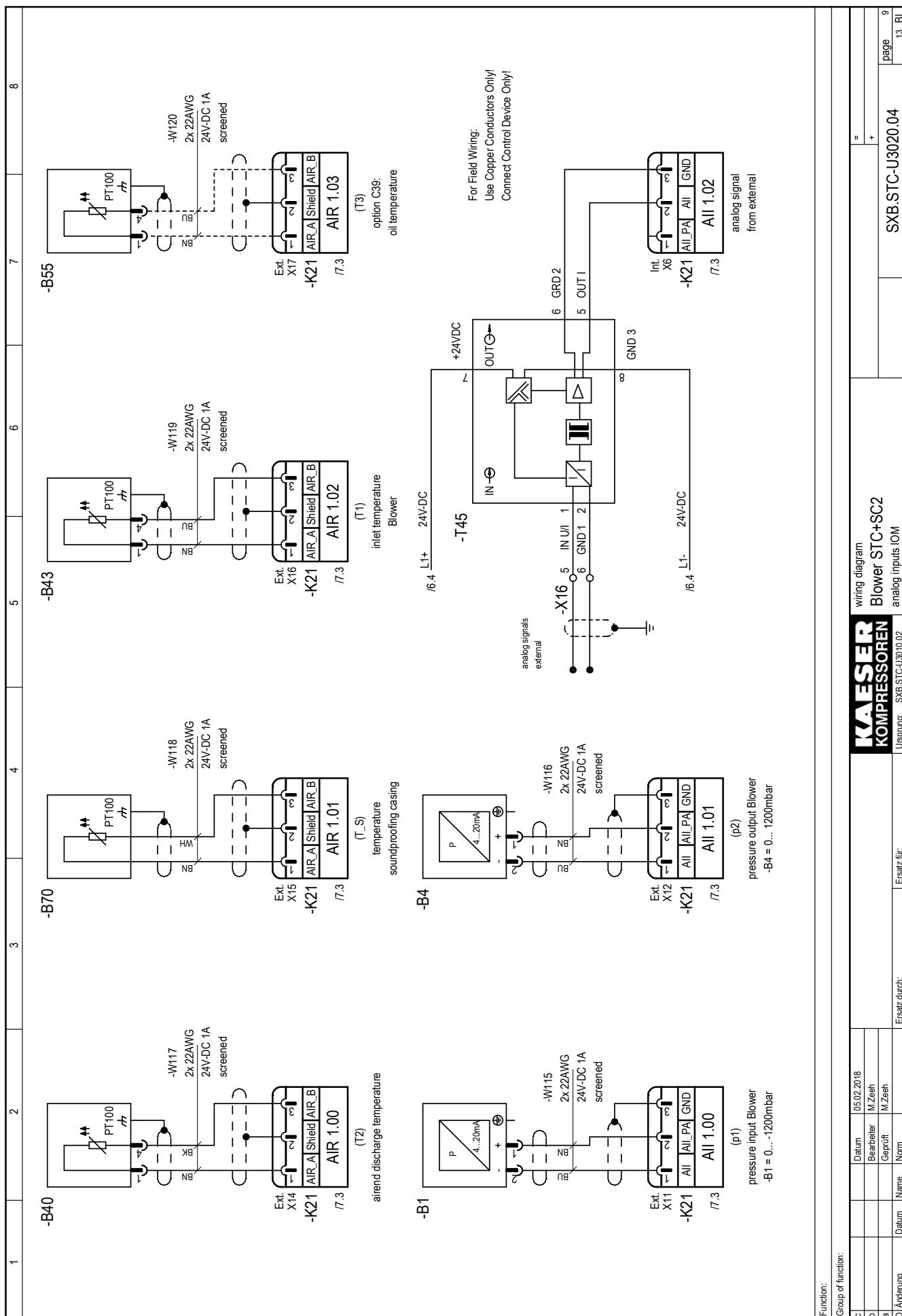




Function: _____

KAESER		wiring diagram	
KOMPRESSOREN		Blower STC+SC2	
IOM-configuration		SXB,STC-U3020.04	
Modell:	SXB,STC-U3020.02	Umrüttung:	13_RU
Modell:	SXB,STC-U3020.02	Umrüttung:	page 7





Function:		KAESER KOMPRESSOREN		wiring diagram Blower STC+SC2		SXB STC-U3020 04		page 9 13 Bl.	
c				Datum	05/02/2018			=	
b				Bearbeiter	M.Zeeh			+	
a				Gerüft	M.Zeeh				
d Änderung		Datum	Name	Norm		Ersatz für:		Ursprung:	SXB STC-U3010.02

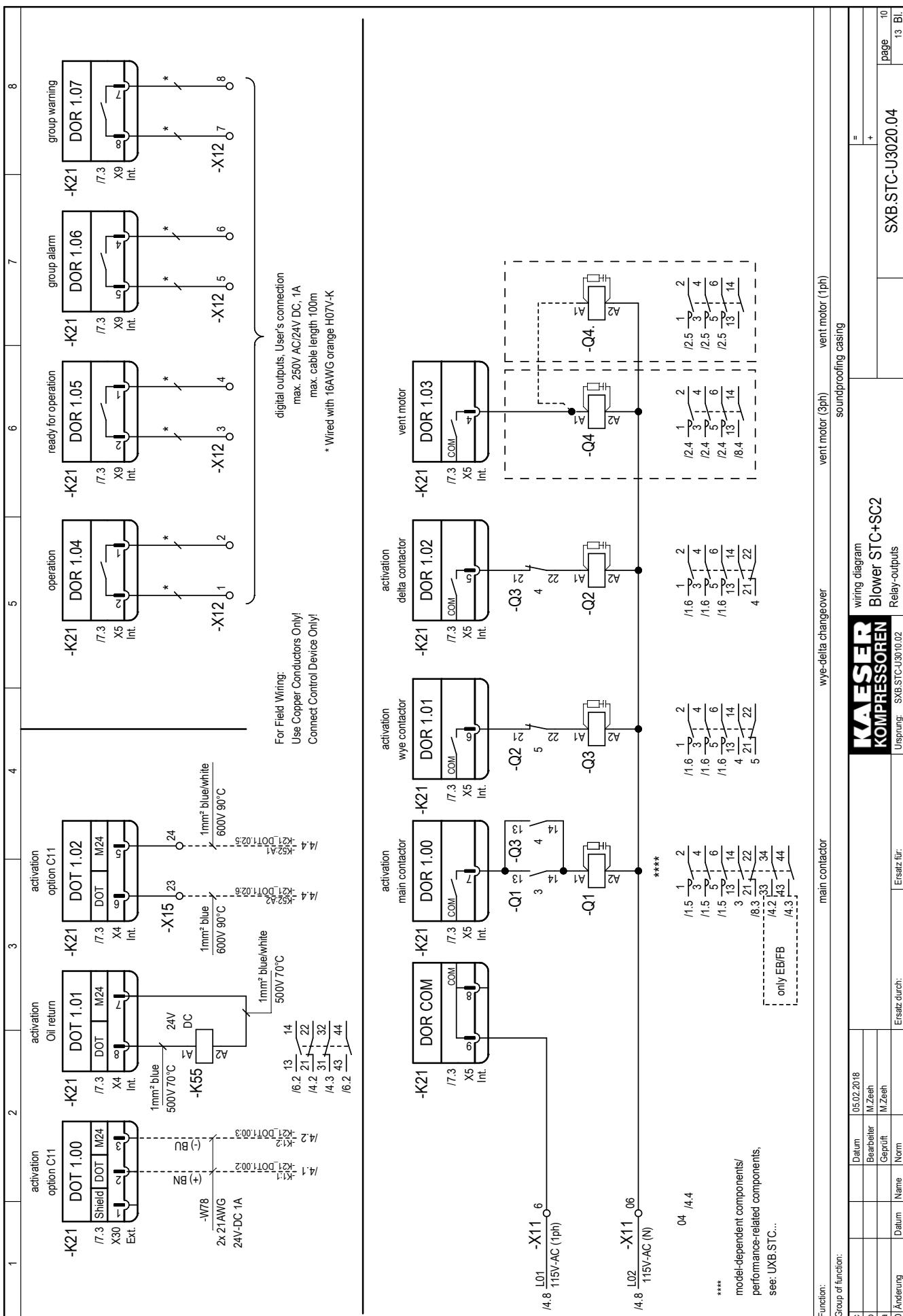


fig.: 1 Handling control line terminal

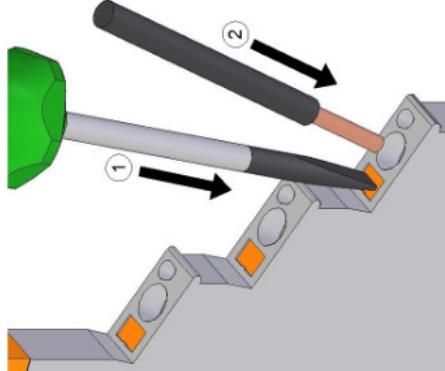


fig.: 2 Handling supply terminals

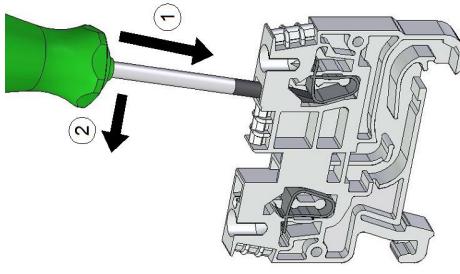
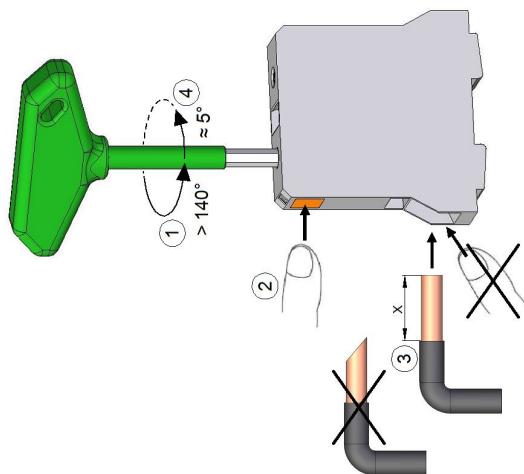


fig.: 3 Handling supply terminals



Function:		Group of function:			
KAESER KOMPRESSOREN	wiring diagram Blower STC+SC2			=	
SX-B-STC-U3020-04				+	
					page 11 -13 Bl.

8

6

5

4

3

2

1

fig.: 1 Feed line connection

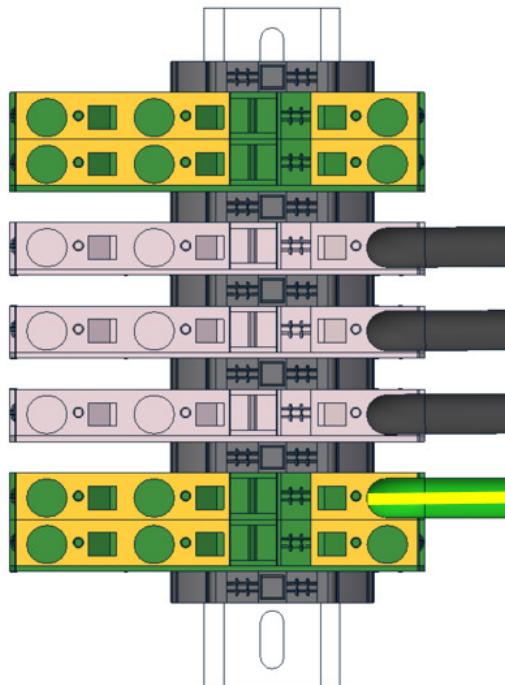
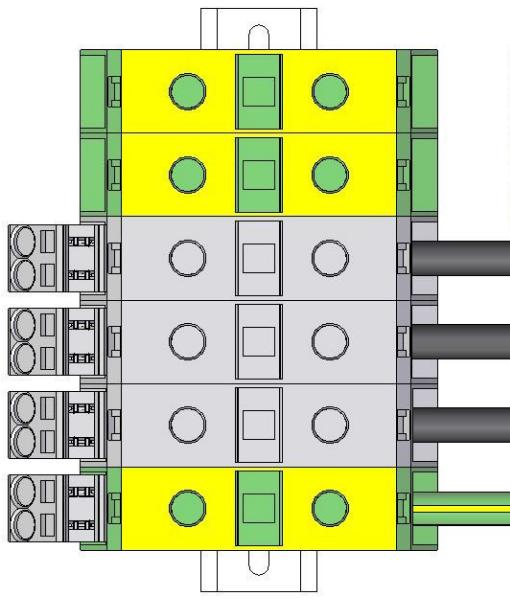


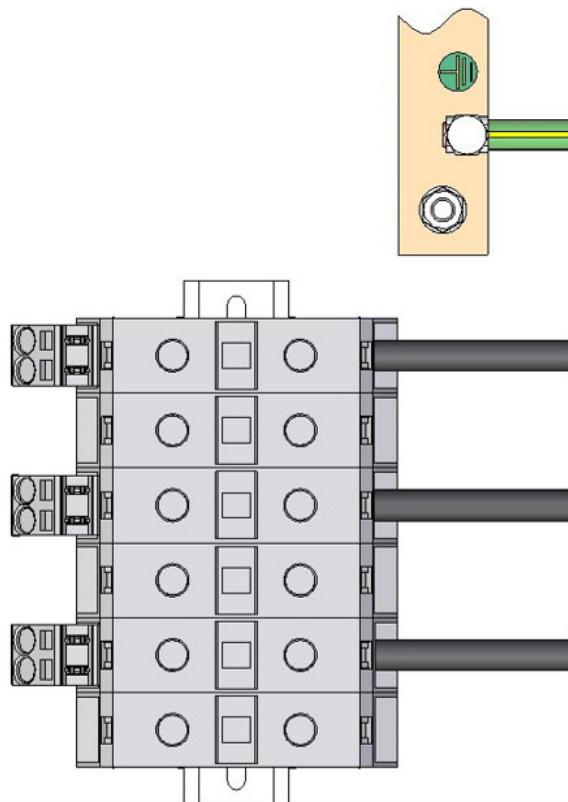
fig.: 2 Feed line connection



Function:
Group of function:

c			Datum	05.02.2018	=
b			Bearbeiter	M.Zeeh	+
a			Gescrft	M.Zeeh	
D Änderung	Datum	Name	Ersatz für:	SXB STC-U-3010.02	Ursprung: SXB STC-U-3010.02
		Norm	Ersatz durch:		Feed line connection
					KAESER KOMPRESSOREN
					wiring diagram Blower STC+SC2
					13 Bl.
					page 12

Fig.: 3 Feed line connection

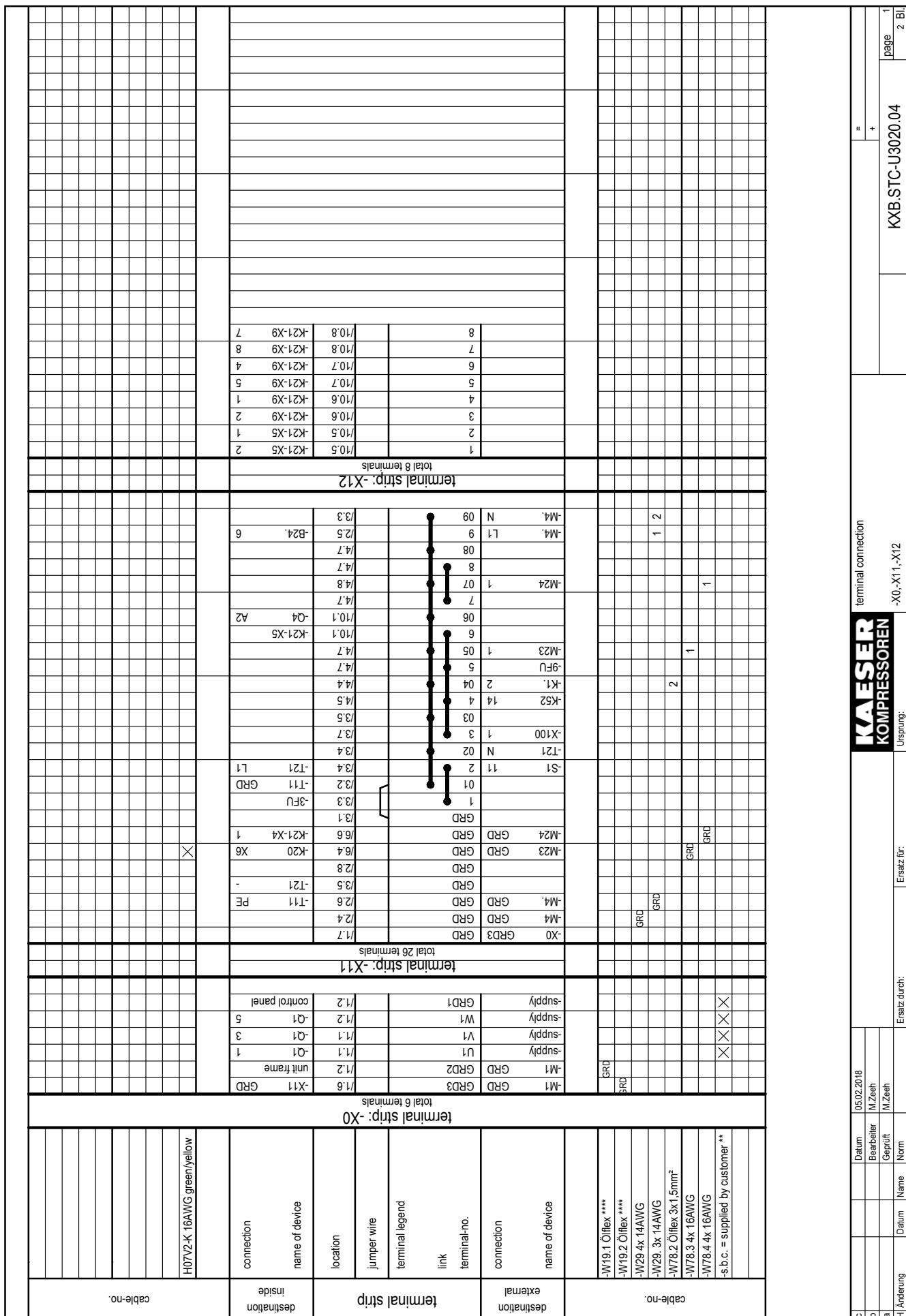


Function:	Group of function
c	
b	
a	
D Änderung	

KAESER
KOMPRESSOREN

wiring diagram
Blower STC-SC2
Feed line connection
List number: SYB-STC-U3010.02

=
+
page 13
13 Bl.



cable-no.	connection	name of device	terminal	terminal strip	destination	inside	cable-no.
connection	name of device	location	jumper wire	terminal legend	link	terminal-no.	connection
terminal strip: X15 total 26 terminals							
1	K21-X3	10					
2	B21	95					
3	-Q1	21					
4	-Q4	13					
5		11					
6	K21-X3	11					
7	-S9	13					
8	K21-X3	3					
9	-S9	14					
10	K26	13					
11	K21-X3	1					
12	K21-X8	2					
13	K21-X8	8					
14	K21-X8	5					
15	K21-X8	5					
16	K21-X8	5					
17	K21-X8	5					
18	K21-X8	11					
19	K21-X8	11					
20		18.5					
21	B60	T1					
22	B60	T2					
23	A2	22					
24	A1	24					
25	K52	A1					
26	K52	A2					
27	B59	T2					
28	T21	+					
29	A1	1					
30	B59	A2					
terminal strip: X21 total 6 terminals							
1							
2							
3							
4							
5							
6							
7							
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terminal strip: X22 total 6 terminals							
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terminal strip: X100 total 6 terminals							
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terminal strip: X22 total 6 terminals							
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terminal strip: X100 total 6 terminals							
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c	b	a	H Änderung
Datum		Datum	Datum
M/Zeeh		M/Zeeh	M/Zeeh
Gerüft		Ersatz für:	

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terminal connection

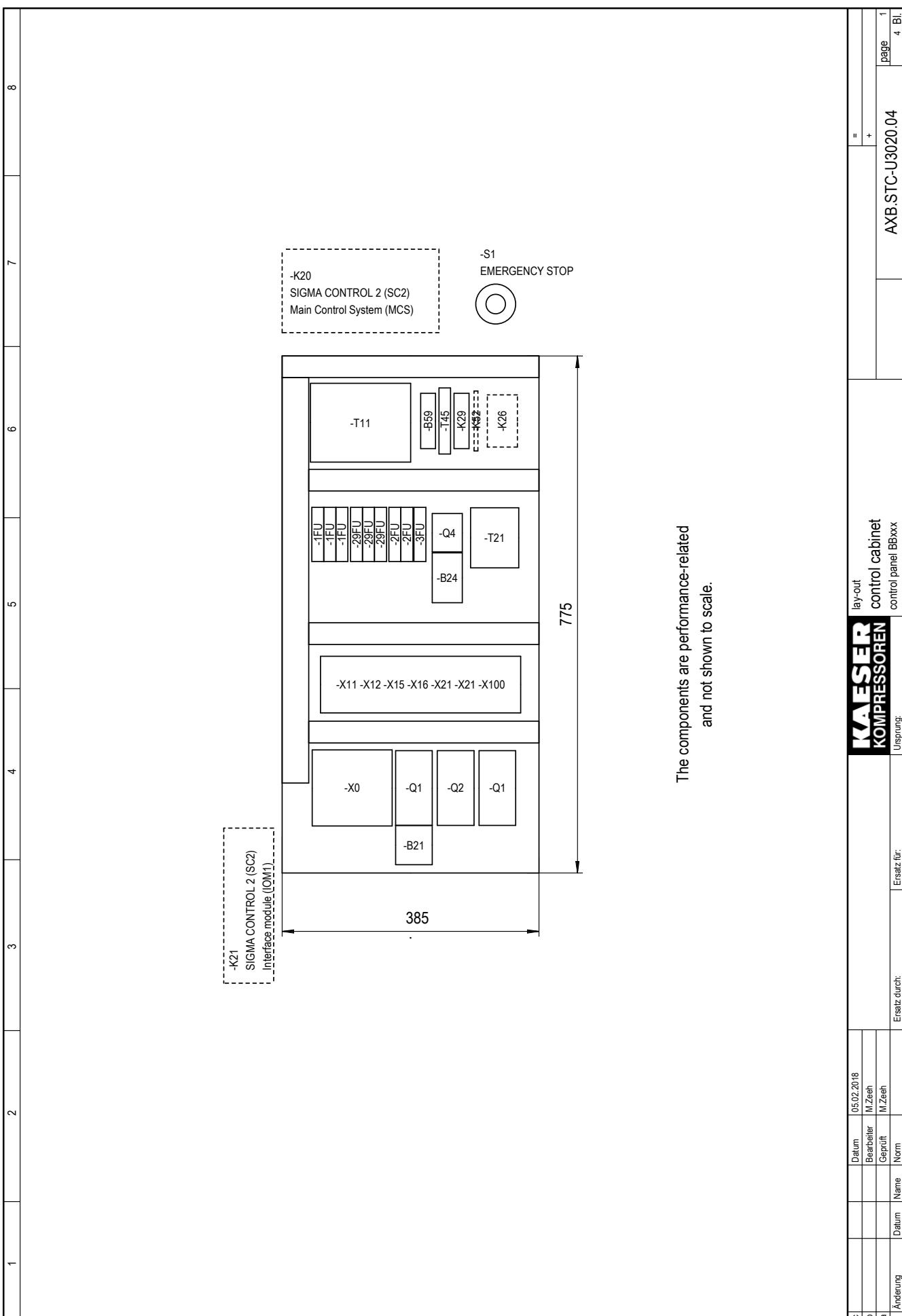
X15,X16,-X22,-X100

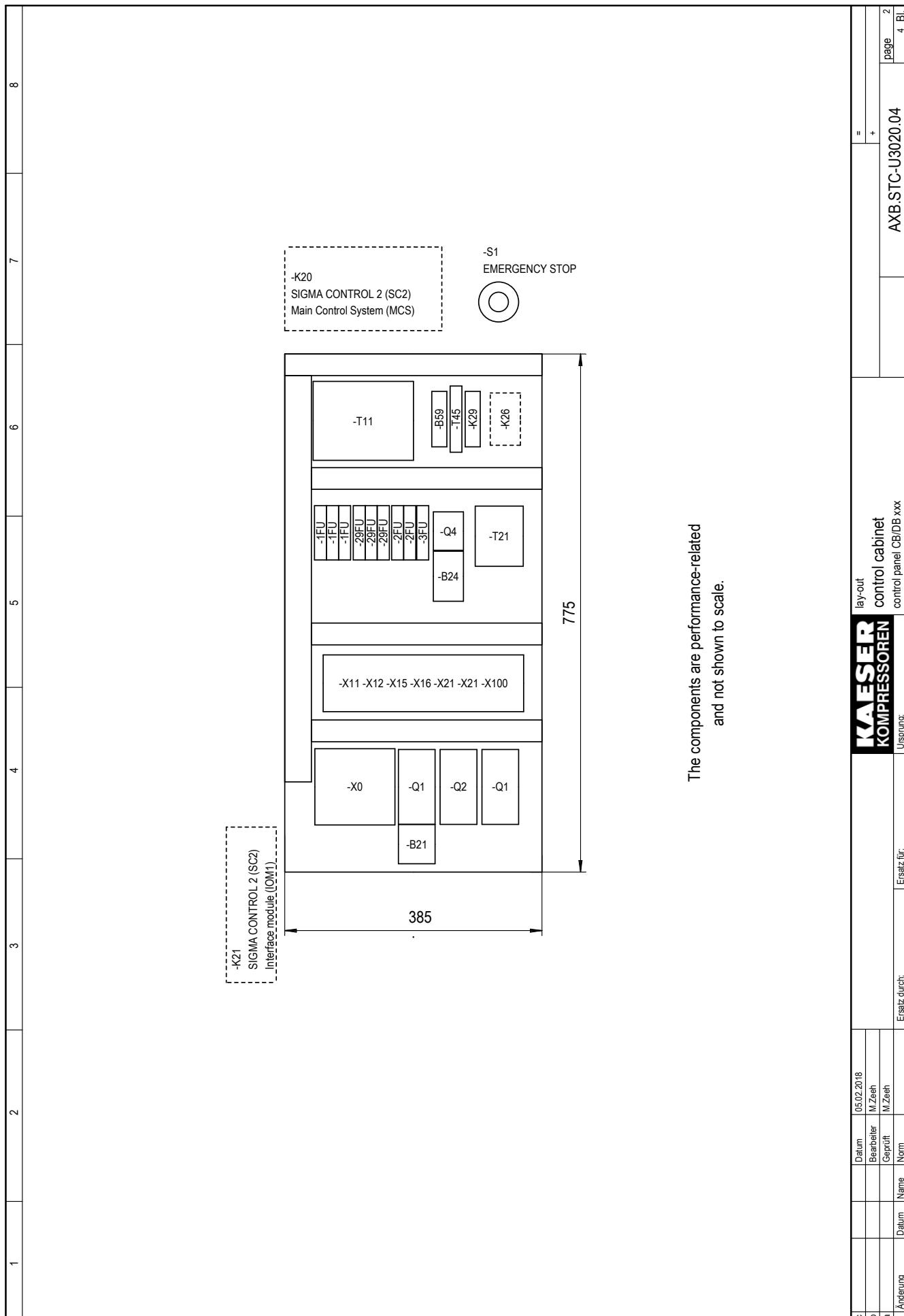
Usprung:

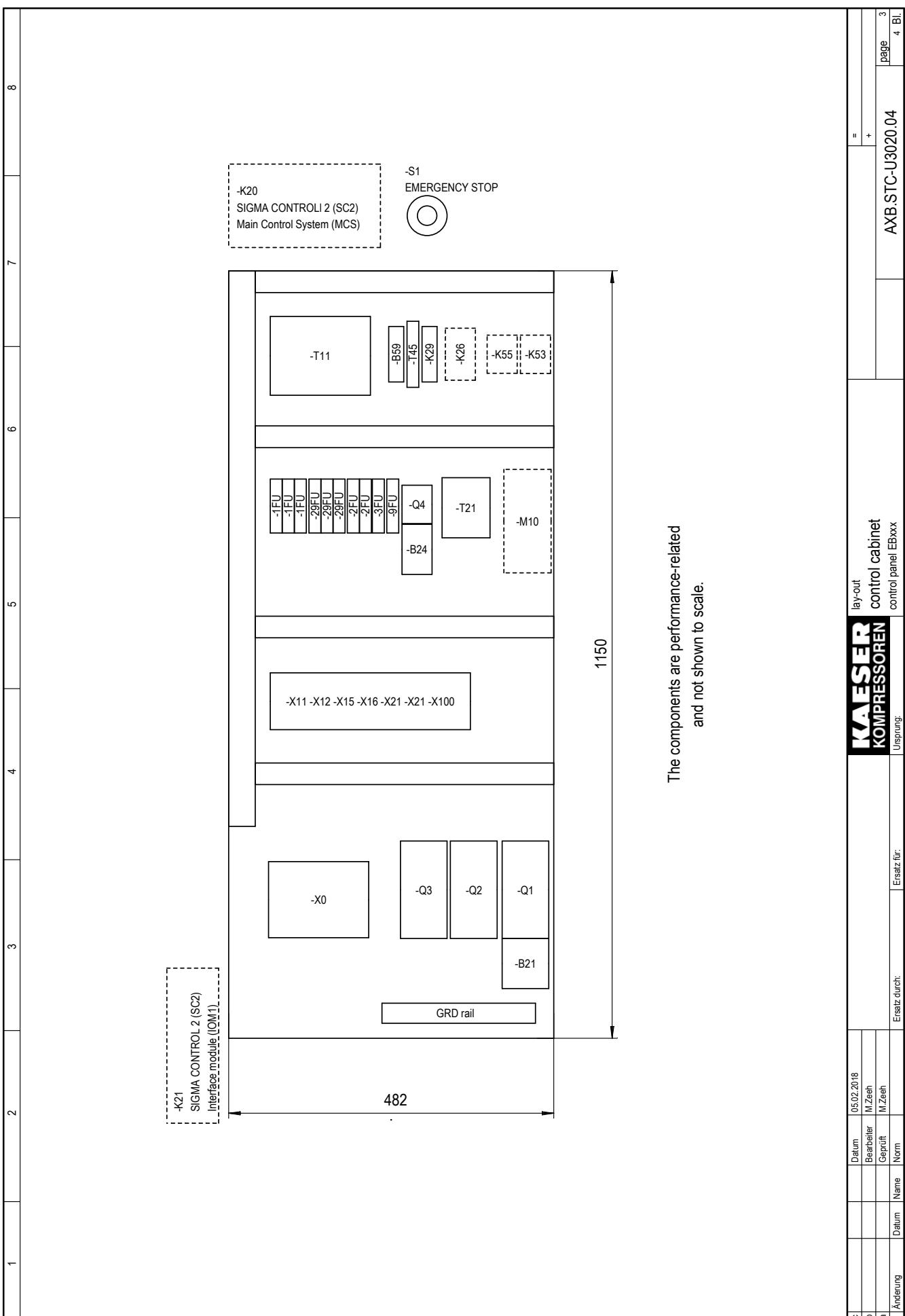
KXB STC-U3020 04

page 2

2 Bl.









13.4.2 Option C34, OMEGA FREQUENCY CONTROL (OFC)

Wiring Diagram

Blower with frequency converter

Siemens Sinamics G120 PM240-2
+ SIGMA CONTROL 2 (SC2)

460V ±10% 3ph 60Hz 5hp-175hp (4kW-132kW)

Power supply:
WYE system with center point solidly grounded

ATTENTION !!!

The document gives collective information on power supply voltages and frequencies for all machines. The voltage and frequency and local conditions under which any particular machine may be used are given on the nameplate of the machine and in the accompanying service manual.

manufacturer: KAESER KOMPRESSOREN SE
Postfach 2143
96410 Coburg

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Ifd. Nr. No.	Benennung Name	Zeichnungsnummer (Kunde) Drawing No. (customer)	Zeichnungsnummer (Hersteller) Drawing No. (manufacturer)	Blatt Page	Anlagenkennzeichen Unit designation
1	cover page		DXB-XFC-U3020.04	1	
2	List of contents		ZXB-XFC-U3020.04	1	
3	general instructions	instructions + option	UXB-XFC-U3020.04	1	
4	component legend	component legend	UXB-XFC-U3020.04	2	
5	electrical component parts list	Common parts	UXB-XFC-U3020.04	3	
6	electrical component parts list	Common parts	UXB-XFC-U3020.04	4	
7	electrical component parts list	option	UXB-XFC-U3020.04	5	
8	electrical component parts list	performance-related components	UXB-XFC-U3020.04	6	
9	electrical component parts list	performance-related components	UXB-XFC-U3020.04	7	
10	electrical component parts list	performance-related components	UXB-XFC-U3020.04	8	
11	electrical component parts list	performance-related components	UXB-XFC-U3020.04	9	
12	electrical component parts list	performance-related components	UXB-XFC-U3020.04	10	
13	electrical component parts list	performance-related components	UXB-XFC-U3020.04	11	
14	wiring diagram	input voltage	SXB-XFC-U3020.04	1	
15	wiring diagram	power unit	SXB-XFC-U3020.04	2	
16	wiring diagram	wiring diagram	SXB-XFC-U3020.04	3	
17	wiring diagram	power unit vent	SXB-XFC-U3020.04	4	
18	wiring diagram	control	SXB-XFC-U3020.04	5	
19	wiring diagram	type speed supervisory module	SXB-XFC-U3020.04	6	
20	wiring diagram	SC2 + IOM	SXB-XFC-U3020.04	7	
21	wiring diagram	IOM-configuration	SXB-XFC-U3020.04	8	
22	wiring diagram	digital inputs / IOM	SXB-XFC-U3020.04	9	
23	wiring diagram	analog inputs / IOM	SXB-XFC-U3020.04	10	
24	wiring diagram	Relay-outputs / IOM	SXB-XFC-U3020.04	11	
25	wiring diagram	frequency converter	SXB-XFC-U3020.04	12	
26	wiring diagram	Handling terminals	SXB-XFC-U3020.04	13	
27	wiring diagram	Feed line connection	SXB-XFC-U3020.04	14	
28	wiring diagram	Feed line connection	SXB-XFC-U3020.04	15	
29	terminal connection	-X0,-X11,-X12	KXB-XFC-U3020.04	1	
30	terminal connection	-X15,-X16,-X21,-X22,-X100	KXB-XFC-U3020.04	2	
31	lay-out	control panel BBxxx	AXB-XFC-U3020.04	1	
32	lay-out	control panel CB/DBxxx	AXB-XFC-U3020.04	2	
33	lay-out	control panel EBxxx control unit	AXB-XFC-U3020.04	3	
34	lay-out	control panel EBxxx power unit	AXB-XFC-U3020.04	4	
35	lay-out	control panel FBxxx control unit	AXB-XFC-U3020.04	5	
36	lay-out	control panel FBxxx power unit	AXB-XFC-U3020.04	6	

c		Datum	05.02.2018	=
b		Bearbeiter	M.Zeeh	+
a		Geprüft	M.Zeeh	
B Änderung	Datum	Name	Ersatz durch:	Ursprung:
				ZXB-XFC-U3020.04
				page 1 Bl 1

1	2	3	4	5	6	7	8
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general instructions

ATTENTION !!!

Install supplies, grounding and shock protection
to local safety regulations.

Control circuits are single-end-grounded, if they are floating
they may only be used together with insulation monitoring.

Do not make or break
live plug-in connectors.

control cabinet wiring for non-designated conductors

with multi-standard stranded conductors

primary circuits:

control voltage AC 115V:

control voltage AC 115V grounded:

control voltage DC 24V:

control voltage DC 24V grounded:

external voltage:

ground conductor:

black 2,5mm² H07V-K, 14AWG UL-Style 1015, CSA-TEW

red 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW

white 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW

blue 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW

blue/white 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW

orange 1,5mm² H07V-K, 16AWG UL-Style 1015, CSA-TEW

green/yellow H07V-K, UL-Style 1015, CSA-TEW

type model-dependent components

B13 = mode of operation overpressure

B14 = mode of operation Vacuum

C5 = option oil level monitoring (-B80/-B81) (standard by Screw blowers)

C10 = option Speed monitoring (-K26+sensor -B90)

C11 = option Unloaded start valve

C34 = OMEGA FREQUENCY CONTROL

C38 = SIGMA FREQUENCY CONTROL

C39 = option oil temperature monitoring (-B55) (standard by Screw blowers)

XXX = Gear housing ventilation+Oil return (only EBS/FBS)

c			Datum	05/02/2018		=	
b			Bearbeiter	M.Zeeh		+	
a			Gerüft	M.Zeeh			
C Änderung	Datum	Name	Ersatz für:		UXXFC-U3020.04	page	1
		Norm	Ursprung:				11 Bl.

1	2	3	4	5	6	7	8	
-B1/-B4 pressure transducer (4...20mA) -B5 differential pressure switch filter clogging -B24 overload Relay vent motor -B40/-B43 temperature probe Blower (PT100) -B55 theristor, compressor motor -B60 temperature probe soundproofing casing -B70 oil level switch -B90 speed sensor	-T1 frequency converter control transformer 230V-AC control voltage supply 24V-DC isolating amplifier	-T11 -T21 -T45	-X0 terminal strip, power supply terminal strip, control SC2-IOM digital outputs	-X11 -X12 -X15 -X16 -X21 -X22 -X100	-X11 -X12 -X15 -X16 -X21 -X22 -X100	-X11 -X12 -X15 -X16 -X21 -X22 -X100	-T11 control transformer 230V-AC control voltage supply 24V-DC isolating amplifier	
-0FU fuse motor Blower -1FU fuse control voltage tapping -2FU primary control fuse control transformer -3FU secondary control fuse control transformer -8FU fuse controller ventilator -10FU fuse 24V-AC -29FU fuse phase sequence relay -F86 Surge protective device (Canada only)	-K1 solenoid valve -K10 solenoid valve Oil return SIGMA CONTROL 2 (SC2) (MCS) SIGMA CONTROL 2 (SC2) (IOM-Modul) -K21 speed supervisory module -K26 phase sequence relay -K29 coupling relay controller ventilator -K50 coupling relay ventilator -K51 coupling relay Oil return -K52 coupling relay Oil return -K55 EMERGENCY STOP (external/customer) -K60	-K20 <i>Main Control System SC2 MCS</i>	-X1 Ethernet IO-BUS RS485-FC (USS-Bus) communication module -X4 SD card slot -X6 ground connection	-K21 <i>IO-Modul SC2 IOM-1</i> <i>inside</i>	-X1 -X2 -X3 -X4 -X5 -X6	-X1 -X2 -X3 -X4 -X5 -X6 -X7 -X8	-X1 -X2 -X3 -X4 -X5 -X6 -X7 -X8	
-M1 motor Blower -M4 ventilator soundproofing casing -M8 controller ventilator (1) -M9 controller ventilator (2) -M10 vacuum pump Gear housing ventilation	-Q4 contactor ventilator soundproofing casing	-R1 line commutation reactor -R3.1 ferrit bead power supply -R3.2 ferrit bead Motor cable -R11 interference suppression filter	-X11...-X13 analog inputs 0-20mA -X14...-X17 analog inputs PT100 -X18...-X29 digital inputs -X30...-X32 digital outputs					
-S1 EMERGENCY STOP pushbutton -S9 REMOTE reset fault message								

c		Datum	05.02.2018	=
b		Bearbeiter	M.Zeeh	+
a		Gefürt	M.Zeeh	
C Änderung	Datum	Name	Ersatz durch:	Page
		Norm		11 Bl.
				UXB,XFC,XU3020.04

model	Common parts 5 - 175 hp / 4 - 132 kW		KAESER KOMPRESSOREN <small>electrical component parts list</small> <small>Blower XFC+SC2</small> <small>Common parts</small>	Fortsetzung: nächstes Blatt		
machine power supply	460 V ±10 %, 60 Hz					
pressure transducer Huba Control	-B1	894786.0 0.-1200mbar				
pressure transducer Huba Control	-B4	894787.0 0.1200mbar				
differential pressure switch Dungs	-B5	893307.00010 setting: 14,1 in.W.C.				
temperature probe WIKA	-B40/-B43	895251.10010 (BB/CB/DB) 895251.10040 (EB-C/FB) 895603.00040 (EB-S) Pt100				
temperature probe	-B55	895251.10100 895603.00100 (EB-S) Pt100				
temperature probe Wieland	-B70	7.7631.0-P21 PT100				
fuse Gould	-1FU	(3x) - 7.3161.00190 ATQR 8 A - 600 V - class CC				
fuse Gould	-2FU	(2x) - 7.3317.1 ATQR 3 A - 600 V - class CC				
fuse Gould	-3FU	(1x) - 7.3161.00160 ATQR 5 A - 600 V - class CC				
fuse Gould	-8FU	(1x) - 7.3304.00010 ATDR 2 A - 600 V - class CC				
fuse Gould	-10FU	895637.0 5x20 0,315 A-T 250 VAC				
fuse Gould	-29FU	(3x) - 7.3161.00360 ATDR 1 A - 600 V - class CC				
fuse socket Wöhner	-1FU-29FU -2FU -3FU/8FU	3-pole (2x) - 7.3320.00060 2-pole (1x) - 7.3320.00070 1-pole (2x) - 7.3320.00050 class CC - Ambus Easy Switch				
solenoid valve bürkert	-K10	895601.0 24V-DC 8W				
Blower control Prodrive	-K20	7.7601.0 SC2MCS				
Blower control Prodrive	-K21	7.7602.1 SC2IOM-1				
phase sequence relay Siemens	-K29	7.7830.00600 3UG4615				
coupling relay Wieland	-K50-K51	7.3149.00660 24DC-1W-250V6A				
coupling relay Siemens	-K55	7.8740.04210 3RH2122-1JB40 DC 17-30 V AC-15: 230 V/10 A				
vacuum pump Schwarzer	-M10	895612.00100 24V-AC 60 Hz, 4W				
Fortsetzung: nächstes Blatt						

model	Common parts 5 - 175 hp / 4 - 132 kW			# + UXB.XFC-U3020.04 page 4 11 Bl.	
machine power supply	460 V ±10 %, 60 Hz				
contactor	-Q4	7.8740.00310 3RT2016-1AK61			
interference suppressor	Siemens	7.8740.05130 3RT2916-1CC00			
control transformer	-T11	7.2238.10090 USTE630 - 630 VA			
	Block	208-600 V/2x 115 V+ 24 V			
power supply	-T21	7.7605P0 PSDC24/2.5			
	Prodrive	100-240 V-AC/24 V-DC 2,5 A			
isolating amplifier	-T45	7.2892.00040 MCR-C-I/I-00-DC			
control line terminal	-X. 11/12/15/16/21/22/100 Handling	895635.0 Wieland WTP fig. 1, Sht. 11			
KAESER KOMPRESSOREN electrical component parts list Blower xFC+SC2 Common parts					
c		Datum	05.02.2018		
b		Bearbeiter	M.Zeeh		
a		Geprägt	M.Zeeh		
C Änderung	Datum	Name	Ersatz für:		
		Norm	Ersatz durch:		

model	option BB CB-DB-EB FB				page 5 11 Bl. II + UXBXFC-U3020.04
machine power supply	460 V / 60 Hz		460 V / 60 Hz	460 V+ 575 V / 60 Hz	
option C5/C39: oil function monitors					
oil level switch (option C5)	-B80/-B81 Elobau	---	894631.00010	894631.00010	
oil temperatur (option C39)	-B55 Wika	---	895251.10100 (xB-C) 895603.00100 (EB-S) Pt100	895251.10100 Pt100	
option C10: Speed monitoring					
supervisory module	-K26 ifm	895323.0 FR1 - DD2503	895323.0 FR1 - DD2503	895323.0 FR1 - DD2503	
speed sensor	-B90 ifm	895039.0 IFC201	895039.0 IFC201	895039.0 IFC201	
option C11: Unloaded start valve 24 V-DC (electromagnetic)					
solenoid valve	-K1 Riegler	---	---	---	
option C11: Unloaded start valve 115 V-AC (electromagnetic)					
solenoid valve	-K1 bürkert	893584.00010 115V/60 Hz (1PH/N/GND)	---	---	
coupling relay	-K52 Wieland	7.3149.00660 FLARE 24 V-DC 1W-250 V/6 A	---	---	
KAESER KOMPRESSOREN					electrical component parts list Blower xFC+SC2 option
c Änderung	a Datum	b Bearbeiter	c Datum	b Bearbeiter	Ursprung:
C Änderung	a Datum	b Name	c Datum	b Name	Ersatz für:
					Ersatz durch:

model	performance-related components					" +	page 6 11 Bl.
	5 hp BB (4 kW)	7,5 hp BB+ CB+DB (5,5 kW)	10 hp BB+ CB+DB (7,5 kW)	15 hp BB+ CB+DB 11 kW)	20 hp BB+ CB+DB (15 kW)		
machine power supply	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz		
overload relay soundproofing casing	-B24 Siemens 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A		
Surge protective device	-F86 Dehn DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G		
Blower motor	-M1 Siemens 460 V-D/60 Hz 7 A, 3600U	894989.0 894990.0 460 V-D/60 Hz 10,1 A, 3600U	894991.0 460 V-D/60 Hz 13,2 A, 3600U	894992.0 460 V-D/60 Hz 20,2 A, 3600U	895049.0 460 V-D/60 Hz 27,6 A, 3600U		
vent motor soundproofing casing	-M4 ebm W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A		
vent motor control cabinet	-M8 / (-M9) Ruebsamen LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A	7.2751.00490 LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A	7.2751.00490 LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A	7.2751.00490 LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A	7.2751.00490 LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A		
line commutation reactor	-R1 Siemens 6SL3203-0CE21-8AA0	7.7831.00310 6SL3203-0CE21-8AA0	7.7831.00310 6SL3203-0CE21-8AA0	7.7831.00310 6SL3203-0CE21-8AA0	7.7831.00320 6SL3203-0CE23-8AA0		
ferrit bead	-R3.1 -R3.2 Magnetec 7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 1x 7.8538.0 (M112)		
interference suppression filter	-R11 Siemens integrated ---	integrated ---	integrated ---	integrated ---	7.8832.10030 Schaffner FS33891-50-07		
frequency converter	-T1 6SL3210-1PE21-1AL0	7.8833.01070 6SL3210-1PE21-1AL0	7.8833.01080 6SL3210-1PE21-4AL0	7.8833.01090 6SL3210-1PE21-8AL0	7.8833.00100 6SL3210-1PE22-7UL0		
control unit	.	7.7830.00710 6SL3244-0BB12-1BAx	7.7830.00710 6SL3244-0BB12-1BAx	7.7830.00710 6SL3244-0BB12-1BAx	7.7830.00710 6SL3244-0BB12-1BAx		
instrument panel	.	7.7830.00100 6SL3255-0AA00-4CA1	7.7830.00100 6SL3255-0AA00-4CA1	7.7830.00100 6SL3255-0AA00-4CA1	7.7830.00100 6SL3255-0AA00-4CA1		
motor cable	-W211	4x10 AWG / 4G6 mm ² 600 V - 80°C - EMV	4x10 AWG / 4G6 mm ² 600 V - 80°C - EMV	4x10 AWG / 4G6 mm ² 600 V - 80°C - EMV	4x8 AWG / 4G10 mm ² 600 V - 80°C - EMV		
connection	-W280.1/2 -W281 -W282	10 AWG / 6 mm ² 10 AWG / 6 mm ² 10 AWG / 6 mm ² 600 V - 90°C	10 AWG / 6 mm ² 10 AWG / 6 mm ² 10 AWG / 6 mm ² 600 V - 90°C	10 AWG / 6 mm ² 10 AWG / 6 mm ² 10 AWG / 6 mm ² 600 V - 90°C	8 AWG / 10 mm ² 8 AWG / 10 mm ² 8 AWG / 10 mm ² 600 V - 90°C		
supply terminals	-X0: U1/V1/W1/GRD Handling Stripped length X supply connection	894864.00010 Wieland 14-4 AWG/2,5-16 mm ² fig. 2, Sht. 12 16 mm fig. 1, Sht. 13	894864.00010 Wieland 14-4 AWG/2,5-16 mm ² fig. 2, Sht. 12 16 mm fig. 1, Sht. 13	894864.00010 Wieland 14-4 AWG/2,5-16 mm ² fig. 2, Sht. 12 16 mm fig. 1, Sht. 13	894864.00010 Wieland 14-4 AWG/2,5-16 mm ² fig. 2, Sht. 12 16 mm fig. 1, Sht. 13		

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Ursprung:
 BB+CB+DB

Ersatz durch:	Name	Norm	Name	Norm	Datum	05.02.2018	M.Zeeh	Bearbeiter	C
									b
									a
									c

13.4 Electrical diagrams

model	performance-related components					page 11 Bl.
	25 hp CB+ DB 18,5W)	30 hp CB+ DB (22 kW)	40 hp CB+ DB (30 kW)	50 hp DB (37 kW)	60 hp DB (45 kW)	
machine power supply	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	
overload relay soundproofing casing	-B24 7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	7.8741.00030 3RB3016-1PB0 1,00-4,00 A / S00 setting: 1,43 A NEC 430.32(C) incremental setting: 1,61 A	
Surge protective device	-F86 Dehn 7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	
Blower motor	-M1 Siemens 894994.0 460 V-D/60 Hz 32,2 A, 3600U	894995.0 460 V-D/60 Hz 38,5 A, 3600U	894996.1 (CB) 894997.1 (DB) 460 V-D/60 Hz 52 A, 3600U	894978.1 460 V-D/60 Hz 63,3 A, 3600U	894979.1 460 V-D/60 Hz 78 A, 3600U	
vent motor soundproofing casing	-M4 ebm 895260.00010 W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A	895260.00010 W2D250 115 V/60 Hz (1Ph/N/GRD) 175W 1,55 A	
vent motor control cabinet	-M8 / (-M9) Ruebsamen 7.2751.00490 LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A	7.2751.00490 LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A	7.2751.00490 LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A	7.2751.00490 LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A	7.2751.00490 LV410 (1Ph/N/GRD) 115 V/60 Hz, 40W 0,5 A	
line commutation reactor	-R1 Siemens integrated ---	integrated ---	integrated ---	integrated ---	integrated ---	
ferrit bead	-R3.1 -R3.2 Magnete 7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 2x 7.8538.0 (M112)	7.8538.0 (M112) 2x 7.8538.0 (M112)	
interference suppression filter	-R11 Siemens integrated ---	integrated ---	integrated ---	integrated ---	integrated ---	
frequency converter	-T1 7.8833.01120 6SL3210-1PE23-8AL0	7.8833.01130 6SL3210-1PE24-5AL0	7.8833.01140 6SL3210-1PE26-0AL0	7.8833.01150 6SL3210-1PE27-5AL0	7.8833.01160 6SL3210-1PE28-8AL0	
control unit	. 7.7830.00710	7.7830.00710	7.7830.00710	7.7830.00710	7.7830.00710	
instrument panel	. 7.7830.00100	6SL3244-0BB12-1BAx 7.7830.00100	6SL3244-0BB12-1BAx 7.7830.00100	6SL3244-0BB12-1BAx 7.7830.00100	6SL3244-0BB12-1BAx 7.7830.00100	
motor cable	-W211 4x6 AWG / 4G16 mm² 600 V - 80°C - EMV	4x6 AWG / 4G16 mm² 600 V - 80°C - EMV	2x4x8 AWG/4G10 mm² (CB) 4x4 AWG / 4G25 mm² (DB) 600 V - 80°C - EMV	4x2 AWG / 4G35 mm² 600 V - 80°C - EMV	3x 1 AWG / 50 mm² 4 AWG / 25 mm² (GRD) 600 V - 90°C	
connection	-W280.1/.2 -W281 -W282 8 AWG / 10 mm² 8 AWG / 10 mm² 8 AWG / 10 mm² 600 V - 90°C	8 AWG / 10 mm² 8 AWG / 10 mm² 8 AWG / 10 mm² 600 V - 90°C	4 AWG / 25 mm² 4 AWG / 25 mm² 4 AWG / 25 mm² 600 V - 90°C	4 AWG / 25 mm² 4 AWG / 25 mm² 4 AWG / 25 mm² 600 V - 90°C	2 AWG / 35 mm² 2 AWG / 35 mm² 2 AWG / 35 mm² 600 V - 90°C	
supply terminals	-X0: U1/V1/W1/GRD Handling Stripped length X connection	894864.00010 Wieland 14-4 AWG/2,5-16 mm² fig. 2, Sht. 12 16 mm fig. 1, Sht. 13	894864.00010 Wieland 14-4 AWG/2,5-16 mm² fig. 2, Sht. 12 16 mm fig. 1, Sht. 13	3x 895314.0 3x 895314.00010 4x 895314.00040 Wago 8-1 AWG/10-50 mm² fig. 3, Sht. 12	3x 895314.0 3x 895314.00010 4x 895314.00040 Wago 8-1 AWG/10-50 mm² fig. 3, Sht. 12	Ersatz durch:
						Datum 05.02.2018 Bearbeiter M.Zeeh Gefürt M.Zeeh
						Datum Datum Name Norm a b c
						Aenderung C Änderung

model	performance-related components				
	25 hp EB 18,5W)	30 hp EB (22 kW)	40 hp EB+ FB-C (30 kW)	40 hp FB-S (30 kW)	
machine power supply	460 V ±10 %, 60 Hz		460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz
overload relay soundproofing casing	-B24	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A
Surge protective device	-F86 Dehn	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G
Blower motor	-M1 Siemens	894994.0 460 V-D/60 Hz 32,2 A, 3600U	894995.0 460 V-D/60 Hz 38,5 A, 3600U	894997.1 460 V-D/60 Hz 52 A, 3600U	894997.1 460 V-D/60 Hz 52 A, 3600U
vent motor soundproofing casing	-M4 Sodeca/ebm	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz (3PH/GRD) 265W 0,62 A
vent motor control cabinet	-M8/-M9 Ruebsamen	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A
line commutation reactor	-R1 Siemens	integrated ---	integrated ---	integrated ---	integrated ---
ferrit bead	-R3.1 -R3.2 Magnete	7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 1x 7.8538.0 (M112)	7.8538.0 (M112) 1x 7.8538.0 (M112)
interference suppression filter	-R11 Siemens	integrated ---	integrated ---	integrated ---	integrated ---
frequency converter	-T1	7.8833.01120 6SL3210-1PE23-8AL0	7.8833.01130 6SL3210-1PE24-5AL0	7.8833.01140 6SL3210-1PE26-0AL0	7.8833.01140 6SL3210-1PE26-0AL0
control unit	.	7.7830.00710	7.7830.00710	7.7830.00710	7.7830.00710
instrument panel	.	6SL3244-0BB12-1BAx 7.7830.00100	6SL3244-0BB12-1BAx 7.7830.00100	6SL3244-0BB12-1BAx 7.7830.00100	6SL3244-0BB12-1BAx 7.7830.00100
Siemens		6SL3255-0AA00-4CA1	6SL3255-0AA00-4CA1	6SL3255-0AA00-4CA1	6SL3255-0AA00-4CA1
motor cable	-W211	4x6 AWG / 4G16 mm ² 600 V - 80°C - EMV	4x6 AWG / 4G16 mm ² 600 V - 80°C - EMV	4x 4 AWG / 25 mm ² 600 V - 90°C	4x 4 AWG / 25 mm ² 600 V - 90°C
connection	-W280.1/2 -W281 -W282	8 AWG / 10 mm ² 8 AWG / 10 mm ² 8 AWG / 10 mm ² 600 V - 90°C	6 AWG / 16 mm ² 6 AWG / 16 mm ² 6 AWG / 16 mm ² 600 V - 90°C	4 AWG / 25 mm ² 4 AWG / 25 mm ² 4 AWG / 25 mm ² 600 V - 90°C	4 AWG / 25 mm ² 4 AWG / 25 mm ² 4 AWG / 25 mm ² 600 V - 90°C
supply terminals	-X0: U1/V1/W1/GRD	894864.00010	894864.00010	3x 895314.0 3x 895314.00010 4x 895314.00040	3x 895314.0 3x 895314.00010 4x 895314.00040
Handling		Wieland 14-4 AWG/2,5-16 mm ²	Wieland 14-4 AWG/2,5-16 mm ²	Wago 8-1 AWG/10-50 mm ²	Wago 8-1 AWG/10-50 mm ²
Stripped length X		fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 3, Sht. 12	fig. 3, Sht. 12
connection		16 mm	16 mm	30 mm	30 mm
supply		fig. 1, Sht. 13	fig. 1, Sht. 13	fig. 2, Sht. 13	fig. 2, Sht. 13

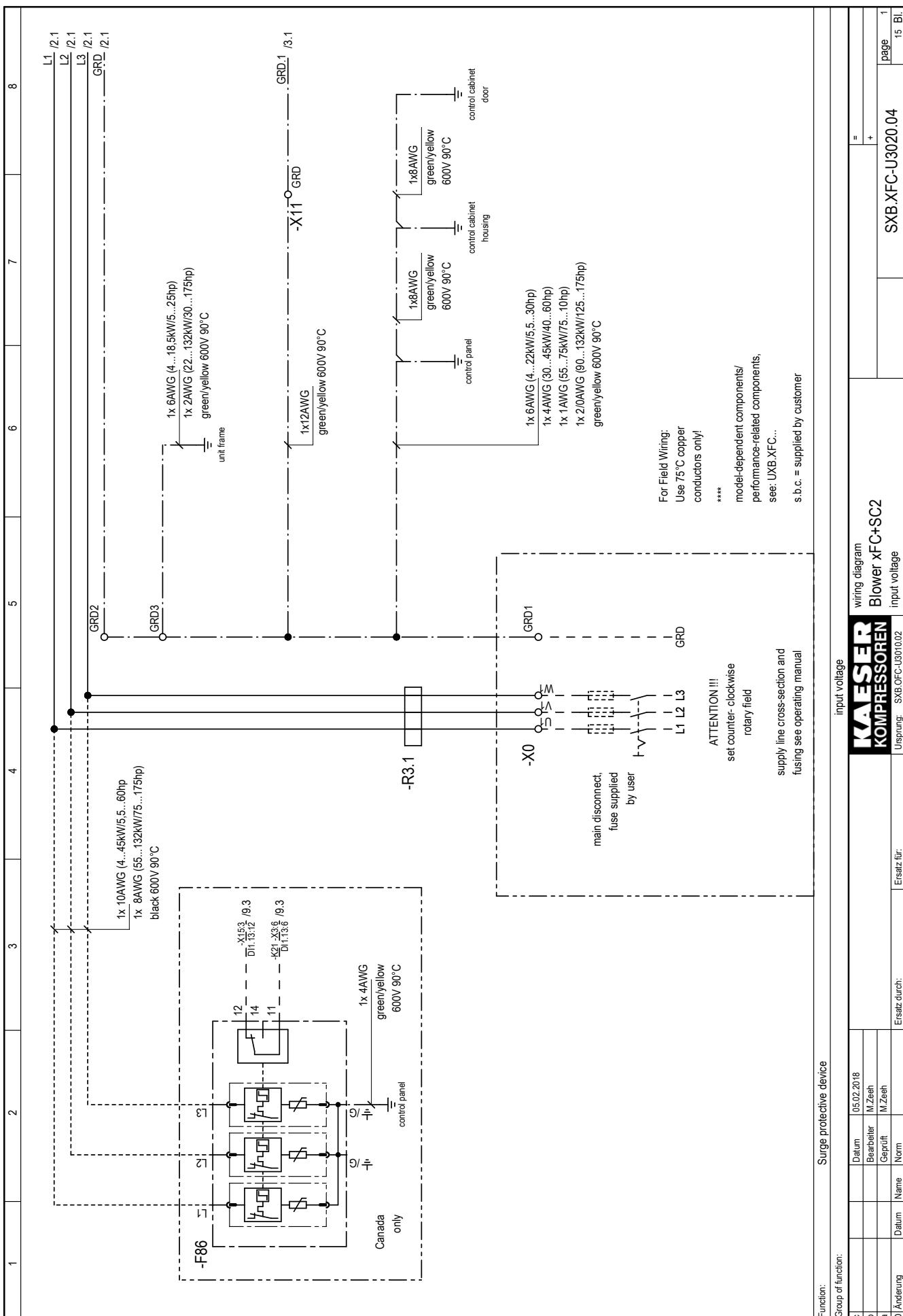
13.4 Electrical diagrams

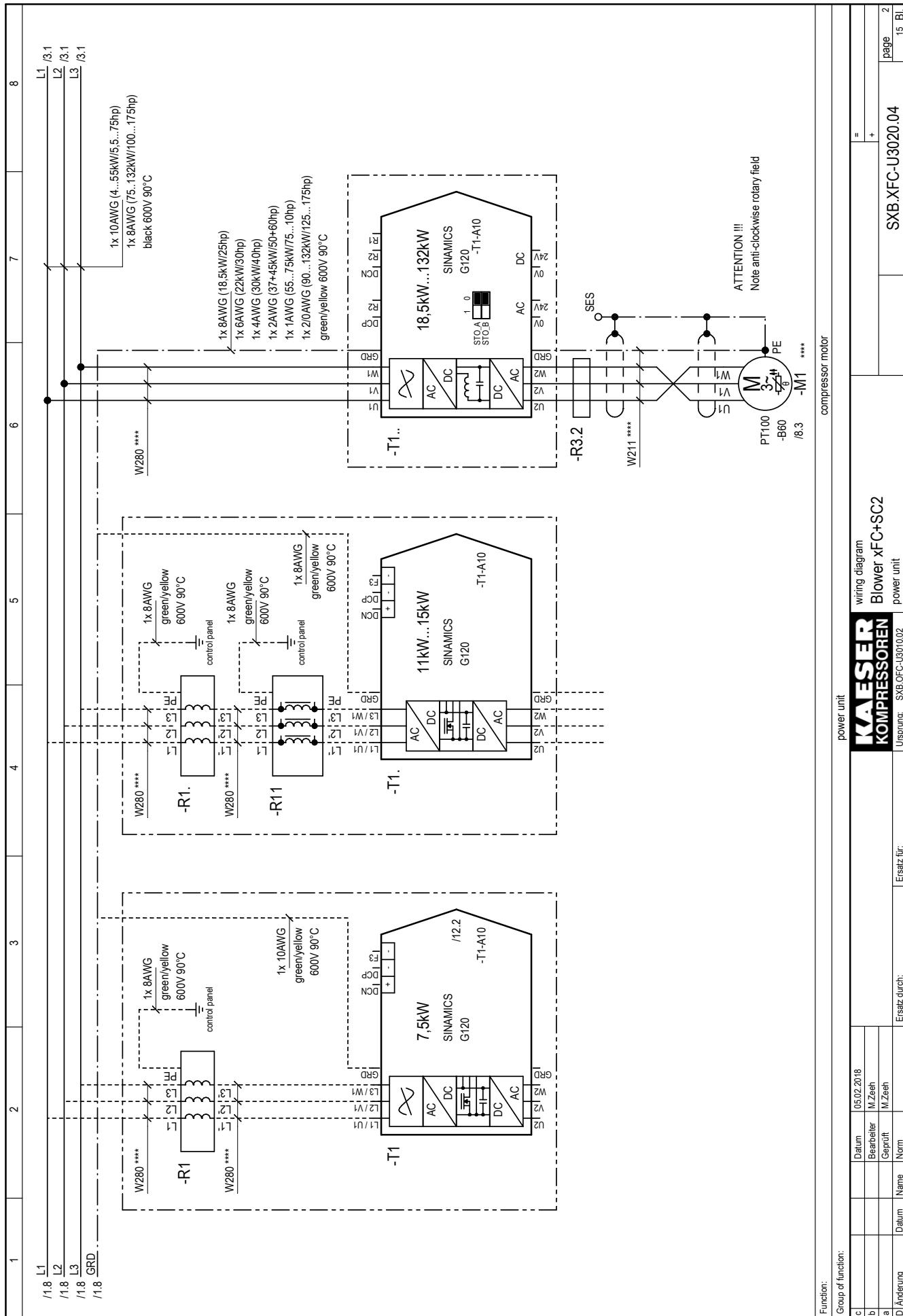
model	performance-related components				page 9 11 Bl.
	50 hp EB+ FB-C (37 kW)	50 hp FB-S (37 kW)	60 hp EB+ FB-C (45 kW)	60 hp FB-S (45 kW)	
machine power supply	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	
overload relay soundproofing casing	-B24 Siemens 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	
Surge protective device	-F86 Dehn DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	
Blower motor	-M1 Siemens 460 V-D/60 Hz 63,3 A, 3600U	894978.1 460 V-D/60 Hz 63,3 A, 3600U	894978.1 460 V-D/60 Hz 63,3 A, 3600U	894979.1 460 V-D/60 Hz 78 A, 3600U	
vent motor soundproofing casing	-M4 Sodeca/ebm HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	895040.00040 W4D420 (ebm) 460 V-Y/60 Hz (3PH/GRD) 265W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 265W 0,62 A	
vent motor control cabinet	-M8/-M9 Ruebsamen LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	
line commutation reactor	-R1 Siemens ---	integrated ---	integrated ---	integrated ---	integrated ---
ferrit bead	-R3.1 -R3.2 Magnete	7.8538.0 (M112) 2x 7.8538.0 (M112)	7.8538.0 (M112) 2x 7.8538.0 (M112)	7.8538.0 (M112) 2x 7.8538.0 (M112)	7.8538.0 (M112) 2x 7.8538.0 (M112)
interference suppression filter	-R11 Siemens ---	integrated ---	integrated ---	integrated ---	integrated ---
frequency converter	-T1	7.8833.01150 6SL3210-1PE27-5AL0	7.8833.01150 6SL3210-1PE27-5AL0	7.8833.01160 6SL3210-1PE28-8AL0	7.8833.01160 6SL3210-1PE28-8AL0
control unit	.	7.7830.00710 6SL3244-0BB12-1BAx	7.7830.00710 6SL3244-0BB12-1BAx	7.7830.00710 6SL3244-0BB12-1BAx	7.7830.00710 6SL3244-0BB12-1BAx
instrument panel	.	7.7830.00100 6SL3255-0AA00-4CA1	7.7830.00100 6SL3255-0AA00-4CA1	7.7830.00100 6SL3255-0AA00-4CA1	7.7830.00100 6SL3255-0AA00-4CA1
motor cable	-W211	3x 2 AWG / 35 mm ² 4 AWG / 25 mm ² (GRD) 600 V - 90°C	3x 2 AWG / 35 mm ² 4 AWG / 25 mm ² (GRD) 600 V - 90°C	3x 1 AWG / 50 mm ² 4 AWG / 25 mm ² (GRD) 600 V - 90°C	3x 1 AWG / 50 mm ² 4 AWG / 25 mm ² (GRD) 600 V - 90°C
connection	-W280.1/.2 -W281 -W282	2 AWG / 35 mm ² 2 AWG / 35 mm ² 2 AWG / 35 mm ² 600 V - 90°C	2 AWG / 35 mm ² 2 AWG / 35 mm ² 2 AWG / 35 mm ² 600 V - 90°C	2 AWG / 35 mm ² 2 AWG / 35 mm ² 2 AWG / 35 mm ² 600 V - 90°C	2 AWG / 35 mm ² 2 AWG / 35 mm ² 2 AWG / 35 mm ² 600 V - 90°C
supply terminals	-X0: U1/V1/W1/GRD Handling Stripped length X connection	3x 895314.0 3x 895314.00010 4x 895314.00040 Wago 8-1 AWG/10-50 mm ² fig. 3, Sht. 12 30 mm fig. 2, Sht. 13	3x 895314.0 3x 895314.00010 4x 895314.00040 Wago 8-1 AWG/10-50 mm ² fig. 3, Sht. 12 30 mm fig. 2, Sht. 13	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG/25-95 mm ² fig. 3, Sht. 12 36 mm fig. 2, Sht. 13	3x 894385.0 3x 894385.00010 4x 894385.00040 25-95 mm ² Wago 4-4/0 AWG/25-95 mm ² fig. 3, Sht. 12 36 mm fig. 2, Sht. 13

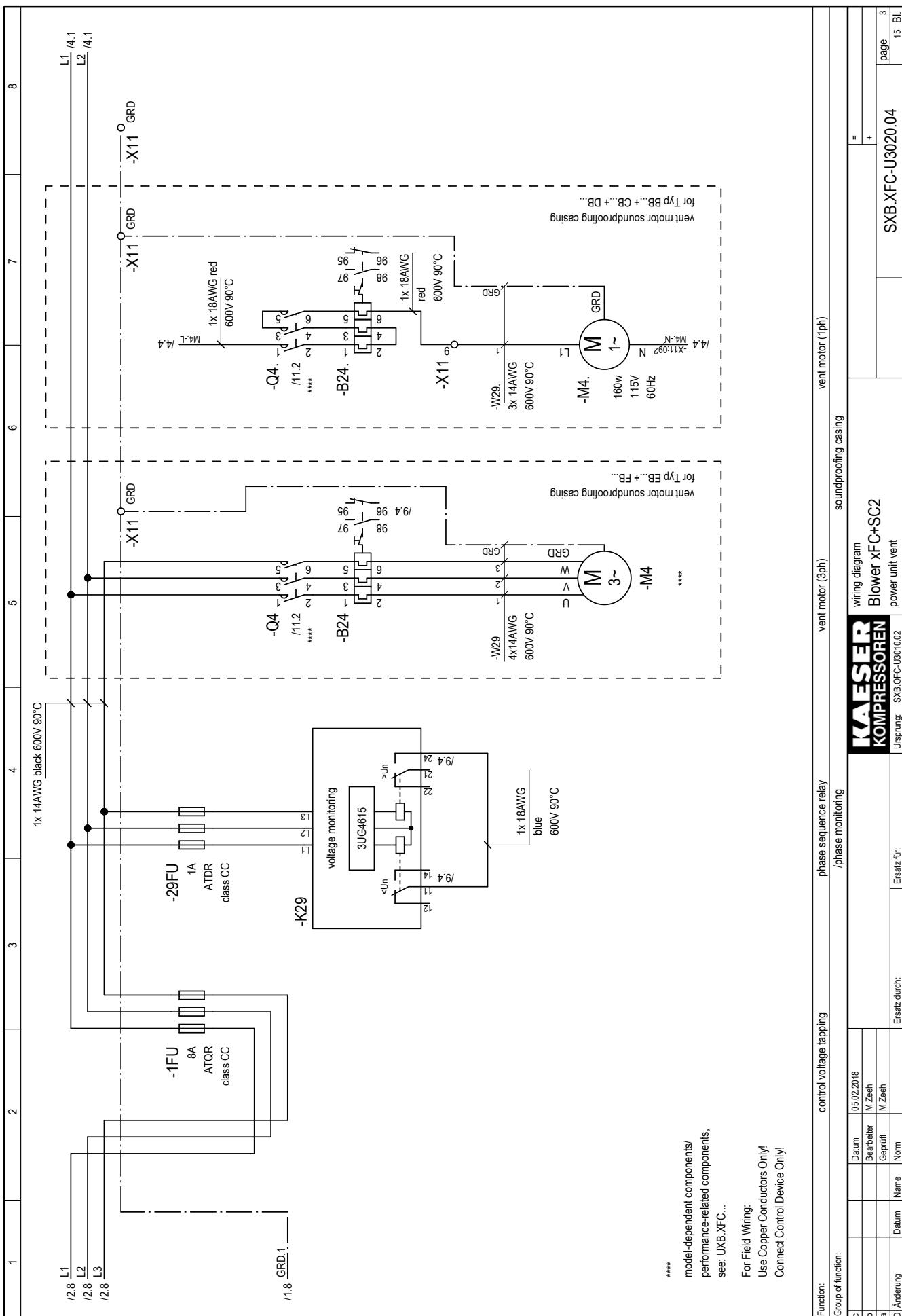
KAESER KOMPRESSOREN	electrical component parts list EB+FB	performance-related components	Usprung:	Ersatz für:	Ersatz durch:
c	b	M/Zeeh	M/Zeeh		
a					
b					
c					

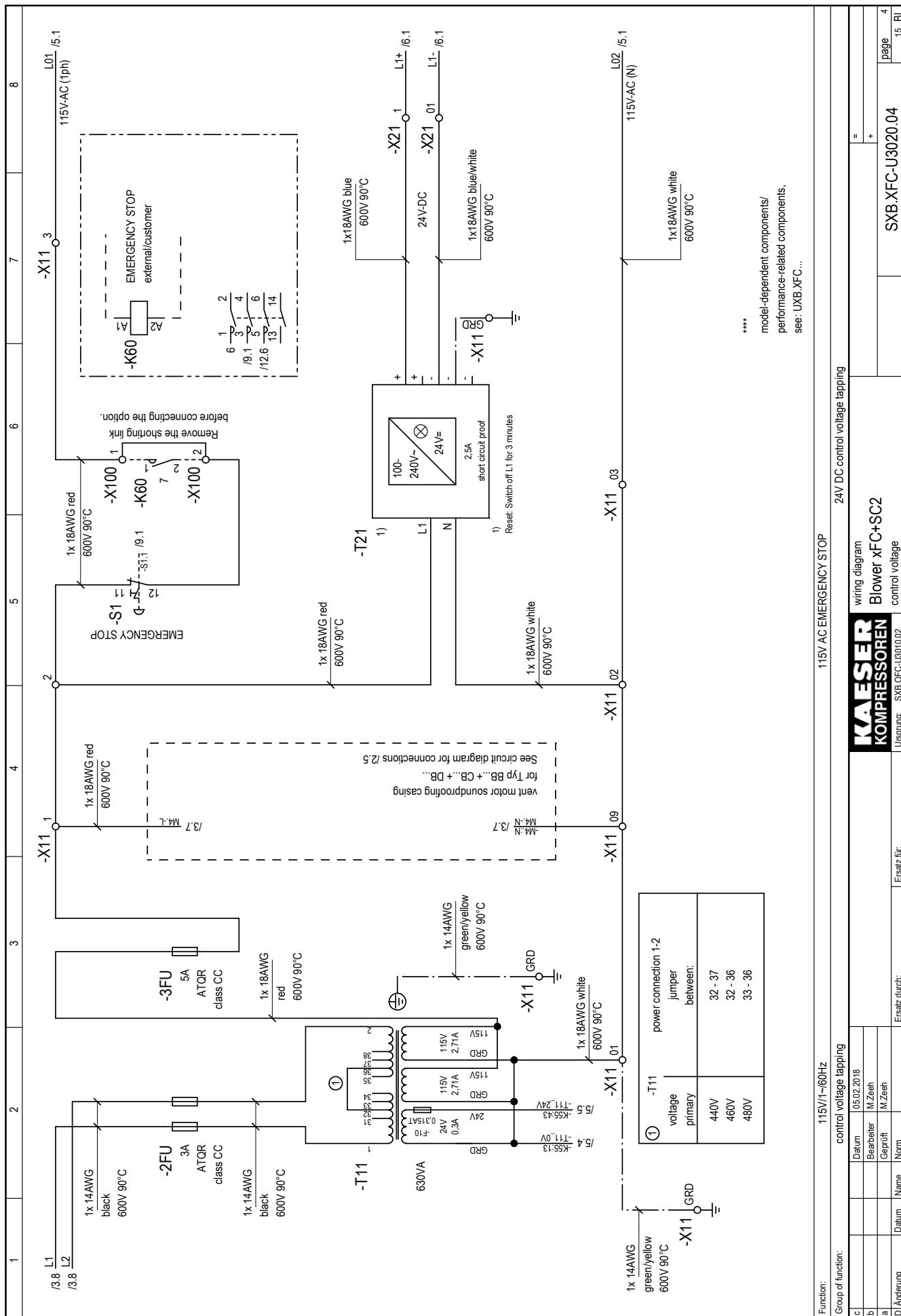
model	performance-related components				Page 10 11 Bl.
	75 hp EB+ FB (55 kW)	75 hp FB-S (55 kW)	100 hp EB+ FB-C (75 kW)	100 hp FB-S (75 kW)	
machine power supply	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	" +
overload relay soundproofing casing	-B24 Siemens 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	UXBXFC-U3020.04
Surge protective device	-F86 Dehn DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	
Blower motor	-M1 Siemens 460 V-D/60 Hz 92 A, 3600U	894717.11000 460 V-D/60 Hz 92 A, 3600U	894717.11000 460 V-D/60 Hz 92 A, 3600U	894719.11000 460 V-D/60 Hz 125 A, 3600U	
vent motor soundproofing casing	-M4 Sodeca/ebm HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	895040.00040 W4D420 (ebm) 460 V-Y/60 Hz (3PH/GRD) 265W 0,62 A	895426.0 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 265W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz (3PH/GRD) 265W 0,62 A
vent motor control cabinet	-M8/-M9 Ruebsamen LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A
line commutation reactor	-R1 Siemens ---	integrated ---	integrated ---	integrated ---	integrated ---
ferrit bead	-R3.1 -R3.2 Magnetec	7.8538.00020 (M113) 2x 7.8538.00020 (M113)	7.8538.00020 (M113) 2x 7.8538.00020 (M113)	7.8538.00020 (M113) 1x 7.8538.00020 (M113)	7.8538.00020 (M113) 1x 7.8538.00020 (M113)
interference suppression filter	-R11 Siemens ---	integrated ---	integrated ---	integrated ---	integrated ---
frequency converter	-T1	7.8833.01170 6SL3210-1PE31-1AL0	7.8833.01170 6SL3210-1PE31-1AL0	7.8833.01180 6SL3210-1PE31-5AL0	7.8833.01180 6SL3210-1PE31-5AL0
control unit	.	7.7830.00710 6SL3244-0BB12-1BAx	7.7830.00710 6SL3244-0BB12-1BAx	7.7830.00710 6SL3244-0BB12-1BAx	7.7830.00710 6SL3244-0BB12-1BAx
instrument panel	.	7.7830.00100 6SL3255-0AA00-4CA1	7.7830.00100 6SL3255-0AA00-4CA1	7.7830.00100 6SL3255-0AA00-4CA1	7.7830.00100 6SL3255-0AA00-4CA1
motor cable	-W211	3x 2/0 AWG / 70 mm ² 2 AWG / 35 mm ² (GRD) 600 V - 90°C	3x 2/0 AWG / 70 mm ² 2 AWG / 35 mm ² (GRD) 600 V - 90°C	3x 3/0 AWG / 95 mm ² 1 AWG / 50 mm ² (GRD) 600 V - 90°C	3x 3/0 AWG / 95 mm ² 1 AWG / 50 mm ² (GRD) 600 V - 90°C
connection	-W280.1/2 -W281 -W282	1 AWG / 50 mm ² 1 AWG / 50 mm ² 1 AWG / 50 mm ² 600 V - 90°C	1 AWG / 50 mm ² 1 AWG / 50 mm ² 1 AWG / 50 mm ² 600 V - 90°C	2/0 AWG / 70 mm ² 2/0 AWG / 70 mm ² 2/0 AWG / 70 mm ² 600 V - 90°C	2/0 AWG / 70 mm ² 2/0 AWG / 70 mm ² 2/0 AWG / 70 mm ² 600 V - 90°C
supply terminals	-X0: U1/V1/W1/GRD Handling Stripped length X connection	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG/25-95 mm ² fig. 3, Sht. 12 36 mm fig. 2, Sht. 13	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG/25-95 mm ² fig. 3, Sht. 12 36 mm fig. 2, Sht. 13	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG/25-95 mm ² fig. 3, Sht. 12 36 mm fig. 2, Sht. 13	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG/25-95 mm ² fig. 3, Sht. 12 36 mm fig. 2, Sht. 13
					Ersatz durch:
	c	Datum	05.02.2018		
	b	Bearbeiter	M.Zeeh		
	a	Geprüft			
	C Änderung	Datum	Name	Norm	

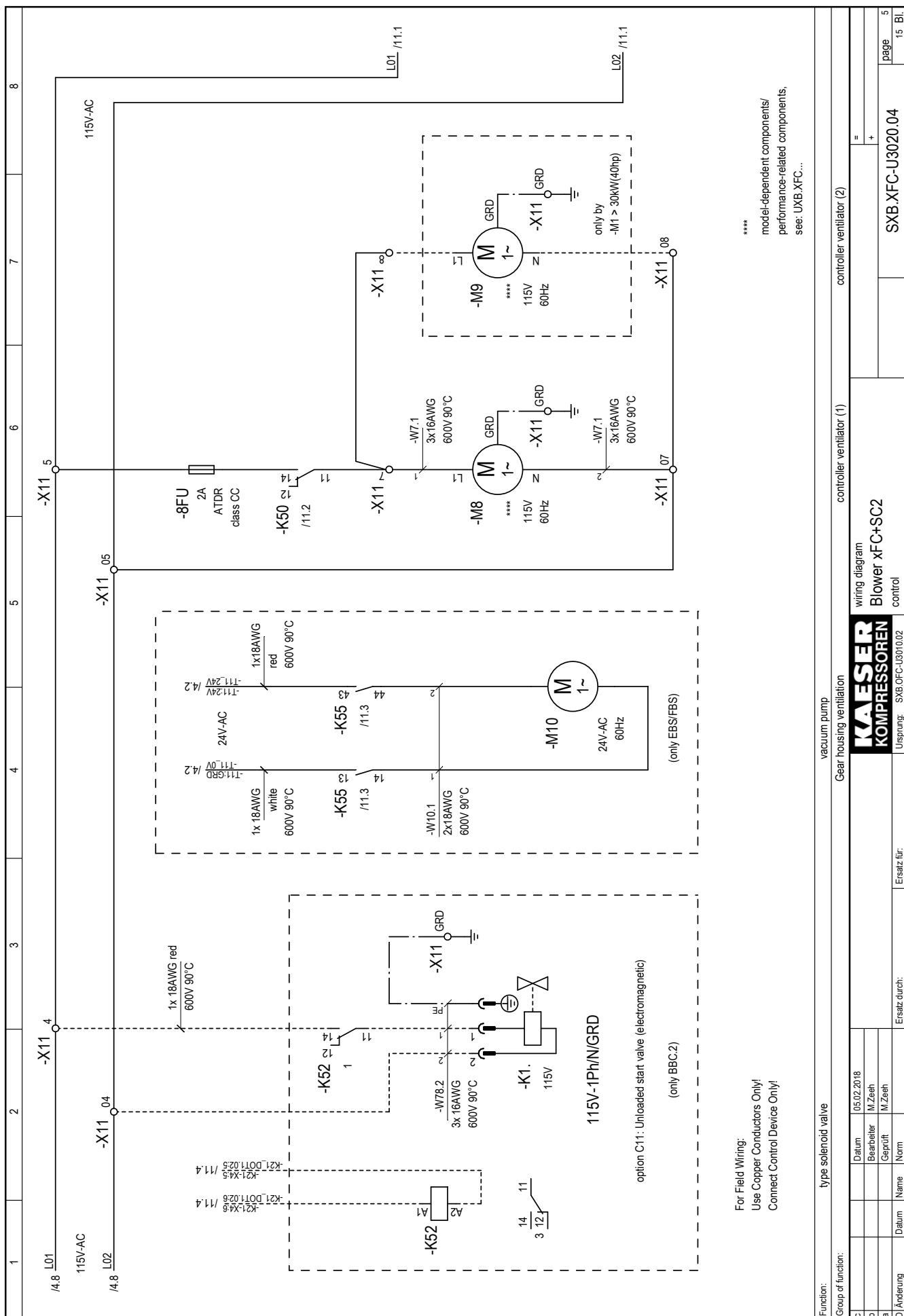
model	performance-related components					page 11 11 Bl.
	125 hp FB-C (90 kW)	125 hp FB-S (90 kW)	150 hp FB-C (110 kW)	150 hp FB-S (110 kW)	175 hp FB (132 kW)	
machine power supply	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	460 V ±10 %, 60 Hz	
overload relay soundproofing casing	-B24 7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental setting: 0,64 A	
Surge protective device	-F86 Dehn 7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	7.8669.00020 DG MU 3PY 480 3W+ G	
Blower motor	-M1 Siemens 894723.11000 460 V-D/60 Hz 158 A, 1800U	894722.11000 460 V-D/60 Hz 149 A, 3600U	895025.11000 460 V-D/60 Hz 191 A, 1800U	894724.11000 460 V-D/60 Hz 185 A, 3600U	894726.11000 460 V-D/60 Hz 225 A, 1800U	
vent motor soundproofing casing	-M4 Sodeca/ebm 895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz (3PH/GRD) 265W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	895426.0 W4D420 (ebm) 460 V-Y/60 Hz (3PH/GRD) 265W 0,62 A	895040.00040 HC-31-2T / H-I-E 460 V-Y/60 Hz (3PH/GRD) 210W 0,62 A	
vent motor control cabinet	-M8/-M9 Ruebsamen 7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	7.2751.00360 LV600 (1Ph/N/GRD) 115 V/60 Hz, 80W 0,7 A	
line commutation reactor	-R1 Siemens integrated ---	integrated ---	integrated ---	integrated ---	integrated ---	
ferrit bead	-R3.1 -R3.2 Magnete 7.8538.00020 (M113) 1x 7.8538.00020 (M113)	7.8538.00020 (M113) 1x 7.8538.00020 (M113)	7.8538.00020 (M113) 1x 7.8538.00020 (M113)	7.8538.00020 (M113) 1x 7.8538.00020 (M113)	7.8538.00020 (M113) 1x 7.8538.00020 (M113)	
interference suppression filter	-R11 Siemens integrated ---	integrated ---	integrated ---	integrated ---	integrated ---	
frequency converter	-T1 7.8833.01190 6SL3210-1PE31-8AL0	7.8833.01190 6SL3210-1PE31-8AL0	7.8833.01200 6SL3210-1PE32-1AL0	7.8833.01200 6SL3210-1PE32-1AL0	7.8833.01210 6SL3210-1PE32-5AL0	
control unit	. 7.7830.00710	7.7830.00710	7.7830.00710	7.7830.00710	7.7830.00710	
instrument panel	. 7.7830.00100 Siemens 6SL3255-0AA00-4CA1	6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	
motor cable	-W211 3x 4/0 AWG / 120 mm ² 2/0 AWG / 70 mm ² (GRD) 600 V - 90°C	3x 4/0 AWG / 120 mm ² 2/0 AWG / 70 mm ² (GRD) 600 V - 90°C	3x 4/0 AWG / 120 mm ² 2/0 AWG / 70 mm ² (GRD) 600 V - 90°C	3x 4/0 AWG / 120 mm ² 2/0 AWG / 70 mm ² (GRD) 600 V - 90°C	3x 4/0 AWG / 120 mm ² 2/0 AWG / 70 mm ² (GRD) 600 V - 90°C	
connection	-W280.1/.2 -W281 -W282 3/0 AWG / 95 mm ² 3/0 AWG / 95 mm ² 3/0 AWG / 95 mm ² 600 V - 90°C	3/0 AWG / 95 mm ² 3/0 AWG / 95 mm ² 3/0 AWG / 95 mm ² 600 V - 90°C	4/0 AWG / 120 mm ² 4/0 AWG / 120 mm ² 4/0 AWG / 120 mm ² 600 V - 90°C	4/0 AWG / 120 mm ² 4/0 AWG / 120 mm ² 4/0 AWG / 120 mm ² 600 V - 90°C	2x 2/0 AWG / 70 mm ² 4/0 AWG / 120 mm ² 4/0 AWG / 120 mm ² 600 V - 90°C	Ersatz für:
supply terminals	-X0: U1/N1/W1 Handling Stripped length X	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0AWG / 25-95mm ² fig. 3, Sht. 13 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0AWG / 25-95mm ² fig. 3, Sht. 13 36 mm	6x 895545.0 3x 895545.00030 3x 895545.00040 Wago (50-185mm ²) 1 AWG - 350 MCM fig. 3, Sht. 13 45 mm	6x 895545.0 3x 895545.00030 3x 895545.00040 Wago (50-185mm ²) 1 AWG - 350 MCM fig. 3, Sht. 13 45 mm	Ersatz durch:
PE-rail	-X0:PE Torque Stripped length X	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins	832489.00010 15Nm 25 mm+ Conductor crimp pins	
supply	-connection	fig. 3, Sht. 15	fig. 3, Sht. 15	fig. 3, Sht. 15	fig. 3, Sht. 15	

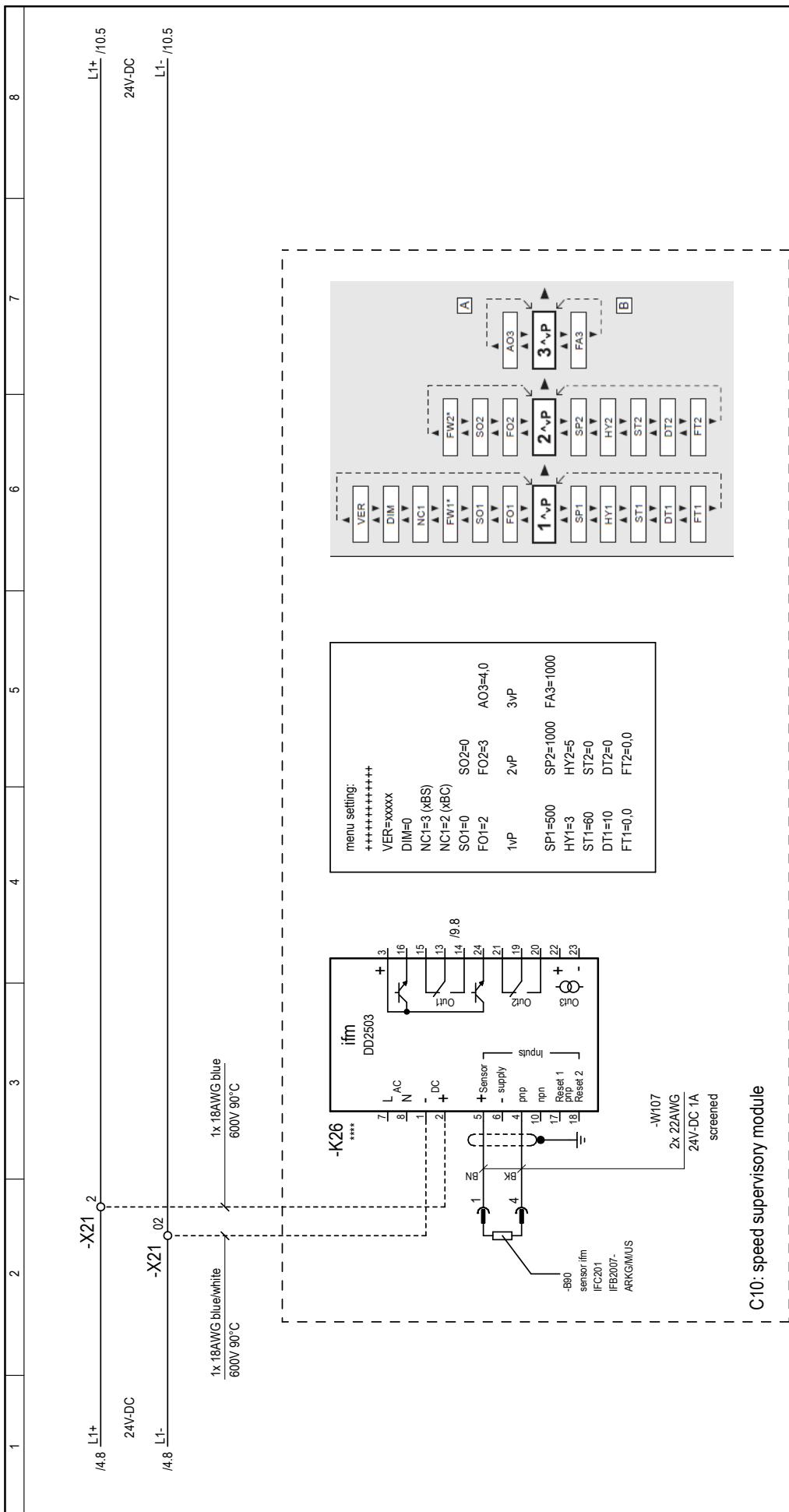








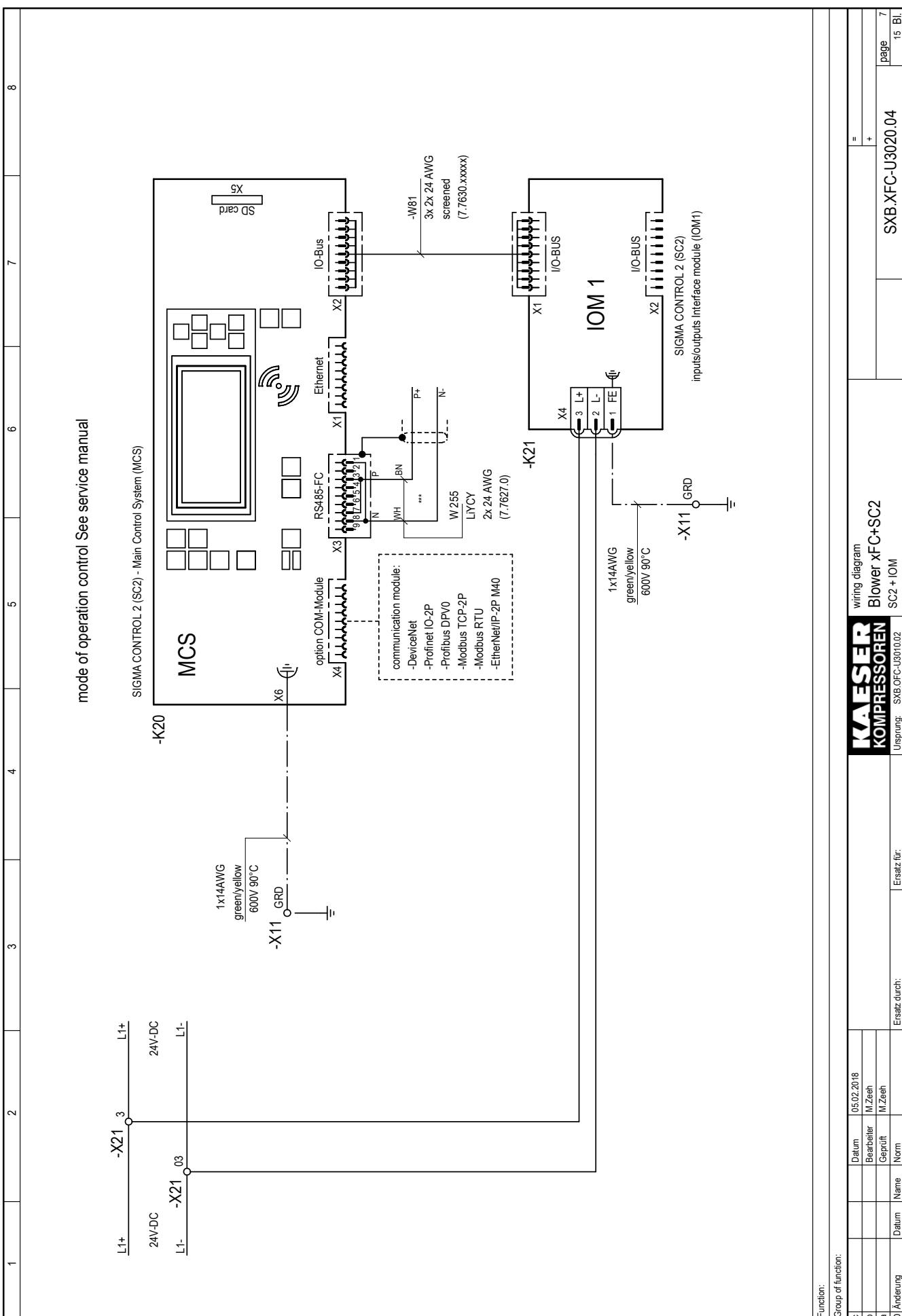


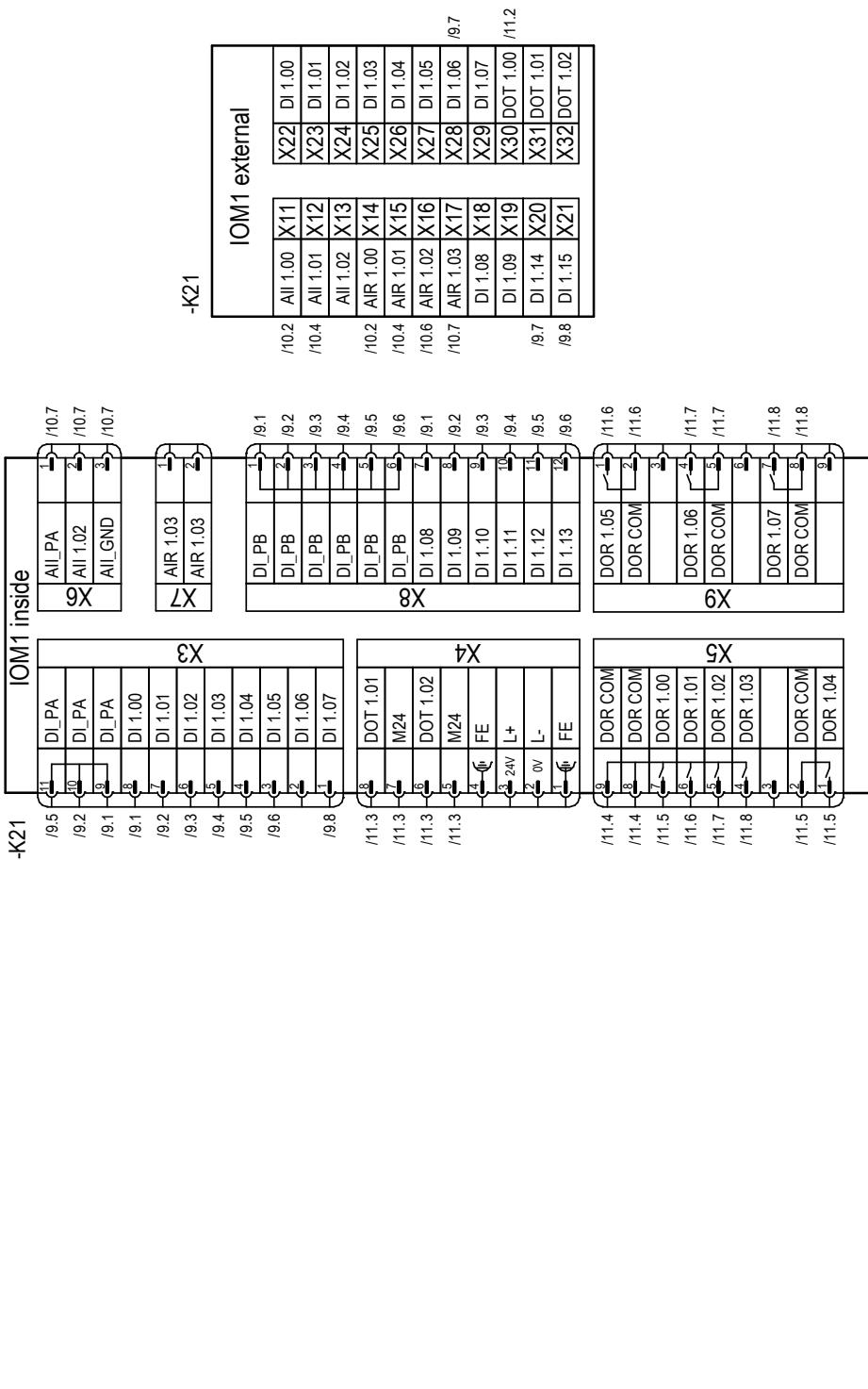


model-dependent components/
performance-related components,
see: UXB-XFC...

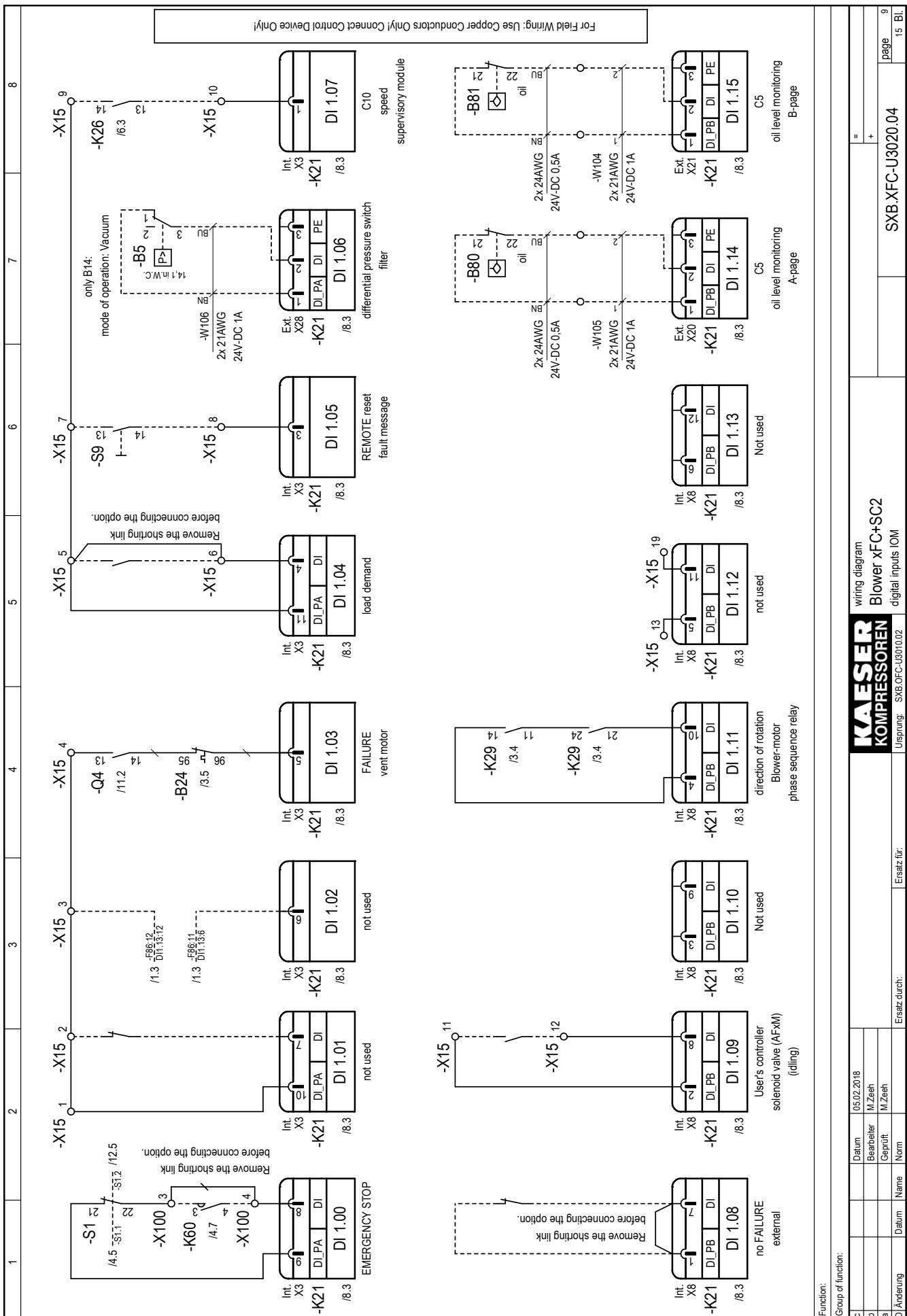
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!

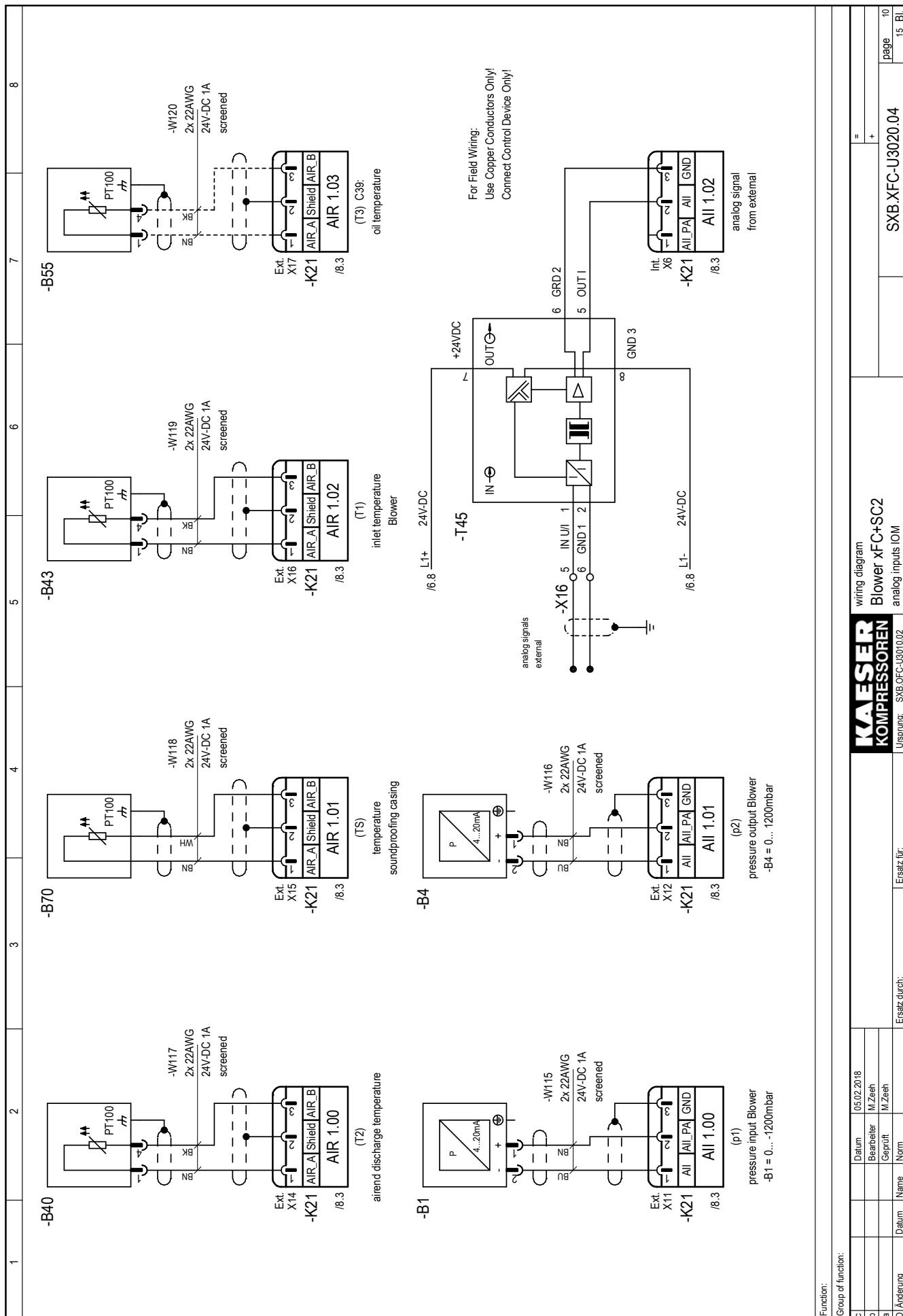
Function:		KAESER KOMPRESSOREN		wiring diagram Blower XFC+SC2	=	page 6
				SXB XFC-U3020 04	+	15 Bl.
Group of function:				Ursprung: SXB XFC-U3020.02	Ersatz für:	
c		D Änderung	Datum	Name	Norm	
b						
a						

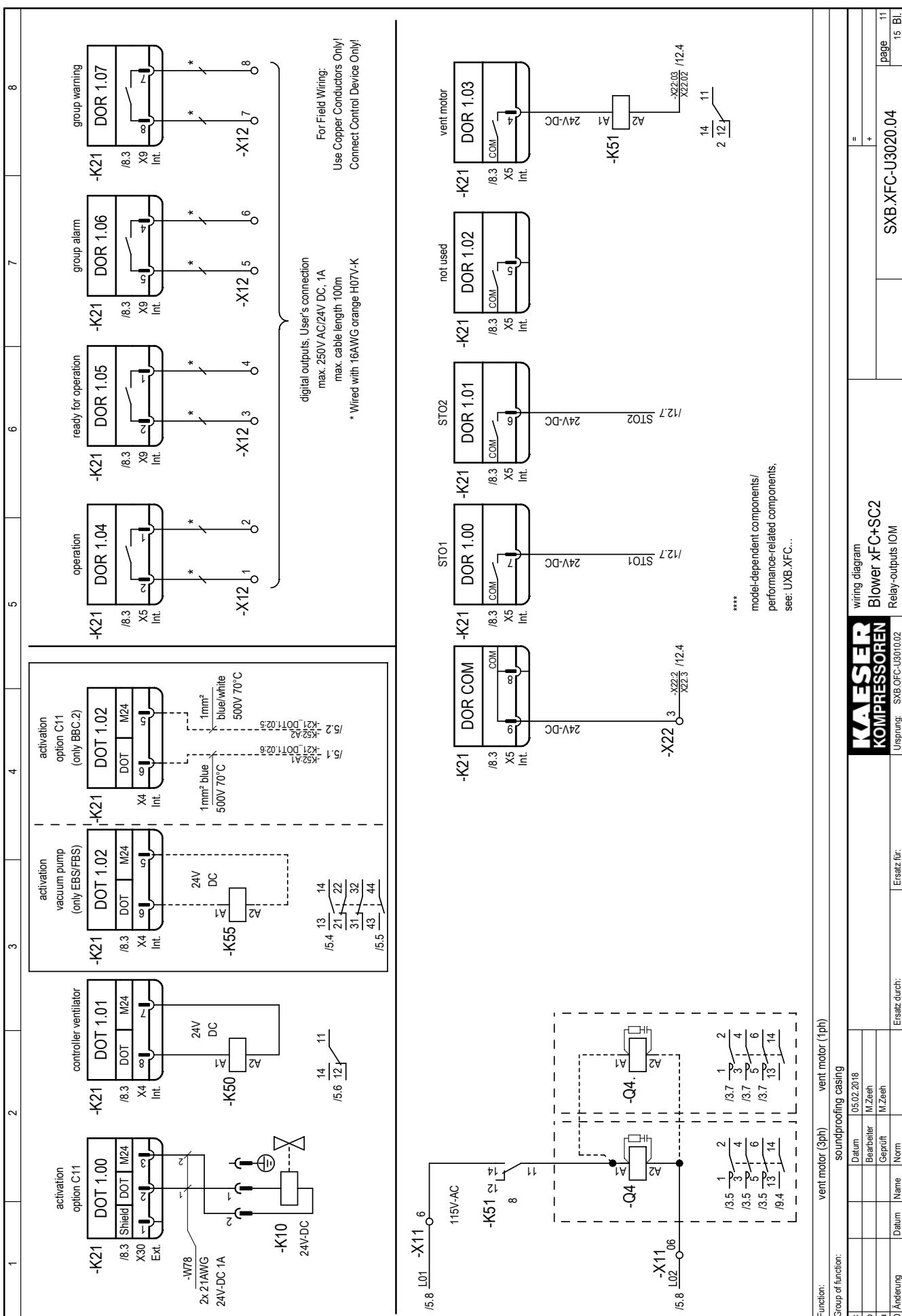




Function: _____

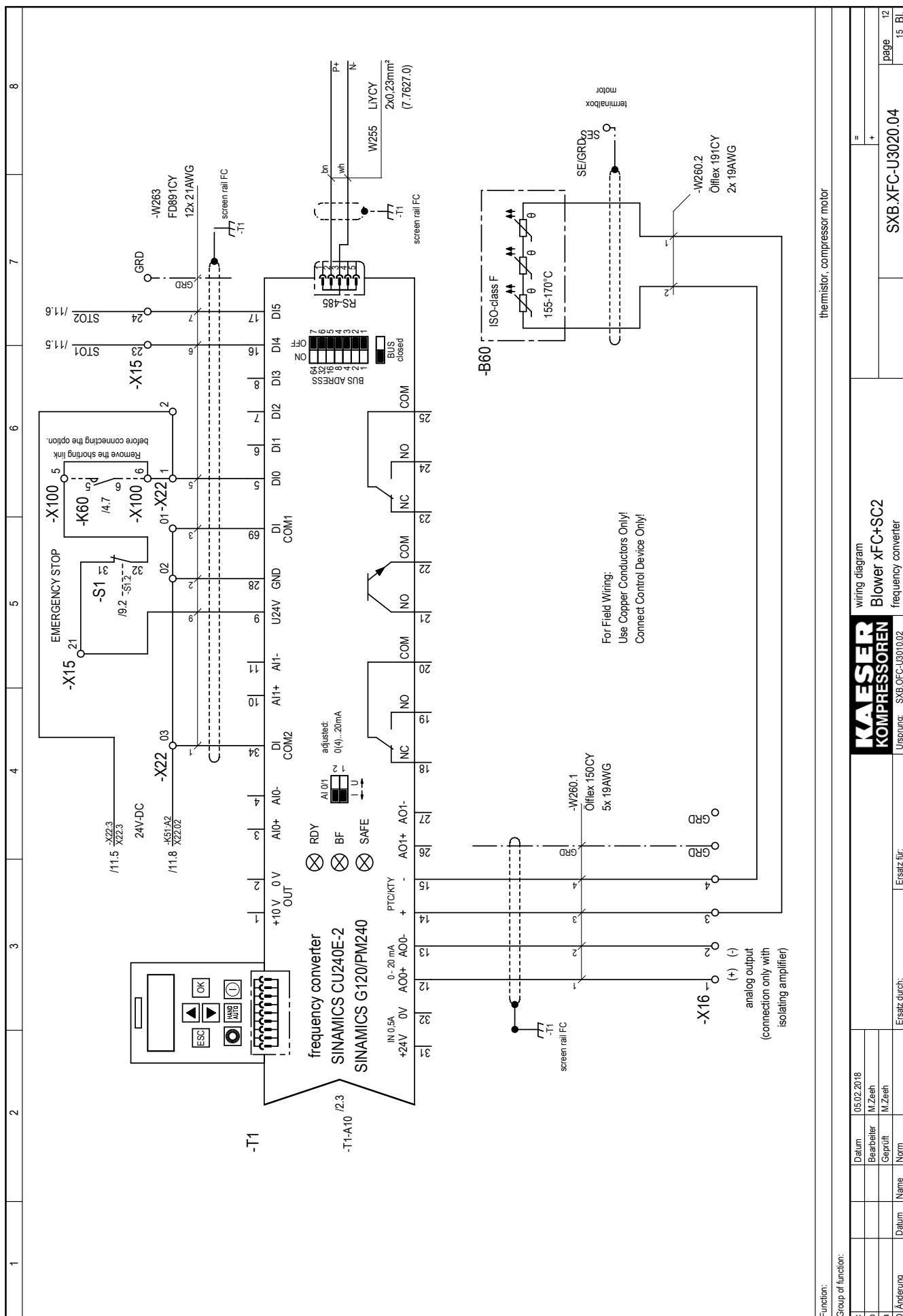






c		Datum	05/02/2018	wiring diagram
a		Bearbeiter	M.Zeeh	Blower XFC+SC2
b		Gerüft	M.Zeeh	SXB OFC-130/10/02
d Änderung	Datum	Name	Norm	Ersatz durch: SXB,XFC-130/20.04

=
+
page 11
15 Bl.



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6

5

4

fig.: 1 Handling control line terminal

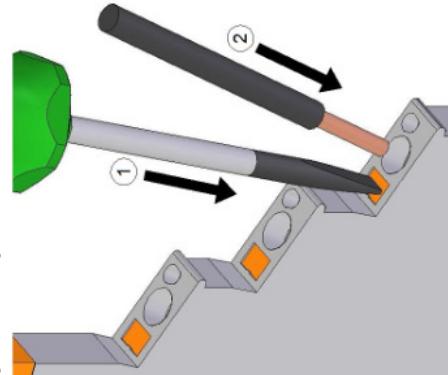


fig.: 2 Handling supply terminals

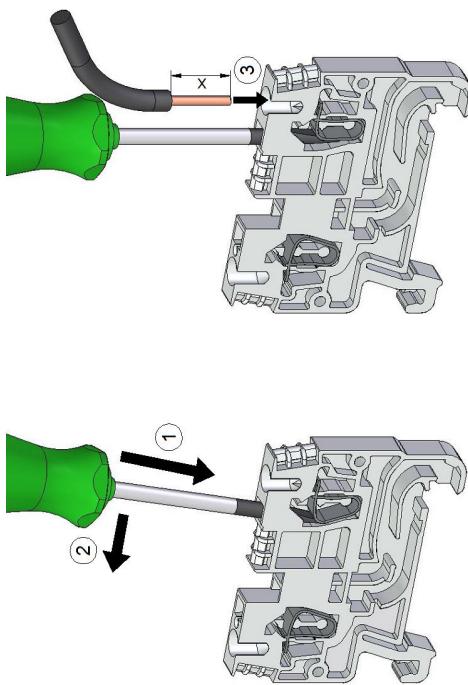
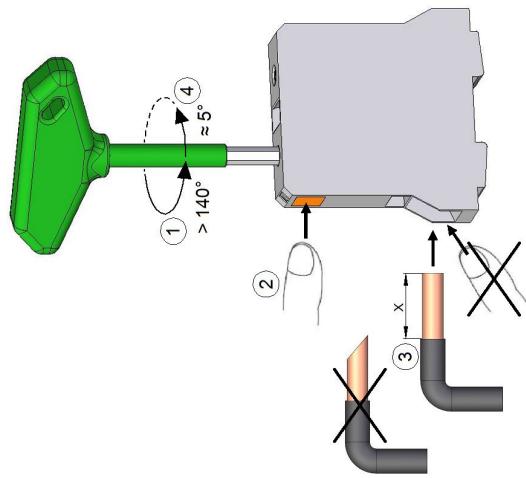


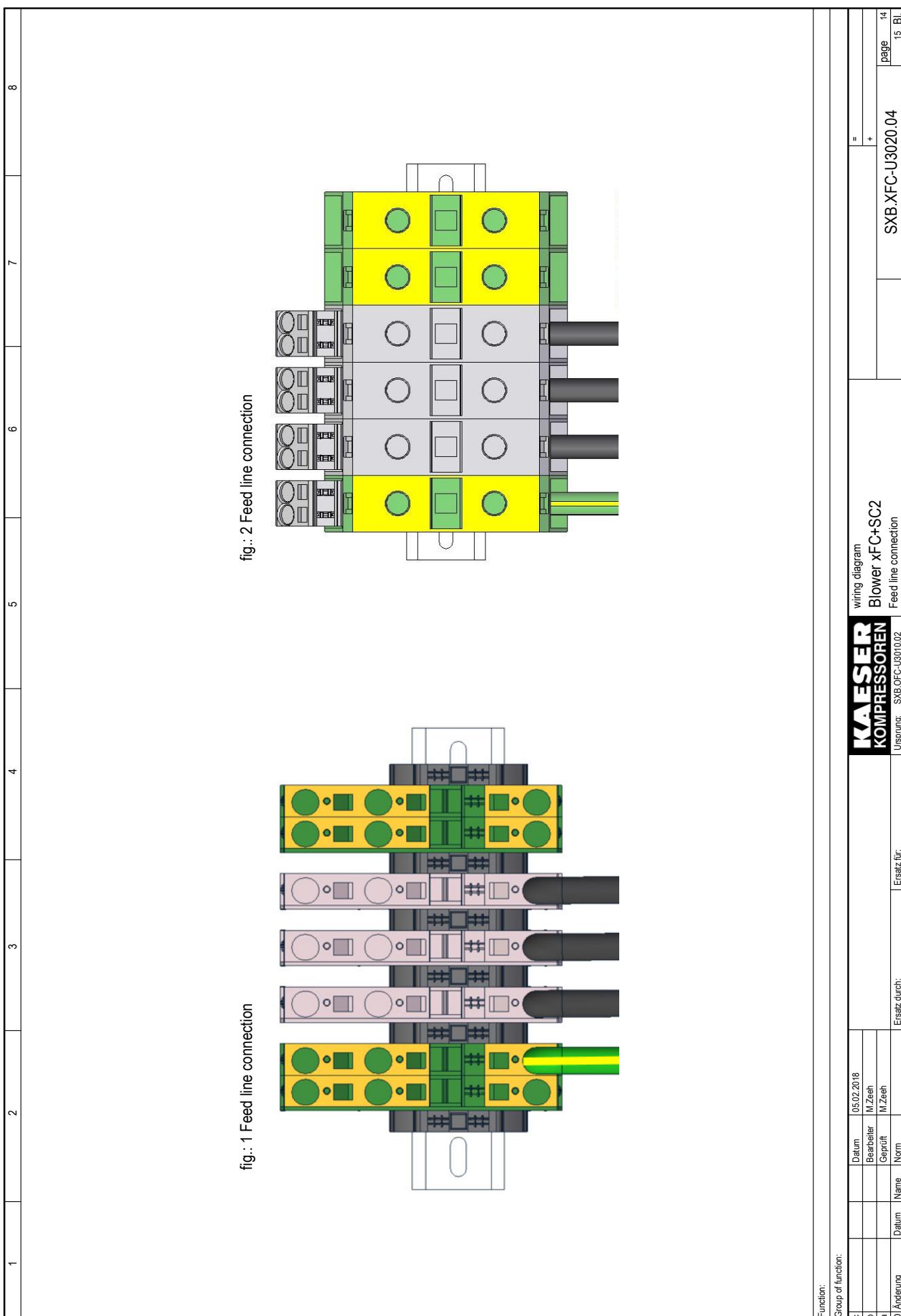
fig.: 3 Handling supply terminals



Function:
Group of function:
c
b
a
D Änderung

	wiring diagram		=
	Blower xFC+SC2		+
	Handling terminals		
	SXB,XFC-U3020.04		page 13

15 Bl.



88

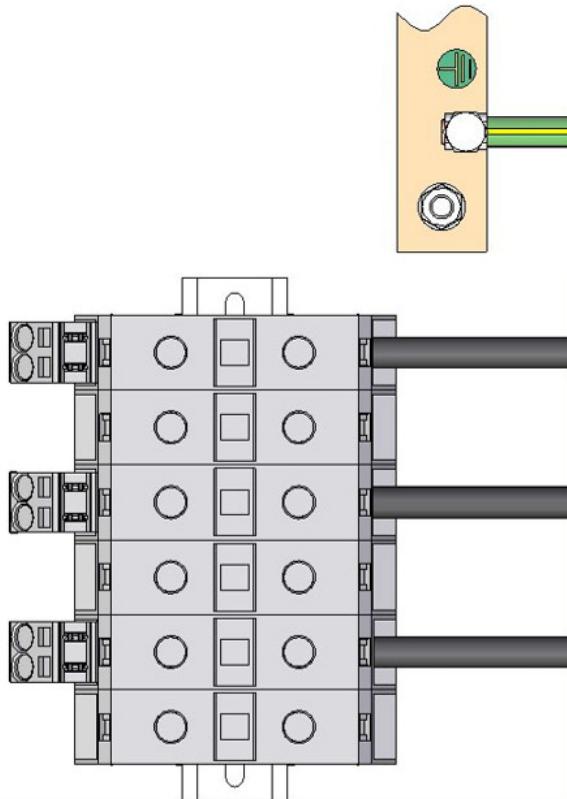
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6

5

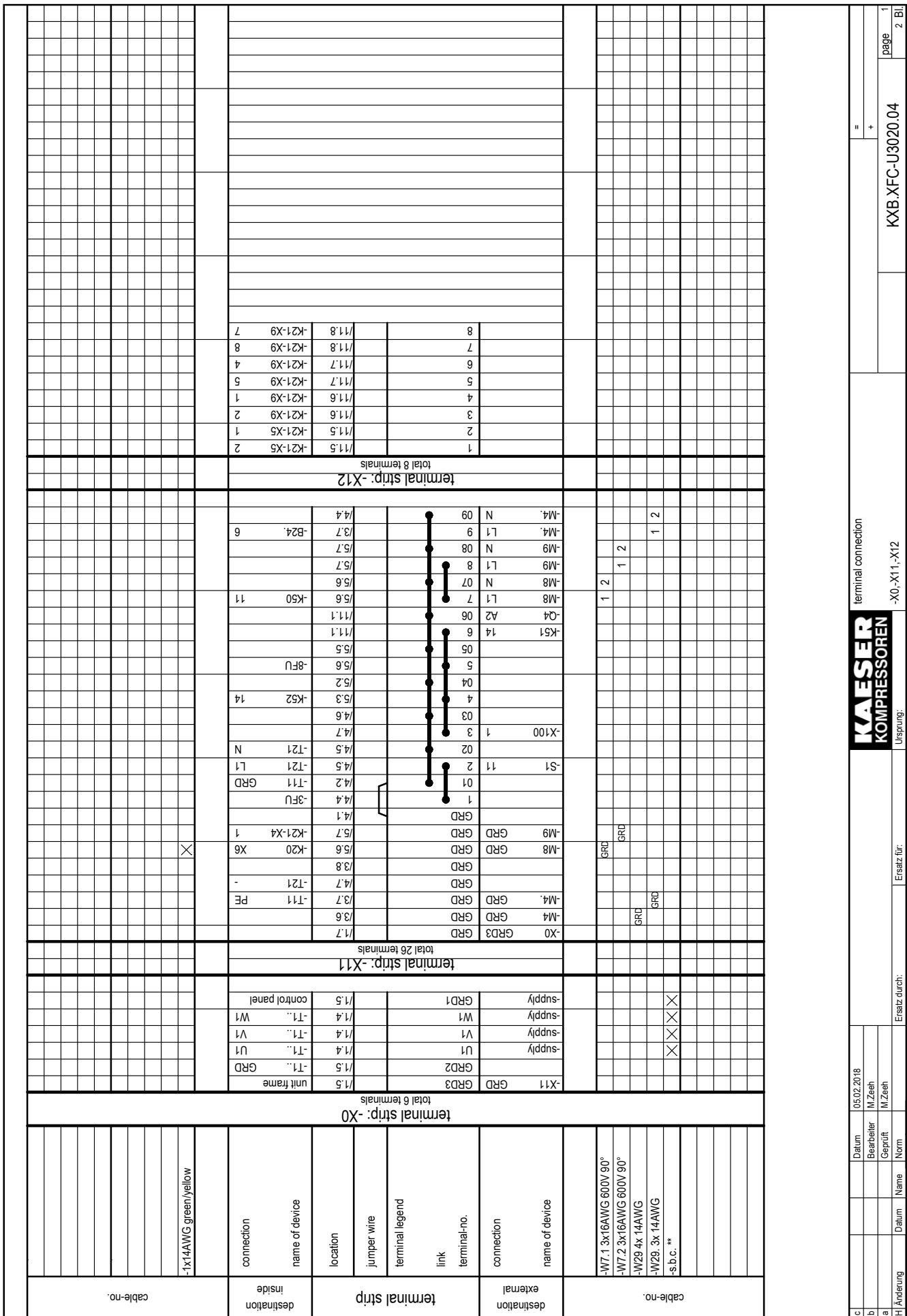
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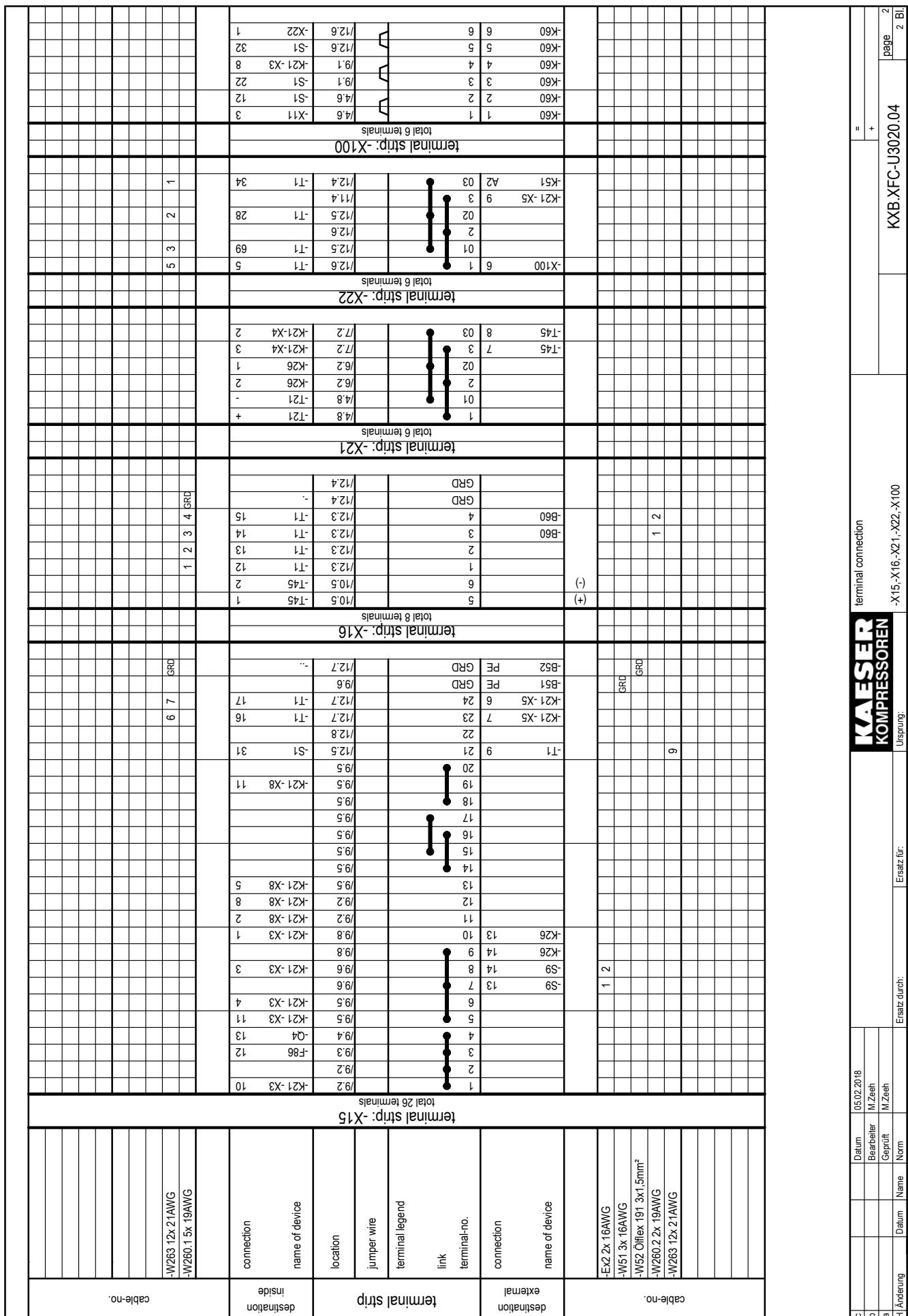
Fig.: 3 Feed line connection

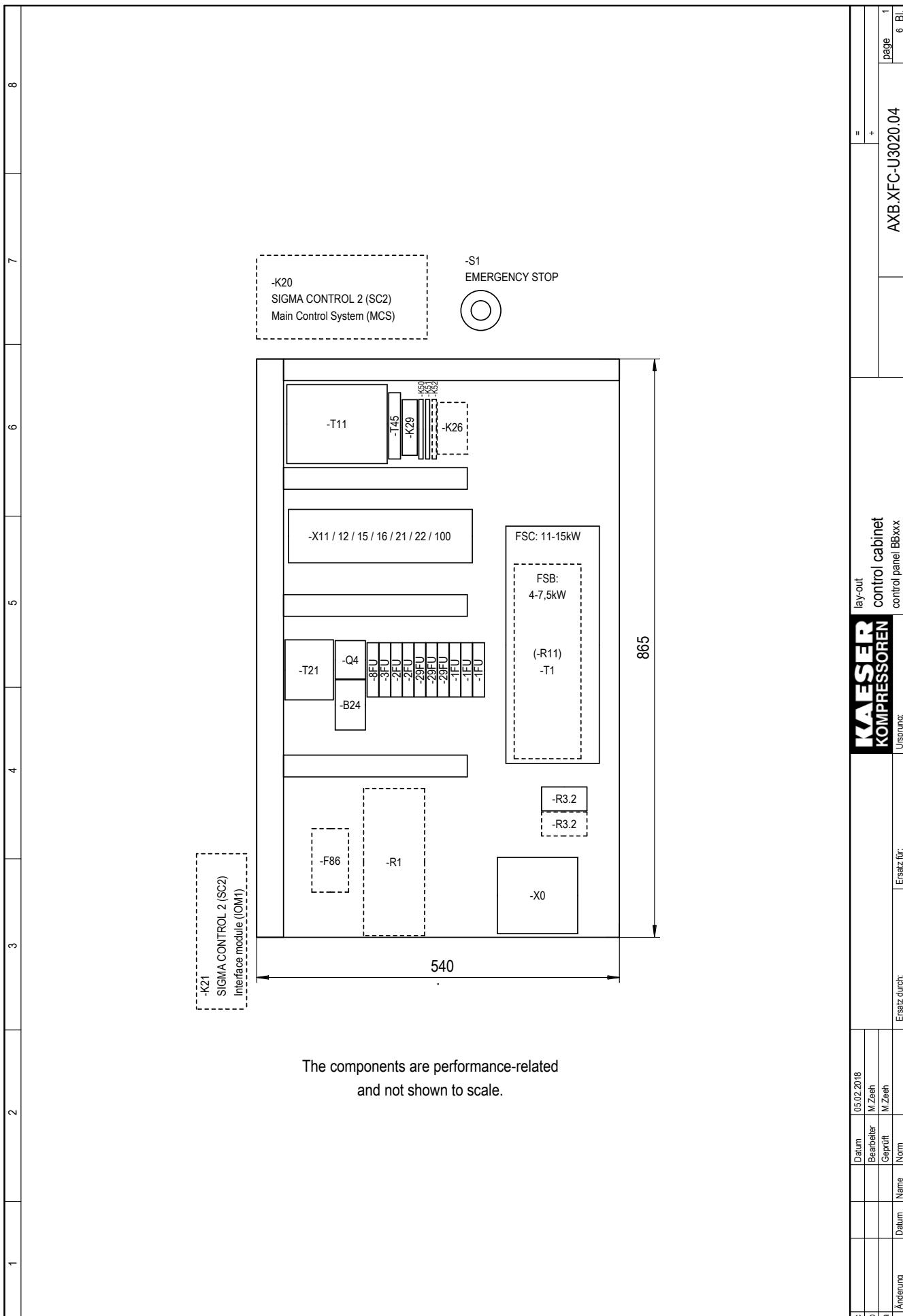


Function:

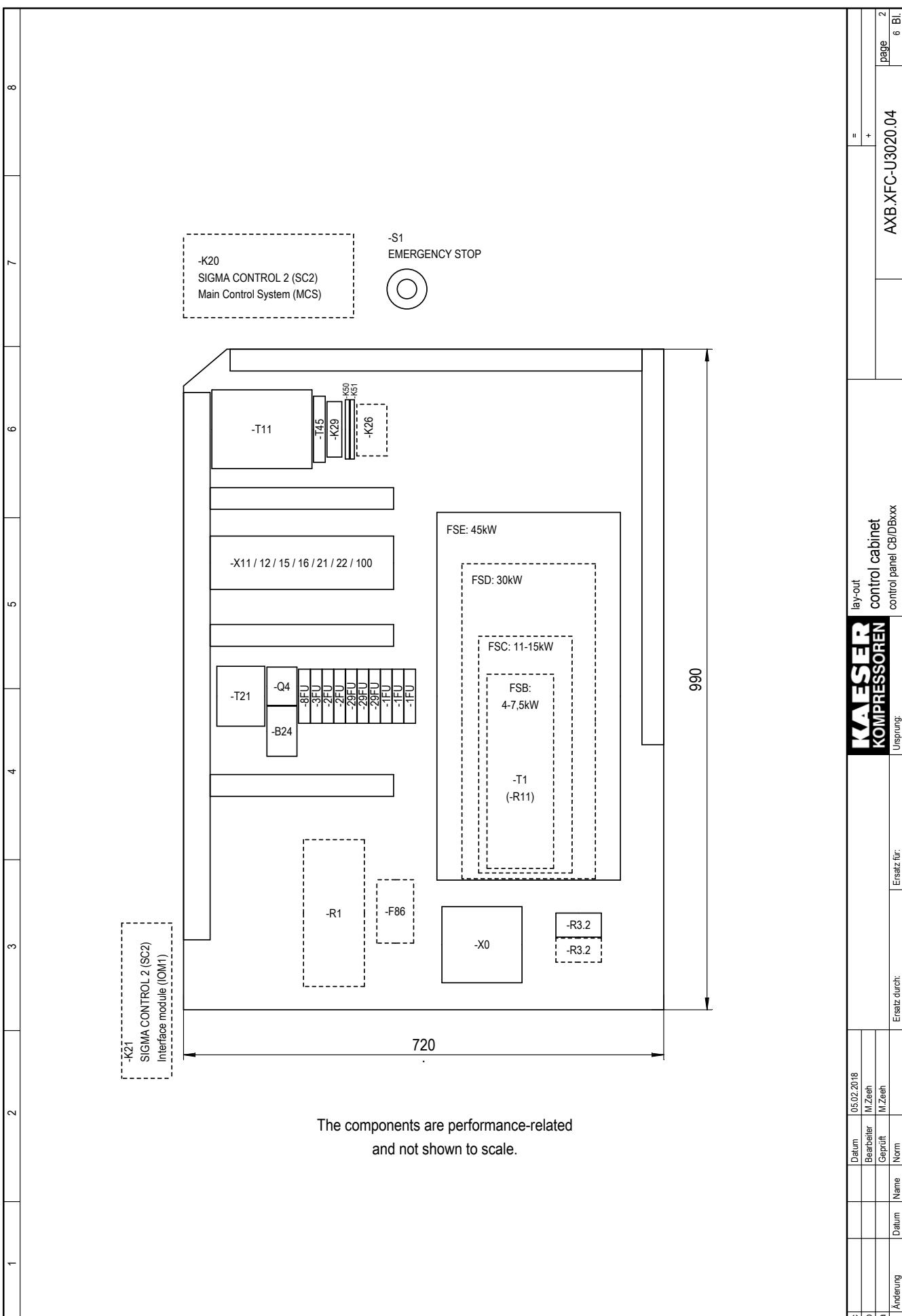
Group of function:			
;	;	Datum	05.02.2018
)	Beauftragter	M.Zeeh
	)	Geprüft	M.Zeeh
	)	Name	Norm
	)	Ersatz durch:	
	)	Ersatz für:	
KAESER KOMPRESSOREN		wiring diagram Blower xFC+SC2 Feed line connection	= +
		SXB.XFC-U3020.04	page 15 15 Bi.
		Ursprung: SXB0FC-U3010.02	

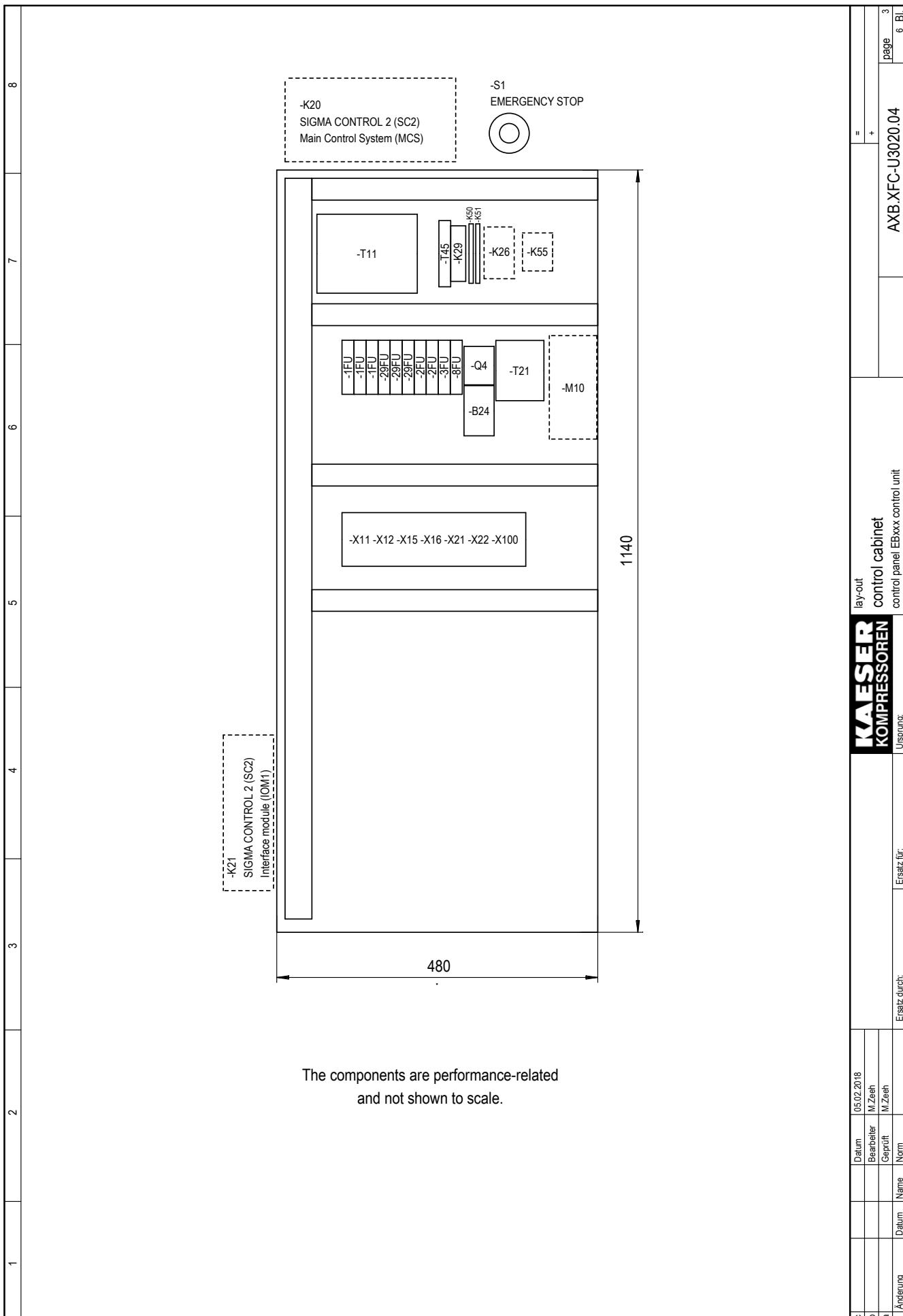


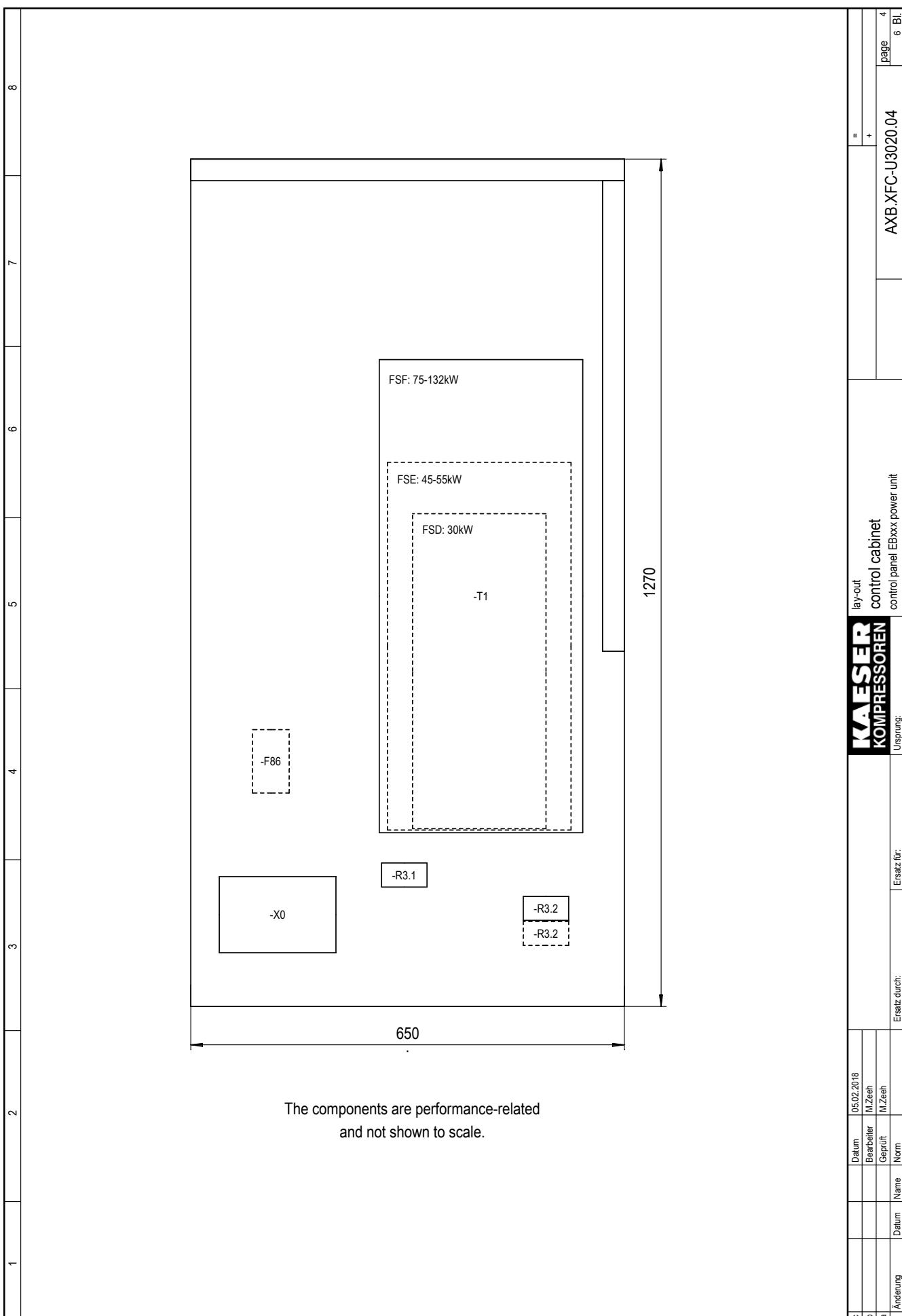


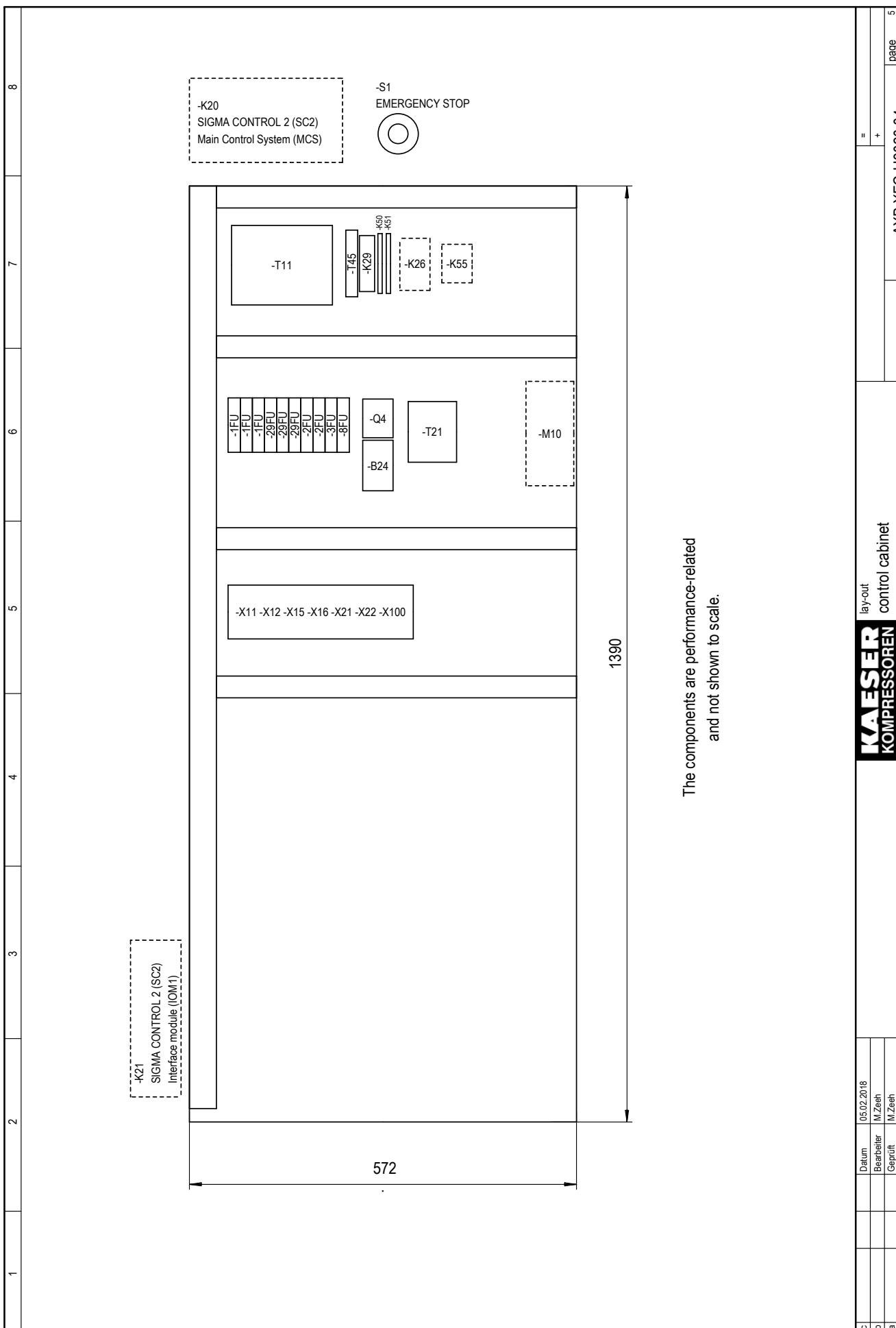


The components are performance-related and not shown to scale.



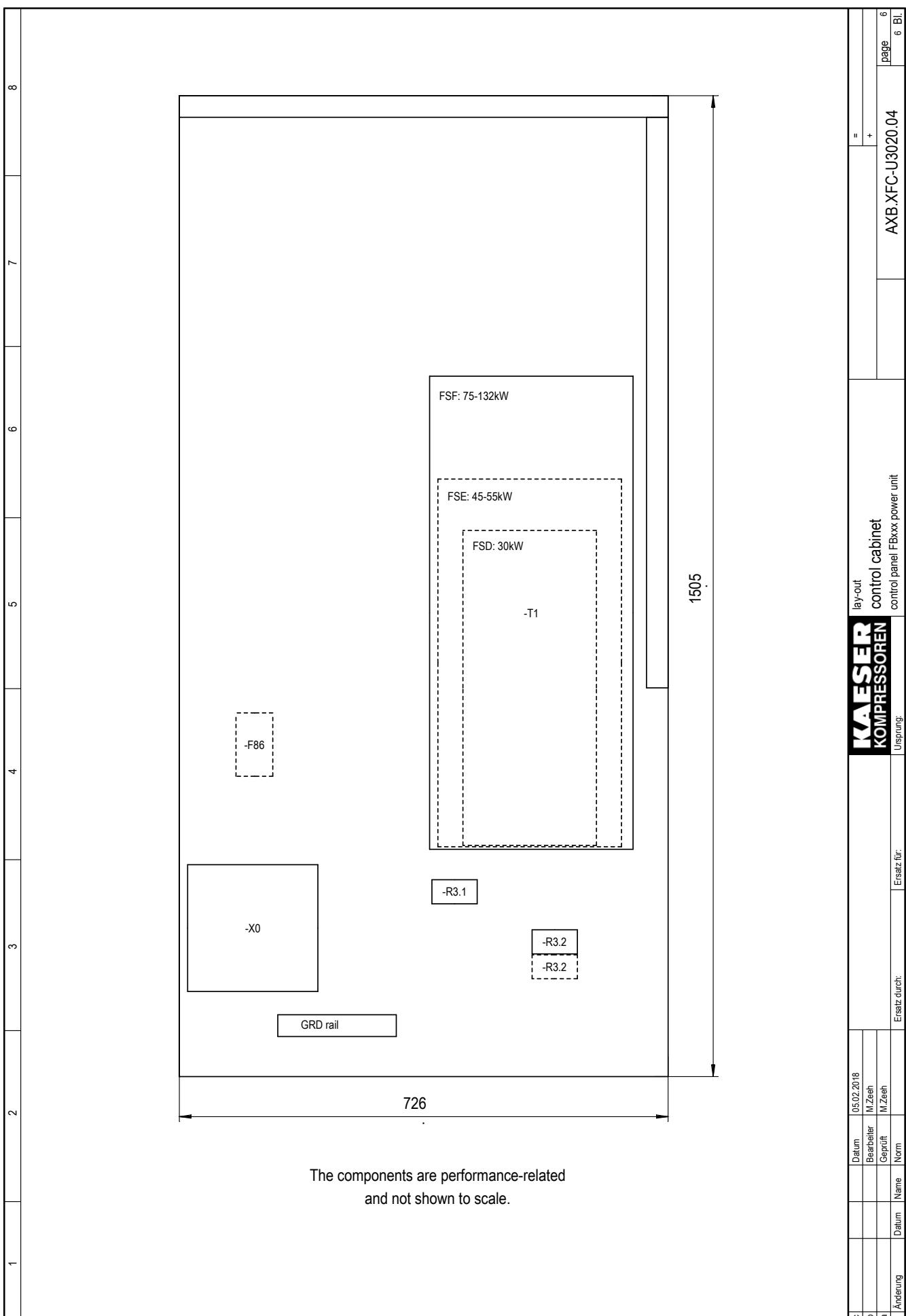






The components are performance-related
and not shown to scale.

Änderung	Datum	Name	Norm	Ersatz für:	Ersatz durch:	Ursprung:	KAESER	control cabinet	control panel FBxxx control unit	AXBXFC-U3020 04	page 5
							KOMPRESSOREN				



13.5 Project planning data