Operating manual

Rotary screw blower

FBS pr SIGMA CONTROL 2

No.: 902319 04 USE

Manufacturer:

KAESER KOMPRESSOREN SE

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KAESER KOMPRESSOREN

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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 stand and at the left side wall 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 2.12.2 (Option C38).

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 screw blower	
Part 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?
SIGMA FREQUENCY CONTROL (SFC)	C38	
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)

	Weight [lb]		
Rated power [hp]	FBS 660 L pr	FBS 660 M pr	—
40.0	4636	4636	—
50.0	4680	4680	—
60.0	4735	4735	—
75.0	5121	5121	—
100.0	5297	5297	—
125.0	5573	5573	—
150.0	5716	5716	—
—	—	—	—
—	—	—	—

Tab. 5 START CONTROL (STC) weight

2.3.2 Option C38 SIGMA FREQUENCY CONTROL (SFC)

	Weight [lb]		
Rated power [hp]	FBS 660 L pr	FBS 660 M pr	—
40.0	—	—	—
50.0	—	—	—
60.0	4841	4841	—
75.0	5293	5293	—
100.0	5469	5469	—
125.0	5751	5751	—
150.0	5917	5917	—
—	—	—	—
—	—	—	—

Tab. 6 Weight SIGMA FREQUENCY CONTROL (SFC)

2.4 Drive motor

➢ Copy the data from the motor nameplate or service plate into the table:

Feature	Value
Enclosure protection	IP55
Motor bearing re-greasing interval *[h]	2000
Grease requirement, each bearing [g]	

h = operating hours

* The lubricating interval is max. 2000 h, even if a longer interval is indicated on the motor service plate.

Tab. 7 Drive motor

2.5 Recommended oil

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

	SIGMA FLUID	
	G-680	FGB-680
Description	Synthetic oil	Synthetic oil

	SIGMA FLUID	
	G-680	FGB-680
Application	Suitable for all applications, except food processing.	Specifically for machines in applications where the compressed air may come into contact with food products.

Tab. 8 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.

2.6 Lubricating oil charge

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

Guide value

	Drive-end	Gear-end
Lubricating oil charge [qt]	1.0 ±15 %	2.0 ±15 %

Tab. 9 Lubricating oil charge

2.7 Working pressure

Undershooting of the minimum working pressure, or overshooting of the maximum working pressure is not permitted. The working pressures during the start and shut-down phases are exceptions. The specified values apply to 14.5 psi of inlet pressure.

	FBS 660 L pr	FBS 660 M pr
Minimum pressure differential [psi]	2.2	4.4
Maximum pressure differential [psi]	9.4	16.0

Tab. 10 Working pressure

2.8 Temperature

	FBS 660 L pr	FBS 660 M pr	—
Maximum block discharge temperature [°F]	257	320	—
Maximum temperature differential [K] *	80	115	—
*Discharge temperature minus inlet temperature			

Tab. 11 Temperature

2.9 Ambient and intake conditions

The following conditions must be maintained:

- No salty atmosphere in the immediate vicinity of the machine.
- The air must be free of chemicals or explosive substances.

	FBS 660 L pr	FBS 660 M pr	—
Permissible ambient temperature [°F]	32 – 113	32 – 113	—
Permissible intake temperature [°F]	5 – 113	5 – 113	—
Relative humidity [%]	0 – 80	0 – 80	—
Maximum altitude AMSL [ft.]	3281	3281	—

Tab. 12 Ambient and intake conditions

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

2.10 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.

2.11 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.

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

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.

2.12 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.

2.12.1 Option C33 START CONTROL (STC)

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

Rated power [hp]	40.0	50.0	60.0	75.0	100.0	125.0	150.0	—	—
Backup fuse [A]	—	—	—	—	—	—	—	—	—
Supply line [AWG]	—	—	—	—	—	—	—	—	—

Rated power [hp]	40.0	50.0	60.0	75.0	100.0	125.0	150.0	—	—
Current consumption [A]	—	—	—	—	—	—	—	—	—

Tab. 13 Connection data 208V±10% / 3 / 60Hz

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

Rated power [hp]	40.0	50.0	60.0	75.0	100.0	125.0	150.0	—	—
Backup fuse [A]	—	—	—	—	—	—	—	—	—
Supply line [AWG]	—	—	—	—	—	—	—	—	—
Current consumption [A]	—	—	—	—	—	—	—	—	—

Tab. 14 Connection data 230V±10% / 3 / 60Hz

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

Rated power [hp]	40.0	50.0	60.0	75.0	100.0	125.0	150.0	—	—
Backup fuse [A]	70	80	100	110	150	175	225	—	—
Supply line [AWG]	1x 4x4	1x 4x3	1x 4x2	1x 4x1/0	1x 4x3/0	2x 4x2	2x 4x1/0	—	—
Current consumption [A]	57.1	68.1	82.1	98.1	128.1	153.1	187.1	—	—

Tab. 15 Connection data 460V±10% / 3 / 60Hz

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

Rated power [hp]	40.0	50.0	60.0	75.0	100.0	125.0	150.0	—	—
Backup fuse [A]	50	60	70	80	125	150	175	—	—
Supply line [AWG]	1x 4x6	1x 4x4	1x 4x3	1x 4x2	1x 4x1/0	1x 4x3/0	2x 4x2	—	—
Current consumption [A]	43.3	51.8	57.8	69.8	102.8	121.0	149.8	—	—

Tab. 16 Connection data 575V±10% / 3 / 60Hz

2.12.2 Option C38 SIGMA FREQUENCY CONTROL (SFC)

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]	40.0	50.0	60.0	75.0	100.0	125.0	150.0	—	—
Backup fuse [A]	60	70	90	100	150	175	225	—	—
Supply line [AWG]	1x 4x4	1x 4x2	1x 4x2	1x 4x1/0	1x 4x2/0	1x 4x3/0	2x 4x1/0	—	—
Current consumption [A]	51.3	61.6	74.9	90.6	120.3	144.9	186.1	—	—
Power factor [λ] (lambda)	0.900	0.917	0.920	0.920	0.920	0.920	0.886	—	—

Tab. 17 Connection data 460V/ 3 / 60Hz

2.13 Options

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

2.13.1 Option C5 Oil level monitoring

Feature	Data
Max. voltage [V]	48
Switching current [A]	0.5
Switching capacity [hp]	0.03
Type of contact	Normally closed
Degree of protection	IP67

Tab. 18 Oil level monitoring (Option C5)

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

2.13.2 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

Feature	Data
Enclosure protection	IP 67
Connection	M12
Working principle	Inductive

Tab. 19 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. 20 Speed monitor sensor (Option C10)

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

2.13.3 Option C11 Unloaded start valve

Model	AFEM 45	AFEM 90
Permissible pressure [psi] (a)	0 – 29	0 – 29
Maximum flow rate [cfm]	1589	3178
Nominal width (DIN ISO 228–1)	G 4 A	DN 150
Voltage [V]	24	24

Tab. 21 Unloaded start valve (Option C11)

2.13.4 Option C18 Unloaded start valve with regulating valve

Model	AFERM 45	AFERM 90	AFR 45	AFR 90
Permissible pressure [psi] (a)	0 – 29	0 – 29	0 – 29	0 – 29
Maximum flow rate [cfm]	1589	3178	1589	3178
Maximum pressure differential [psi]	13.8	13.8	13.8	13.8
Nominal width (DIN ISO 228–1)	G 4 A	DN 150	G 4 A	DN 150

Model	AFERM 45	AFERM 90	AFR 45	AFR 90
Control line Connection (DIN ISO 228–1)	R 1/8 A	R 1/8 A	R 1/8 A	R 1/8 A
Voltage [V]	24	24	—	—

Tab. 22 Unloaded start valve with regulating valve (Option C18)

2.13.5 Option C39 Oil temperature monitoring

Feature	Data
Measuring element	PT100
Measuring range [°F]	-58 – +392
Connection	M12x1 circular connection
Switching type	2-conductor switching
Process connection [“]	G 1/4 screw-in thread

Tab. 23 Oil temperature monitoring (Option C39)

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

2.13.6 Option G1 Check valve

Nominal pipe size	Max. pressure and back pressure [psi]
DN 200	21.8
—	—

Tab. 24 Check valve (Option G1)

2.13.7 Option H11 Piped inlet

The dimensional drawings in chapter 13.2 include connection dimensions.

2.13.8 Option H12 Fan (sound enclosure)

Feature	Value
Maximum flow rate [cfm]	3396

Tab. 25 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 even 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/tag 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 safety relief valve control rod is blown upward with great force.
- ➢ Do not carry out welding, heat treatment or mechanical modifications on pressurized components, as this adversely affects 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 or the belt drive while the machine is switched on can result in serious injury.

- ➢ Do not remove separating protective installations when the machine is running.
- ➢ Switch off and lock out/tag out the power supply isolating 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 work 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 absorbs and reduces the machine noise to a tolerable level. This function will be effective only if the sound enclosure is closed.

- ➢ Wear ear protection if necessary.
  Safety relief valve blow off results in high noise emission.

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 to or of the machine can result in unpredictable hazards.

➢ Do not convert or modify the machine!

➢ Obtain the written approval of the manufacturer prior to any technical modification and expansions of the machine.

Extending or modifying the compressed air station

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

➢ When extending or modifying the compressed air station:
Check the blow off capacity of the safety relief valves prior to installing the new machine.

➢ If the blow off capacity is insufficient:
Install safety relief valves with larger blow off 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.
- ➢ 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.
- ➢ 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. 26 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. 27 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 C38, SIGMA FREQUENCY CONTROL (SFC):
  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 28 lists the various safety signs used and their meanings.

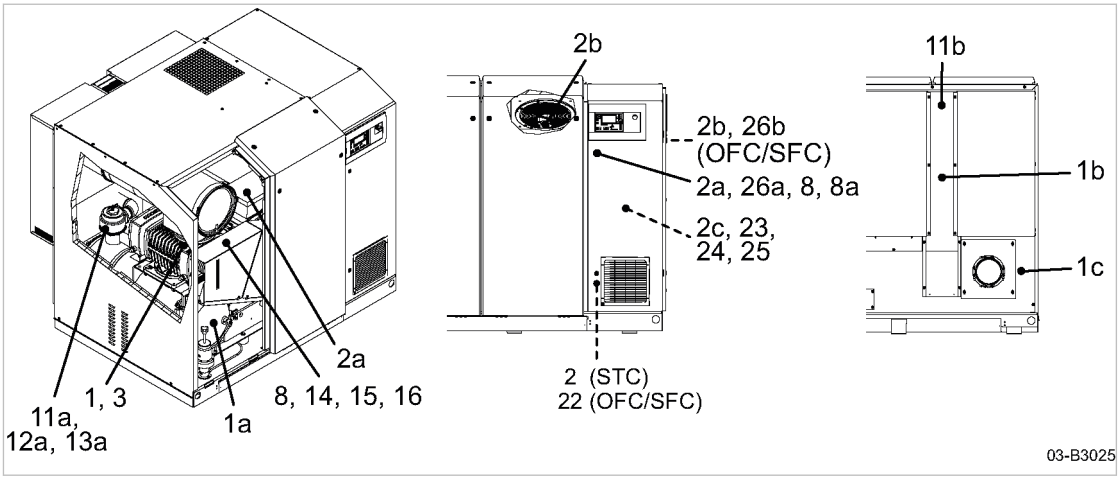


Fig. 3 Location of the safety signs on the machine

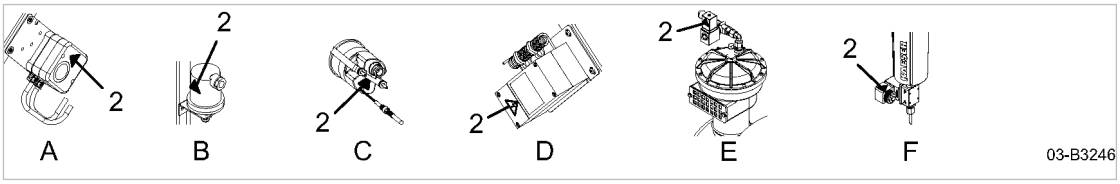


Fig. 4 Safety sign location, electronically actuated components

- Ⓐ Filter differential pressure switch
- Ⓑ Pressure switch
- Ⓒ Temperature display with switching point
- Ⓓ Thermostat
- Ⓔ Magnetically actuated valve
- Ⓕ Oil chamber ventilation

Location	Symbol	Meaning
1 1a 1b 1c		Hot surface can cause burns! ➢ Let the machine cool down. ➢ Wear long-sleeved garments (not synthetics such as polyester) and protective gloves.
2 2a 2b 2c		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 before opening any machine enclosure or guard.
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! ➢ Read and understand the service manual and all safety signs before switching on this machine.

Location	Symbol	Meaning
8a		Machine starts automatically! Severe injury can result from rotating components, electrical voltage, and air pressure. ➢ 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.
11a 11b		Hot gas! Burning, from contact with hot gasses. ➢ Do not enter danger zone. ➢ Wear long-sleeved garments (not synthetics such as polyester) and protective gloves.
12a		Serious injury or death can result from loosening or opening component that is under pressure and heavily spring loaded! ➢ Do not open or dismantle the valve. ➢ Contact an authorized KAESER service representative if a fault occurs.
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.

Location	Symbol	Meaning
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. 28 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

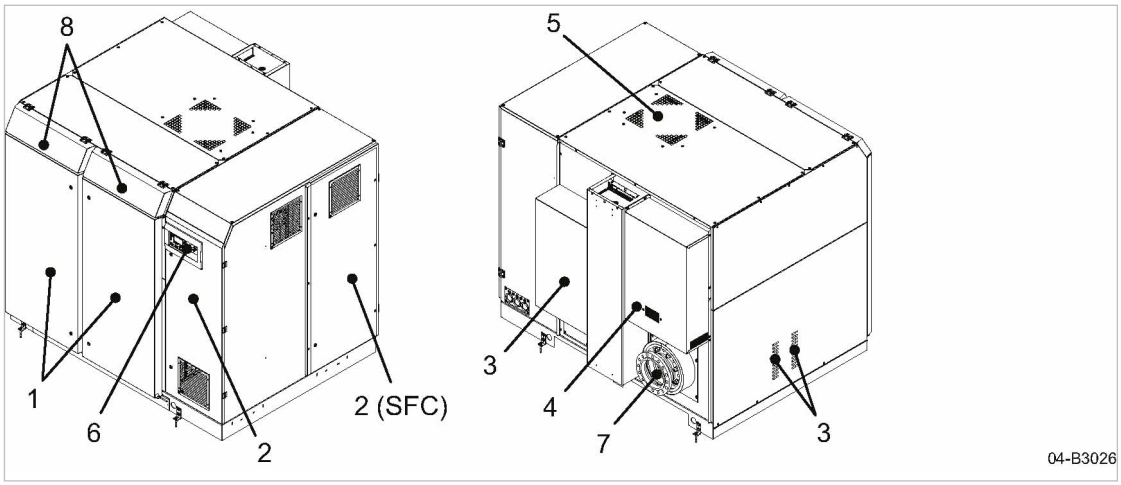


Fig. 5 Enclosure overview

1	Access doors	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	8	Cover with two flaps

The motor fan draws cooling air through the cooling air 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. The warm air is blown out in order to prevent 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 access doors 1 and a cover with two flaps 8 that can be opened.

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:

- Persons walking, standing or sitting on the machine.
- Use as a resting place or storage of any kind of load.

4.2 SIGMA CONTROL 2 operating panel

4.2.1 Keys

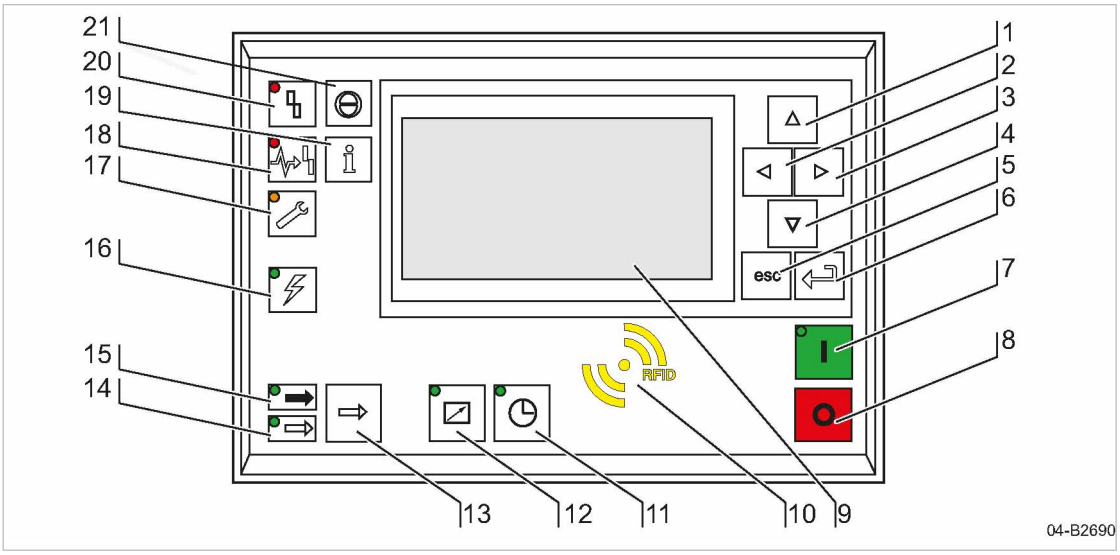


Fig. 6 Indicating and operating elements

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.
19	«Information & Events»	Displays the event memory.
21	«Reset»	Signifies recognition of alarms and warning messages. If permissible: Resets the fault counter (RESET).

Tab. 29 Controls

4.2.2 LEDs

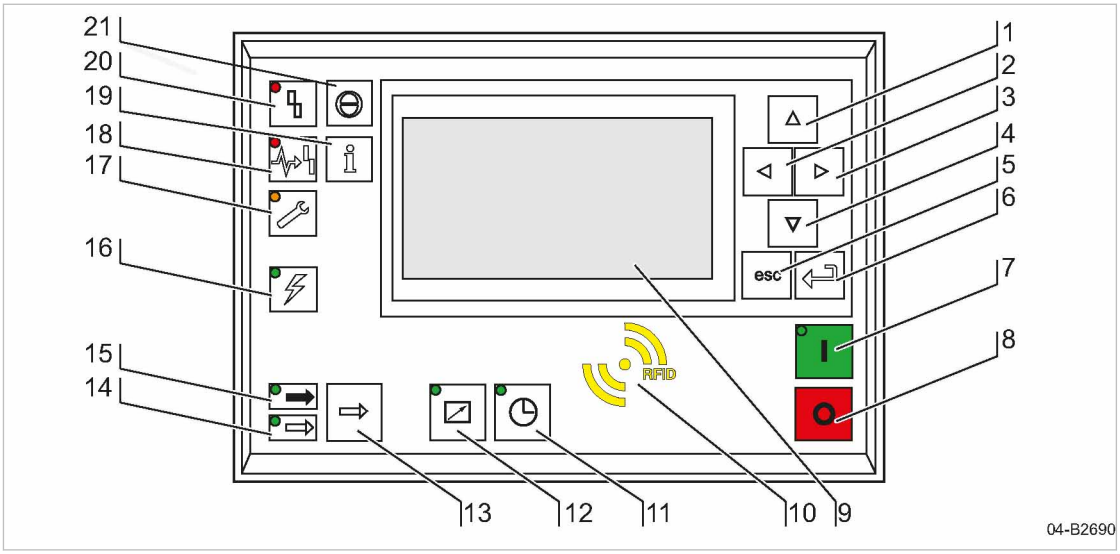


Fig. 7 Indicating and operating elements

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

Tab. 30 Display elements

4.2.3 RFID sensor field

RFID is the abbreviation for “**R**adio **F**requency **I**dentification” 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.

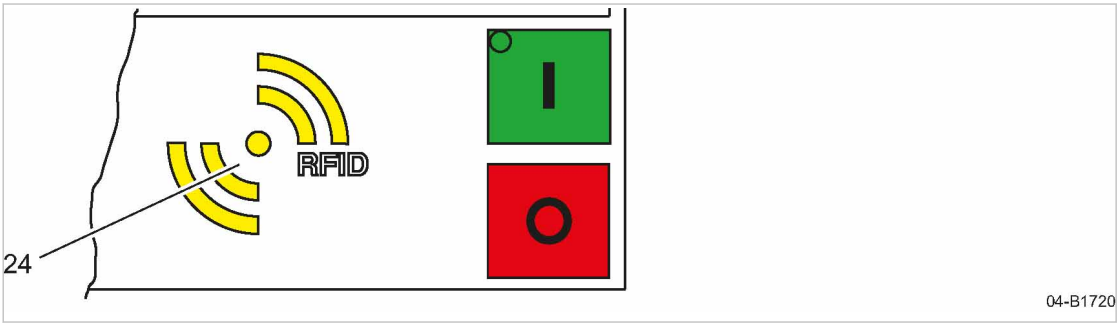


Fig. 8 RFID sensor field

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

Tab. 31 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

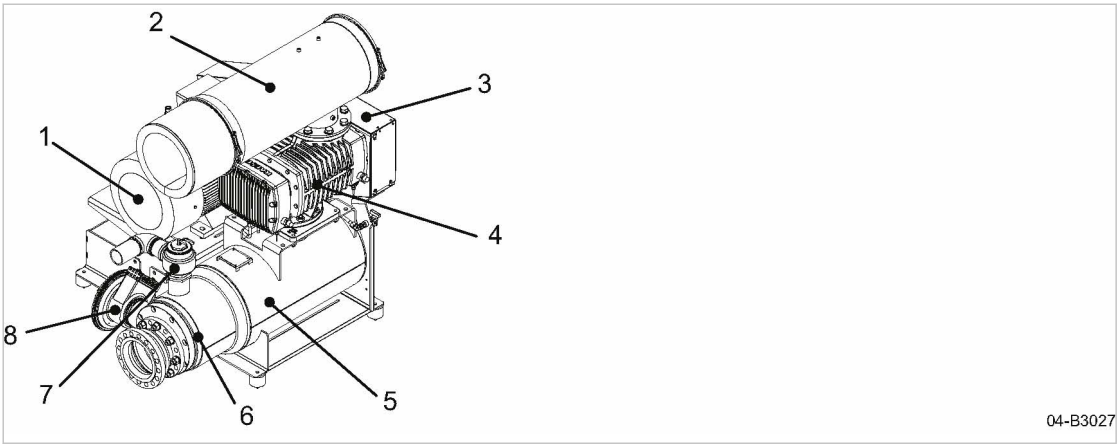


Fig. 9 Machine

1 Drive motor
2 Inlet silencer
3 Belt guard
4 Blower block
5 Outlet silencer
6 Check valve (option G1)
7 Safety relief valve
8 Unloaded start valve or unloaded start valve with regulating valve (option C11, C18)

The motor 1 drives the blower block 4 via belts.

Air is drawn into the inlet silencer [2] through an air filter where it is cleaned.

The air is then transported through the blower block vertically into the outlet silencer [5], where the process forces pressure build-up.

4.4 Blower block

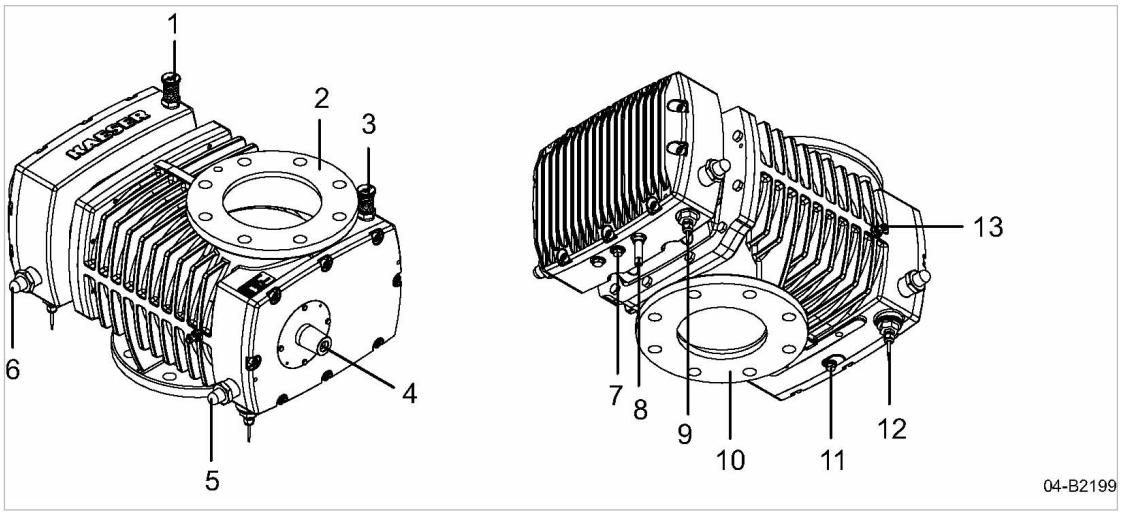


Fig. 10 Blower block

[1] Gear-end oil inlet
[2] Flange connection, intake side
[3] Drive-end oil inlet
[4] Drive shaft
[5] Drive-end oil sight glass
[6] Gear-end oil sight glass
[7] Oil drain connection, gear side
[8] Oil temperature monitoring
[9] Oil level monitoring, gear side
[10] Flange connection, pressure side
[11] Oil drain connection, drive side
[12] Oil level monitoring, drive side
[13] Speed monitoring connection (optional)

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 is trapped between the rotors and the casing and moved round to the discharge side.

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 (blow-off valve) protects the system from excessive pressure. It is factory set.

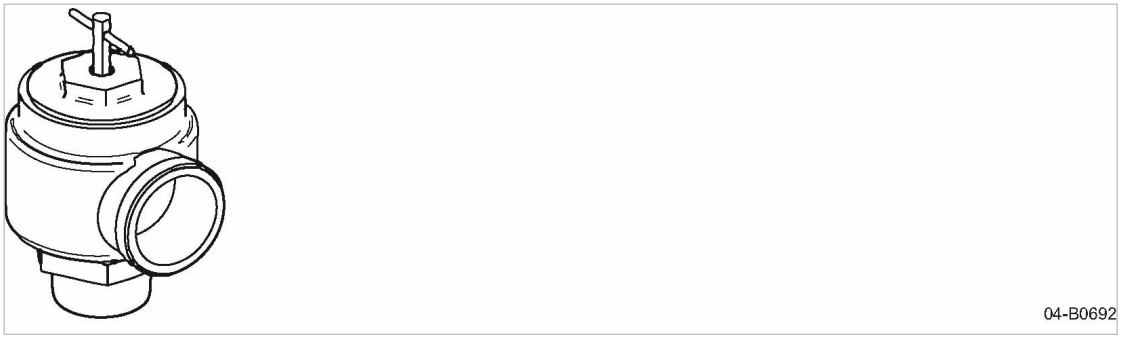


Fig. 11 Safety relief valve (blow-off valve)

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.

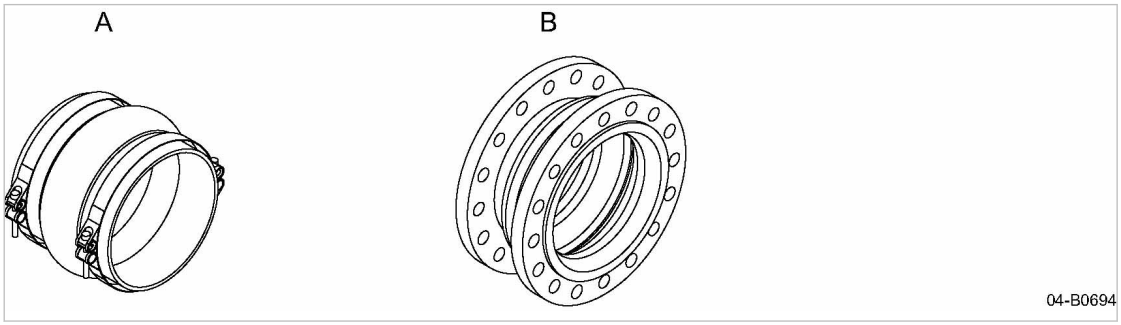


Fig. 12 Compensator

[A] Compensator, at intake end (in Option H11)
[B] Compensator, at pressure end

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 C5 Oil level monitor

The oil level switch monitors the lubricant level of the blower block.

Two float-type level sensors monitor the level of oil in the drive and gear-end oil chambers. If the oil level falls below the minimum level, a switching contact is opened.

The controller registers the signal, displays an alarm message and shuts down the machine.

4.10.2 Option C10 Speed monitor

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

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

4.10.3 Option C11 Unloaded start valve

The unloaded start valve prevents the machine starting against a load in the star-delta phase. The valve closes when the motor starter switches from star (Y) to delta (Δ).

The unloaded start valve is factory set.

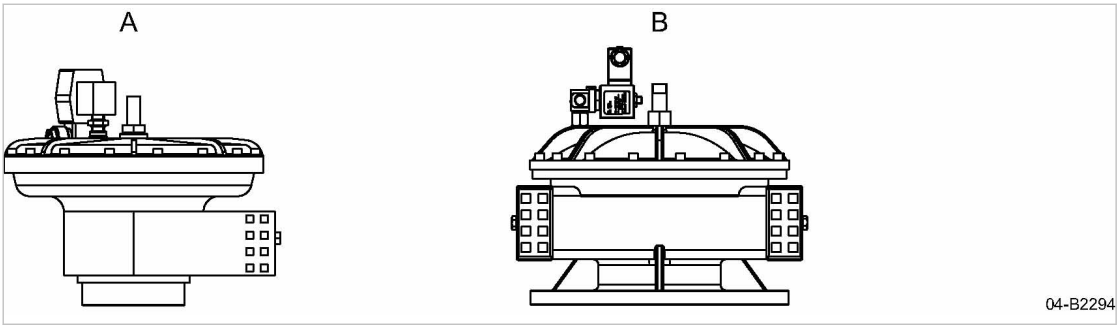


Fig. 13 Unloaded start valve

[A] AFEM 45
[B] AFEM 90

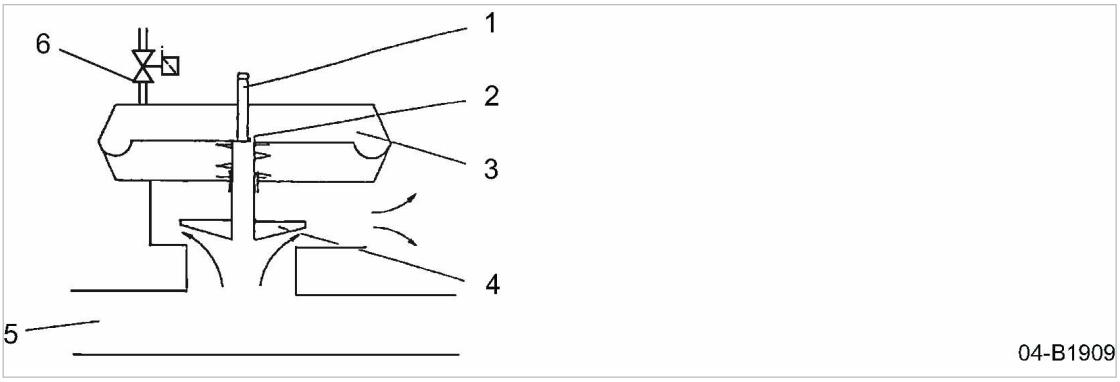


Fig. 14 Diagram of the unloaded start valve

[1] Adjustment screw with counter nut against the housing cover
[2] Nozzle
[3] Diaphragm chamber
[4] Valve cone
[5] Pressure silencer with valve connection
[6] Solenoid valve (open when de-energized)

The unloaded start function only works if the pressure in the air network reaches at least 2.2 psi.

4.10.4 Option C18
Unloaded start valve with regulating valve

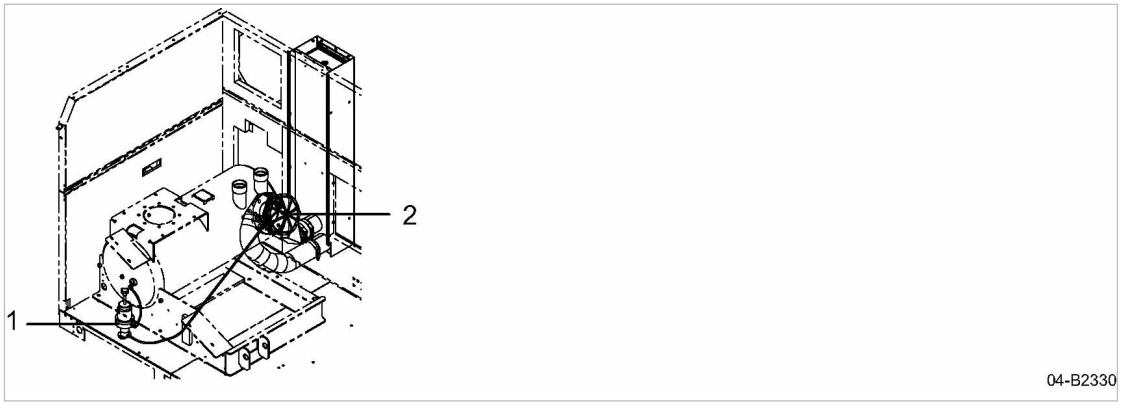


Fig. 15 Unloaded start valve with regulating valve

[1] Control air regulator
[2] Regulating valve

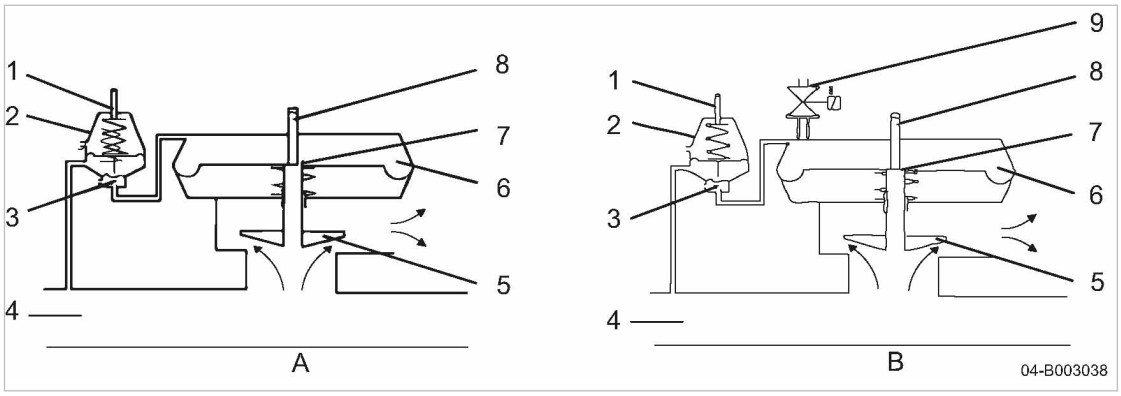


Fig. 16 Diagram of the unloaded start valve with regulating valve

[A] AFR 45, AFR 90
[B] AFERM 45, AFERM 90
[1] Adjustment screw with star knob control air regulator
[2] Control air regulator body
[3] Nozzle in the control air regulator
[4] Pressure silencer with valve connection
[5] Valve cone
[6] Diaphragm chamber
[7] Nozzle
[8] Adjustment screw with counter nut against the housing cover
[9] Solenoid valve

Overflow regulation

If the control air regulator reacts, the diaphragm chamber is relieved and the valve cone lifts.

The activating pressure of the control air regulator must be set to the regulating pressure specified in the order documentation.

If the order documentation does not specify a regulating pressure, you must set this value to the working pressure of the machine.

- Min. adjustable activating pressure for the control air regulator: 4.4 psi (g)
- Max. adjustable activating pressure for the control air regulator: 13.8 psi (g)

To set the system pressure, loosen the counter nut of the adjustment screw with star knob at the control air regulator body.
Turn the adjustment screw with star knob to change the valve opening:

- Clockwise:
  Increases the pressure at which the regulating valve opens; increased system pressure.
- Counterclockwise:
  Reduces the pressure at which the regulating valve opens; lower system pressure.

After the adjustment, secure the adjustment screw with star knob by tightening the counter nut.

Option C33 START CONTROL (STC): Unloaded starting

The unloaded starting function is factory-set.

The unloaded start function only works if the pressure in the air network reaches at least 2.2 psi.

4.10.5 Option C39 Oil temperature monitoring

The Pt100 sensor of the oil temperature monitoring continuously records the lubricant temperature at the gear side of the blower block. The machine controller evaluates the sensor. Two threshold values are pre-set.

When these threshold values are reached, the controller displays a warning or alarm message:

- Warning message at a lubricant temperature of ≥ 239°F,
  the machines does **not** shut down.
- Alarm message at a lubricant temperature of ≥ 266°F,
  the machine shuts down.

This warning or alarm message is provided as a group message for external analysis.

4.10.6 Option G1 Check valve

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

The valve is closed when the machine is at standstill.

The check valve is integrated in the outlet silencer.

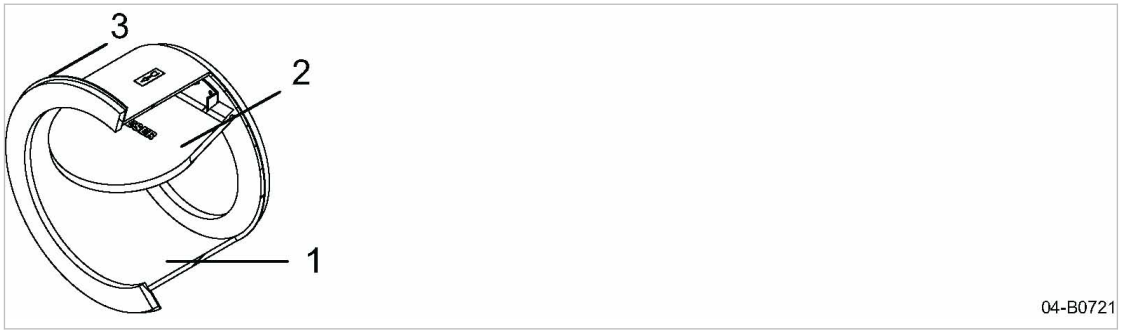


Fig. 17 Check valve

1 Enclosure
2 Closing mechanism
3 Gasket

4.10.7 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.

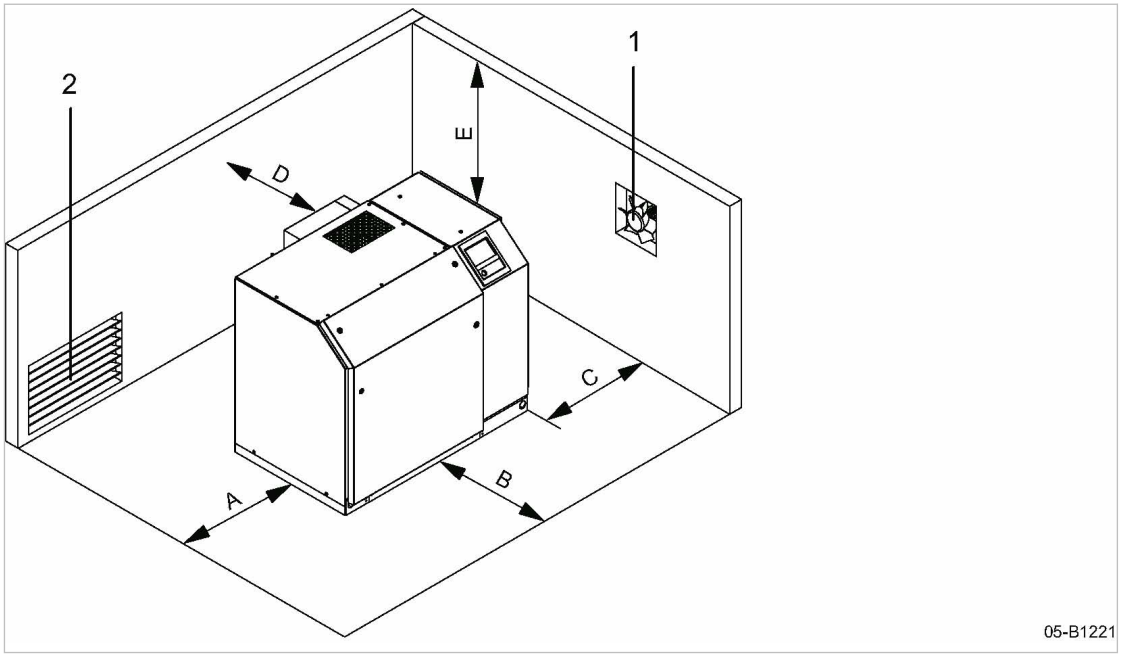


Fig. 18 Recommended positioning of the machine, minimum dimensions [in.]

A	See Table 32	E	32.0
B	51.2	1	Exhaust fan
C	See Table 32	2	Ventilation inlet air opening
D	39.4		

➢ Determine clearances A and C.

Characteristic, option	Recommended positioning of the machine, minimum dimensions
C33, START CONTROL (STC)	Distance A or C must be a minimum of 27.6 in.. Version 1: A = 2.4 in. and C = 27.6 in. Version 2: A = 27.6 in. and C = 2.4 in.
C38, SIGMA FREQUENCY CONTROL (SFC)	A = 2.4 in. C = 29.5 in.

Tab. 32 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 the instructions below for safe installation.

Warning instructions are located before a potentially dangerous task.

Disregard of warning instructions can cause serious injuries!

Complying with safety warnings

Disregard of safety warnings can cause unforeseeable dangers!

- ➢ Follow the instructions in chapter 3 “Safety and Responsibility”.
- ➢ Installation work may only be carried out by authorized personnel.
- ➢ Make sure that no one is working on the machine.
- ➢ Ensure that all service panels and doors are secured.

When working on live components

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

- ➢ Work on electrical equipment may only be carried out by authorized electricians.
- ➢ 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.

When working on the compressed air system

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

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

When working on the drive system

Touching voltage-carrying components can result in electric shocks, burns, or death.
Touching the fan wheels or the belt drive while the machine is switched on can result in serious injury.

- ➢ Switch off and lock out the power supply disconnecting device and verify the absence of voltage.
- ➢ Do not open any doors or panels while the machine is switched on.

Further information

Details of authorized personnel are found in chapter 3.4.2.

Details of dangers and their avoidance are 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 Align the blower block and secure the machine

Suitable fixings are delivered with the machine.

⚠ The foundation plan is contained in the dimensional drawing in chapter 13.2.

1. Open both service doors.

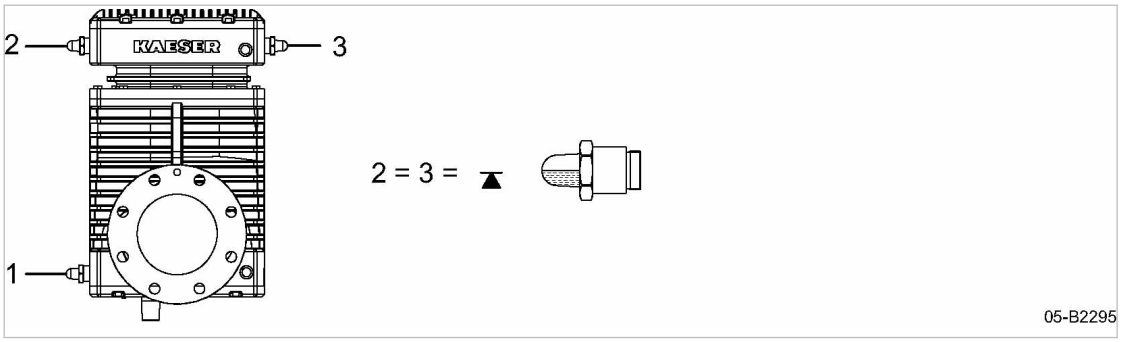


Fig. 19 Blower block (top view)

[1] Drive-end oil sight glass
[2] Gear-end oil sight glass
[3] Gear-end oil sight glass

2. Visually inspect the lubricant levels in the oil sight glasses of the gear side [2] and [3].
3. If necessary, use blocks to horizontally orient the lubricant levels of the oil sight glasses [2] and [3].
4. Use appropriate fixing bolts to anchor the machine to the floor and prevent it from shifting.
5. Close both service doors.

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 C38, SIGMA FREQUENCY CONTROL (SFC):
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 2.12.
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.
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 ±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 2.12.
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 air main 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.

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	Torque [lbf-ft]
Compressor with hose clamps	—
Compressor with screwed joint M20*	66.4
* Manually tighten screws equally, torque crosswise at 37 lbf-ft and subsequently retighten crosswise with torque according to table.	

Tab. 33 Torques for customer pipeline

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

6.6 Option H11 Connecting the inlet pipeline

If suction is to be from a 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	14.8
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. 34 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 Fitting the cover plate

A base frame cover plate is attached to the belt guard.

Fitting takes place after the machine has been installed.

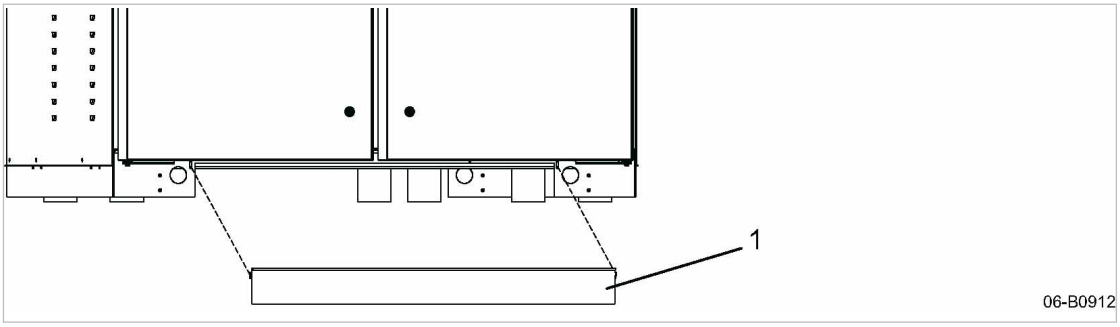


Fig. 20 Fitting the cover plate

[1] Cover plate

➢ Screw the cover plate to the base frame.

7 Initial Start-up

7.1 Ensuring safety

Follow the instructions below for safe commissioning of the machine.
Warning instructions are located before a potentially dangerous task.

⚠ Disregard of warning instructions can cause serious injuries!

Complying with safety warnings

Disregard of safety warnings can cause unforeseeable dangers!

- ➢ Follow the instructions in chapter 3 “Safety and Responsibility”.
- ➢ Installation work may only be carried out by authorized personnel.
- ➢ Make sure that no one is working on the machine.
- ➢ Ensure that all service panels and doors are secured.

When working on live components

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

- ➢ Work on electrical equipment may only be carried out by authorized electricians.
- ➢ 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.

When working on the compressed air system

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

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

When working on the drive system

Touching voltage-carrying components can result in electric shocks, burns, or death.
Touching the fan wheels or the belt drive while the machine is switched on can result in serious injury.

- ➢ Switch off and lock out the power supply disconnecting device and verify the absence of voltage.
- ➢ Do not open any doors or panels while the machine is switched on.

Further information Details of authorized personnel are found in chapter 3.4.2.
Details of dangers and their avoidance are 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	➢ Change the lubricating oil. ➢ Re-grease the drive motor bearings if they are not of the permanently-greased type. ➢ 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	➢ Have the overall technical condition checked by an authorized KAESER service representative.

Tab. 35 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 positioning conditions been fulfilled?	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?	2.12	
➢ Is a user-supplied lockable power supply disconnecting device installed?	6.4	
➢ Has the control cabinet connection been checked?	6.4	
➢ Has a suitable check valve been installed professionally?	6.5	
➢ Has the connection to the compressed air network been made with a flexible hose or compensator?	6.5	
➢ Has the direction of rotation of the drive motor and fan (sound enclosure) been checked?	7.7	
➢ Have all electrical connections been checked for tightness? (This check must be repeated after 50 operating hours)	—	

To be checked	See chapter	Confirmed?
➢ Is there adequate lubricating oil in the drive-end and gear-end of the blower block? (Level in the center of the sight glass)	10.6	
➢ Has the drive belt tension been checked? (The check must be repeated after 24 operating hours)	10.5	
➢ Are all access doors closed and latched, and removable panels in place and secured? (Option H12)	4.1	

Tab. 36 Installation conditions checklist

7.4 Re-greasing the motor bearings

➢ The motor bearings of motors with re-greasing facility must be re-greased with bearing grease prior to the initial commissioning of the machine.

Further information Further information on re-greasing motor bearings can be found in chapter 10.11.1.

7.5 Configuring the controller

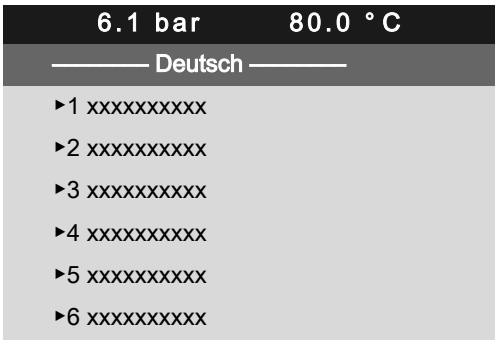
➢ Configure the controller as described in the SIGMA CONTROL 2 operating manual.

7.6 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.

7.7 Checking the direction of rotation for the drive motor

The machine is designed for a clockwise phase sequence.

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, interchange 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 valve 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.

7.8 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.

7.9 Starting the machine for the first time

Precondition No personnel are working on the machine.
The control cabinet's door is closed and locked.
All maintenance doors and panels are in place and secured.

1. Allow the machine to cool 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 *Control voltage* LED is lit continuously.
3. If required:
   Change the display language as described in chapter 7.6.
4. Press the «ON» key.
   The green *IDLE* LED is lit 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.

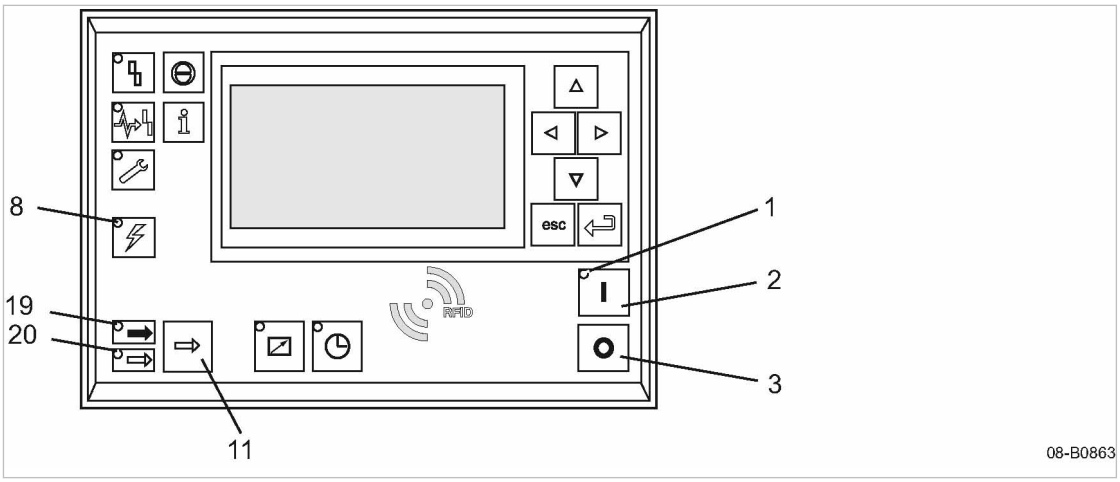


Fig. 21 Switching on and off

1 *Machine ON* LED
2 «ON» key
3 «OFF» key
8 *Controller voltage* LED
11 «LOAD/IDLE» toggle key
19 *LOAD* LED
20 *IDLE* LED

8.1.1 Switching on

Precondition No personnel are working on the machine.
No personnel inside the machine.
All access doors and removable panels are in place and secured.

1. Switch on the power supply disconnecting device.
   The *Controller voltage* LED lights green.
2. Press the «ON» key.
   The *ON* LED lights green.

Starting frequency

Option	Maximum frequency of motor starts per hour
C33, START CONTROL (STC)	■ 4 –times, 2 minutes rest period between 2 starts
C38, SIGMA FREQUENCY CONTROL (SFC)	■ any

Tab. 37 Starting frequency

➢ Adhere to maximum frequency of motor starts per hour.

Automatic restart

If a power failure occurs, the machine is **not** prevented from restarting automatically when power is resumed.
It can restart automatically as soon as power is restored.

➢ Note the instructions in the operating 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 (based on the configuration of the machine), 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/tag out the power supply disconnecting device.

Result The *Controller voltage* 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.

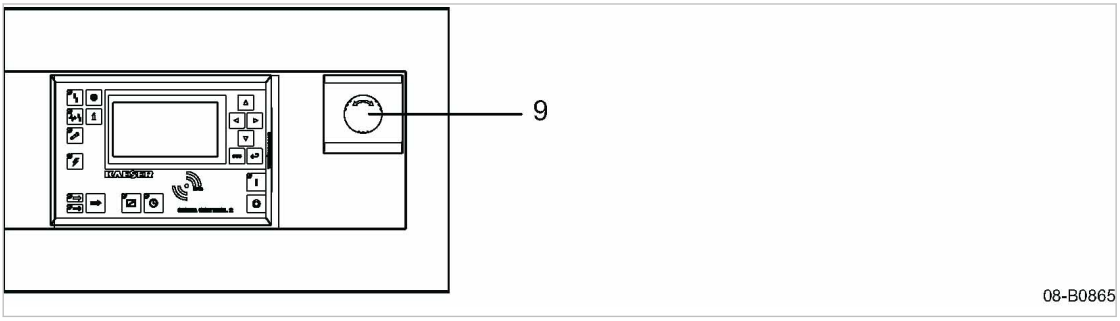


Fig. 22 Switching off in an emergency
9 EMERGENCY-STOP push button

Switching off

➢ Press the EMERGENCY STOP push button.

Result The EMERGENCY STOP push button remains latched after actuation.
The blower's pressure/vacuum system is vented and the machine is prevented from automatically restarting.

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.

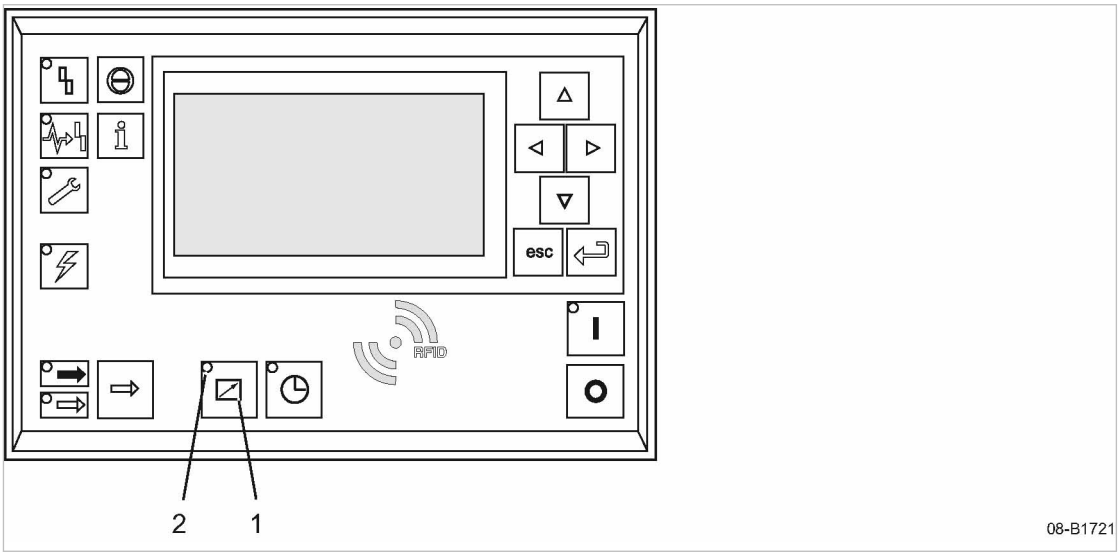


Fig. 23 Switching on and off from a remote control center

[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. 38 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. 39 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.

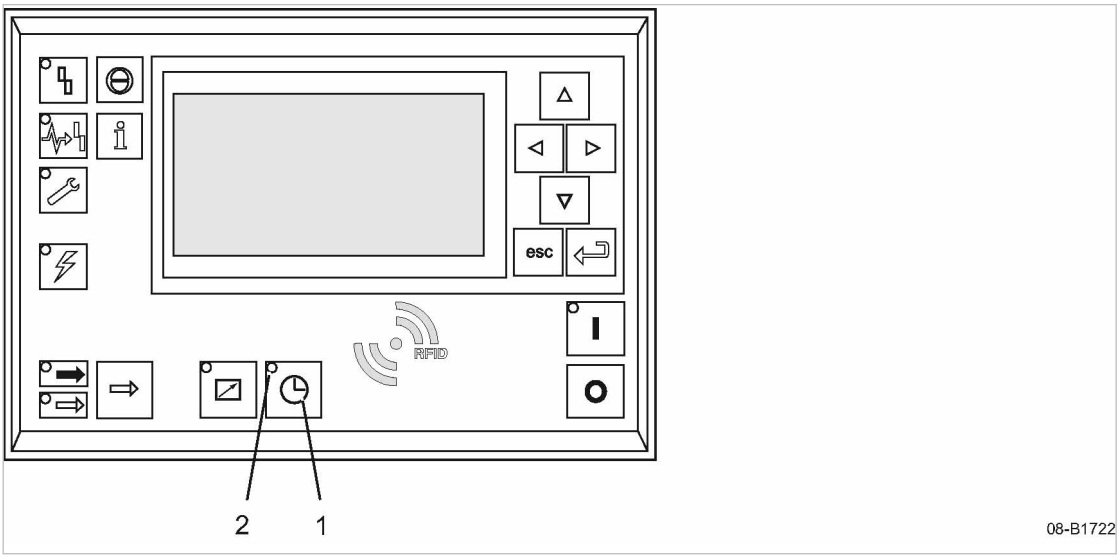


Fig. 24 Switching on and off with the clock (timer)

[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. 40 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 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 An authorized KAESER service representative 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

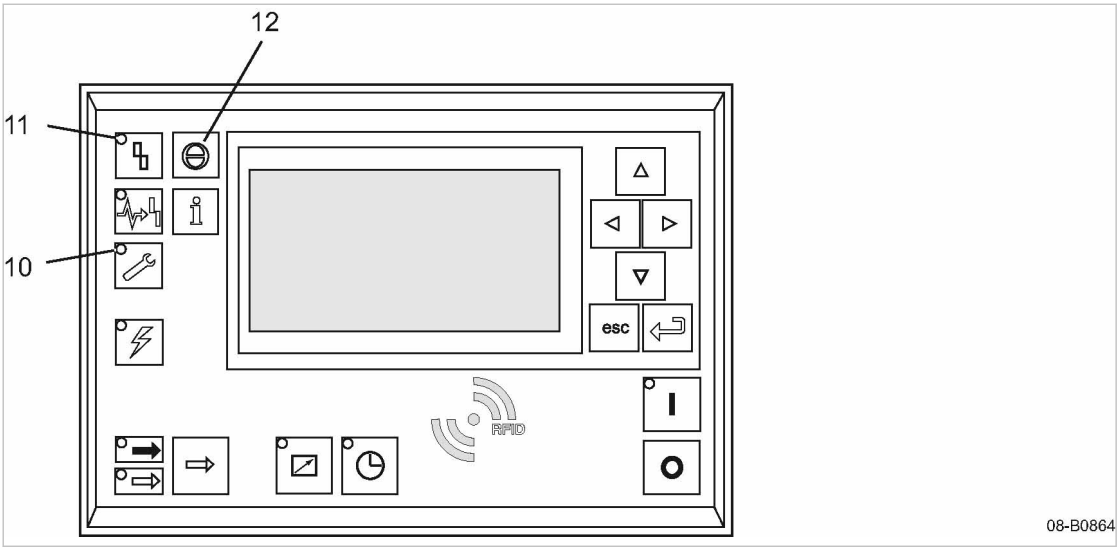


Fig. 25 Acknowledging messages

[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

Fault	Possible cause	Remedy
Unusual noise when running.	Too much backlash in the timing gears.	Contact an authorized KAESER service representative.
	Too much play in the rotor bearings.	Contact an authorized KAESER service representative.
	Rotors not synchronized.	Maintain the pressure differential and speed shown in the specification. Contact an authorized KAESER service representative.
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 plays too high.	Contact an authorized KAESER service representative.
	Leakage due to incorrect installation of pressure-bearing components.	Contact an authorized KAESER service representative.
Oil leaks from the gas drain.	Oil level too high.	Drain off lubricating oil until the correct level is reached.
Oil leaking from around the drive shaft.	Sliding ring seal defective.	Contact an authorized KAESER service representative.
Low intake flow volume.	Intake resistance too high.	Clean the inlet filter.

Fault	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 renew the sight glass.
	Oil overheated.	Contact an authorized KAESER service representative.
	Blower airend overloaded.	Contact an authorized KAESER service representative.
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. 41 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. 42 Faults and remedies (option H12)

10 Maintenance

10.1 Ensuring safety

Follow the instructions below for safe maintenance.

Warning instructions are located before a potentially dangerous task.

Disregard of warning instructions can cause serious injuries!

Complying with safety warnings

Disregard of safety warnings can cause unforeseeable dangers!

- ➢ Follow the instructions in chapter 3 “Safety and Responsibility”.
- ➢ Installation work may only be carried out by authorized personnel.
- ➢ Make sure that no one is working on the machine.
- ➢ Ensure that all service panels and doors are secured.

When working on live components

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

- ➢ Work on electrical equipment may only be carried out by authorized electricians.
- ➢ 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.

When working on the compressed air system

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

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

When working on the drive system

Touching voltage-carrying components can result in electric shocks, burns, or death.
Touching the fan wheels or the belt drive while the machine is switched on can result in serious injury.

- ➢ Switch off and lock out the power supply disconnecting device and verify the absence of voltage.
- ➢ Do not open any doors or panels while the machine is switched on.

Further information

Details of authorized personnel are found in chapter 3.4.2.

Details of dangers and their avoidance are 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 10.14.

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.

When 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 tighten if necessary.	–
Weekly	Control cabinet: Check the filter mat.	10.3
Up to 500 h Or monthly	Check drive belt tension.	10.5
	Check the air filter.	10.9
	Control cabinet: Clean the filter mat.	10.3
Up to 1000 h	Clean the machine.	10.10
h = operating hours		

Interval	Maintenance task	See chapter
Up to 2000 h, At least once a year	Drive motor bearings with re-greasing facility: Re-grease the motor bearings.	10.11.1
Up to 3000 h, At least once a year	Change the FGB-680 lubricating oil.	10.8
Up to 3000 h, At least once a year	Change the air filter.	10.9
	Control cabinet: Change the filter mat.	10.3
Annually	Check the safety relief valve.	10.12
	Check the EMERGENCY STOP push button.	10.13
	Check that all electrical connections are secure and tighten if necessary.	–
Up to 6000 h, At least every 2 years	Change the G-680 lubricating oil.	10.8
Up to 12000 h, At least every 4 years	Replace the drive belt.	10.5
h = operating hours		

Tab. 43 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 service 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	Gear box ventilation: Check the solenoid valve and replace filter cartridge.
	Option C11, Unloaded start valve with solenoid valve: Service the solenoid valve.
	Option C18, Start-up pressure regulating valve: Service the solenoid valve.
Up to 12000 h, At least every 4 years	Permanently greased drive motor bearings: Replace the motor bearings.
h = operating hours	

Interval	Service task
Up to 36000 h	Drive motor bearings with re-greasing facility: Replace the motor bearings.
	Frequency converter fan: Replace the fan.
	Control cabinet fan: Replace the fan.
	Sound enclosure fan: Replace the fan.
	Option C11, service the unloaded start valve.
	Option C18, service the start-up pressure regulating valve.
Up to 36000 h, At least every 8 years	Option G1, maintain the check valve.
	Replace the compensators.
Up to 60000 h, At least every 10 years	Gear box ventilation: Service the vacuum pump.
After at least 20 years	Replace safety-relevant components of the safety functions.
h = operating hours	

Tab. 44 Regular service tasks

10.3 Cleaning or replacing the control cabinet filter mats

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 and household detergent

Spare parts (as required)

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

Fig. 26 Control cabinet ventilation grill

[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 grill.

10.4 Option H12 Sound enclosure

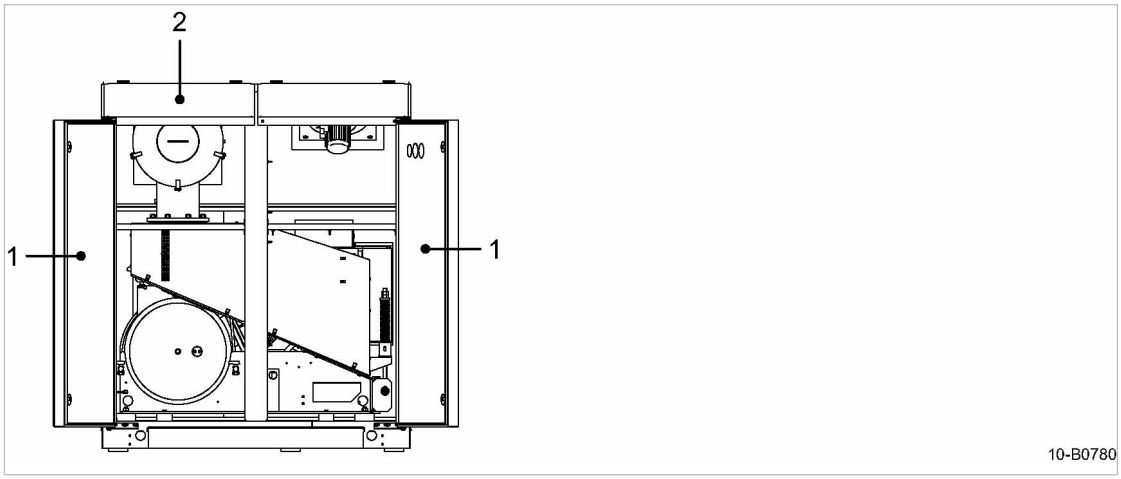


Fig. 27 Sound enclosure

[1] Access doors
[2] Flaps

➢ Open maintenance doors [1] for maintenance tasks.

➢ If required, open the flap(s) [2].
Latches are released by a key supplied with the machine.

Crushing hazard due to potential risk of flap(s) falling back down.

➢ Fold the flap(s) [2] back completely to safeguard against unintentional folding back down.

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 voltage has been verified.

The machine has cooled down.

⚠ WARNING

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

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

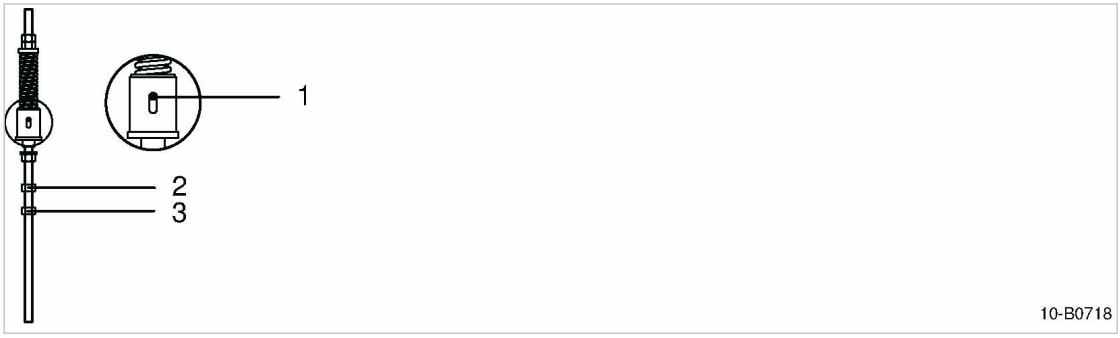


Fig. 28 Drive belt maintenance

[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 automatically adjust the 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 with caution.*
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 drive belt.

1. Remove the belt guard.
2. Loosen the locking nut [3].
3. Turn the adjusting nut [2] 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 [2] to adjust the tension until the marker pin reaches the lower end of the elongated hole.
5. Tighten the locking nut [3].
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.*

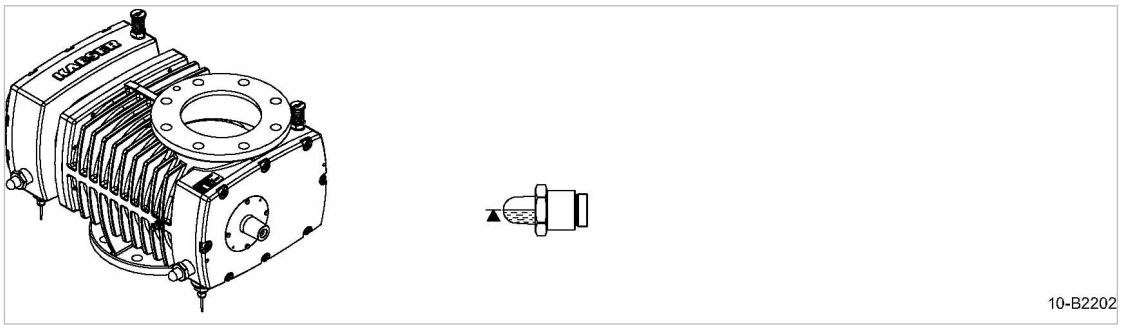


Fig. 29 Checking the oil level

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

10.7 Replenishing lubricating oil

A label specifying the oil type for topping off can be found on the blower block and belt guard.

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

Material Wrench
Lubricating oil
Sealing ring

Precondition The power supply disconnecting device is switched off,
lock out and tag out the device,
verify the absence of any voltage.
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 blower block!

➢ *Never mix different types of oil.*

➢ *Never top off with a different type of oil than that has already been used in the blower block.*

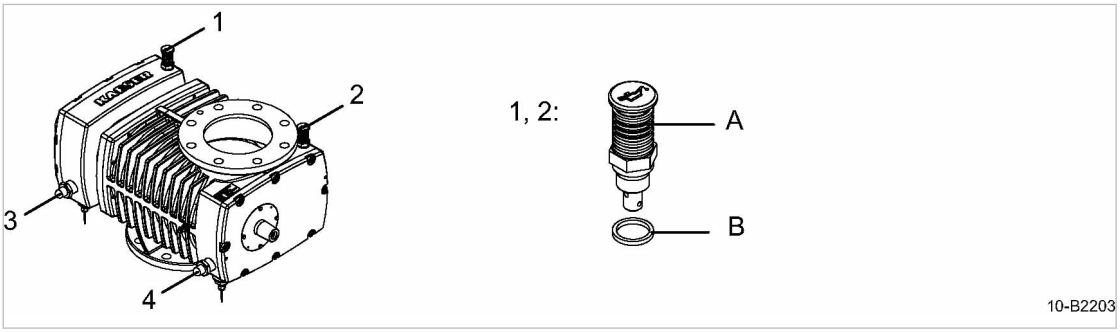


Fig. 30 Replenishing lubricating oil

[1]	Gear-end oil inlet	[4]	Drive-end oil sight glass
[2]	Drive-end oil inlet	[A]	Vent
[3]	Gear-end oil sight glass	[B]	Sealing ring

1. Use the wrench to slowly unscrew the vent(s) [A] at the oil inlet [1] and/or [2] and remove the sealing ring [B].
2. Top off until the level is at the marking on the sight glass [3] and/or [4].
3. Clean the sealing ring and check for damage. Replace any damaged sealing ring.
4. Close the oil inlet at the gear and/or drive side with vent and sealing ring.
5. Visually check for leaks.

10.8 Changing the lubricating oil

The following sequence must be maintained:

1. Return the gearbox ventilation lubricating oil.
2. Change the blower block lubricating oil.

10.8.1 Returning the gearbox ventilation lubricating oil

While bleeding the gear housing of the blower block, the lubricating oil is separated and collects in the filter housing of the gearbox ventilation. The return process is initiated by activating a menu item of the SIGMA CONTROL 2 controller.

Precondition
The machine is ready to be switched on or is running,
password access level 2 has been activated,
the operation display is shown.

1. Open the *<Maintenance>* menu.
2. Use the «Up» or «Down» keys to select the *<Oil Service>* row.
3. Press «Enter».
   The check box flashes.
4. Press the «Up» key.
   The check box is activated.
5. Press «Enter».
   <Oil service> is activated.

Result
Collected lubricating oil from the filter housing of the gearbox ventilation is returned to the gear-end oil chamber of the blower block. The return process takes approx. 3 min and ends when the check-mark in the check box is extinguished.

Further information
Press «Escape» repeatedly to leave this menu.

10.8.2 Changing the blower block lubricating oil

Prior to any work requiring the opening of the pressure system, the machine must be fully isolated from the compressed air network and completely depressurized.

Drain lubricating oil at a block temperature of at least 77 °F to ensure sufficiently low viscosity.

Drain the oil thoroughly from the blower block:

- Gear-end
- Drive-end

Material
Wrench
Lubricating oil
Lubricating oil receptacle
Sealing ring

Precondition
Gearbox ventilation lubricating oil has been returned,
the power supply disconnecting device is switched off,
lock out and tag out the device,
the absence of voltage has been verified.

⚠ WARNING

Danger of burns from hot components and oil

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

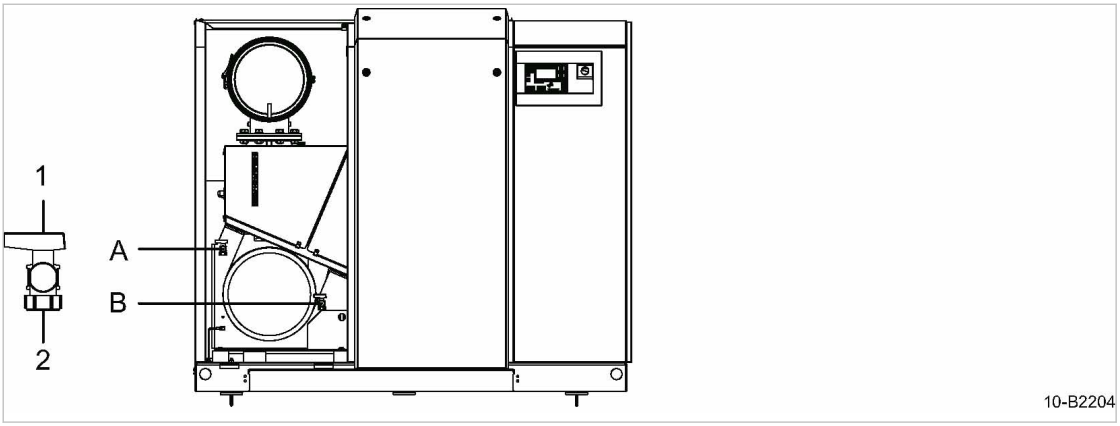


Fig. 31 Changing the lubricating oil

A	Drive-end oil drain device	1	Oil drain tap
B	Gear-end oil drain device	2	Caps

Draining the lubricating oil

1. Prepare a lubricating oil receptacle.
2. Use the wrench to slowly unscrew the vents for the oil inlets at the blower block, see 1 and 2 in Fig. 30 and remove the sealing rings.
3. Unscrew the caps 2 at the control and drive ends and open the oil drain tap 1 at the gear and drive ends.
4. Drain the lubricating oil.

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

Filling with fresh lubricating oil

1. Fill with fresh lubricating oil.
2. Allow the lubricating oil drain tap to remain open until fresh lubricating oil begins to drain (bleeding the lubricating oil drain lines).
3. Close the lubricating oil drain tap 1 at the gear and drive ends.
4. Top off lubricating oil to the mark on the oil sight glass.
5. Screw on the caps 2 at the gear and drive ends.
6. Clean vent sealing rings (blower block oil inlet) and inspect for damage. Replace any damaged sealing rings.
7. Close the oil inlets with vent and sealing ring.
8. 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.

10.9.1 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 parts

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

⚠ WARNING

Danger of burns from hot components!

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

Fig. 32 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 off the cover [1].
3. Loosen the Velcro strip 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 Velcro strip.
6. Attach the cover to the inlet silencer.

10.10 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.

10.11 Motor maintenance

Motor maintenance depends on the type of motor.

Material
Grease gun with bearing grease UNIREX N3
Cleaning cloth

10.11.1 Drive motor bearings with re-greasing facility

Use only the high temperature grease UNIREX N3 for the motor bearings. Damage to bearings caused by the use of other brands of grease is excluded from the warranty.
The required quantity of grease is stated on the motor maintenance plate.

Precondition
The motor is running.

1. **⚠ WARNING** *Noise during machine operation (without sound enclosure) or noise due to opened service access of the sound enclosure (Option H12)!*
   Hearing may be damaged.
   ➢ *Always wear ear protection.*
2. **⚠ WARNING** *Danger of burns from hot components!*
   ➢ *Wear long-sleeved clothing and protective gloves.*
   ➢ *Work with caution.*
3. **NOTICE** *Motor damage due to incorrect re-greasing!*
   If the motor is switched off, the new bearing grease is distributed incorrectly and pressed unused into the old grease tank.
   ➢ *Re-grease the bearings only with the motor running.*

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

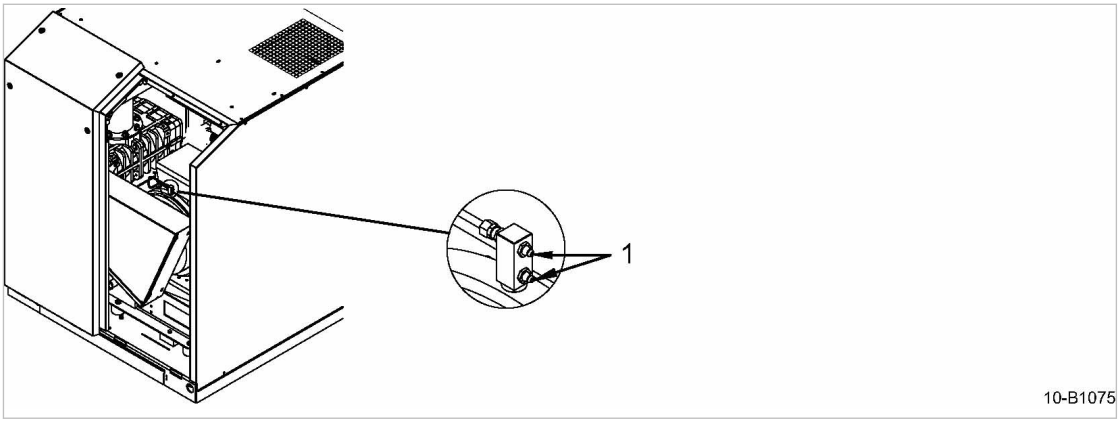


Fig. 33 Maintenance of a drive motor with re-greasing facility
[1] Grease fitting

1. Open the right-side service panel of the sound enclosure.
2. Clean the grease fittings [1] with a cloth before greasing.
3. Grease both bearings with a grease gun.
4. Close the service panel, close the latch.

Further information The re-greasing interval and required quantity of grease are provided in chapter 2.4.
For further information regarding the motor, please consult the motor manual.

10.11.2 Permanently greased drive motor bearings

The motor bearings are permanently lubricated. Re-greasing is not necessary.

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

Further information For further information regarding the motor, please consult the motor manual.

10.11.3 Fan motor

The motor bearings are permanently lubricated. Re-greasing is not necessary.

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

10.12 Testing the safety relief valve

Free movement of the safety relief valve's tension rod is checked by hand or with a lifting device.

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

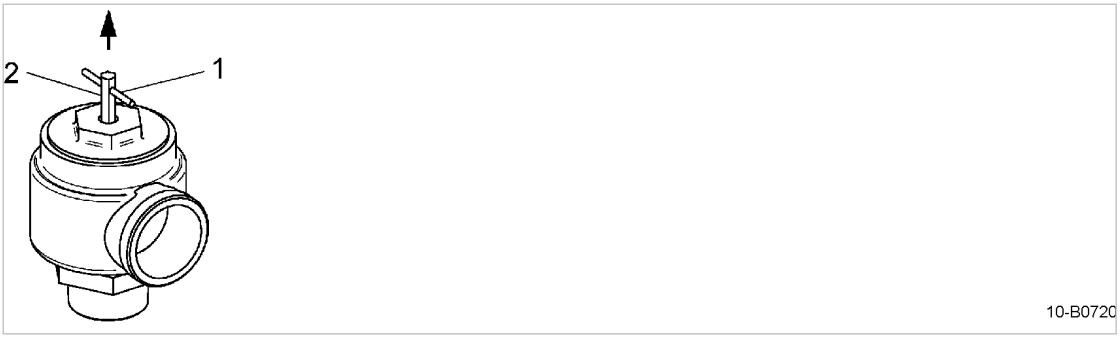


Fig. 34 Testing the safety relief valve

[1] Opening lever
[2] Tension rod

➢ Check for free movement of the tension rod [2] by pulling vertically by 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.

10.13 Testing the EMERGENCY STOP push button

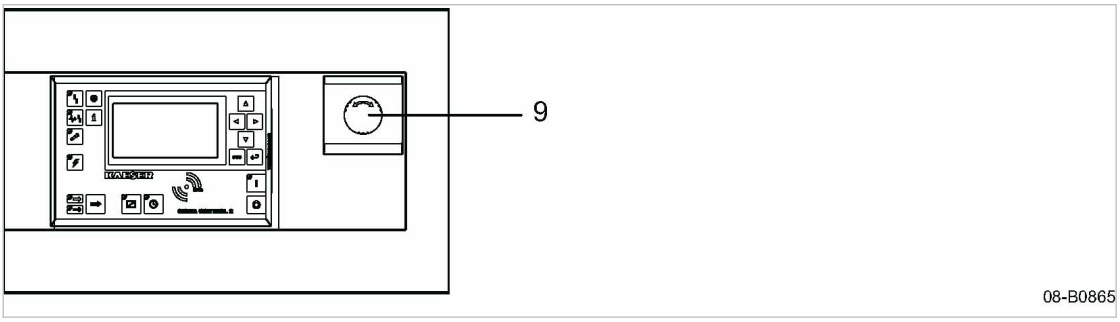


Fig. 35 Testing the EMERGENCY STOP push button

[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.

10.14 Documenting maintenance and service work

Machine equipment number:

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

Date	Maintenance task carried out	Operating hours	Signature

Tab. 45 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

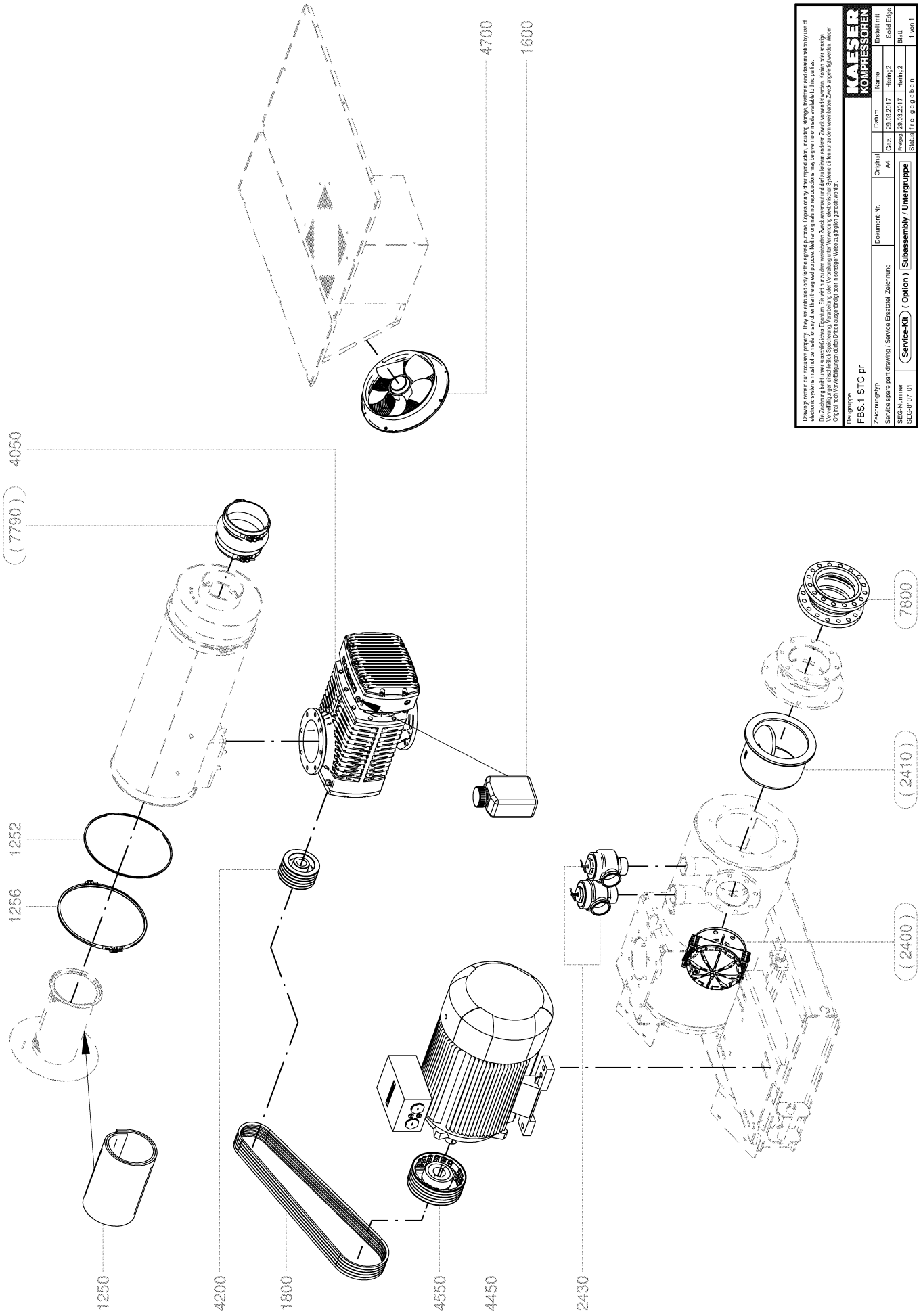
Tab. 46 Consumable parts

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)


4700
1600
4050
(7790)
1252
1256
7800
(2410)
(2400)
1250
4200
1800
4550
4450
2430
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KAESER KOMPRESSOREN
Baugruppe
FBS.1 STC pr
Zeichnungstyp
Service spare part drawing / Service Ersatzteil Zeichnung
SEG-Nummer
SEG-8107_01
Service-Kit (Option) Subassembly / Untergruppe
Dokument-Nr.
Original
A4
Datum
Name
Erstellt mit
Gez. 29.03.2017 Hering2 Solid Edge
Freigb 29.03.2017 Hering2 Blatt
Status freigegeben 1 von 1

Legend		KAESER
	FBS.1 STC pr	SEL-4227_01 E

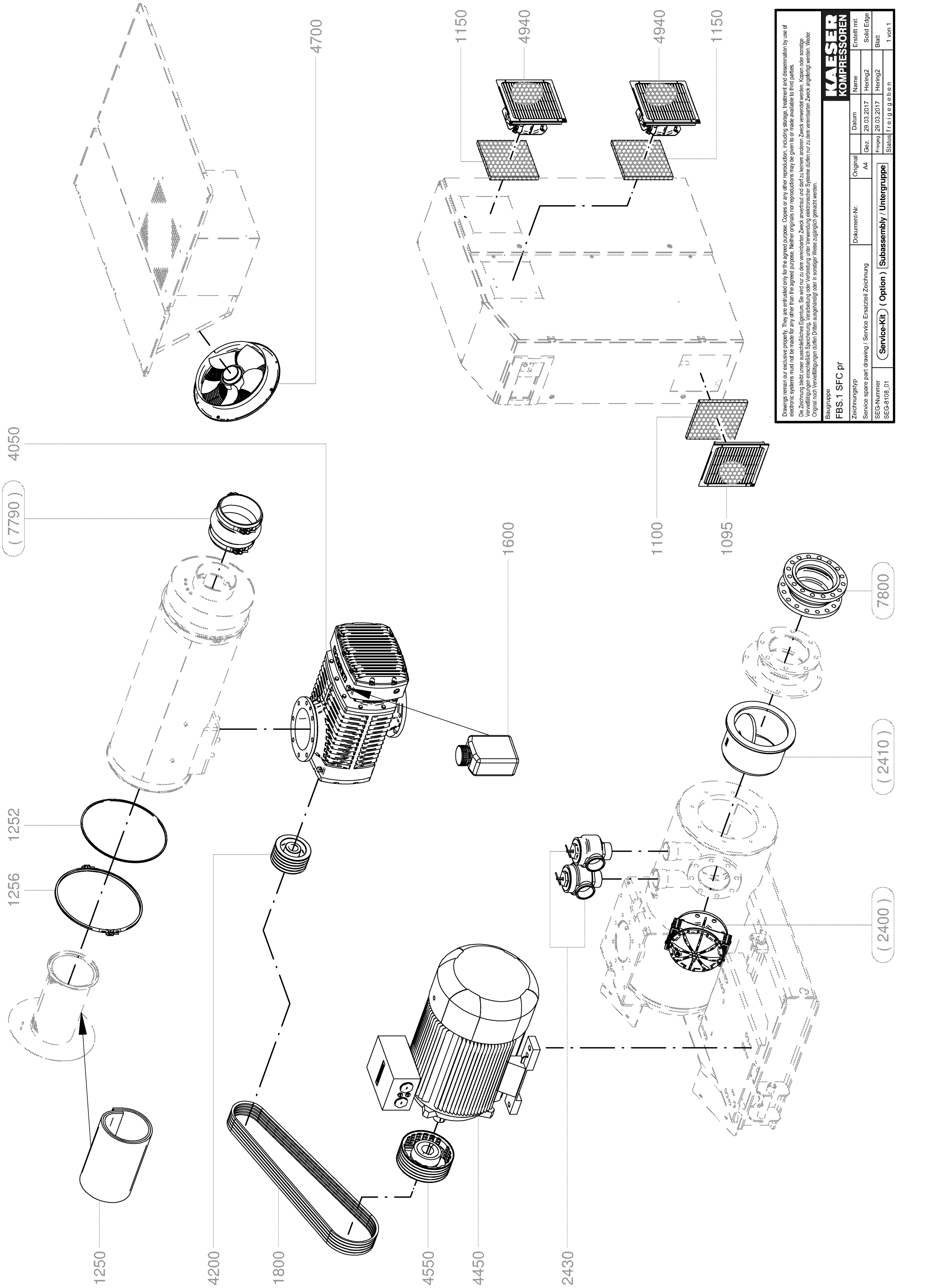
Item	Description	Option
1250	Air filter insert	
1252	Inlet silencer gasket	
1256	Canopy fastener	
1600	SIGMA FLUID	
1800	Drive belt	
2400	Start control valve	X
2410	Check valve	X
2430	Pressure limiting valve	
4050	SIGMA blower block	
4200	Airend pulley	
4450	Drive motor	
4550	Drive motor pulley	
4700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

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 C38, SIGMA FREQUENCY CONTROL (SFC)


4700
1150
4940
4940
1150
4050
(7790)
1600
1100
1095
7800
(2410)
1252
1256
(2400)
1250
4200
1800
4550
4450
2430
FBS.1 SFC pr
SEG-8108_01
Service-Kit
(Option)
Subassembly / Untergruppe

Legend		KAESER
	FBS.1 SFC pr	SEL-4224_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	SIGMA FLUID	
1800	Drive belt	
2400	Start control valve	X
2410	Check valve	X
2430	Pressure limiting valve	
4050	SIGMA blower block	
4200	Airend pulley	
4450	Drive motor	
4550	Drive motor pulley	
4700	Fan unit	
4940	Control cabinet fan SFC	
7790	Compensator, air inlet	X
7800	Compensator, air outlet	

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 necessary, for example, under the following circumstances:

- The machine is temporarily not needed,
- The machine is to be moved to another location,
- The machine is to be scrapped.

Temporary decommissioning

Precondition The machine can be started at regular intervals.

➢ Run the machine once a week for at least 30 minutes at operating temperature to ensure corrosion protection.

Long-term decommissioning

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

1. Allow the machine to completely cool down.
2. Disconnect all air and electrical connections.
3. Relax the drive belt.
4. Spray the machine inside and out with a preservative to prevent corrosion.
5. Store the machine in a dry, frost-proof room.

Further information Details of preservatives can be found in 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 Transportation

12.3.1 Safety

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

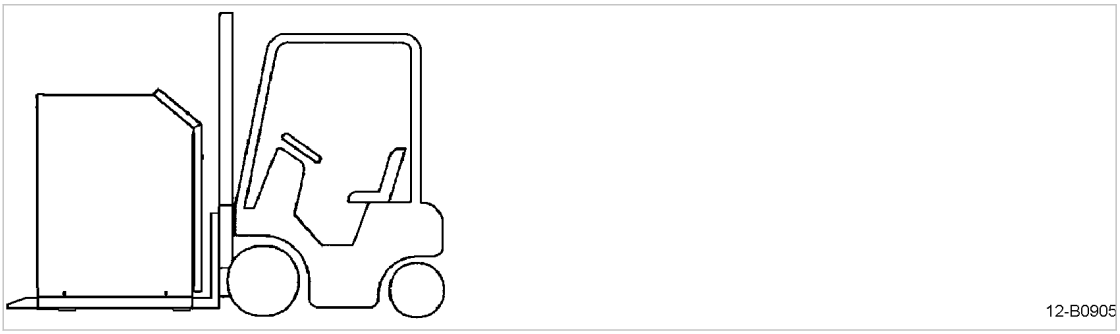


Fig. 36 Transport

1. Remove the cover sheet from the sound enclosure's frame (see chapter 6.7).
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!
Danger of crushing or severing limbs.

➢ *Do not reach into the interior of the blower block.*

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 entry of dirt.
➢ Every month, manually turn the motor shaft by about 30°.

➢ Change the lubricating oil annually.

After long-term storage

➢ Observe the procedures for assembly and initial start-up.

12.5 Disposal

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

Precondition The machine is decommissioned.

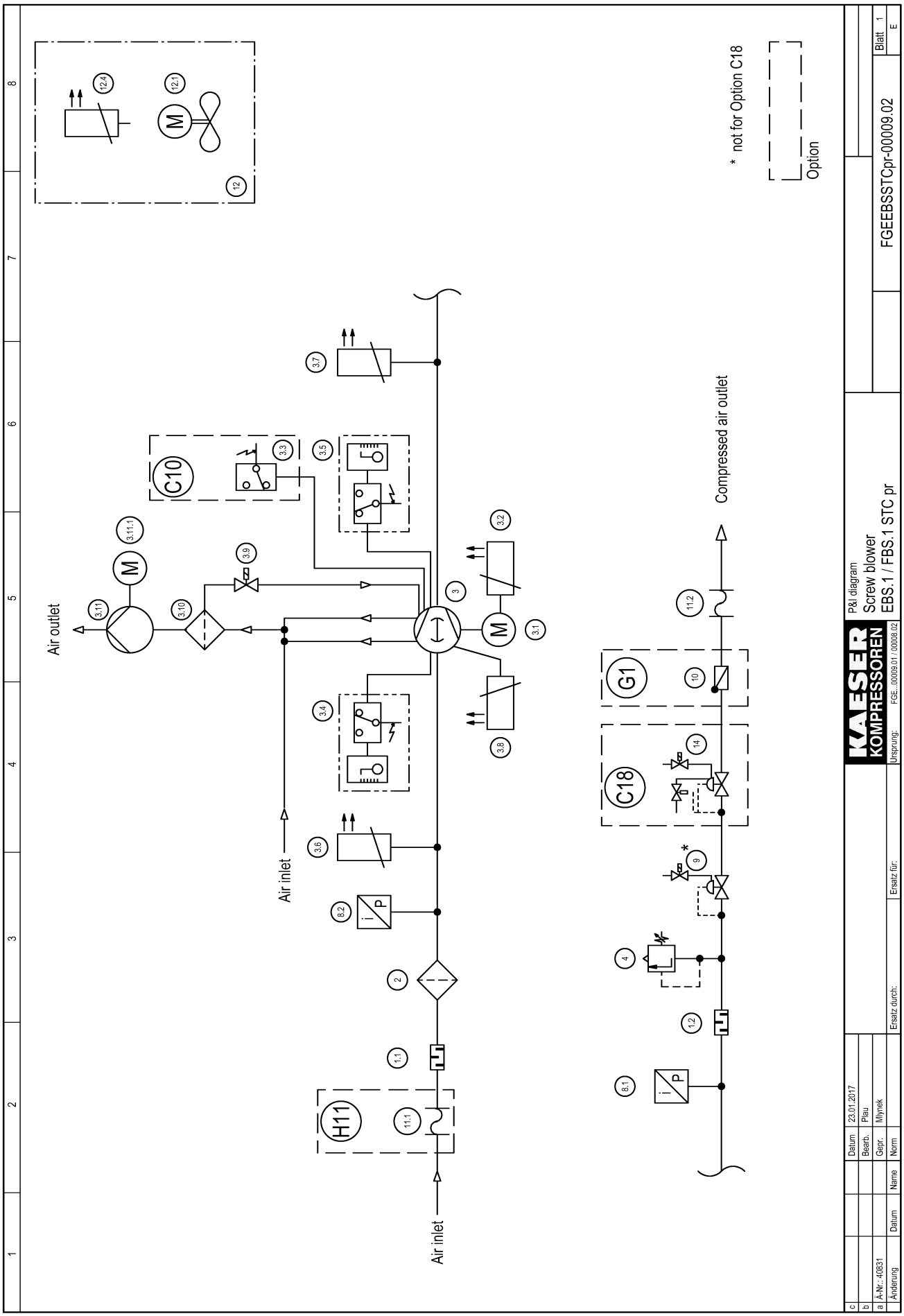
1. Completely drain the oil from the machine.
2. Remove old filters.
3. Hand the machine over to an authorized disposal expert.

➢ 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)

13.1.1 Option C33, START CONTROL (STC)


* not for Option C18
Option
Compressed air outlet
Air outlet
Air inlet
Air inlet
C10
C18
G1
H11
P&I diagram
Screw blower
EBS.1 / FBS.1 STC pr
FGEEBSSTCpr-00009.02
KAESER KOMPRESSOREN
Datum 23.01.2017
Bearb. Pleu
Gepr. Mlynek
Norm
Name
Datum
Änderung
Ersatz durch:
Ersatz für:
Ursprung: FGE...00009.01 / 00008.02
Blatt 1
E

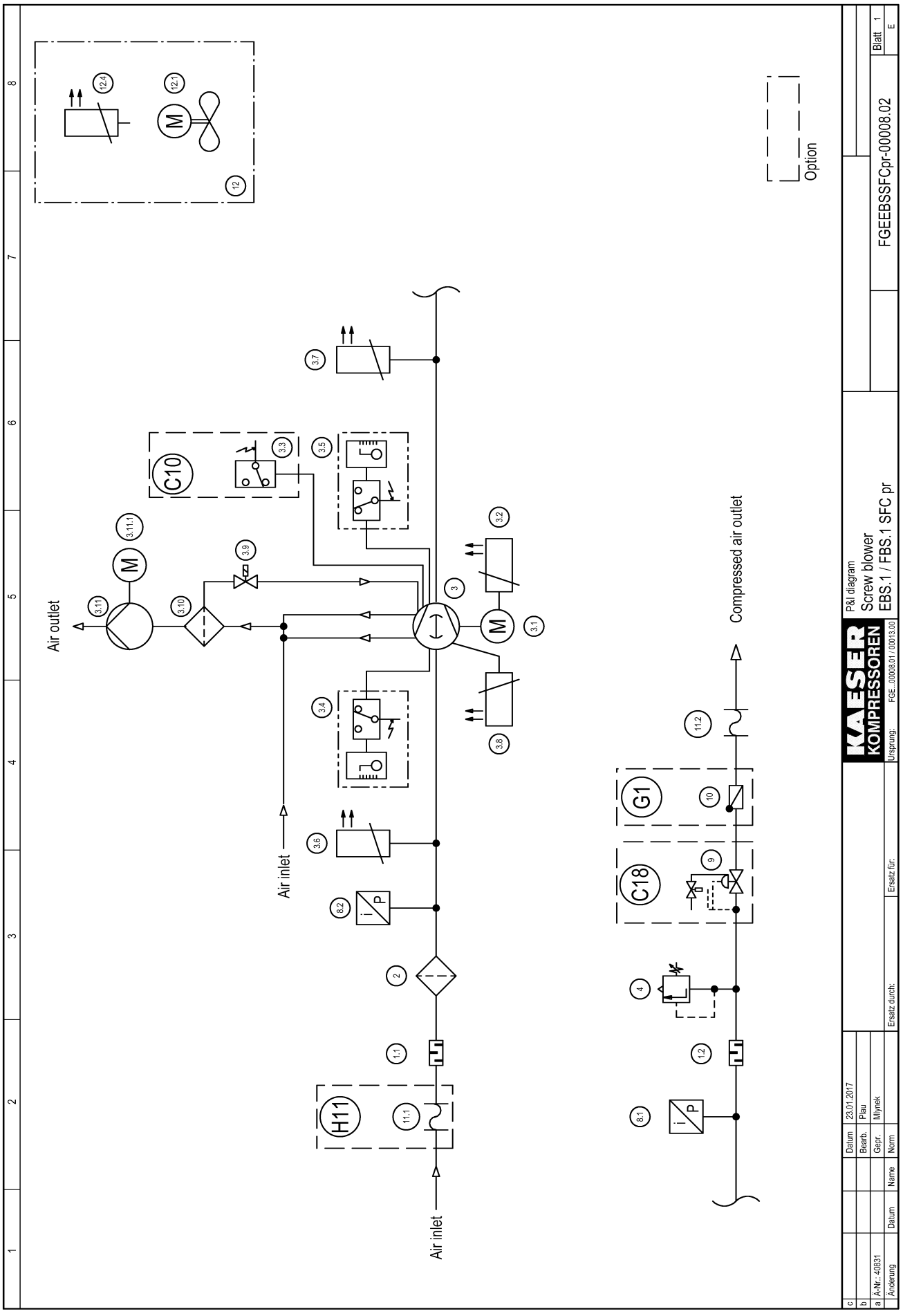
1.1	Silencer - Inlet pressure
1.2	Silencer - Network pressure
2	Air filter
3	Blower block
3.1	Drive motor
3.2	PTC-sensor - Drive motor
3.3	Speed monitor
3.4	Oil level monitoring - Drive-end
3.5	Oil level monitoring - Gear-end
3.6	Pt100 sensor - Inlet temperature [t_1]
3.7	Pt100 sensor - Airend discharge temperature [t_2]
3.8	Pt100 sensor - Oil temperature [t_3]
3.9	Solenoid valve
3.10	Filter
3.11	Pump
3.11.1	Drive motor
4	Pressure relief valve
8.1	Pressure transducer - Network pressure
8.2	Pressure transducer - Inlet pressure
9	Unloaded start valve (not for Option C18)
10	Check plate
11.1	Compensator - Inlet pressure
11.2	Compensator - Network pressure
12	Sound enclosure
12.1	Fan motor
12.4	Pt100 sensor - Sound enclosure temperature [t_S]

Option

C10	Speed monitor
C18	Start-up pressure control valve
G1	Check plate
H11	Piped inlet

c				Datum	23.01.2017		KAESER KOMPRESSOREN	P&I diagram	
b				Bearb.	Plau			Screw blower	
a				Gepr.	Mlynek			EBS.1 / FBS.1 STC pr	FGEEBSSTCpr-00009.02 Blatt 2
	Änderung	Datum	Name	Norm		Ersatz durch:	Ersatz für:	Ursprung: FGE...00009.01 / 00008.02	E

13.1.2 Option C38, SIGMA FREQUENCY CONTROL (SFC)

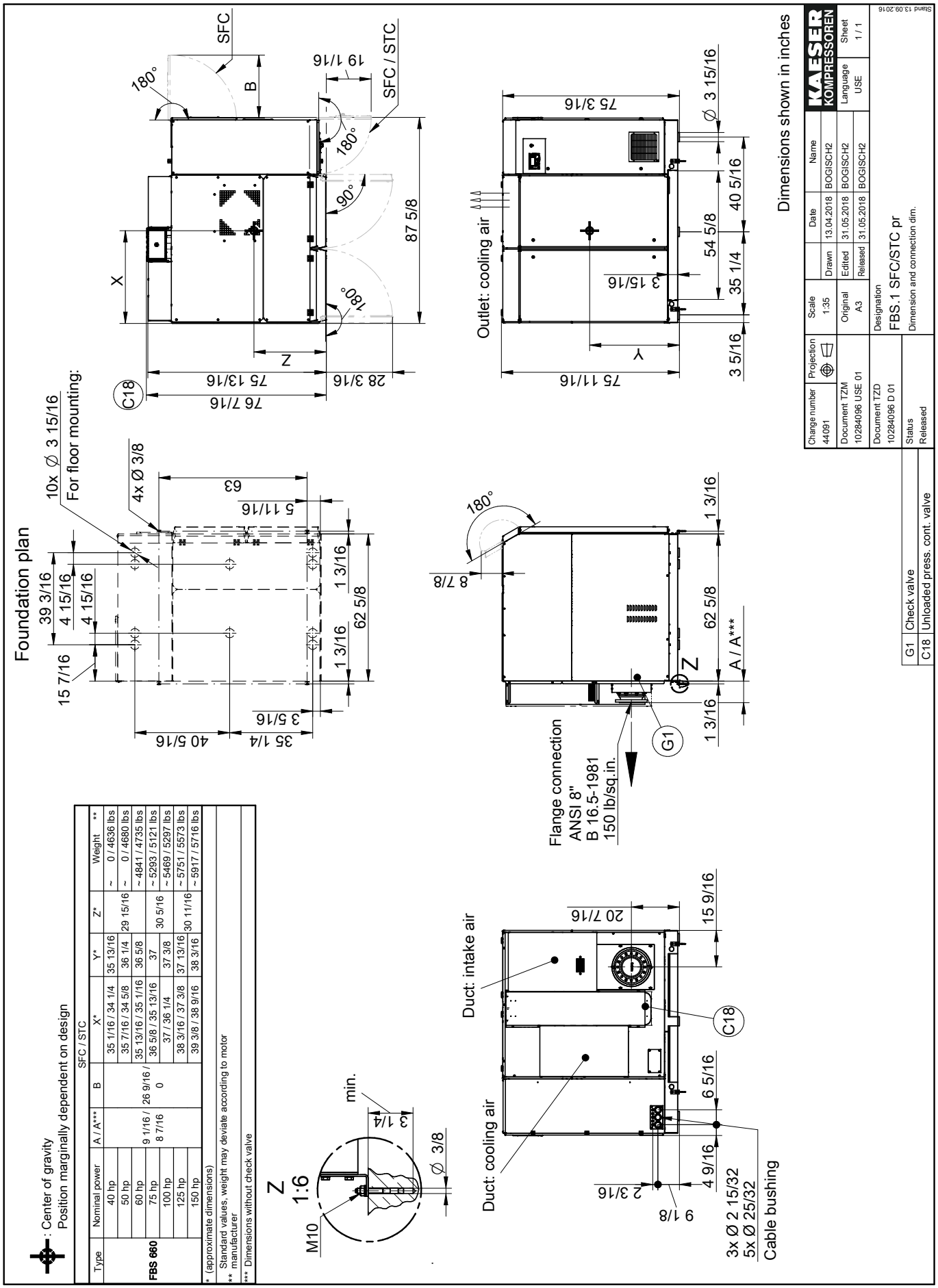

Option
Air outlet
Air inlet
Air inlet
Compressed air outlet
C10
C18
G1
H11
P&I diagram
Screw blower
EBS.1 / FBS.1 SFC pr
FGEEBSSFCpr-00008.02
Blatt 1
KAESER KOMPRESSOREN
Ursprung: FGE...00008.01 / 00013.00
Ersatz durch:
Ersatz für:
Datum 23.01.2017
Bearb. Plau
Gepr. Mlynek
Norm
Name
Datum
Änderung
A-Nr.: 40831

1	2	3	4	5	6	7	8

1.1	Silencer - Inlet pressure	
1.2	Silencer - Network pressure	
2	Air filter	
3	Blower block	
3.1	Drive motor	
3.2	PTC-sensor - Drive motor	
3.3	Speed monitor	
3.4	Oil level monitoring - Drive-end	
3.5	Oil level monitoring - Gear-end	
3.6	Pt100 sensor - Inlet temperature [t_1]	
3.7	Pt100 sensor - Airend discharge temperature [t_2]	
3.8	Pt100 sensor - Oil temperature [t_3]	
3.9	Solenoid valve	
3.10	Filter	
3.11	Pump	
3.11.1	Drive motor	
4	Pressure relief valve	
8.1	Pressure transducer - Network pressure	
8.2	Pressure transducer - Inlet pressure	
9	Start-up pressure control valve	
10	Check plate	
11.1	Compensator - Inlet pressure	
11.2	Compensator - Network pressure	
12	Sound enclosure	
12.1	Fan motor	
12.4	Pt100 sensor - Sound enclosure temperature [t_S]	
Option		
C10	Speed monitor	
C18	Start-up pressure control valve	
G1	Check plate	
H11	Piped inlet	

c				Datum	23.01.2017		KAESER KOMPRESSOREN	P&I diagram	
b				Bearb.	Plau			Screw blower	
a				Gepr.	Mlynek			EBS.1 / FBS.1 SFC pr	
	Änderung	Datum	Name	Norm		Ersatz durch:	Ersatz für:	Ursprung: FGE...00008.01 / 00013.00	FGEEBSSFCpr-00008.02 Blatt 2 E

13.2 Dimensional drawing



Type	Nominal power	A / A***	B	X*	Y*	Z*	Weight **
FBS 660	40 hp	9 1/16 / 8 7/16	26 9/16 / 0	35 1/16 / 34 1/4	35 13/16	29 15/16	~ 0 / 4636 lbs
	50 hp			35 7/16 / 34 5/8	36 1/4		~ 0 / 4680 lbs
	60 hp			35 13/16 / 35 1/16	36 5/8		~ 4841 / 4735 lbs
	75 hp			36 5/8 / 35 13/16	37	30 5/16	~ 5293 / 5121 lbs
	100 hp			37 / 36 1/4	37 3/8		~ 5469 / 5297 lbs
	125 hp			38 3/16 / 37 3/8	37 13/16	30 11/16	~ 5751 / 5573 lbs
	150 hp			39 3/8 / 38 9/16	38 3/16		~ 5917 / 5716 lbs

* (approximate dimensions)
** Standard values, weight may deviate according to motor manufacturer
*** Dimensions without check valve

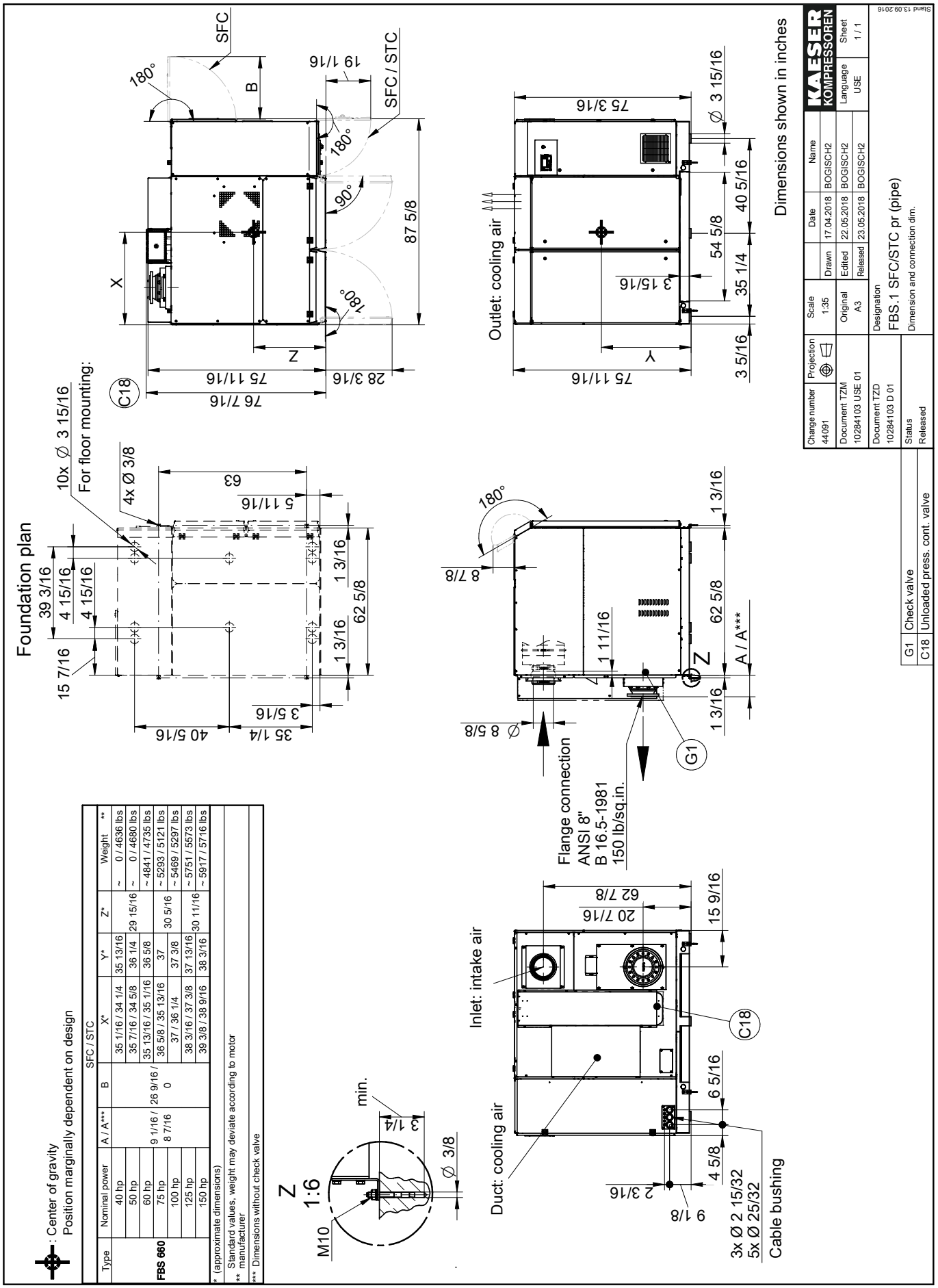
: Center of gravity
Position marginally dependent on design

G1	Check valve
C18	Unloaded press. cont. valve

Change number 44091	Projection	Scale 1:35		Date	Name
			Drawn	13.04.2018	BOGISCH2
Document TZM 10284096 USE 01		Original A3	Edited	31.05.2018	BOGISCH2
			Released	31.05.2018	BOGISCH2
Document TZD 10284096 D 01		Designation FBS.1 SFC/STC pr			
		Dimension and connection dim.			
	Status Released				

KAESER KOMPRESSOREN
Language USE
Sheet 1 / 1

Stand 13.09.2016


Dimensions shown in inches
SFC
SFC / STC
180°
B
19 1/16
90°
87 5/8
X
Z
76 7/16
75 11/16
28 3/16
C18
Outlet: cooling air
75 3/16
Ø 3 15/16
40 5/16
54 5/8
35 1/4
3 15/16
3 5/16
Y
Foundation plan
10x Ø 3 15/16
For floor mounting:
4x Ø 3/8
39 3/16
4 15/16
15 7/16
63
5 11/16
1 3/16
62 5/8
35 1/4
40 5/16
Flange connection
ANSI 8"
B 16.5-1981
150 lb/sq.in.
8 7/8
1 11/16
Z
A / A***
8 5/8 Ø
G1
Inlet: intake air
Duct: cooling air
20 7/16
62 7/8
15 9/16
6 5/16
4 5/8
2 3/16
9 1/8
3x Ø 2 15/32
5x Ø 25/32
Cable bushing
Z
1:6
min.
3 1/4
Ø 3/8
M10
: Center of gravity
Position marginally dependent on design
SFC / STC
Type
Nominal power
A / A***
B
X*
Y*
Z*
Weight **
FBS 660
40 hp
50 hp
60 hp
75 hp
100 hp
125 hp
150 hp
9 1/16 / 8 7/16
26 9/16 / 0
35 1/16 / 34 1/4
35 7/16 / 34 5/8
35 13/16 / 35 1/16
36 5/8 / 35 13/16
37 / 36 1/4
38 3/16 / 37 3/8
39 3/8 / 38 9/16
35 13/16
36 1/4
36 5/8
37
37 3/8
37 13/16
38 3/16
29 15/16
30 5/16
30 11/16
~ 0 / 4636 lbs
~ 0 / 4680 lbs
~ 4841 / 4735 lbs
~ 5293 / 5121 lbs
~ 5469 / 5297 lbs
~ 5751 / 5573 lbs
~ 5917 / 5716 lbs
* (approximate dimensions)
** Standard values, weight may deviate according to motor manufacturer
*** Dimensions without check valve
Subject to development-related changes.
Drawing may be altered only via CAD.
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Charge number 44091
Projection
Scale 1:35
Drawn 17.04.2018 BOGISCH2
Edited 22.05.2018 BOGISCH2
Released 23.05.2018 BOGISCH2
Language USE
Sheet 1 / 1
Document TZM 10284103 USE 01
Original A3
Document TZD 10284103 D 01
Designation FBS.1 SFC/STC pr (pipe)
Status Released
Dimension and connection dim.
G1 Check valve
C18 Unloaded press. cont. valve
Stand 13.09.2016

13.3 Noise emission

The values for sound pressure levels and sound power levels are provided in the table below.

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

	Table legend
a)	Model
b)	Pressure differential
c)	Sound pressure level
d)	Sound power level

Tab. 47 Noise emission

a)	b) Pressure differential		c) Sound pressure level	d) Sound power level
	[mbar]	[psi]	[dB(A)]	[dB(A)]
			± 3 dB(A)	± 3 dB(A)
FBS 660 L	300	4	74	92
FBS 660 L	400	6	74	92
FBS 660 L	500	7	74	92
FBS 660 L	550	8	74	92
FBS 660 M	450	7	77	95
FBS 660 M	500	7	76	94
FBS 660 M	600	9	75	93
FBS 660 M	700	10	73	91
FBS 660 M	800	12	73	91
FBS 660 M	900	13	72	90
FBS 660 M	1000	15	72	90
FBS 660 M	1100	16	72	90

13.4 Electrical diagrams

13.4.1 Option C33, START CONTROL (STC)

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

c				Date	14.12.2020 USE	KAESER KOMPRESSOREN	cover page	=	
b				Drawn	M.Zeeh		Blower STC+SC2	+	
a				Released	M.Zeeh				
A	Change	Date	Name			SXB.STC-U3010.02		DXB.STC-U3020.06	page 1 / 1 Sht.

Lfd. Nr. No.	Benennung Name		Zeichnungsnummer (Kunde) Drawing No. (customer)	Zeichnungsnummer (Hersteller) Drawing No. (manufacturer)	Blatt Page	Anlagenkennzeichen Unit designation
1	cover page			DXB.STC-U3020.06	1	
2	list of contents			ZXB.STC-U3020.06	1	
3	list of contents			ZXB.STC-U3020.06	2	
4	block diagram	instructions + option		UXB.STC-U3020.06	1	
5	block diagram	component legend		UXB.STC-U3020.06	2	
6	electrical component parts list	Common parts		UXB.STC-U3020.06	3	
7	electrical component parts list	Common parts		UXB.STC-U3020.06	4	
8	electrical component parts list	option		UXB.STC-U3020.06	5	
9	electrical component parts list	option		UXB.STC-U3020.06	6	
10	electrical component parts list	performance-related components		UXB.STC-U3020.06	7	
11	electrical component parts list	performance-related components		UXB.STC-U3020.06	8	
12	electrical component parts list	performance-related components		UXB.STC-U3020.06	9	
13	electrical component parts list	performance-related components		UXB.STC-U3020.06	10	
14	electrical component parts list	performance-related components		UXB.STC-U3020.06	11	
15	electrical component parts list	performance-related components		UXB.STC-U3020.06	12	
16	electrical component parts list	performance-related components		UXB.STC-U3020.06	13	
17	electrical component parts list	performance-related components		UXB.STC-U3020.06	14	
18	electrical component parts list	performance-related components		UXB.STC-U3020.06	15	
19	electrical component parts list	performance-related components		UXB.STC-U3020.06	16	
20	electrical component parts list	performance-related components		UXB.STC-U3020.06	17	
21	electrical component parts list	performance-related components		UXB.STC-U3020.06	18	
22	electrical component parts list	performance-related components		UXB.STC-U3020.06	19	
23	electrical component parts list	performance-related components		UXB.STC-U3020.06	20	
24	electrical component parts list	performance-related components		UXB.STC-U3020.06	21	
25	electrical component parts list	performance-related components		UXB.STC-U3020.06	22	
26	electrical component parts list	performance-related components		UXB.STC-U3020.06	23	
27	electrical component parts list	performance-related components		UXB.STC-U3020.06	24	
28	electrical component parts list	performance-related components		UXB.STC-U3020.06	25	
29	electrical component parts list	performance-related components		UXB.STC-U3020.06	26	
30	electrical component parts list	performance-related components		UXB.STC-U3020.06	27	
31	electrical component parts list	performance-related components		UXB.STC-U3020.06	28	
32	wiring diagram	power unit		SXB.STC-U3020.06	1	
33	wiring diagram	power unit vent		SXB.STC-U3020.06	2	
34	wiring diagram	control voltage		SXB.STC-U3020.06	3	
35	wiring diagram	Gear housing ventilation + venting valve		SXB.STC-U3020.06	4	
36	wiring diagram	type speed supervisory module		SXB.STC-U3020.06	5	
37	wiring diagram	Oil return + SC2 + IOM		SXB.STC-U3020.06	6	
38	wiring diagram	IOM-configuration		SXB.STC-U3020.06	7	
39	wiring diagram	digital inputs IOM		SXB.STC-U3020.06	8	
40	wiring diagram	analog inputs IOM		SXB.STC-U3020.06	9	
41	wiring diagram	Relay-outputs		SXB.STC-U3020.06	10	
42	wiring diagram	Handling terminals		SXB.STC-U3020.06	11	
43	wiring diagram	Feed line connection		SXB.STC-U3020.06	12	
44	wiring diagram	Feed line connection		SXB.STC-U3020.06	13	
45	terminal connection	-X0,-X11,-X12,-X13		KXB.STC-U3020.06	1	

c				Date	14.12.2020	KAESER KOMPRESSOREN	list of contents	=	
b				Drawn	M.Zeeh			+	
a				Released	M.Zeeh			ZXB.STC-U3020.06	page 1
B	Change	Date	Name						2 Sht.

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		KXB.STC-U3020.06	2	
47	lay-out	control panel BBxxx		AXB.STC-U3020.06	1	
48	lay-out	control panel CB/DB xxx		AXB.STC-U3020.06	2	
49	lay-out	control panel EBxxx		AXB.STC-U3020.06	3	
50	lay-out	control panel FBxxx		AXB.STC-U3020.06	4	

c				Date	14.12.2020	KAESER KOMPRESSOREN	list of contents	=	
b				Drawn	M.Zeeh			+	
a				Released	M.Zeeh			ZXB.STC-U3020.06	page 2
B	Change	Date	Name						2 Sht.

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:	black 2,5mm² H07V-K, 14AWG UL-Style 1015, CSA-TEW
control voltage AC 115V:	red 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
control voltage AC 115V grounded:	white 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
control voltage DC 24V:	blue 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
control voltage DC 24V grounded:	blue/white 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
external voltage:	orange 1,5mm² H07V-K, 16AWG UL-Style 1015, CSA-TEW
ground conductor:	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				Date	14.12.2020	KAESER KOMPRESSOREN	block diagram	=	
b				Drawn	M.Zeeh		Blower STC+SC2	+	
a				Released	M.Zeeh		instructions + option	UXB.STC-U3020.06	page 1
C	Change	Date	Name						28 Sht.

-B1/-B4	pressure transducer (4...20mA)
-B5	differential pressure switch filter clogging
-B21	overload relay motor Blower
-B24	overload relay vent motor soundproofing casing
-B40/-B43	temperature probe Blower (PT100)
-B55	temperature probe PT100 (option)
-B59	thermal overload releasing relay
-B60	thermistor, compressor motor
-B70	temperature probe soundproofing casing
-B80/-B81	oil level switch
-B90	speed sensors
-1FU	fuse control voltage tapping
-2FU	primary control fuse control transformer
-3FU	secondary control fuse control transformer
-9FU	fuse start unloading ball valve (-M23/-M24)
-10FU	fuse 24V-AC
-12FU	fuse auto-transformer 575V/460V
-29FU	fuse phase sequence relay
-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)
-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
-S1	EMERGENCY STOP pushbutton
-S9	REMOTE reset fault message

-T11	control transformer 230V-AC
-T12	auto-transformer 575V/460V
-T21	control voltage supply 24V-DC
-T45	isolating amplifier
-X0	terminal strip, power supply
-X11	terminal strip, control
-X12	SC2-IOM digital outputs
-X15	SC2-IOM digital inputs
-X16	analog signals (external)
-X21	control voltage 24V-DC
-X22	not used
-X100	EMERGENCY STOP (external/customer)
-K20	*Main Control System SC2 MCS*
-X1	Ethernet
-X2	IO-BUS
-X3	RS485-FC (USS-Bus)
-X4	communication module
-X5	SD card slot
-X6	ground connection
-K21	*IO-Modul SC2 IOM-1*
	inside
-X1	*IO-Bus input*
-X2	*IO-Bus output*
-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
	external
-X11...-X13	analog inputs 0-20mA
-X14...-X17	analog inputs PT100
-X18...-X29	digital inputs
-X30...-X32	digital outputs

c				Date	14.12.2020	KAESER KOMPRESSOREN	block diagram	=	
b				Drawn	M.Zeeh		Blower STC+SC2	+	
a				Released	M.Zeeh		component legend	UXB.STC-U3020.06	page 2 / 28 Sht.
C	Change	Date	Name						

model	Common parts 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 -B1 Huba Control	894786.0 0.-1200mbar	894786.0 0.-1200mbar	894786.0 0.-1200mbar	894786.0 0.-1200mbar
pressure transducer -B4 Huba Control	894787.0 0.1200mbar	894787.0 0.1200mbar	894787.0 0.1200mbar	894787.0 0.1200mbar
differential pressure switch -B5 Dungs	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 -B40/-B43 WIKA	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	895393.10400 (BB/CB/DB) 895393.10410 (EB) 895393.10420 (FB) Pt100	895393.10400 (BB/CB/DB) 895393.10410 (EB) 895393.10420 (FB) Pt100	895393.10400 (BB/CB/DB) 895393.10410 (EB) 895393.10420 (FB) Pt100	895393.10400 (BB/CB/DB) 895393.10410 (EB) 895393.10420 (FB) 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	895637.0 5x20 0,315 A-T 250 VAC	895637.0 5x20 0,315 A-T 250 VAC	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 -K20 control Prodrive	7.7601.0 SC2MCS	7.7601.0 SC2MCS	7.7601.0 SC2MCS	7.7601.0 SC2MCS
Blower -K21 control 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	7.8237.00340 3RH2122-2JB40 DC 17-30 V AC-15: 230 V/10 A	7.8237.00340 3RH2122-2JB40 DC 17-30 V AC-15: 230 V/10 A	7.8237.00340 3RH2122-2JB40 DC 17-30 V AC-15: 230 V/10 A	7.8237.00340 3RH2122-2JB40 DC 17-30 V AC-15: 230 V/10 A
vacuum pump -M10 Schwarzer	895612.00100 24V-AC 60 Hz, 4W	895612.00100 24V-AC 60 Hz, 4W	895612.00100 24V-AC 60 Hz, 4W	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

Fortsetzung: nächstes Blatt

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electrical component parts list
Blower STC+SC2
Common parts
KAESER KOMPRESSOREN

Date	14.12.2020
Drawn	M.Zeeh
Released	M.Zeeh

C	Change	Date	Name
a			
b			
c			

model	Common parts 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)**
interference suppressor **Siemens**	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00	7.8740.05130 3RT2916-1CC00
Not-Halt **-S1**	834424.0 subassembly complete	834424.0 subassembly complete	834424.0 subassembly complete	834424.0 subassembly complete
control transformer **-T11** **Block**	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	7.2238.10090 USTE630 - 630 VA 208-600 V/2x 115 V+ 24 V
power supply **-T21** **Prodrive**	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	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	895635.0 Wieland WTP fig. 1, Sht. 11	895635.0 Wieland WTP fig. 1, Sht. 11	895635.0 Wieland WTP fig. 1, Sht. 11

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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 -B80/-B81 (option C5) Elobau	--- ---	--- ---	--- ---	--- ---
oil temperature -B55 (option C39) 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	7.3149.00660 FLARE 24 V-DC 1W-250 V/6 A	7.3149.00660 FLARE 24 V-DC 1W-250 V/6 A	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	--- ---	--- ---	--- ---	--- ---

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Blower STC+SC2
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model	option CB-DB-EB	CB-DB-EB	CB-DB-EB	CB-DB-EB	FB
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 **-B80/-B81** (option C5) **Elobau**	894631.00010	894631.00010	894631.00010	894631.00010	894631.00010
oil temperature **-B55** (option C39) **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 **-K26** **ifm**	895323.0 FR1 - DD2503	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	895039.0 IFC201
option C11: Unloaded start valve 24 V-DC (electromagnetic) (only EBS+ FBS)					
solenoid valve **-K1** **Riegler**	894204.00020 24V - DC	894204.00020 24V - DC	894204.00020 24V - DC	894204.00020 24V - DC	894204.00020 24V - DC
option C11: Unloaded start valve 115 V-AC (ball valve) (only EBS)					
coupling relay **-K53** **Siemens**	7.8237.00340 3RH2122-2JB40 DC 17-30 V AC-15: 240 V/10 A	7.8237.00340 3RH2122-2JB40 DC 17-30 V AC-15: 240 V/10 A	7.8237.00340 3RH2122-2JB40 DC 17-30 V AC-15: 240 V/10 A	7.8237.00340 3RH2122-2JB40 DC 17-30 V AC-15: 240 V/10 A	--- --- --- ---
actuator drive **-M23 / (-M24)** **Sun Yeh**	895449.00010 OM-1 110 V	895449.00010 OM-1 110 V	895449.00010 OM-1 110 V	895449.00010 OM-1 110 V	--- ---
fuse **-9FU** **Gould**	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 **-9FU** **Wöhner**	1-pole - 7.3320.00050 cl. CC Ambus Easy Switch	1-pole - 7.3320.00050 cl. CC Ambus Easy Switch	1-pole - 7.3320.00050 cl. CC Ambus Easy Switch	1-pole - 7.3320.00050 cl. CC Ambus Easy Switch	--- ---

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Released M.Zeeh

performance-related components

model	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 3RB3026-1VB0 10-40 A / S0 setting: 19,7 A NEC 430.32(C) incremental setting: 22,2 A
overload relay -B24 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
Blower motor -M1 Siemens	894989.0 208V-DD/60 Hz	894990.0 208V-DD/60 Hz	894991.0 208V-DD/60 Hz	894992.0 208V-DD/60 Hz
vent motor -M4 soundproofing casing . 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
contactor -Q1 / -Q2	7.8740.00350 3RT2024-1AK60	7.8740.00360 3RT2025-1AK60	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 . 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	7.8740.00330 3RT2018-1AK61	7.8740.00380 3RT2027-1AK60
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 . 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 mm² 600 V - 90°C	4x14 AWG / 4G2,5 mm² 600 V - 90°C	4x12 AWG / 4G4 mm² 600 V - 90°C	4x10 AWG / 4G6 mm² 600 V - 90°C
connection -W11 -W13 -W14	10 AWG / 6 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	10 AWG / 6 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	8 AWG / 10 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	8 AWG / 10 mm2 Phase rail Phase rail 600 V - 90°C
supply terminals -X0: U1/V1/W1/GRD	894864.00010 14-4 AWG / 2,5-16 mm² Wieland	894864.00010 14-4 AWG / 2,5-16 mm² Wieland	894864.00010 14-4 AWG / 2,5-16 mm² Wieland	894864.00010 14-4 AWG / 2,5-16 mm² Wieland
Handling	fig. 2, Sht. 11	fig. 2, Sht. 11	fig. 2, Sht. 11	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

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c b a C Change Date Name

performance-related components

model	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
overload relay -B24 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
Blower motor -M1 Siemens	895049.0 208V-DD/60 Hz	894994.0 208V-DD/60 Hz	894995.0 208V-DD/60 Hz	894996.1 (CB) 208V-DD/60 Hz	894997.1 (DB) 208V-DD/60 Hz
vent motor -M4 soundproofing casing . 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
contactor -Q1 / -Q2	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
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
terminal .	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
Phase rail . Siemens	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
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	7.8740.05140 3RT2926-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00	7.8740.05150 3RT2936-1CC00
wye bridge . Siemens	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
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 -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	1 AWG / 50 mm2 Phase rail Phase rail 600 V - 90°C	1 AWG / 50 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	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm² Wago	3x 894385.0 3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm² Wago
Handling	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11
Stripped length X	30 mm	30 mm	30 mm	36 mm	36 mm
supply connection	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12

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electrical component parts list
208V BB+CB+DB
performance-related components
KAESER KOMPRESSOREN
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Change Date Name

performance-related components

model	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 -B21 Siemens	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: 54,2 A NEC 430.32(C) incremental setting: 61,2 A	
overload relay -B24 soundproofing casing . Siemens	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 -M1 Siemens	894994.0 208V-DD/60 Hz	894995.0 208V-DD/60 Hz	894997.1 208V-DD/60 Hz	
vent motor -M4 soundproofing casing . Sodeca	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 -Q1 / -Q2 auxiliary switch . auxiliary switch . interference suppressor . terminal . Phase rail . Siemens	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 -Q3 auxiliary switch . auxiliary switch . interference suppressor . wye bridge . Siemens	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 -W19.1/19.2	4x6 AWG / 4G16 mm² 600 V - 90°C	4x6 AWG / 4G16 mm² 600 V - 90°C	4x4 AWG / 4G25 mm² 600 V - 90°C	
connection -W11 -W13 -W14	4 AWG / 25 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	
supply terminals -X0: U1/V1/W1/GRD Handling Stripped length X supply 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 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	

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UXB.STC-U3020.06
electrical component parts list
208V EB
performance-related components
KAESER KOMPRESSOREN

	Date	Name
c		
b	Drawn 14.12.2020	M.Zeeh
a	Released	M.Zeeh
C Change	Date	Name

performance-related components

model	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 Siemens	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 6,9 A NEC 430.32(C) incremental setting: 7,7 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 9,9 A NEC 430.32(C) incremental setting: 11,1 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 13,2 A NEC 430.32(C) incremental setting: 14,8 A	7.8741.00080 3RB3026-1VB0 10-40 A / S0 setting: 20,3 A NEC 430.32(C) incremental setting: 22,8 A
overload relay -B24 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
Blower motor -M1 Siemens	894989.0 230V-DD/60 Hz	894990.0 230V-DD/60 Hz	894991.0 230V-DD/60 Hz	894992.0 230V-DD/60 Hz
vent motor -M4 soundproofing casing . 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
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 . 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	7.8740.00330 3RT2018-1AK61	7.8740.00380 3RT2027-1AK60
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 . 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 mm² 600 V - 90°C	4x14 AWG / 4G2,5 mm² 600 V - 90°C	4x12 AWG / 4G4 mm² 600 V - 90°C	4x10 AWG / 4G6 mm² 600 V - 90°C
connection -W11 -W13 -W14	10 AWG / 6 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	10 AWG / 6 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	8 AWG / 10 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	8 AWG / 10 mm2 Phase rail Phase rail 600 V - 90°C
supply terminals -X0: U1/V1/W1/GRD	894864.00010	894864.00010	894864.00010	894864.00010
	14-4 AWG / 2,5-16 mm² Wieland	14-4 AWG / 2,5-16 mm² Wieland	14-4 AWG / 2,5-16 mm² Wieland	14-4 AWG / 2,5-16 mm² Wieland
Handling	fig. 2, Sht. 11	fig. 2, Sht. 11	fig. 2, Sht. 11	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

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230V BB+CB+DB
performance-related components
KAESER KOMPRESSOREN
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
c b a C Change Date Name

performance-related components

model	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 Siemens	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 27,7 A NEC 430.32(C) incremental setting: 31 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 32,4 A NEC 430.32(C) incremental setting: 36,3 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 38,1 A NEC 430.32(C) incremental setting: 42,7 A	7.8741.00140 3RB3046-1EB0 32-115 A / S3 setting: 54,3 A NEC 430.32(C) incremental setting: 60,8 A	7.8741.00140 3RB3046-1EB0 32-115 A / S3 setting: 54,3 A NEC 430.32(C) incremental setting: 60,8 A
overload relay -B24 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
Blower motor -M1 Siemens	895049.0 230V-DD/60 Hz	894994.0 230V-DD/60 Hz	894995.0 230V-DD/60 Hz	894996.1 (CB) 230V-DD/60 Hz	894997.1 (DB) 230V-DD/60 Hz
vent motor -M4 soundproofing casing . 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
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 . Siemens	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
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 . Siemens	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	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 -W13 -W14	6 AWG / 16 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	1 AWG / 50 mm2 4 AWG / 25 mm2 8 AWG / 10 mm2 600 V - 90°C	1 AWG / 50 mm2 4 AWG / 25 mm2 8 AWG / 10 mm2 600 V - 90°C
supply terminals -X0: U1/V1/W1/GRD Handling Stripped length X supply 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	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

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230V BB+CB+DB
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Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Change Date Name

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: 32,4 A NEC 430.32(C) incremental setting: 36,3 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 38,1 A NEC 430.32(C) incremental setting: 42,7 A	7.8741.00140 3RB3046-1EB0 32-115 A / S3 setting: 54,3 A NEC 430.32(C) incremental setting: 60,8 A	
	Siemens				
overload relay soundproofing casing	-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	
	Siemens				
Blower motor	-M1	894994.0 230V-DD/60 Hz	894995.0 230V-DD/60 Hz	894997.1 230V-DD/60 Hz	
	Siemens				
vent motor soundproofing casing	-M4 .	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	895040.00040 HC-31-2T / H-I-E 230 V-D/60 Hz (3PH/GRD) 210W 1,10 A	
	Sodeca				
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	7.3140.05270	7.3140.05370	
	Siemens	3RA2933-3FA00	3RA2933-3FA00	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	7.3140.01170	7.3140.01170	
	Siemens	3RT1936-4BA31	3RT1936-4BA31	3RT1936-4BA31	
motor cable	-W19.1/19.2	4x6 AWG / 4G16 mm² 600 V - 90°C	4x6 AWG / 4G16 mm² 600 V - 90°C	4x4 AWG / 4G25 mm² 600 V - 90°C	
connection	-W11 -W13 -W14	4 AWG / 25 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 4 AWG / 25 mm2 8 AWG / 10 mm2 600 V - 90°C	
supply terminals	-X0:	3x 895314.0	3x 895314.0	3x 894385.0	
	U1/V1/W1/GRD	3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago	3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago	3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm² Wago	
	Handling	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11	
	Stripped length X	30 mm	30 mm	36 mm	
supply	connection	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12	

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230V EB
performance-related components
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	Change	Date	Name
c			
b			
a		Date	M.Zeeh
		Drawn	M.Zeeh
		Released	

performance-related components

model		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: 3,4 A NEC 430.32(C) incremental setting: 3,8 A	7.8741.00060 3RB3026-1SB0 3-12 A / S0 setting: 5 A NEC 430.32(C) incremental setting: 5,6 A	7.8741.00060 3RB3026-1SB0 3-12 A / S0 setting: 6,6 A NEC 430.32(C) incremental setting: 7,4 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 10,2 A NEC 430.32(C) incremental setting: 11,4 A	7.8741.00070 3RB3026-1QB0 6-25 A / S0 setting: 13,9 A NEC 430.32(C) incremental setting: 15,5 A
overload relay soundproofing casing	-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 460V-D/60 Hz	894990.0 460V-D/60 Hz	894991.0 460V-D/60 Hz	894992.0 460V-D/60 Hz	895049.0 460V-D/60 Hz
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	7.8740.00340 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	. Siemens	7.6861.0 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	7.8740.00330 3RT2018-1AK61	7.8740.00370 3RT2026-1AK60
auxiliary switch	.	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	7.8740.05010 3RH2911-1HA11	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	. Siemens	7.3140.05030 3RT1916-4BA31	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 mm² 600 V - 90°C	4x14 AWG / 4G2,5 mm² 600 V - 90°C	4x14 AWG / 4G2,5 mm² 600 V - 90°C	4x12 AWG / 4G4 mm² 600 V - 90°C	4x10 AWG / 4G6 mm² 600 V - 90°C
connection	-W11 -W13 -W14	14 AWG / 2,5 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	14 AWG / 2,5 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	14 AWG / 2,5 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	10 AWG / 6 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	8 AWG / 10 mm2 Phase rail Phase rail 600 V - 90°C
supply terminals	-X0: U1/V1/W1/GRD	894864.00010 14-4 AWG / 2,5-16 mm² Wieland	894864.00010 14-4 AWG / 2,5-16 mm² Wieland	894864.00010 14-4 AWG / 2,5-16 mm² Wieland	894864.00010 14-4 AWG / 2,5-16 mm² Wieland	894864.00010 14-4 AWG / 2,5-16 mm² Wieland
	Handling	fig. 2, Sht. 11	fig. 2, Sht. 11	fig. 2, Sht. 11	fig. 2, Sht. 11	fig. 2, Sht. 11
	Stripped length X	16 mm	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	fig. 1, Sht. 12

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electrical component parts list
460V BB+CB+DB
performance-related components
KAESER KOMPRESSOREN
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Change Date Name
a b c

model	performance-related components 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 -B21 Siemens	7.8741.00080 3RB3026-1VB0 10-40 A / S0 setting: 16,2 A NEC 430.32(C) incremental setting: 18,2 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 19,1 A NEC 430.32(C) incremental setting: 21,3 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 27,1 A NEC 430.32(C) incremental setting: 30,4 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 32,9 A NEC 430.32(C) incremental setting: 36,9 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 40,4 A NEC 430.32(C) incremental setting: 45,3 A
overload relay -B24 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
Blower motor -M1 Siemens	894994.0 460 V-D/60 Hz	894995.0 460 V-D/60 Hz	894996.1 (CB) 894997.1 (DB) 460 V-D/60 Hz	894978.1 460 V-D/60 Hz	894979.1 460 V-D/60 Hz
vent motor -M4 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
contactor -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
auxiliary switch .					
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 . 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
contactor -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
auxiliary switch .					
auxiliary switch .					
interference suppressor .	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
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
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
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
supply terminals -X0: U1/V1/W1/GRD	894864.00010 14-4 AWG / 2,5-16 mm² Wieland	894864.00010 14-4 AWG / 2,5-16 mm² Wieland	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago	3x 895314.0 3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago
Handling	fig. 2, Sht. 11	fig. 2, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11
Stripped length X	16 mm	16 mm	30 mm	30 mm	30 mm
supply connection	fig. 1, Sht. 12	fig. 1, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12

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electrical component parts list
460V CB+DB
performance-related components
KAESER KOMPRESSOREN

Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh

c	b	a	C	Change	Date	Name

model	performance-related components 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: 16,2 A NEC 430.32(C) incremental setting: 18,2 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 19,1 A NEC 430.32(C) incremental setting: 21,3 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 27,1 A NEC 430.32(C) incremental setting: 30,4 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 27,1 A NEC 430.32(C) incremental setting: 30,4 A
overload relay -B24 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	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	894995.0 460V-D/60 Hz	894997.1 460V-D/60 Hz	894997.1 460V-D/60 Hz
vent motor -M4 soundproofing casing . 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 . Siemens	7.6861.0 3RV1915-1AB	7.3140.05270 3RA2933-3FA00	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 . Siemens	7.3140.02070 3RT1926-4BA31	7.3140.02070 3RT1926-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31
motor cable -W19.1/19.2	4x10 AWG / 4G6 mm² 600 V - 90°C	4x10 AWG / 4G6 mm² 600 V - 90°C	4x8 AWWG / 4G10 mm² 600 V - 90°C	4x8 AWWG / 4G10 mm² 600 V - 90°C
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 Phase rail 600 V - 90°C	6 AWG / 16 mm2 Phase rail Phase rail 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
	14-4 AWG / 2,5-16 mm² Wieland	14-4 AWG / 2,5-16 mm² Wieland	8-1 AWG / 10-50 mm² Wago	8-1 AWG / 10-50 mm² Wago
Handling	fig. 2, Sht. 11	fig. 2, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11
Stripped length X	16 mm	16 mm	30 mm	30 mm
supply connection	fig. 1, Sht. 12	fig. 1, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12

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electrical component parts list
460V EB+FB
performance-related components
KAESER KOMPRESSOREN
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
c
b
a
C Change Date Name

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	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: 32,9 A NEC 430.32(C) incremental setting: 36,9 A	7.8741.00090 3RB3036-1UB0 12,5-50 A / S2 setting: 32,9 A NEC 430.32(C) incremental setting: 36,9 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 40,4 A NEC 430.32(C) incremental setting: 45,3 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 40,4 A NEC 430.32(C) incremental setting: 45,3 A
overload relay -B24 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	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	894978.1 460V-D/60 Hz	894978.1 460V-D/60 Hz	894979.1 460V-D/60 Hz	894979.1 460V-D/60 Hz
vent motor -M4 soundproofing casing . 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	895426.0 W4D420 (ebm) 460 V-Y/60 Hz 265W 0,62 A
contactor -Q1 / -Q2 auxiliary switch . auxiliary switch . interference suppressor . terminal . Phase rail . Siemens	7.8740.00410 3RT2036-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.05270 3RA2933-3FA00	7.8740.00410 3RT2036-1AK60 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	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 -Q3 auxiliary switch . auxiliary switch . interference suppressor . wye bridge . Siemens	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	7.8740.00400 3RT2035-1AK60 7.8740.05150 3RT2936-1CC00 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	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 Handling Stripped length X supply 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	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

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UXB.STC-U3020.06
electrical component parts list
460V EB+FB
performance-related components
KAESER KOMPRESSOREN

Date	14.12.2020
Drawn	M.Zeeh
Released	M.Zeeh

c	b	a	C	Change	Date	Name

performance-related components

model	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: 47,9 A NEC 430.32(C) incremental setting: 53,7 A	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 47,9 A NEC 430.32(C) incremental setting: 53,7 A	7.8741.00140 3RB3046-1XB0 32-115 A / S3 setting: 64,1 A NEC 430.32(C) incremental setting: 71,8 A	7.8741.00140 3RB3046-1XB0 32-115 A / S3 setting: 64,1 A NEC 430.32(C) incremental setting: 71,8 A	7.8741.00140 3RB3046-1XB0 32-115 A / S3 setting: 65,8 A NEC 430.32(C) incremental setting: 73,7 A
overload relay -B24 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	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	894717.1 460V-D/60 Hz	894719.1 460V-D/60 Hz	894719.1 460V-D/60 Hz	894719.12010 460V-D/60 Hz
vent motor -M4 soundproofing casing . 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	7.8740.00450 3RT2046-1AK60	7.8740.00450 3RT2046-1AK60
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 . Siemens	7.3140.05270 3RA2933-3FA00	7.3140.05270 3RA2933-3FA00	--- ---	--- ---	--- ---
contactor -Q3	7.8740.00400 3RT2035-1AK60	7.8740.00400 3RT2035-1AK60	7.8740.00420 3RT2037-1AK60	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
wye bridge . Siemens	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.01170 3RT1936-4BA31	7.3140.00940 3RT1946-4BA31	7.3140.00940 3RT1946-4BA31
motor cable -W19.1/19.2	4x4 AWG / 4G25 mm² 600 V - 90°C	4x4 AWG / 4G25 mm² 600 V - 90°C	4x2 AWG / 4G35 mm² 600 V - 90°C	4x2 AWG / 4G35 mm² 600 V - 90°C	4x2 AWG / 4G35 mm² 600 V - 90°C
connection -W11 -W13 -W14	1 AWG / 50 mm² Phase rail Phase rail 600 V - 90°C	1 AWG / 50 mm² Phase rail Phase rail 600 V - 90°C	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	2 AWG / 35 mm² 2 AWG / 35 mm² 8 AWG / 10 mm² 600 V - 90°C
supply terminals -X0: U1/V1/W1/PE Handling Stripped length X	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² 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

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UXB.STC-U3020.06
electrical component parts list
460V EB+FB
performance-related components
KAESER KOMPRESSOREN
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
c
b
a
C Change Date Name

performance-related components

model	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 -B21 Siemens	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 78,5 A NEC 430.32(C) incremental setting: 87,9 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 77,9 A NEC 430.32(C) incremental setting: 87,3 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 98,2 A NEC 430.32(C) incremental setting: 109,9 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 92,4 A NEC 430.32(C) incremental setting: 103,5 A	7.6873.00240 3RB2056-1FW2 50-200 A / S6 setting: 114,3 A NEC 430.32(C) incremental setting: 128 A
overload relay -B24 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	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	894723.1 460V-D/60 Hz	894722.12010 460V-D/60 Hz	895025.1 460V-D/60 Hz	894724.1 460V-D/60 Hz	894726.1 460V-D/60 Hz
vent motor -M4 soundproofing casing . 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	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 -Q1 / -Q2 auxiliary switch . auxiliary switch . interference suppressor . terminal . Phase rail . Siemens	7.3140.02140 3RT1054-1AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- ---	7.3140.02140 3RT1054-1AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- ---	7.3140.02140 3RT1054-1AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- ---	7.3140.02140 3RT1054-1AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- ---	7.3140.02160 3RT1056-6AF36 7.3140.01690 3RH1921-1CA10 7.3140.02030 3RH1921-1CA01 7.3140.02020 3RT1956-1CC00 --- --- --- ---
contactor -Q3 auxiliary switch . auxiliary switch . interference suppressor . wye bridge . Siemens	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 -W19.1/19.2	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	4x2/0 AWG / 4G70 mm² 600 V - 90°C	4x3/0 AWG / 4G95 mm² 600 V - 90°C
connection -W11 -W13 -W14	1 AWG / 50 mm² 1 AWG / 50 mm² 4 AWG / 25 mm² 600 V - 90°C	1 AWG / 50 mm² 1 AWG / 50 mm² 4 AWG / 25 mm² 600 V - 90°C	2/0 AWG / 70 mm² 2/0 AWG / 70 mm² 2 AWG / 35 mm² 600 V - 90°C	2/0 AWG / 70 mm² 2/0 AWG / 70 mm² 2 AWG / 35 mm² 600 V - 90°C	3/0 AWG / 95 mm² 3/0 AWG / 95 mm² 2 AWG / 35 mm² 600 V - 90°C
supply terminals -X0: U1/V1/W1 Handling Stripped length X	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 895545.0 3x 895545.00030 3x 895545.00040 Wago (50-185 mm²) 1 AWG - 350 MCM fig. 3, Sht. 11 45 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	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

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UXB.STC-U3020.06
page 18
28 Sht.
electrical component parts list
460V FB
performance-related components
KAESER KOMPRESSOREN
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Name
Date
c b a C Change

performance-related components

model	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 Siemens	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 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
Blower motor -M1 Siemens	894969.00500 575V-D/60 Hz	894970.00500 575V-D/60 Hz	894971.00500 575V-D/60 Hz	894972.00500 575V-D/60 Hz	894973.00500 575V-D/60 Hz
vent motor -M4 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
contactor -Q1 / -Q2 auxiliary switch . auxiliary switch . interference suppressor . terminal . Phase rail . Siemens	7.8740.00340 3RT2023-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05140 3RT2926-1CC00 7.3140.05080 3RV2925-5EB 7.6861.0 3RV1915-1AB	7.8740.00340 3RT2023-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05140 3RT2926-1CC00 7.3140.05080 3RV2925-5EB 7.6861.0 3RV1915-1AB	7.8740.00350 3RT2024-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05140 3RT2926-1CC00 7.3140.05080 3RV2925-5EB 7.6861.0 3RV1915-1AB	7.8740.00360 3RT2025-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05140 3RT2926-1CC00 7.3140.05080 3RV2925-5EB 7.6861.0 3RV1915-1AB	7.8740.00380 3RT2027-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05140 3RT2926-1CC00 7.3140.05080 3RV2925-5EB 7.6861.0 3RV1915-1AB
contactor -Q3 auxiliary switch . auxiliary switch . interference suppressor . wye bridge . Siemens	7.8740.00310 3RT2016-1AK61 7.8740.05010 3RH2911-1HA11 7.8740.05130 3RT2916-1CC00 7.3140.05030 3RT1916-4BA31	7.8740.00310 3RT2016-1AK61 7.8740.05010 3RH2911-1HA11 7.8740.05130 3RT2916-1CC00 7.3140.05030 3RT1916-4BA31	7.8740.00310 3RT2016-1AK61 7.8740.05010 3RH2911-1HA11 7.8740.05130 3RT2916-1CC00 7.3140.05030 3RT1916-4BA31	7.8740.00310 3RT2016-1AK61 7.8740.05010 3RH2911-1HA11 7.8740.05130 3RT2916-1CC00 7.3140.05030 3RT1916-4BA31	7.8740.00360 3RT2025-1AK60 7.8740.05140 3RT2926-1CC00 7.3140.02070 3RT1926-4BA31
motor cable -W19.1/19.2	4x14 AWG / 4G2,5 mm² 600 V - 90°C	4x14 AWG / 4G2,5 mm² 600 V - 90°C	4x14 AWG / 4G2,5 mm² 600 V - 90°C	4x14 AWG / 4G2,5 mm² 600 V - 90°C	4x12 AWG / 4G4 mm² 600 V - 90°C
connection -W11 -W13 -W14	14 AWG / 2,5 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	14 AWG / 2,5 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	14 AWG / 2,5 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	10 AWG / 6 mm2 Phase rail 14 AWG / 2,5 mm2 600 V - 90°C	10 AWG / 6 mm2 Phase rail Phase rail 600 V - 90°C
supply terminals -X0: U1/V1/W1/GRD Handling Stripped length X supply connection	894864.00010 14-4 AWG / 2,5-16 mm² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12

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UXB.STC-U3020.06
electrical component parts list
575V BB+CB+DB
performance-related components
KAESER KOMPRESSOREN
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh

model	performance-related components 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 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: 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 -B24 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
Blower motor -M1 Siemens	8949743.00500 575 V-D/60 Hz	894975.00500 575 V-D/60 Hz	894976.10500 (CB) 894977.10500 (DB) 575 V-D/60 Hz	894978.10500 575 V-D/60 Hz	894979.10500 575 V-D/60 Hz
vent motor -M4 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
contactor -Q1 / -Q2 auxiliary switch . auxiliary switch . interference suppressor . terminal . Phase rail . Siemens	7.8740.00380 3RT2027-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05140 3RT2926-1CC00 7.3140.05080 3RV2925-5EB 7.6861.0 3RV1915-1AB	7.8740.00400 3RT2035-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.02120 3RV1935-1A	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	7.8740.00400 3RT2035-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.05270 3RA2933-3FA00	7.8740.00410 3RT2036-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.05270 3RA2933-3FA00
contactor -Q3 auxiliary switch . auxiliary switch . interference suppressor . wye bridge . Siemens	7.8740.00360 3RT2025-1AK60 7.8740.05140 3RT2926-1CC00 7.3140.02070 3RT1926-4BA31	7.8740.00370 3RT2026-1AK60 7.8740.05140 3RT2926-1CC00 7.3140.02070 3RT1926-4BA31	7.8740.00380 3RT2027-1AK60 7.8740.05140 3RT2926-1CC00 7.3140.02070 3RT1926-4BA31	7.8740.00390 3RT2028-1AK60 7.8740.05140 3RT2926-1CC00 7.3140.02070 3RT1926-4BA31	7.8740.00400 3RT2035-1AK60 7.8740.05150 3RT2936-1CC00 7.3140.01170 3RT1936-4BA31
motor cable -W19.1/19.2	4x12 AWG / 4G4 mm² 600 V - 90°C	4x10 AWG / 4G6 mm² 600 V - 90°C	4x8 AWG / 4G10 mm² 600 V - 90°C	4x8 AWG / 4G10 mm² 600 V - 90°C	4x6 AWG / 4G16 mm² 600 V - 90°C
connection -W11 -W13 -W14	10 AWG / 6 mm2 Phase rail Phase rail 600 V - 90°C	8 AWG / 10 mm2 Phase rail 10 AWG / 6 mm2 600 V - 90°C	8 AWG / 10 mm2 Phase rail 10 AWG / 6 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
supply terminals -X0: U1/V1/W1/GRD Handling Stripped length X supply connection	894864.00010 14-4 AWG / 2,5-16 mm² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm² Wieland fig. 2, Sht. 11 16 mm fig. 1, Sht. 12	894864.00010 14-4 AWG / 2,5-16 mm² 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 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

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electrical component parts list
575V CB+DB
performance-related components
KAESER KOMPRESSOREN
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Date Name
c b a C Change

model		performance-related components 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	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
	Siemens				
overload relay soundproofing casing	-B24 .	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
	Siemens				
Blower motor	-M1	8949743.00500	894975.00500	894977.10500	894977.10500
	Siemens	575V-D/60 Hz	575V-D/60 Hz	575V-D/60 Hz	575V-D/60 Hz
vent motor soundproofing casing	-M4 .	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
	Sodeca/ebm				
auto-transformer	-T12	--- --- ---	--- --- ---	--- --- ---	7.5452.00340 AT3/x 558 VA 575 V/460 V
	Block				
fuse	-12FU	---	---	---	(3x) - 7.3161.00390
	Gould	---	---	---	ATQR 1 A - 600 V - class CC
fuse socket	-12FU	---	---	---	3-pole - 7.3320.00060
	Wöhner	---	---	---	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 3RV2925-5EB	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E	7.3140.05070 3RV2935-5E
Phase rail	.	7.6861.0	7.3140.05270	7.3140.05270	7.3140.05270
	Siemens	3RV1915-1AB	3RA2933-3FA00	3RA2933-3FA00	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	7.3140.02070	7.3140.02070	7.3140.02070
	Siemens	3RT1926-4BA31	3RT1926-4BA31	3RT1926-4BA31	3RT1926-4BA31
motor cable	-W19.1/19.2	4x12 AWG / 4G4 mm² 600 V - 90°C	4x10 AWG / 4G6 mm² 600 V - 90°C	4x8 AWWG / 4G10 mm² 600 V - 90°C	4x8 AWWG / 4G10 mm² 600 V - 90°C
connection	-W11 -W13 -W14	10 AWG / 6 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	6 AWG / 16 mm² Phase rail 10 AWG / 6 mm² 600 V - 90°C

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

	Date	Name
c		
b	14.12.2020	M.Zeeh
a	Drawn	M.Zeeh
C Change	Released	

	performance-related components			
model	25 hp	30 hp	40 hp	40 hp
	EB (18,5 kW)	EB (22 kW)	EB+ FB-C (30 kW)	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 -X0:	894864.00010	894864.00010	3x 895314.0	3x 895314.0
U1/V1/W1/GRD			3x 895314.00010	3x 895314.00010
			4x 895314.00040	4x 895314.00040
	14-4 AWG / 2,5-16 mm²	14-4 AWG / 2,5-16 mm²	8-1 AWG / 10-50 mm²	8-1 AWG / 10-50 mm²
	Wieland	Wieland	Wago	Wago
Handling	fig. 2, Sht. 11	fig. 2, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11
Stripped length X	16 mm	16 mm	30 mm	30 mm
supply connection	fig. 1, Sht. 12	fig. 1, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12

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575V EB+FB
performance-related components
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		Date	Name
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b	Drawn	14.12.2020	M.Zeeh
a	Released	M.Zeeh	
C	Change	Date	Name

performance-related components

model	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 soundproofing casing . 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 575V-D/60 Hz	894978.10500 575V-D/60 Hz	894979.10500 575V-D/60 Hz	894979.10500 575V-D/60 Hz
vent motor -M4 soundproofing casing . 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 auxiliary switch . auxiliary switch . interference suppressor . terminal . Phase rail . Siemens	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	7.8740.00400 3RT2035-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.05270 3RA2933-3FA00	7.8740.00410 3RT2036-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.05270 3RA2933-3FA00	7.8740.00410 3RT2036-1AK60 7.8740.05030 3RH2911-1HA20 7.8740.05150 3RT2936-1CC00 7.3140.05070 3RV2935-5E 7.3140.05270 3RA2933-3FA00
contactor -Q3 auxiliary switch . auxiliary switch . interference suppressor . wye bridge . Siemens	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	7.8740.00400 3RT2035-1AK60 7.8740.05150 3RT2936-1CC00 7.3140.01170 3RT1936-4BA31
motor cable -W19.1/19.2	4x8 AWWG / 4G10 mm² 600 V - 90°C	4x8 AWWG / 4G10 mm² 600 V - 90°C	4x8 AWWG / 4G10 mm² 600 V - 90°C	4x8 AWWG / 4G10 mm² 600 V - 90°C
connection -W11 -W13 -W14	6 AWG / 16 mm² Phase rail Phase rail 600 V - 90°C	6 AWG / 16 mm² Phase rail Phase rail 600 V - 90°C	4 AWG / 25 mm² Phase rail Phase rail 600 V - 90°C	4 AWG / 25 mm² Phase rail Phase rail 600 V - 90°C

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

Date	14.12.2020
Drawn	M.Zeeh
Released	M.Zeeh

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	performance-related components			
model	50 hp	50 hp	60 hp	60 hp
	EB+ FB-C (37 kW)	FB-S (37 kW)	EB+ FB-C (45 kW)	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:	3x 895314.0	3x 895314.0	3x 895314.0	3x 895314.0
U1/V1/W1/GRD	3x 895314.00010	3x 895314.00010	3x 895314.00010	3x 895314.00010
	4x 895314.00040	4x 895314.00040	4x 895314.00040	4x 895314.00040
	8-1 AWG / 10-50 mm²	8-1 AWG / 10-50 mm²	8-1 AWG / 10-50 mm²	8-1 AWG / 10-50 mm²
	Wago	Wago	Wago	Wago
Handling	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11
Stripped length X	30 mm	30 mm	30 mm	30 mm
supply connection	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 2, Sht. 12

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C Change | Date | Name
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh

model		performance-related components 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	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 39,1 A NEC 430.32(C) incremental	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 39,1 A NEC 430.32(C) incremental	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 53,6 A NEC 430.32(C) incremental	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 53,6 A NEC 430.32(C) incremental	7.8741.00100 3RB3036-1WB0 20-80 A / S2 setting: 53,6 A NEC 430.32(C) incremental
	Siemens	setting: 44,2 A	setting: 44,2 A	setting: 60,6 A	setting: 60,6 A	setting: 60,6 A
overload relay	-B24	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,36 A NEC 430.32(C) incremental	7.8741.00020 3RB3016-1NB0 0,32-1,25 A / S00 setting: 0,57 A NEC 430.32(C) incremental
soundproofing casing	.					
	Siemens	setting: 0,41 A	setting: 0,64 A	setting: 0,41 A	setting: 0,41 A	setting: 0,64 A
Blower motor	-M1	894717.10500	894717.10500	894719.10500	894719.10500	894719.10500
	Siemens	575V-D/60 Hz	575V-D/60 Hz	575V-D/60 Hz	575V-D/60 Hz	575V-D/60 Hz
vent motor	-M4	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz	895426.0 W4D420 (ebm) 460 V-Y/60 Hz	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz	895040.00010 HC-31-2T / H-I-E 575 V-Y/60 Hz	895426.0 W4D420 (ebm) 460 V-Y/60 Hz
soundproofing casing	.					
	Sodeca/ebm	180W 0,39 A	265W 0,62 A	180W 0,39 A	180W 0,39 A	265W 0,62 A
auto-transformer	-T12	--- ---	7.5452.00340 AT3/x	--- ---	--- ---	7.5452.00340 AT3/x
	Block	---	558 VA 575 V/460 V	---	---	558 VA 575 V/460 V
fuse	-12FU	---	(3x) - 7.3161.00390	---	---	(3x) - 7.3161.00390
	Gould	---	ATQR 1 A - 600 V - class CC	---	---	ATQR 1 A - 600 V - class CC
fuse socket	-12FU	---	3-pole - 7.3320.00060	---	---	3-pole - 7.3320.00060
	Wöhner	---	class CC-Ambus Easy Switch	---	---	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 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	7.8740.05150 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	7.3140.05070 3RV2935-5E
Phase rail	.	7.3140.05270	7.3140.05270	7.3140.05270	7.3140.05270	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	7.3140.01170	7.3140.01170	7.3140.01170	7.3140.01170
	Siemens	3RT1936-4BA31	3RT1936-4BA31	3RT1936-4BA31	3RT1936-4BA31	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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b	Drawn	M.Zeeh
a	Released	M.Zeeh
C Change	14.12.2020	

model	performance-related components 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:	3x 895314.0	3x 895314.0	6x 894385.0 (Wago)	3x 894385.0	3x 894385.0
U1/V1/W1/PE	3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago	3x 895314.00010 4x 895314.00040 8-1 AWG / 10-50 mm² Wago	3x 894385.00030 3x 894385.00040 4-4/0 AWG / 25-95 mm² Wago	3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm² Wago	3x 894385.00010 4x 894385.00040 4-4/0 AWG / 25-95 mm² Wago
Handling	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11	fig. 3, Sht. 11
Torque	---	---	---	---	---
Stripped length X	30 mm	30 mm	36 mm	36 mm	36 mm
PE-rail	---	---	832489.00010 (PE)	---	---
Torque	---	---	133lb-in	---	---
Stripped length X	---	---	25 mm + Conductor crimp pins	---	---
supply connection	fig. 2, Sht. 12	fig. 2, Sht. 12	fig. 3, Sht. 13	fig. 2, Sht. 12	fig. 2, Sht. 12

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575V EB+FB
performance-related components
KAESER KOMPRESSOREN
c Change Date Name
b Date 14.12.2020
a Drawn M.Zeeh
Released M.Zeeh

performance-related components

model		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	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
	Siemens					
overload relay	-B24	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
soundproofing casing	.					
	Siemens					
Blower motor	-M1	894723.10500 575V-D/60 Hz	894722.10500 575V-D/60 Hz	895025.10500 575V-D/60 Hz	894724.10500 575V-D/60 Hz	894726.10500 575V-D/60 Hz
	Siemens					
vent motor	-M4	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
soundproofing casing	.					
	Sodeca/ebm					
auto-transformer	-T12	--- --- ---	7.5452.00340 AT3/x 558 VA 575 V/460 V	--- --- ---	7.5452.00340 AT3/x 558 VA 575 V/460 V	--- --- ---
	Block					
fuse	-12FU	--- ---	(3x) - 7.3161.00390 ATQR 1 A - 600 V - class CC	--- ---	(3x) - 7.3161.00390 ATQR 1 A - 600 V - class CC	--- ---
	Gould					
fuse socket	-12FU	--- ---	3-pole (2x) - 7.3320.00060 class CC-Ambus Easy Switch	--- ---	3-pole (2x) - 7.3320.00060 class CC-Ambus Easy Switch	--- ---
	Wöhner					
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
	Siemens					
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	2 AWG / 35 mm²	2 AWG / 35 mm²	1 AWG / 50 mm²	1 AWG / 50 mm²	1 AWG / 50 mm²
	-W13	2 AWG / 35 mm²	2 AWG / 35 mm²	1 AWG / 50 mm²	1 AWG / 50 mm²	1 AWG / 50 mm²
	-W14	8 AWG / 10 mm² 600 V - 90°C	8 AWG / 10 mm² 600 V - 90°C	6 AWG / 16 mm² 600 V - 90°C	6 AWG / 16 mm² 600 V - 90°C	4 AWG / 25 mm² 600 V - 90°C

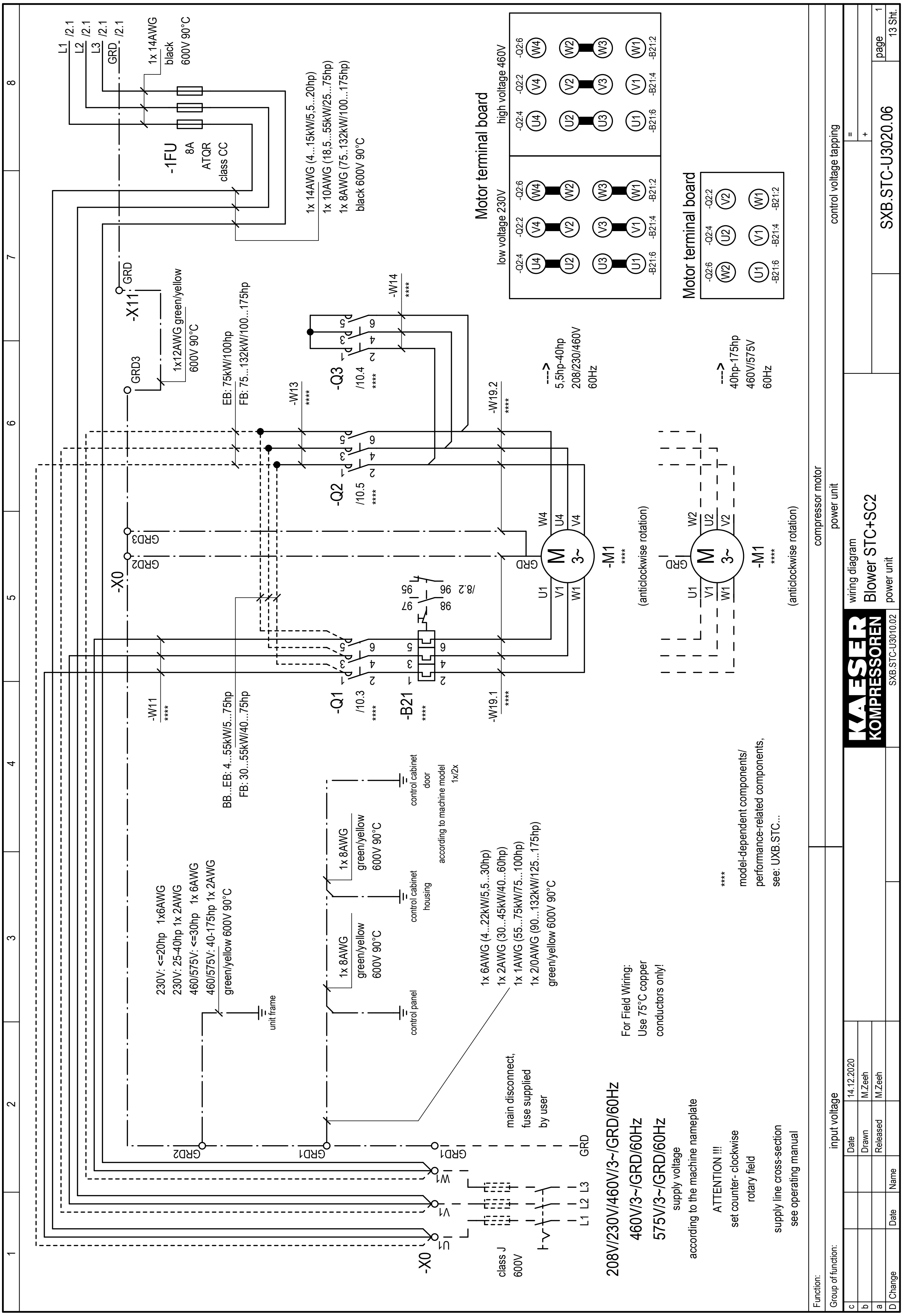
Fortsetzung: nächstes Blatt

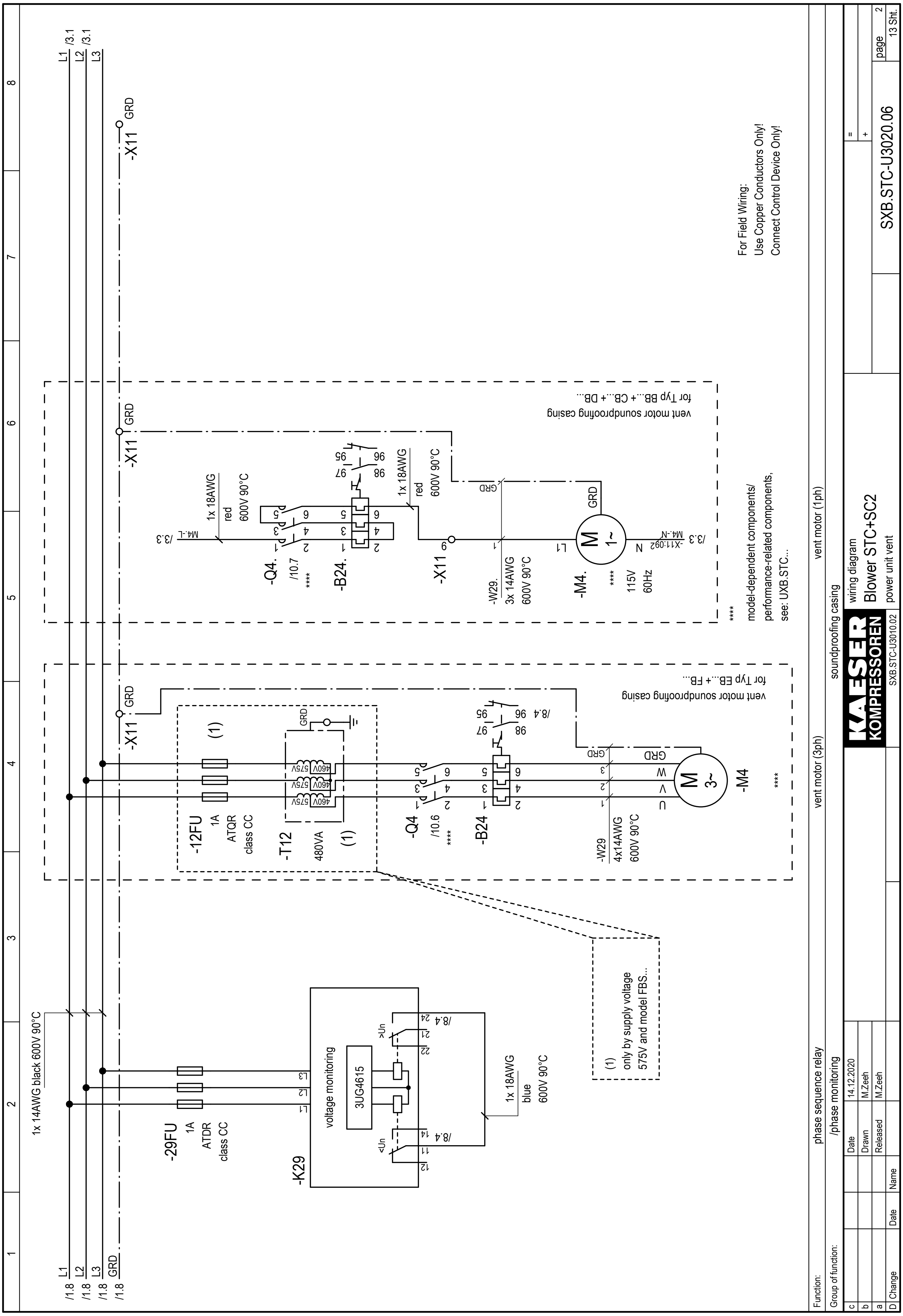
page 27
28 Sht.
UXB.STC-U3020.06
electrical component parts list
575V FB
performance-related components
KAESER KOMPRESSOREN

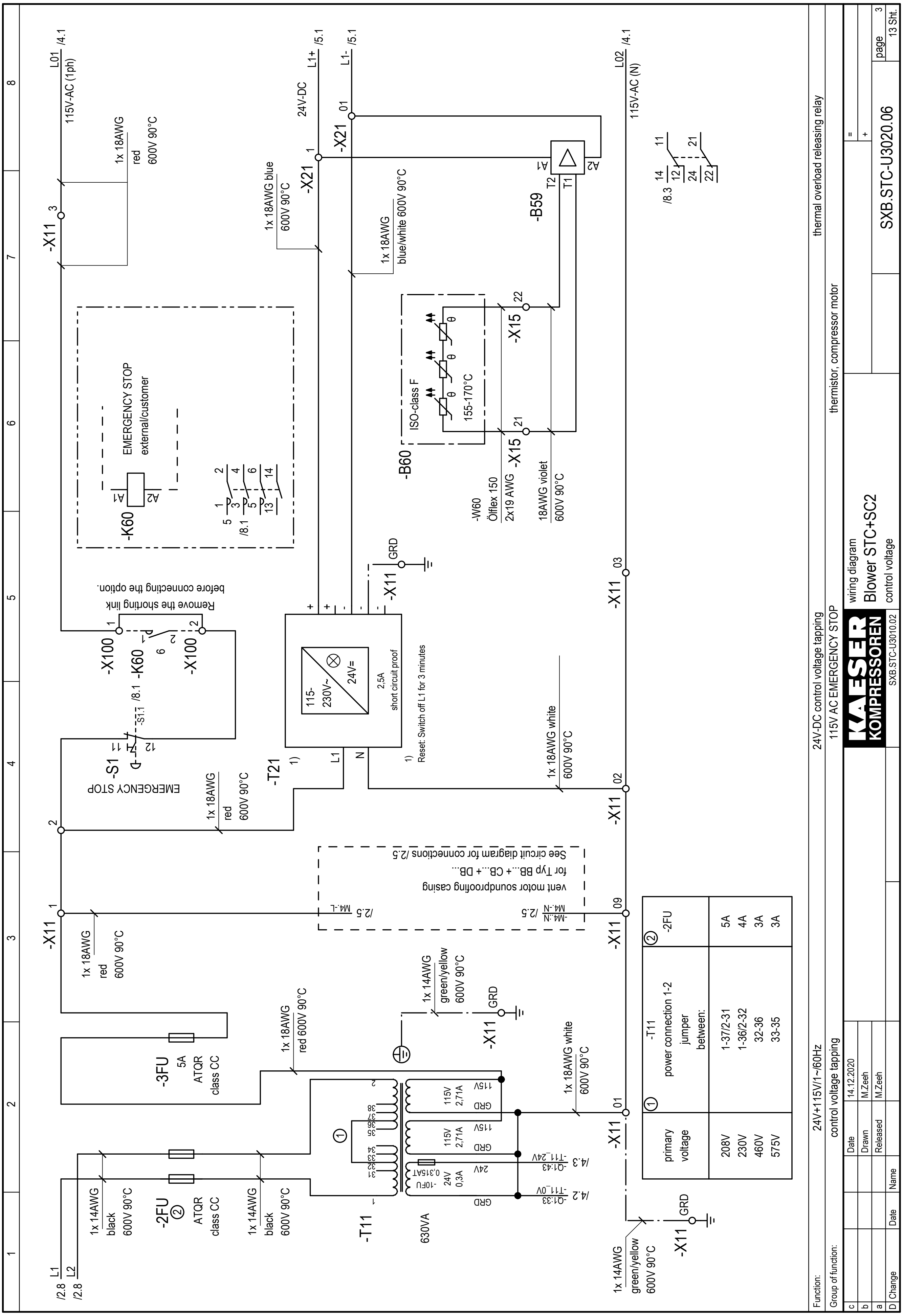
	Date	Name
Drawn	14.12.2020	M.Zeeh
Released		M.Zeeh
Change	Date	Name
c		
b		
a		
C		

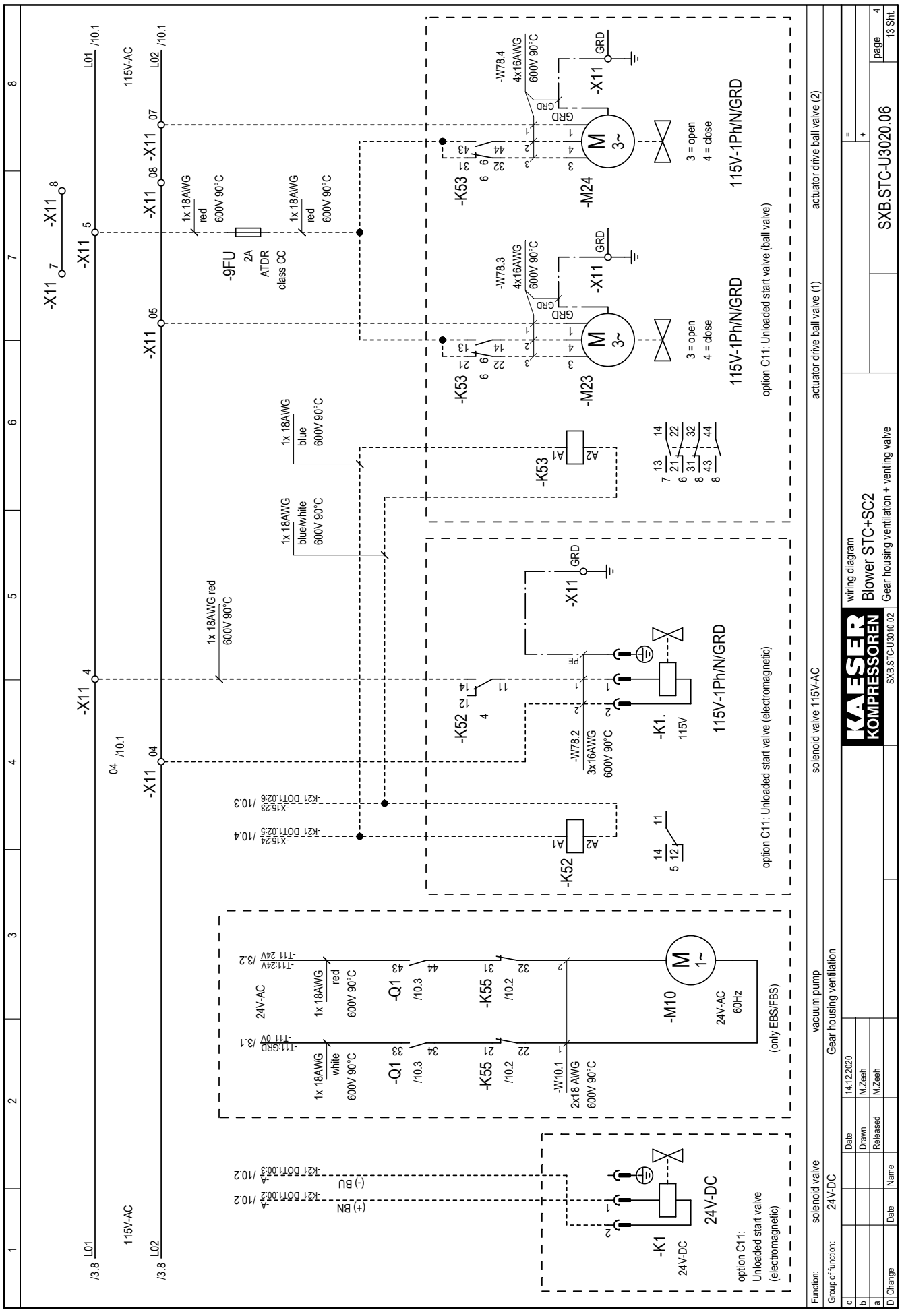
model	performance-related components 125 hp FB-C (90 kW)	125 hp FB-S (90 kW)	150 hp FB-C (110 kW)	150 hp FB-S (110 kW)	175 hp FB (132 kW)
machine power supply	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz	575 V ±10 %, 60 Hz
supply terminals -X0: U1/V1/W1 Handling Stripped length X	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² fig. 3, Sht. 11 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0 AWG / 25-95 mm² 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	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

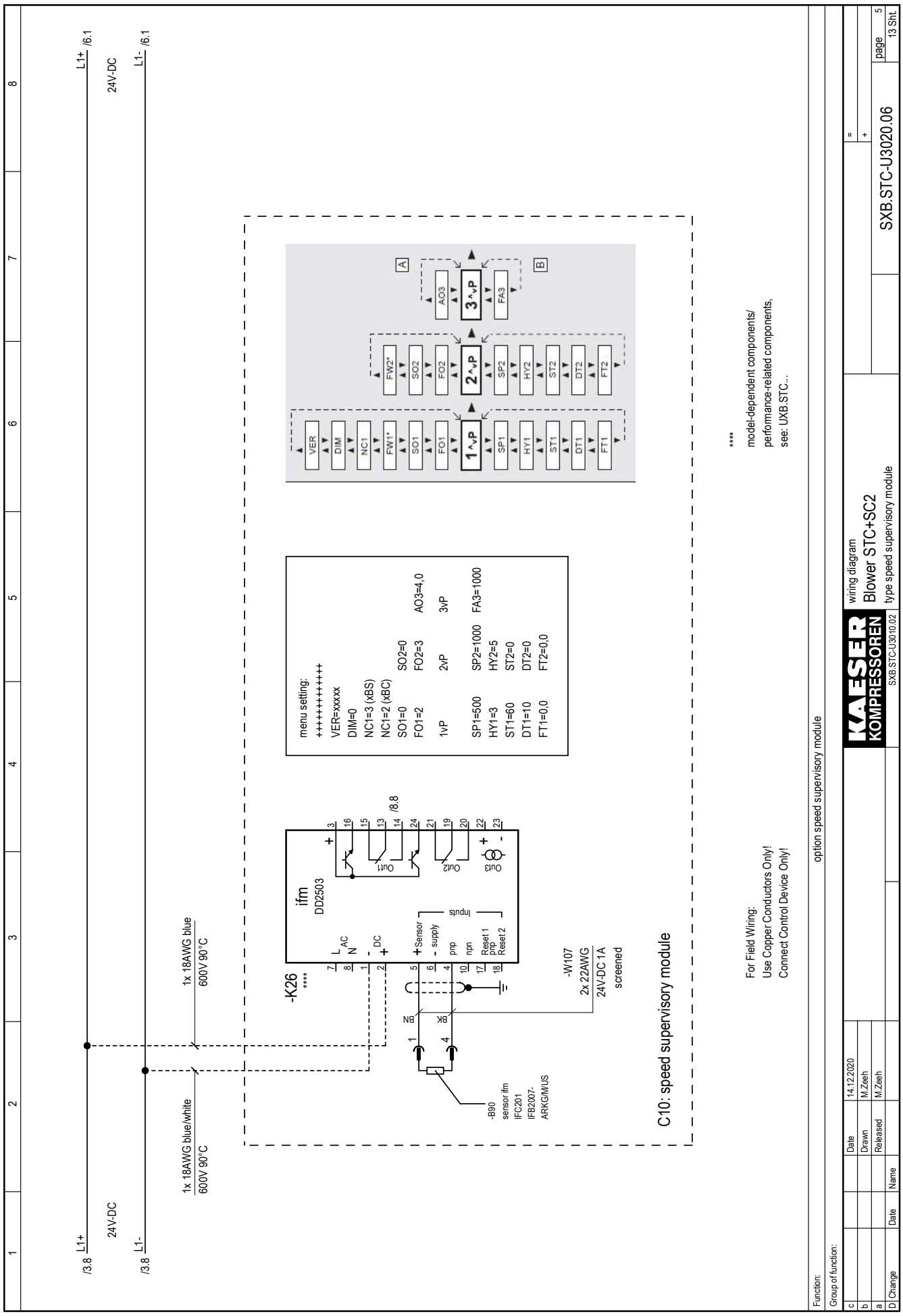
page 28
28 Sht.
=
+
UXB.STC-U3020.06
electrical component parts list
575V FB
performance-related components
KAESER KOMPRESSOREN
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
c
b
a
C Change Date Name

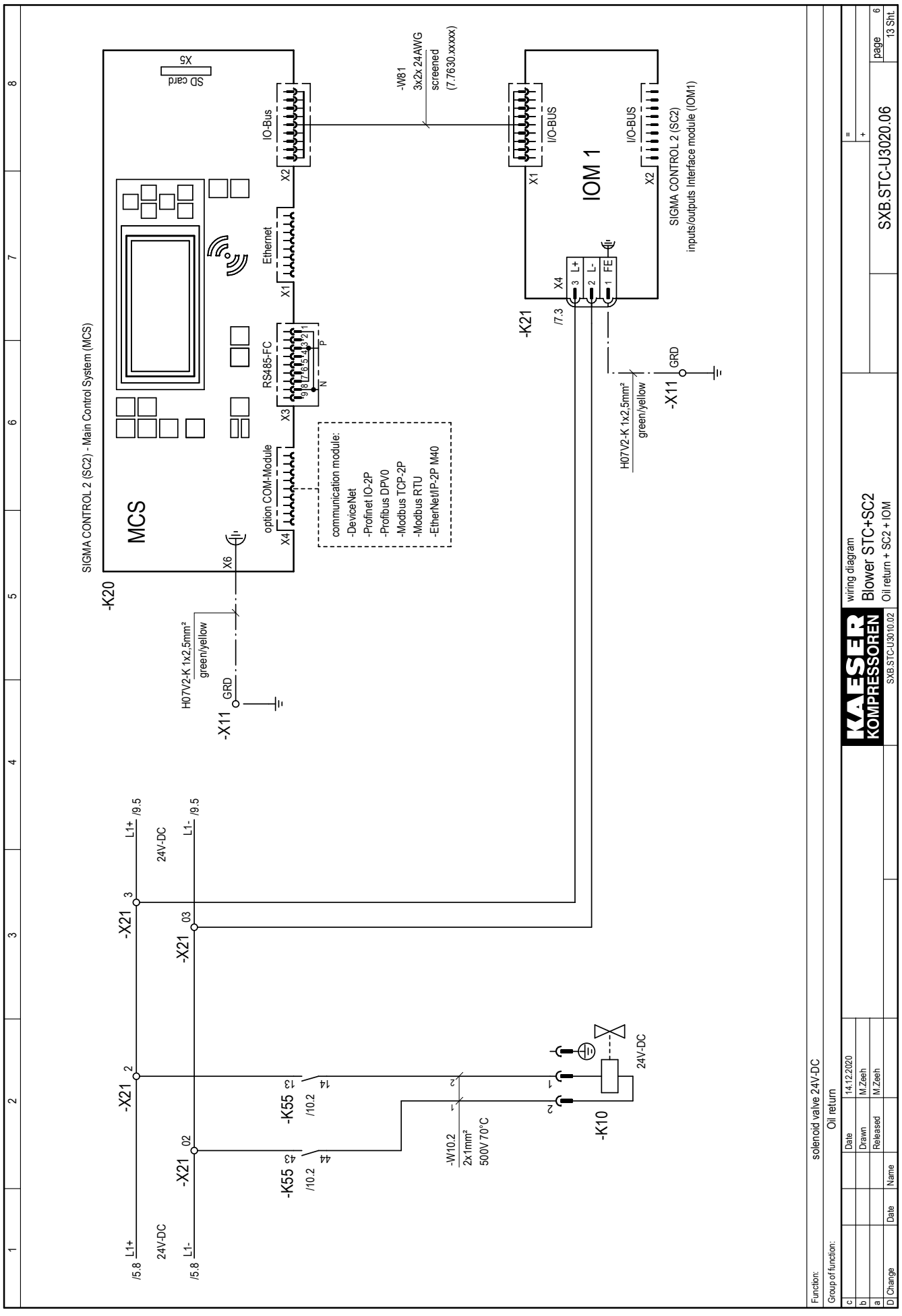

Motor terminal board
low voltage 230V
high voltage 460V
Motor terminal board
-1FU
8A
ATQR
class CC
1x 14AWG
black
600V 90°C
1x 14AWG (4...15kW/5,5...20hp)
1x 10AWG (18,5...55kW/25...75hp)
1x 8AWG (75..132kW/100...175hp)
black 600V 90°C
-X11
GRD
GRD3
1x12AWG green/yellow
600V 90°C
EB: 75kW/100hp
FB: 75...132kW/100...175hp
BB...EB: 4...55kW/5...75hp
FB: 30...55kW/40...75hp
-Q1
-Q2
-Q3
-B21
-W11
-W13
-W14
-W19.1
-W19.2
-X0
-M1
(anticlockwise rotation)
---> 5,5hp-40hp 208/230/460V 60Hz
---> 40hp-175hp 460V/575V 60Hz
230V: <=20hp 1x6AWG
230V: 25-40hp 1x 2AWG
460/575V: <=30hp 1x 6AWG
460/575V: 40-175hp 1x 2AWG
green/yellow 600V 90°C
unit frame
1x 8AWG
green/yellow
600V 90°C
control panel
control cabinet housing
control cabinet door
according to machine model
1x 6AWG (4...22kW/5,5...30hp)
1x 2AWG (30...45kW/40...60hp)
1x 1AWG (55...75kW/75...100hp)
1x 2/0AWG (90...132kW/125...175hp)
green/yellow 600V 90°C
For Field Wiring:
Use 75°C copper
conductors only!
main disconnect,
fuse supplied
by user
class J
600V
208V/230V/460V/3~/GRD/60Hz
460V/3~/GRD/60Hz
575V/3~/GRD/60Hz
supply voltage
according to the machine nameplate
ATTENTION !!!
set counter- clockwise
rotary field
supply line cross-section
see operating manual
****
model-dependent components/
performance-related components,
see: UXB.STC...
compressor motor
power unit
input voltage
control voltage tapping
wiring diagram
Blower STC+SC2
power unit
SXB.STC-U3010.02
SXB.STC-U3020.06
page 1
13 Sht.
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh

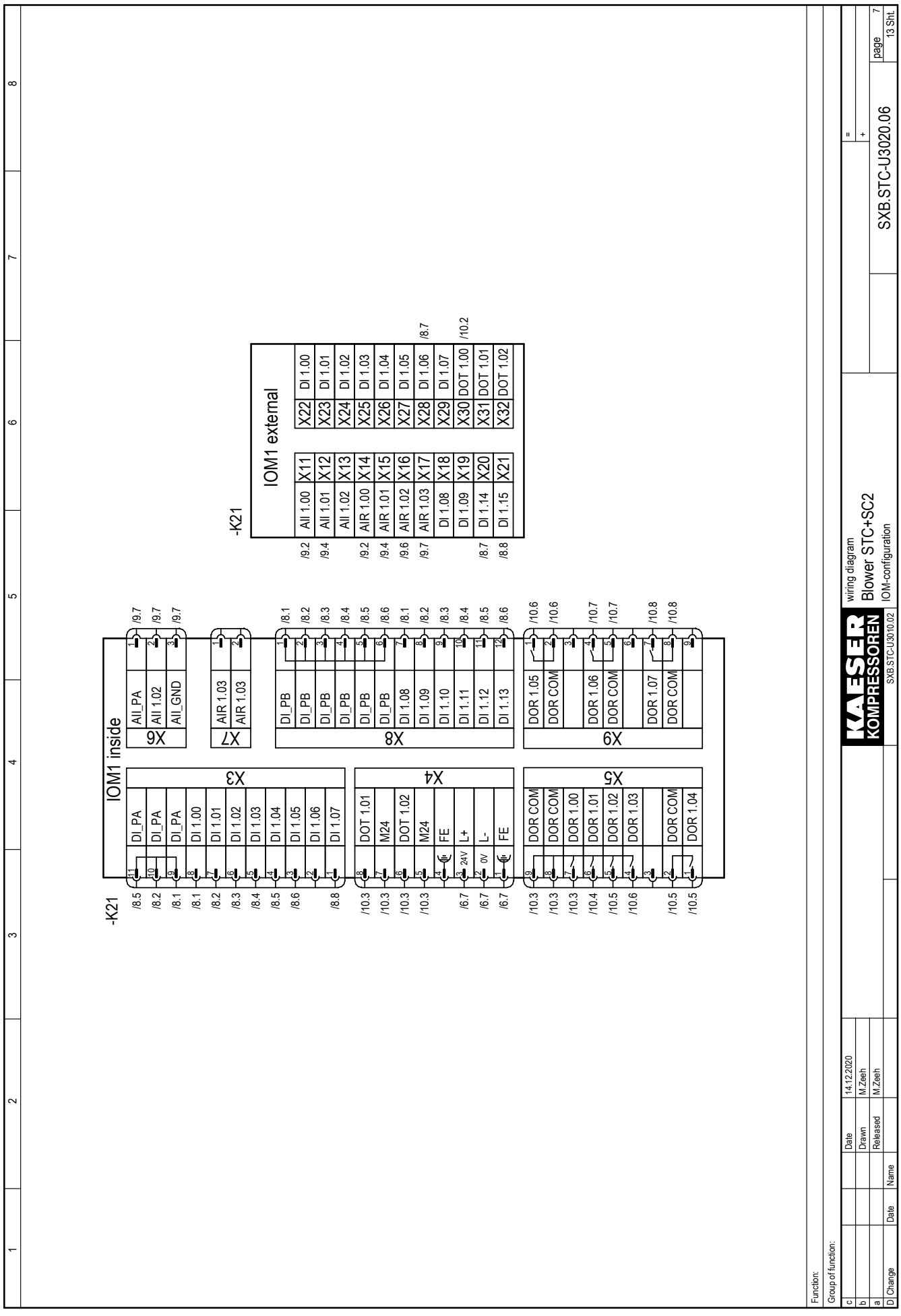

For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
vent motor soundproofing casing
for Typ BB...+ CB...+ DB...
vent motor soundproofing casing
for Typ EB...+ FB...
****
model-dependent components/
performance-related components,
see: UXB.STC...
(1)
only by supply voltage
575V and model FBS...
voltage monitoring
3UG4615
-K29
-29FU
1A
ATDR
class CC
-12FU
1A
ATQR
class CC
-T12
480VA
-Q4
-B24
-M4
-M4.
115V
60Hz
-X11
GRD
1x 14AWG black 600V 90°C
1x 18AWG
blue
600V 90°C
1x 18AWG
red
600V 90°C
-W29
4x14AWG
600V 90°C
-W29.
3x 14AWG
600V 90°C
phase sequence relay
/phase monitoring
vent motor (3ph)
soundproofing casing
vent motor (1ph)
Function:
Group of function:
Date
14.12.2020
Drawn
M.Zeeh
Released
M.Zeeh
Change
Date
Name
SXB.STC-U3010.02
wiring diagram
Blower STC+SC2
power unit vent
SXB.STC-U3020.06
page
2
13 Sht.

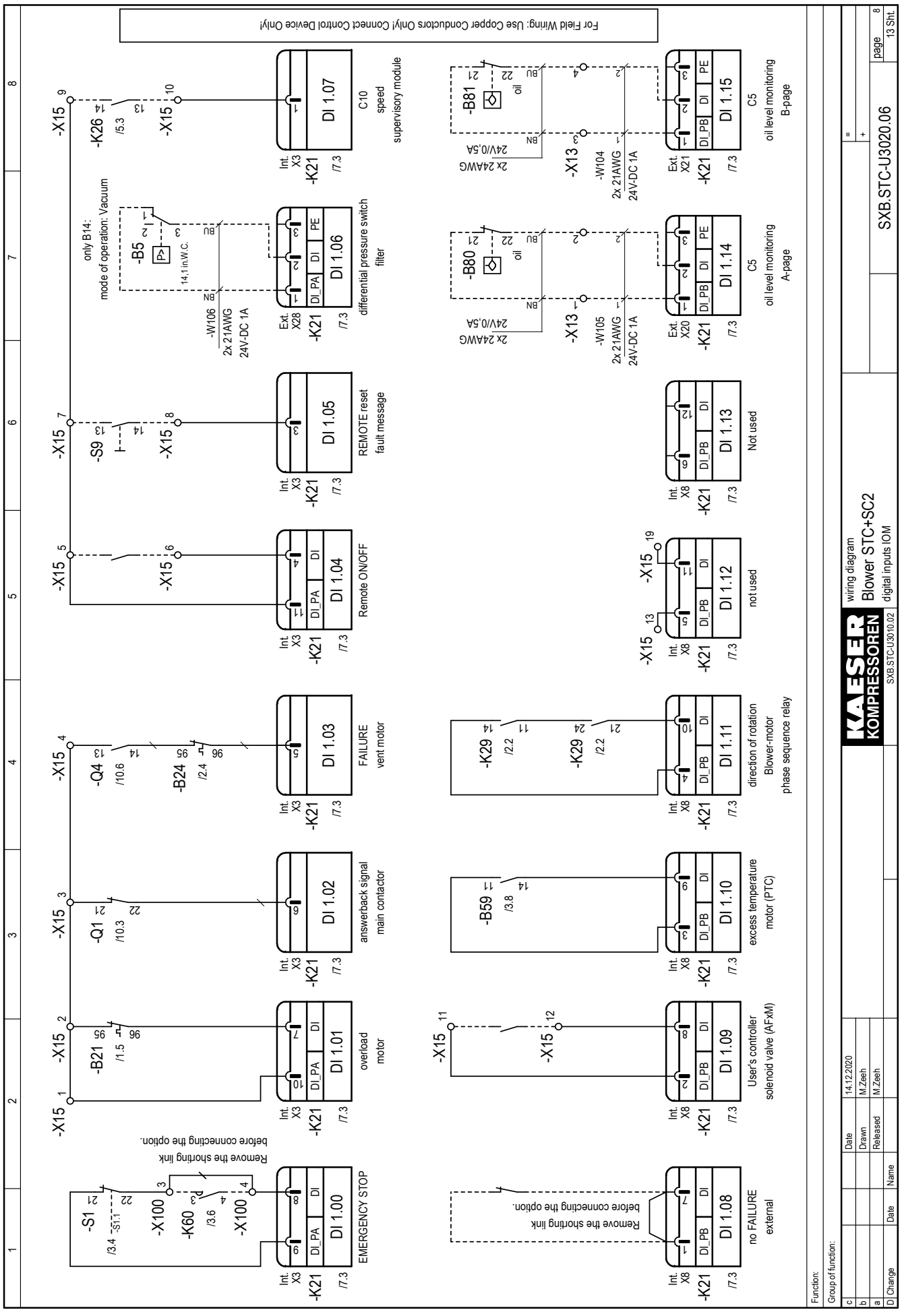

24V-DC control voltage tapping
115V AC EMERGENCY STOP
thermistor, compressor motor
thermal overload releasing relay
24V+115V/1~/60Hz
control voltage tapping
wiring diagram
Blower STC+SC2
control voltage
SXB.STC-U3020.06
SXB.STC-U3010.02
page 3
13 Sht.
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
EMERGENCY STOP external/customer
Remove the shorting link before connecting the option.
ISO-class F
155-170°C
Reset: Switch off L1 for 3 minutes
vent motor soundproofing casing for Typ BB...+ CB...+ DB... See circuit diagram for connections /2.5
115V-AC (1ph)
115V-AC (N)
24V-DC
EMERGENCY STOP
-T11
630VA
-2FU
-3FU
-T21
-K60
-S1
-B59
-B60
-X11
-X15
-X21
-X100
primary voltage
power connection 1-2 jumper between:
208V 1-37/2-31 5A
230V 1-36/2-32 4A
460V 32-36 3A
575V 33-35 3A

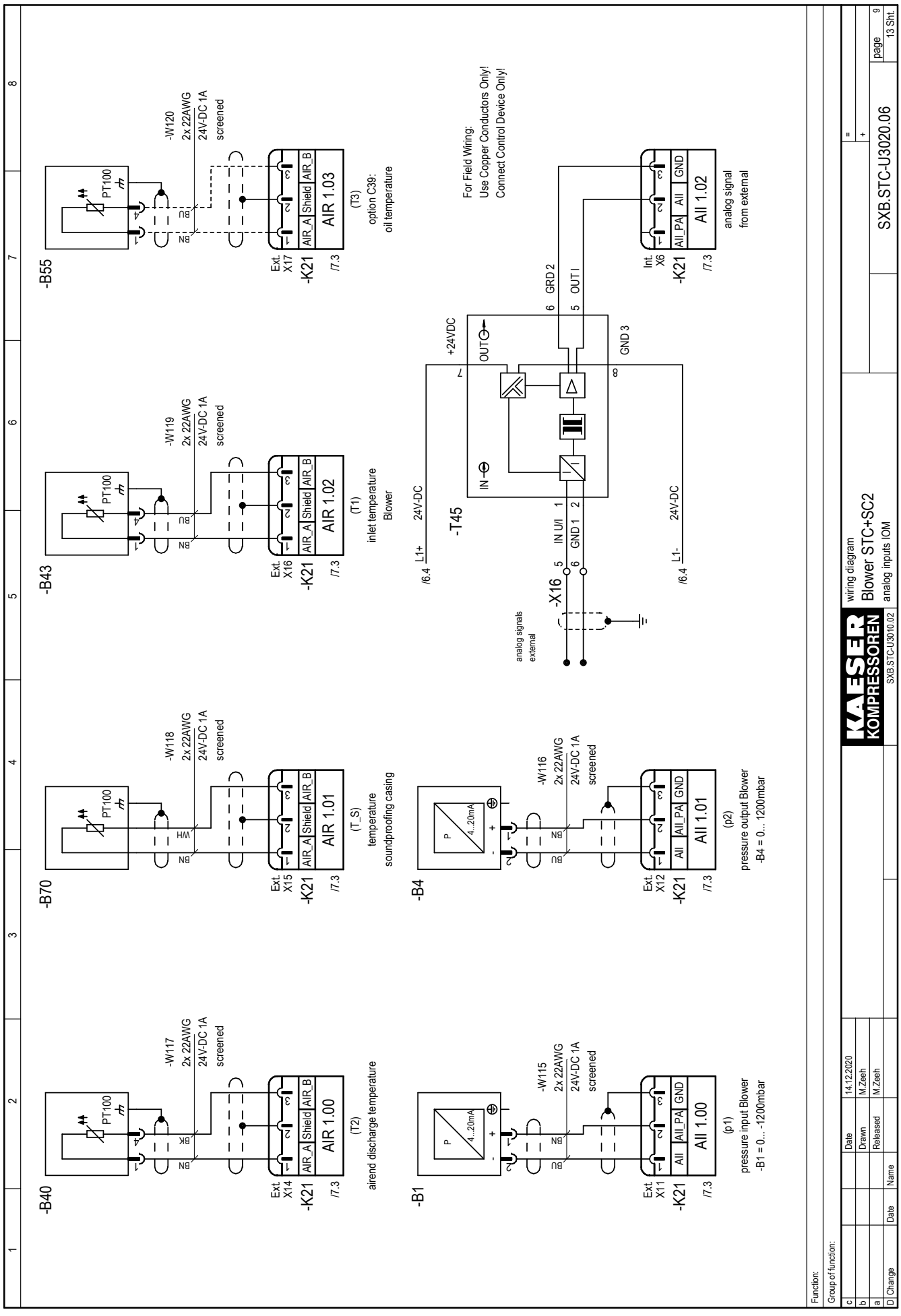

Function: solenoid valve
Group of function: 24V-DC
vacuum pump
Gear housing ventilation
solenoid valve 115V-AC
actuator drive ball valve (1)
actuator drive ball valve (2)
wiring diagram
Blower STC+SC2
Gear housing ventilation + venting valve
SXB.STC-U3020.06
SXB.STC-U3010.02
page 4
13 Sht.
option C11: Unloaded start valve (ball valve)
option C11: Unloaded start valve (electromagnetic)
(only EBS/FBS)
option C11: Unloaded start valve (electromagnetic)
115V-AC
24V-DC
115V-1Ph/N/GRD
3 = open
4 = close
-M24
-M23
-M10
-K1
-K52
-K53
-K55
-Q1
-K1.
-9FU
-X11
-W78.4 4x16AWG 600V 90°C
-W78.3 4x16AWG 600V 90°C
-W78.2 3x16AWG 600V 90°C
-W10.1 2x18 AWG 600V 90°C
1x 18AWG red 600V 90°C
1x 18AWG blue 600V 90°C
1x 18AWG blue/white 600V 90°C
1x 18AWG white 600V 90°C
1x 18AWG red 600V 90°C
1x 18AWG red 600V 90°C
1x 18AWG red 600V 90°C
2A ATDR class CC
24V-AC 60Hz
115V

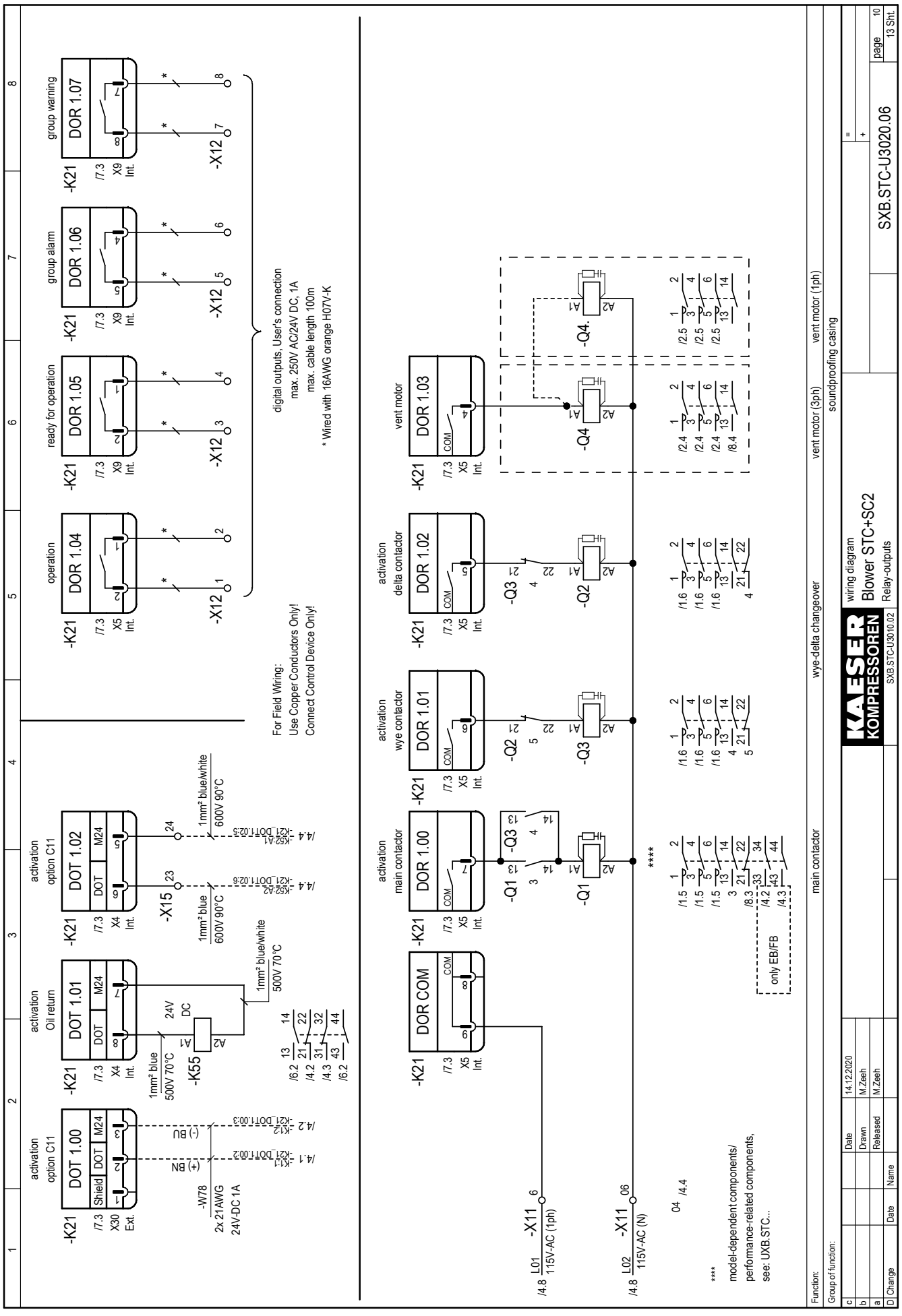

L1+ /6.1
24V-DC
L1- /6.1
L1+ /3.8
24V-DC
L1- /3.8
1x 18AWG blue
600V 90°C
1x 18AWG blue/white
600V 90°C
-K26
****
ifm
DD2503
L AC
N
DC
+Sensor
- supply
pnp
npn
Reset1
pnp
Reset2
Inputs
Out1
Out2
Out3
/8.8
-W107
2x 22AWG
24V-DC 1A
screened
BU
BK
-B90
sensor ifm
IFC201
IFB2007-
ARKG/M/US
menu setting:
++++++++++++
VER=xxxxx
DIM=0
NC1=3 (xBS)
NC1=2 (xBC)
SO1=0 SO2=0
FO1=2 FO2=3 AO3=4,0
1vP 2vP 3vP
SP1=500 SP2=1000 FA3=1000
HY1=3 HY2=5
ST1=60 ST2=0
DT1=10 DT2=0
FT1=0,0 FT2=0,0
VER
DIM
NC1
FW1*
SO1
FO1
1 ^vP
SP1
HY1
ST1
DT1
FT1
FW2*
SO2
FO2
2 ^vP
SP2
HY2
ST2
DT2
FT2
AO3
3 ^vP
FA3
A
B
C10: speed supervisory module
****
model-dependent components/
performance-related components,
see: UXB.STC...
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
Function:
option speed supervisory module
Group of function:
KAESER KOMPRESSOREN
SXB.STC-U3010.02
wiring diagram
Blower STC+SC2
type speed supervisory module
SXB.STC-U3020.06
page 5
13 Sht.
Change
Date
Name
14.12.2020
M.Zeeh
M.Zeeh


SIGMA CONTROL 2 (SC2) - Main Control System (MCS)
MCS
-K20
SD card
X5
IO-Bus
X2
Ethernet
X1
RS485-FC
X3
option COM-Module
X4
X6
-W81
3x2x 24AWG
screened
(7.7630.xxxxx)
communication module:
-DeviceNet
-Profinet IO-2P
-Profibus DPV0
-Modbus TCP-2P
-Modbus RTU
-EtherNet/IP-2P M40
H07V2-K 1x2,5mm²
green/yellow
GRD
-X11
-K21
/7.3
X4
L+
L-
FE
I/O-BUS
X1
IOM 1
I/O-BUS
X2
SIGMA CONTROL 2 (SC2)
inputs/outputs Interface module (IOM1)
H07V2-K 1x2,5mm²
green/yellow
GRD
-X11
L1+ /9.5
24V-DC
L1- /9.5
-X21
3
03
-X21
-X21
2
-X21
02
L1+
/5.8
24V-DC
L1-
/5.8
-K55
13
14
/10.2
-K55
43
44
/10.2
-W10.2
2x1mm²
500V 70°C
2
1
1
2
24V-DC
-K10
Function:
solenoid valve 24V-DC
Group of function:
Oil return
c
b
a
D Change
Date
Name
14.12.2020
M.Zeeh
M.Zeeh
Date
Drawn
Released
KAESER KOMPRESSOREN
SXB.STC-U3010.02
wiring diagram
Blower STC+SC2
Oil return + SC2 + IOM
SXB.STC-U3020.06
=
+
page
6
13 Sht.


IOM1 inside
-K21
X6
AII_PA
AII 1.02
AII_GND
X7
AIR 1.03
AIR 1.03
X8
DI_PB
DI 1.08
DI 1.09
DI 1.10
DI 1.11
DI 1.12
DI 1.13
X9
DOR 1.05
DOR COM
DOR 1.06
DOR COM
DOR 1.07
DOR COM
X3
DI_PA
DI 1.00
DI 1.01
DI 1.02
DI 1.03
DI 1.04
DI 1.05
DI 1.06
DI 1.07
X4
DOT 1.01
M24
DOT 1.02
M24
FE
L+
L-
FE
X5
DOR COM
DOR 1.00
DOR 1.01
DOR 1.02
DOR 1.03
DOR COM
DOR 1.04
-K21
IOM1 external
AII 1.00
AII 1.01
AII 1.02
AIR 1.00
AIR 1.01
AIR 1.02
AIR 1.03
DI 1.08
DI 1.09
DI 1.14
DI 1.15
DI 1.00
DI 1.01
DI 1.02
DI 1.03
DI 1.04
DI 1.05
DI 1.06
DI 1.07
DOT 1.00
DOT 1.01
DOT 1.02
KAESER KOMPRESSOREN
wiring diagram
Blower STC+SC2
IOM-configuration
SXB.STC-U3010.02
SXB.STC-U3020.06
page 7
13 Sht.
Function:
Group of function:
Change
Date
Name
14.12.2020
M.Zeeh
M.Zeeh


For Field Wiring: Use Copper Conductors Only! Connect Control Device Only!
-X15
-S1
-X100
-K60
-B21
-Q1
-B24
-Q4
-S9
-K26
-B5
-W106
2x 21AWG
24V-DC 1A
only B14:
mode of operation: Vacuum
14,1 in.W.C.
-B81
-B80
-W104
-W105
2x 24AWG
24V/0,5A
-X13
-B59
-K29
-X15 11
-X15 12
-X15 13
-X15 19
Remove the shorting link
before connecting the option.
Int. X3
Int. X8
Ext. X28
Ext. X21
Ext. X20
-K21
/7.3
DI 1.00
EMERGENCY STOP
DI 1.01
overload motor
DI 1.02
answerback signal main contactor
DI 1.03
FAILURE vent motor
DI 1.04
Remote ON/OFF
DI 1.05
REMOTE reset fault message
DI 1.06
differential pressure switch filter
DI 1.07
C10 speed supervisory module
DI 1.08
no FAILURE external
DI 1.09
User's controller solenoid valve (AFxM)
DI 1.10
excess temperature motor (PTC)
DI 1.11
direction of rotation Blower-motor phase sequence relay
DI 1.12
not used
DI 1.13
Not used
DI 1.14
C5 oil level monitoring A-page
DI 1.15
C5 oil level monitoring B-page
Function:
Group of function:
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Name
Change
KAESER KOMPRESSOREN
SXB.STC-U3010.02
wiring diagram
Blower STC+SC2
digital inputs IOM
SXB.STC-U3020.06
page 8
13 Sht.


-B40
PT100
-W117
2x 22AWG
24V-DC 1A
screened
BN
BK
Ext.
X14
-K21
/7.3
AIR_A
Shield
AIR_B
AIR 1.00
(T2)
airend discharge temperature
-B70
PT100
-W118
2x 22AWG
24V-DC 1A
screened
BN
WH
Ext.
X15
-K21
/7.3
AIR_A
Shield
AIR_B
AIR 1.01
(T_S)
temperature
soundproofing casing
-B43
PT100
-W119
2x 22AWG
24V-DC 1A
screened
BN
BU
Ext.
X16
-K21
/7.3
AIR_A
Shield
AIR_B
AIR 1.02
(T1)
inlet temperature
Blower
-B55
PT100
-W120
2x 22AWG
24V-DC 1A
screened
BN
BU
Ext.
X17
-K21
/7.3
AIR_A
Shield
AIR_B
AIR 1.03
(T3)
option C39:
oil temperature
-B1
P
4...20mA
-W115
2x 22AWG
24V-DC 1A
screened
BN
BU
Ext.
X11
-K21
/7.3
All
All_PA
GND
All 1.00
(p1)
pressure input Blower
-B1 = 0... -1200mbar
-B4
P
4...20mA
-W116
2x 22AWG
24V-DC 1A
screened
BN
BU
Ext.
X12
-K21
/7.3
All
All_PA
GND
All 1.01
(p2)
pressure output Blower
-B4 = 0... 1200mbar
-T45
/6.4 L1+ 24V-DC
+24VDC
OUT
IN
7
8
GND 3
6 GRD 2
5 OUT I
IN U/I 1
GND 1 2
-X16
5
6
/6.4 L1- 24V-DC
analog signals
external
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
Int.
X6
-K21
/7.3
All_PA
All
GND
All 1.02
analog signal
from external
KAESER KOMPRESSOREN
SXB.STC-U3010.02
wiring diagram
Blower STC+SC2
analog inputs IOM
SXB.STC-U3020.06
page 9
13 Sht.
Function:
Group of function:
Date
Drawn
Released
14.12.2020
M.Zeeh
M.Zeeh
Change
Name


SXB.STC-U3020.06
Blower STC+SC2
wiring diagram
Relay-outputs
SXB.STC-U3010.02
KAESER KOMPRESSOREN
main contactor
wye-delta changeover
vent motor (3ph)
vent motor (1ph)
soundproofing casing
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
digital outputs, User's connection
max. 250V AC/24V DC, 1A
max. cable length 100m
* Wired with 16AWG orange H07V-K
model-dependent components/
performance-related components,
see: UXB.STC...
only EB/FB
DOR 1.00
DOR 1.01
DOR 1.02
DOR 1.03
DOR 1.04
DOR 1.05
DOR 1.06
DOR 1.07
DOR COM
DOT 1.00
DOT 1.01
DOT 1.02
-Q1
-Q2
-Q3
-Q4
-K55
-X11
-X12
-X15
-W78
activation main contactor
activation wye contactor
activation delta contactor
vent motor
activation option C11
activation Oil return
operation
ready for operation
group alarm
group warning
L01 115V-AC (1ph)
L02 115V-AC (N)

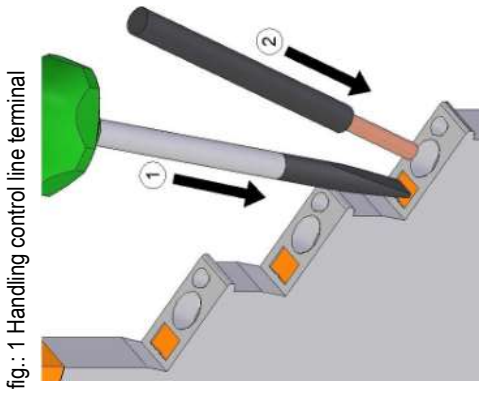


fig.: 1 Handling control line terminal

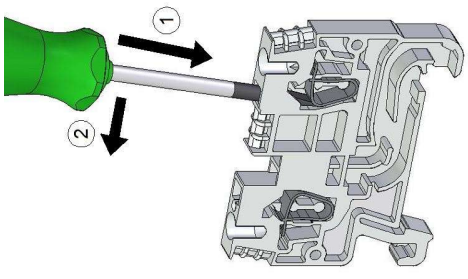
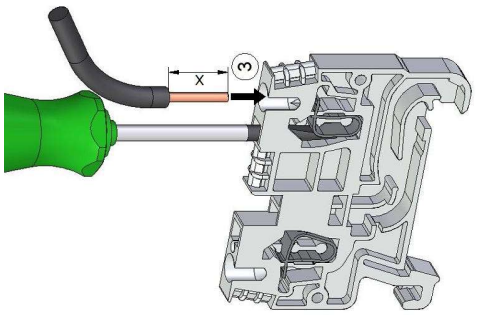
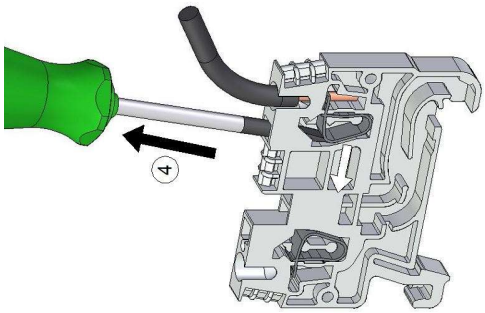


fig.: 2 Handling supply terminals





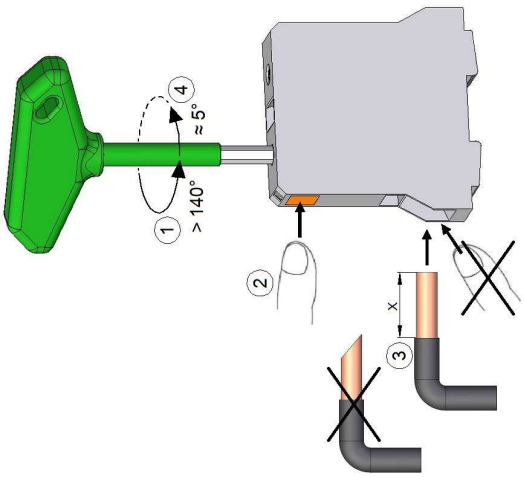


fig.: 3 Handling supply terminals

Function:							
Group of function:							
c						=	
b		Date	14.12.2020	KAESER KOMPRESSOREN	wiring diagram	+	
a		Drawn	M.Zeeh	SXB.STC-U3010.02	Blower STC+SC2	page	11
D	Change	Released	M.Zeeh		Handling terminals		13 Sht.
	Date	Name			SXB.STC-U3020.06		

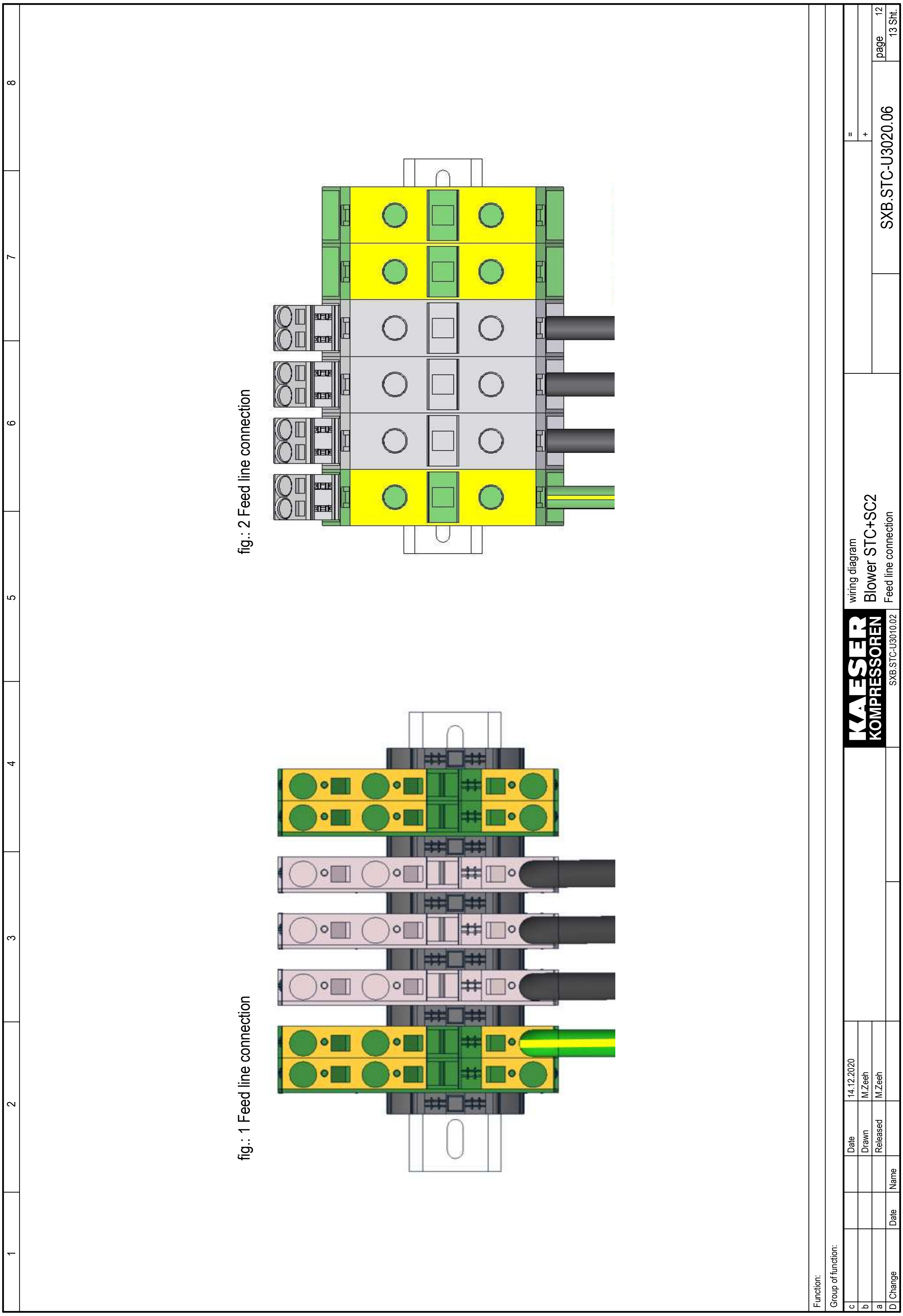


fig.: 1 Feed line connection
fig.: 2 Feed line connection
wiring diagram
Blower STC+SC2
Feed line connection
SXB.STC-U3020.06
SXB.STC-U3010.02
KAESER KOMPRESSOREN
page 12
13 Sht.
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Function:
Group of function:
Change
Date
Name

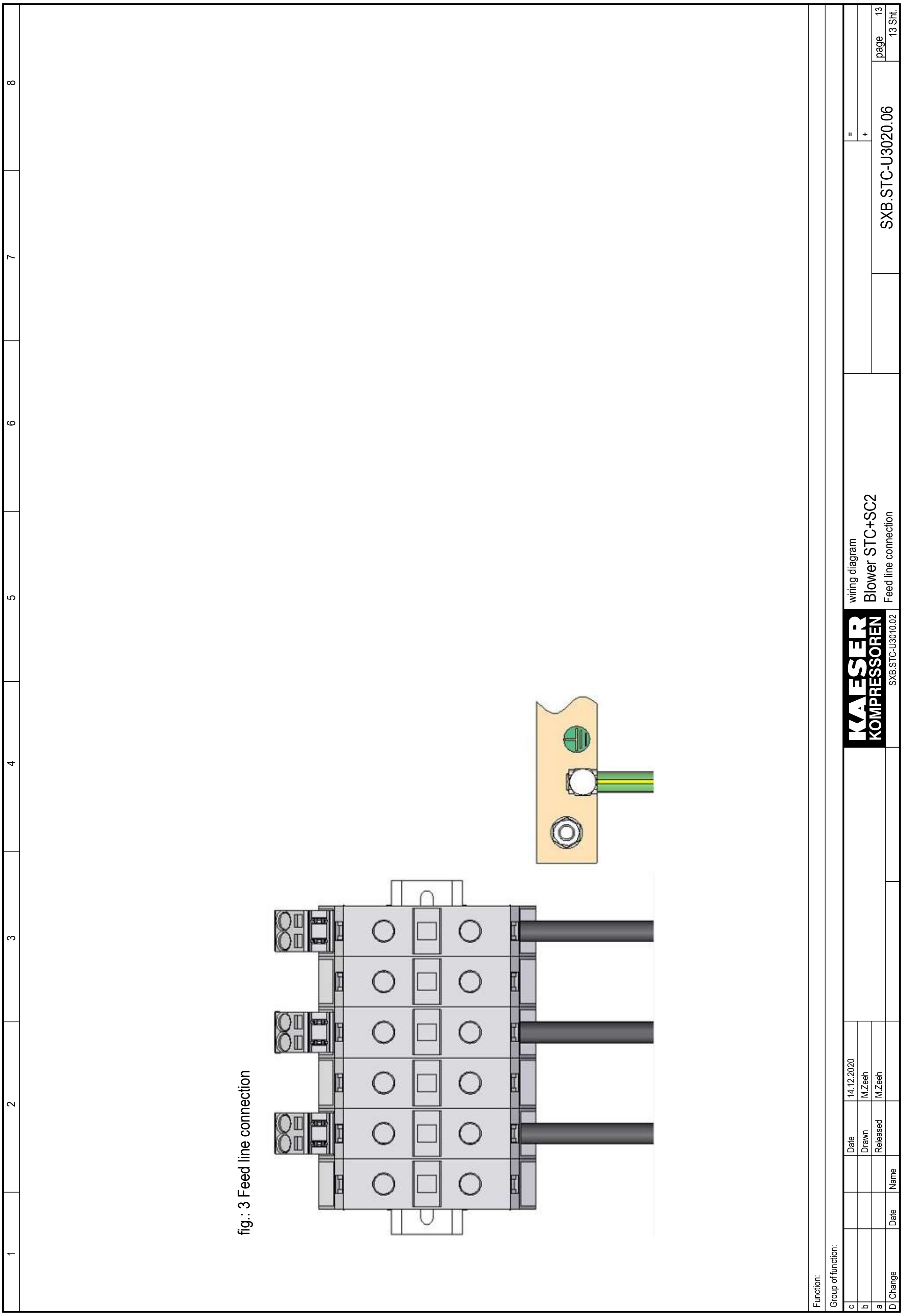
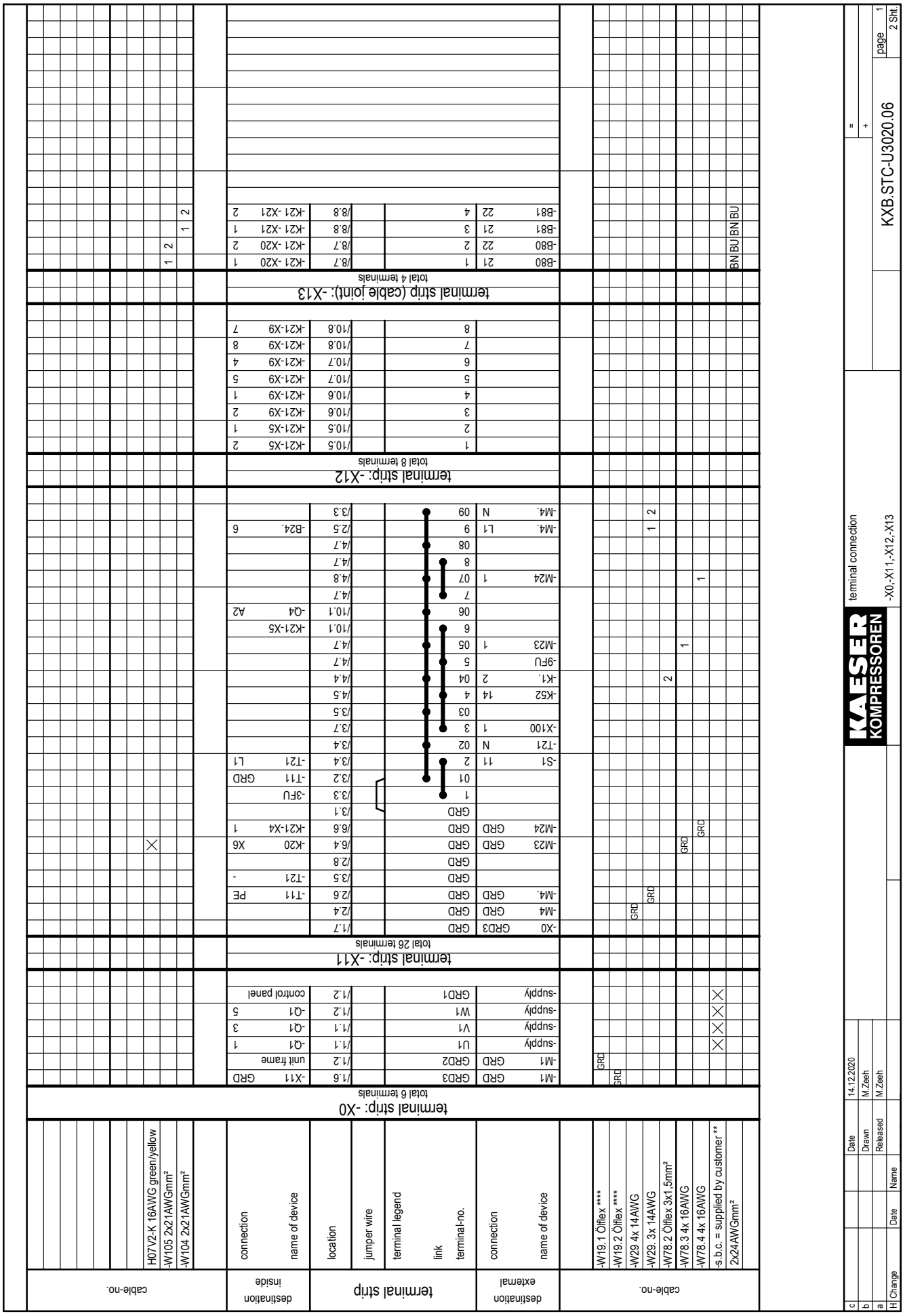
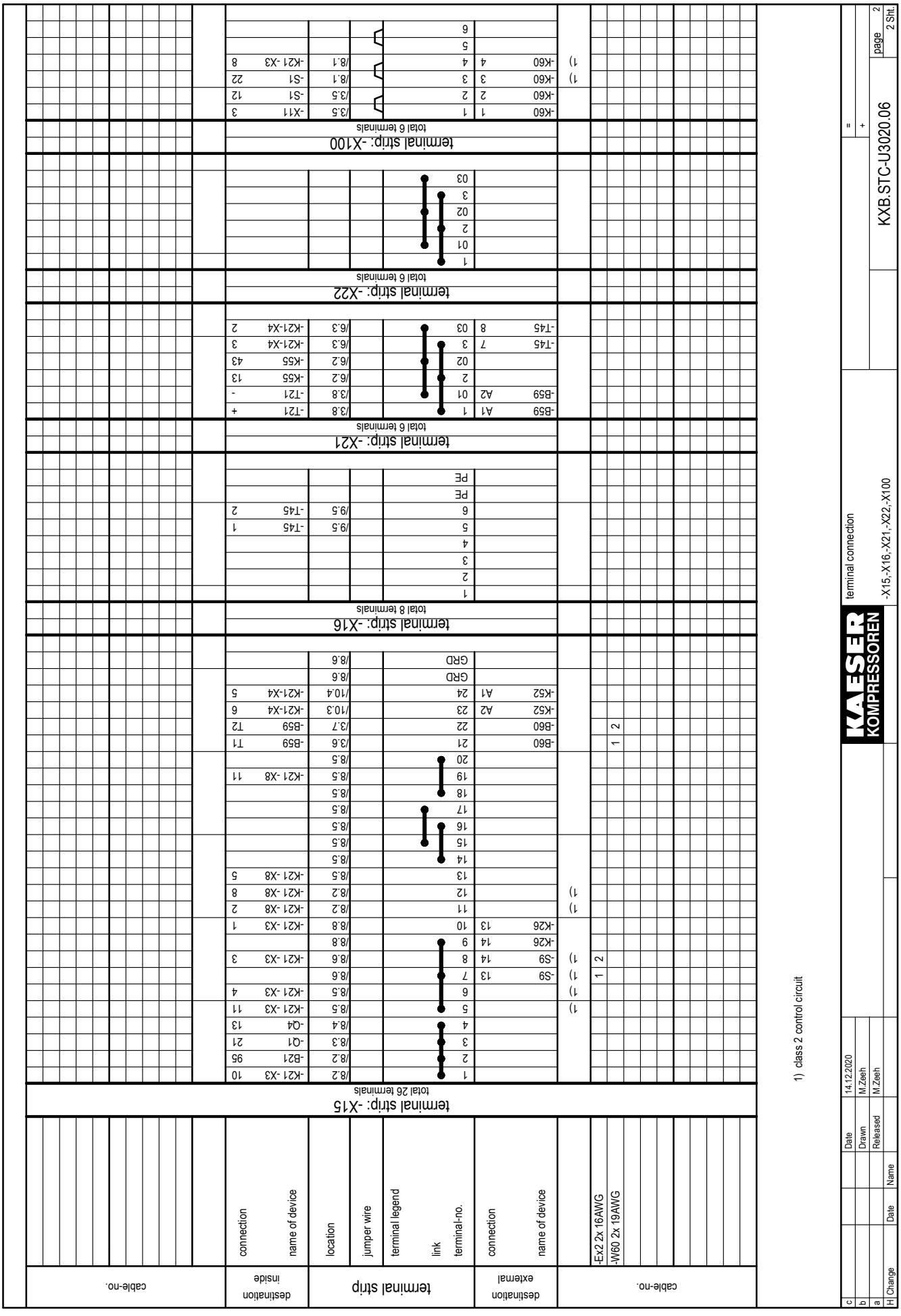
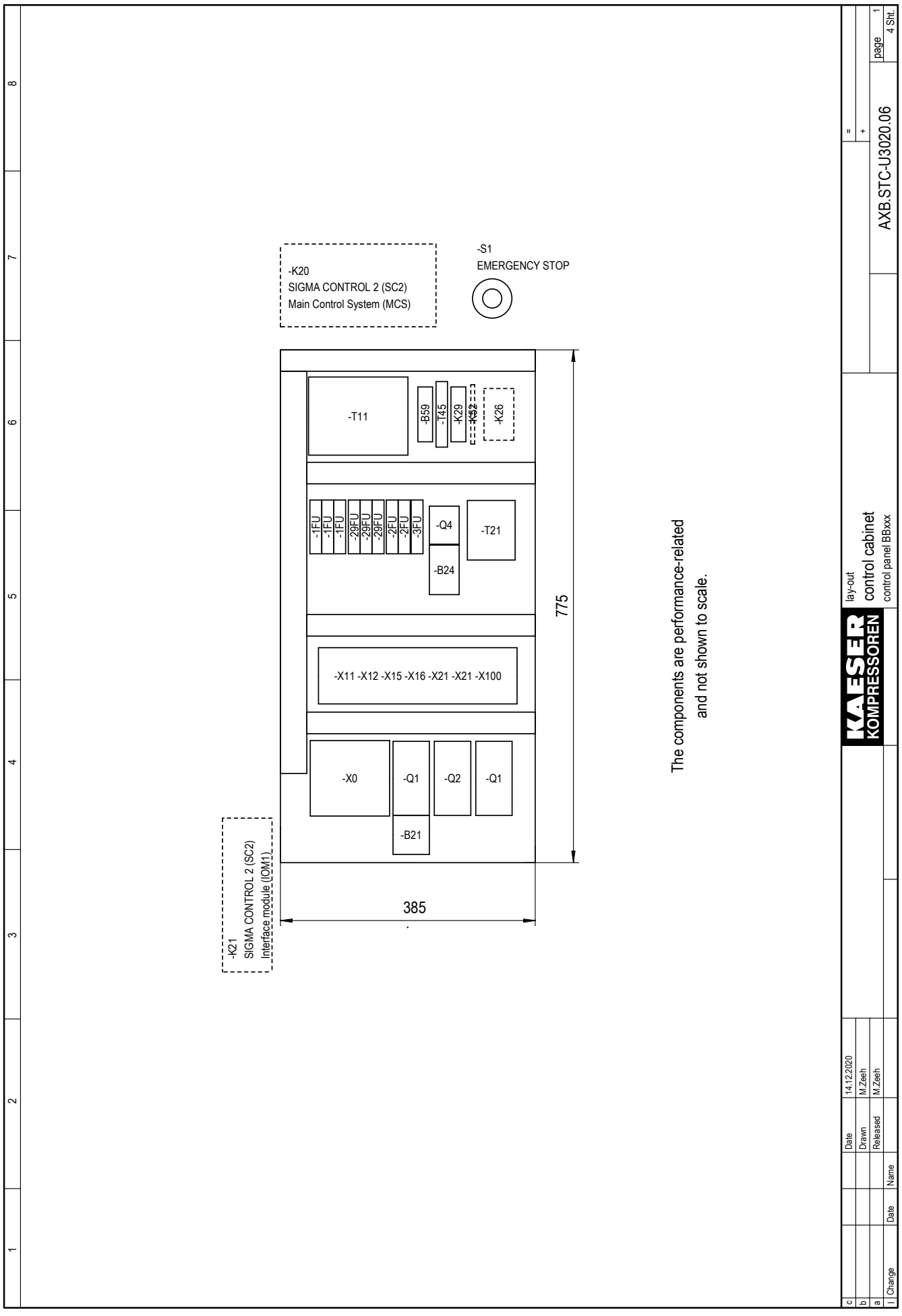
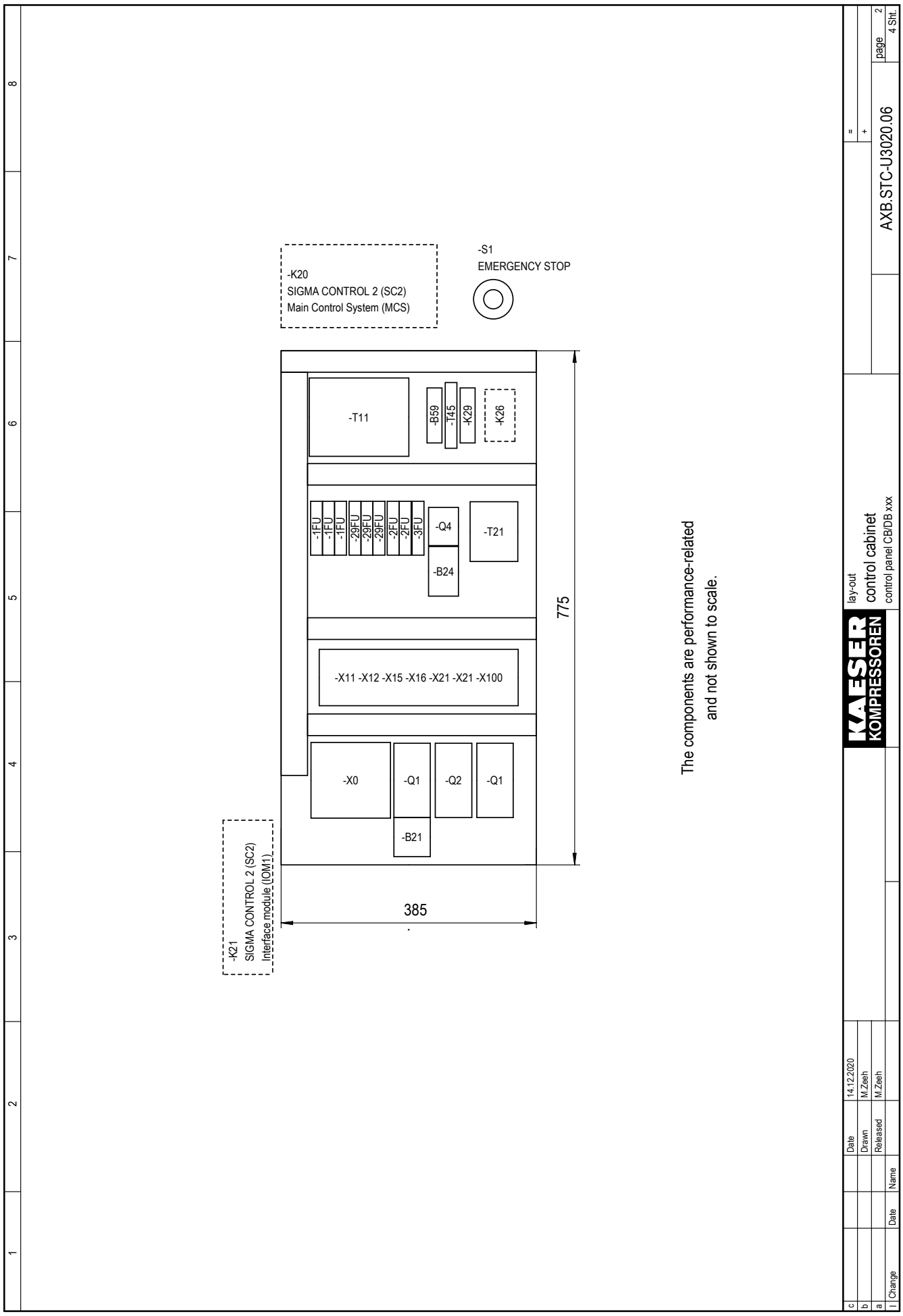


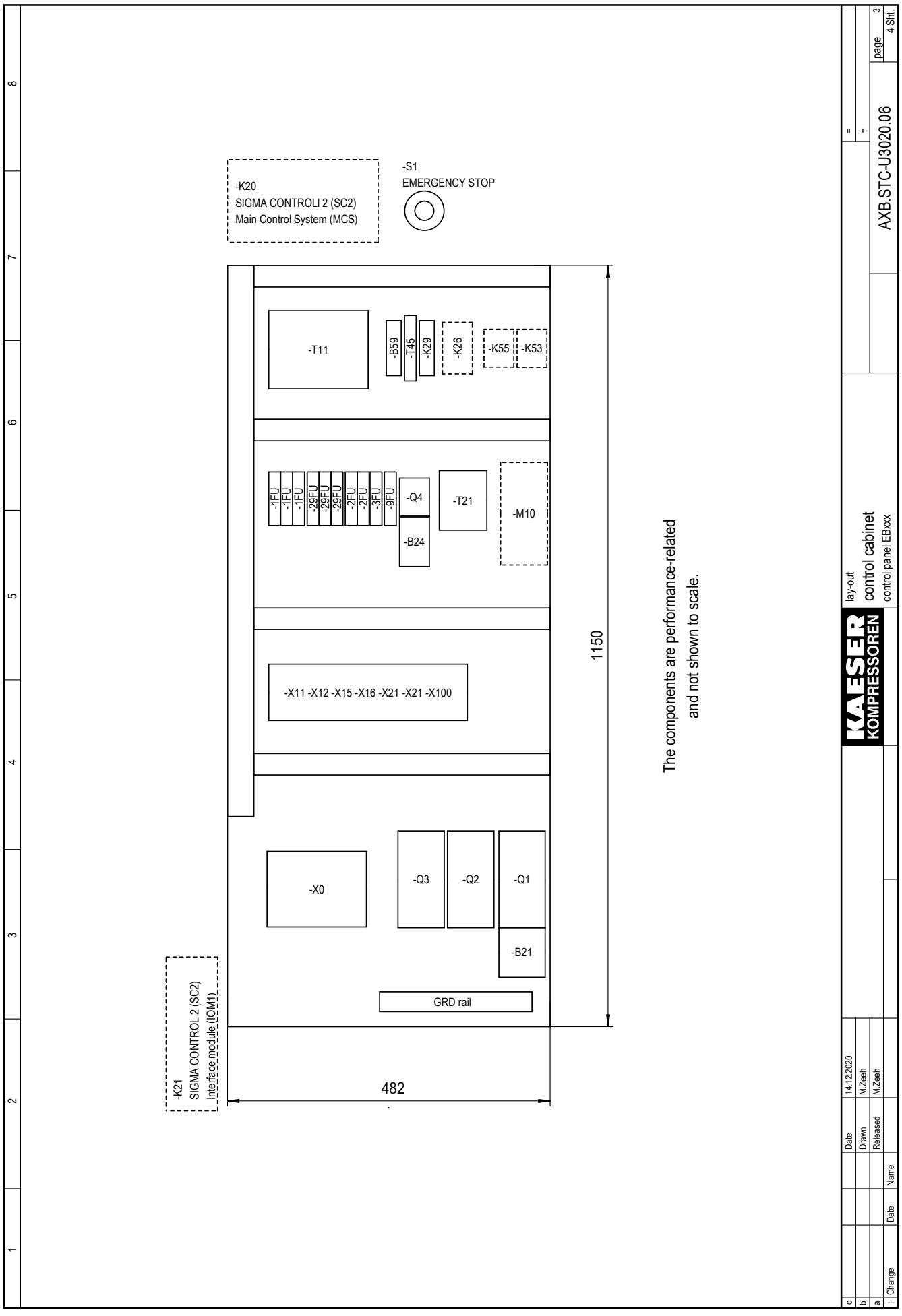
fig.: 3 Feed line connection

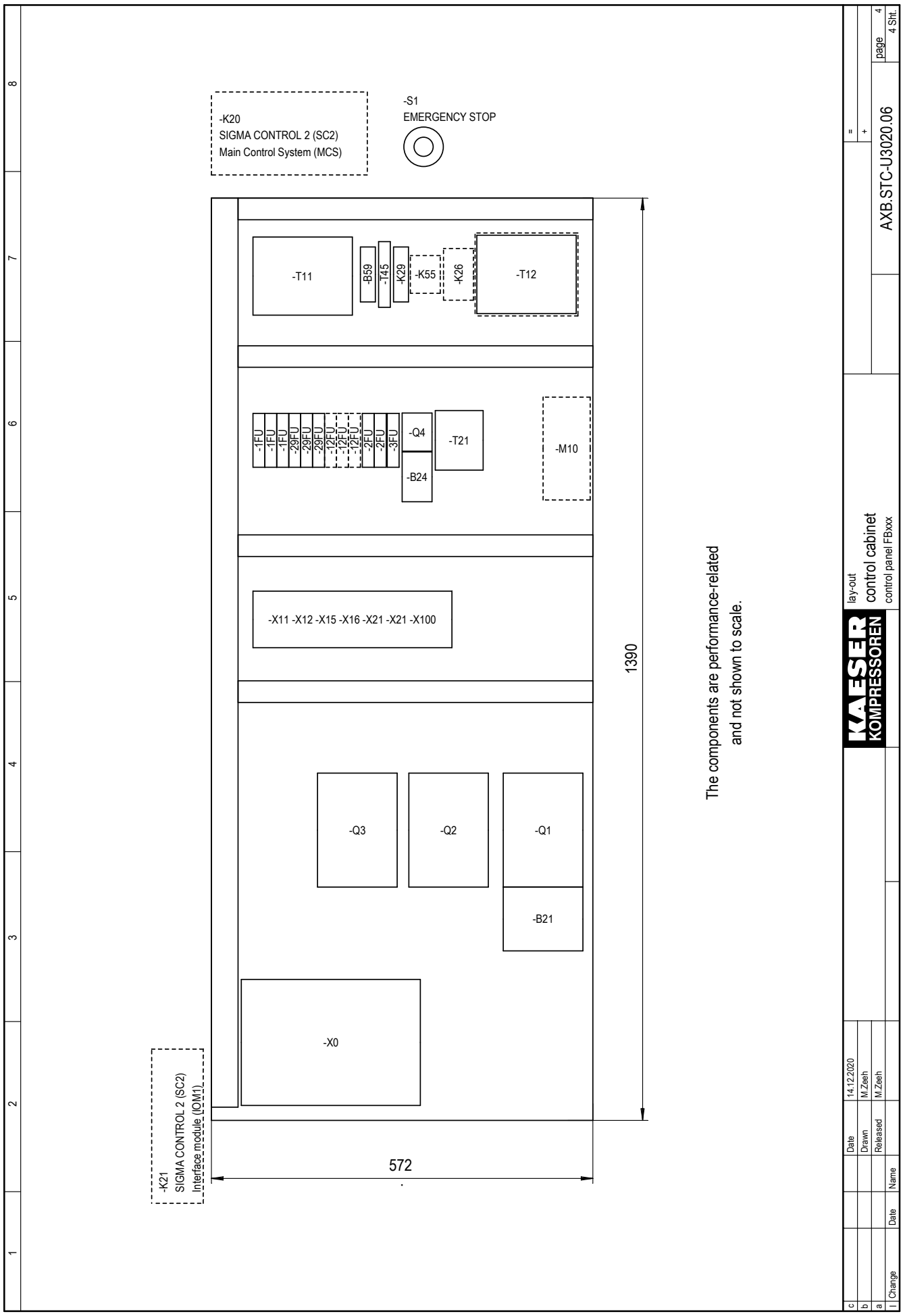

terminal strip: -X0
total 6 terminals
terminal strip: -X11
total 26 terminals
terminal strip (cable joint): -X13
total 4 terminals
terminal strip: -X12
total 8 terminals
terminal connection
-X0.-X11.-X12.-X13
KXB.STC-U3020.06
page 1
2 Sht.
14.12.2020
M.Zeeh
M.Zeeh


terminal strip: -X15
total 26 terminals
terminal strip: -X16
total 8 terminals
terminal strip: -X21
total 6 terminals
terminal strip: -X22
total 6 terminals
terminal strip: -X100
total 6 terminals
1) class 2 control circuit
KAESER KOMPRESSOREN
terminal connection
-X15,-X16,-X21,-X22,-X100
KXB.STC-U3020.06
page 2
2 Sht.
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Name
Date
Change


-K20
SIGMA CONTROL 2 (SC2)
Main Control System (MCS)
-S1
EMERGENCY STOP
-T11
-B59
-T45
-K29
-K32
-K26
-1FU
-1FU
-1FU
-29FU
-29FU
-29FU
-2FU
-2FU
-3FU
-Q4
-B24
-T21
-X11 -X12 -X15 -X16 -X21 -X21 -X100
-X0
-Q1
-B21
-Q2
-Q1
775
385
-K21
SIGMA CONTROL 2 (SC2)
Interface module (IOM1)
The components are performance-related
and not shown to scale.
KAESER KOMPRESSOREN
lay-out
control cabinet
control panel BBxxx
AXB.STC-U3020.06
page 1
4 Sht.
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Name
Change


-K20
SIGMA CONTROL 2 (SC2)
Main Control System (MCS)
-S1
EMERGENCY STOP
-T11
-B59
-T45
-K29
-K26
-1FU
-1FU
-1FU
-29FU
-29FU
-29FU
-2FU
-2FU
-3FU
-Q4
-T21
-B24
775
-X11 -X12 -X15 -X16 -X21 -X21 -X100
-X0
-Q1
-Q2
-Q1
-B21
385
-K21
SIGMA CONTROL 2 (SC2)
Interface module (IOM1)
The components are performance-related
and not shown to scale.
KAESER KOMPRESSOREN
lay-out
control cabinet
control panel CB/DB xxx
AXB.STC-U3020.06
page 2
4 Sht.
Date
Drawn
Released
14.12.2020
M.Zeeh
M.Zeeh
Name
Date
Change


-K20
SIGMA CONTROLI 2 (SC2)
Main Control System (MCS)
-S1
EMERGENCY STOP
-T11
-B59
-T45
-K29
-K26
-K55
-K53
-1FU
-1FU
-1FU
-29FU
-29FU
-29FU
-2FU
-2FU
-3FU
-9FU
-Q4
-B24
-T21
-M10
-X11 -X12 -X15 -X16 -X21 -X21 -X100
-X0
-Q3
-Q2
-Q1
-B21
GRD rail
-K21
SIGMA CONTROL 2 (SC2)
Interface module (IOM1)
1150
482
The components are performance-related
and not shown to scale.
KAESER KOMPRESSOREN
lay-out
control cabinet
control panel EBxxx
AXB.STC-U3020.06
page 3
4 Sht.
Date 14.12.2020
Drawn M.Zeeh
Released M.Zeeh
Name
Change


-K20
SIGMA CONTROL 2 (SC2)
Main Control System (MCS)
-S1
EMERGENCY STOP
-T11
-B59
-T45
-K29
-K55
-K26
-T12
-1FU
-1FU
-1FU
-29FU
-29FU
-29FU
-12FU
-12FU
-12FU
-2FU
-2FU
-3FU
-Q4
-T21
-B24
-M10
-X11 -X12 -X15 -X16 -X21 -X21 -X100
1390
-Q3
-Q2
-Q1
-B21
-X0
-K21
SIGMA CONTROL 2 (SC2)
Interface module (IOM1)
572
The components are performance-related
and not shown to scale.
KAESER KOMPRESSOREN
lay-out
control cabinet
control panel FBxxx
AXB.STC-U3020.06
page 4
4 Sht.
Date
Drawn
Released
14.12.2020
M.Zeeh
M.Zeeh
Change
Date
Name

13.4.2 Option C38, SIGMA FREQUENCY CONTROL (SFC)

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

c				Datum	05.02.2018 USE		KAESER KOMPRESSOREN	cover page		=
b				Bearbeiter	M.Zeeh			Blower xFC+SC2		+
a				Geprüft	M.Zeeh					
A	Änderung	Datum	Name	Norm		Ersatz durch:	Ursprung: SXB.OFC-U3010.02		DXB.XFC-U3020.04	page 1 / 1 Bl.

Lfd. 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	power unit vent		SXB.XFC-U3020.04	3	
17	wiring diagram	control voltage		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		KAESER KOMPRESSOREN	list of contents	=
b				Bearbeiter	M.Zeeh				+
a				Geprüft	M.Zeeh				page 1
B	Änderung	Datum	Name	Norm		Ersatz durch:	Ersatz für:	Ursprung:	ZXB.XFC-U3020.04	1 Bl.

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:	black 2,5mm² H07V-K, 14AWG UL-Style 1015, CSA-TEW
control voltage AC 115V:	red 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
control voltage AC 115V grounded:	white 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
control voltage DC 24V:	blue 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
control voltage DC 24V grounded:	blue/white 1mm² H05V-K, 18AWG UL-Style 1015, CSA-TEW
external voltage:	orange 1,5mm² H07V-K, 16AWG UL-Style 1015, CSA-TEW
ground conductor:	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)

-B1/-B4	pressure transducer (4...20mA)
-B5	differential pressure switch filter clogging
-B24	overload Relay vent motor
-B40/-B43	temperature probe Blower (PT100)
-B55	temperature probe PT100 (option)
-B60	thermistor, compressor motor
-B70	temperature probe soundproofing casing
-B80/-B81	oil level switch
-B90	speed sensor
-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
-K20	SIGMA CONTROL 2 (SC2) (MCS)
-K21	SIGMA CONTROL 2 (SC2) (IOM-Modul)
-K26	speed supervisory module
-K29	phase sequence relay
-K50	coupling relay controller ventilator
-K51	coupling relay ventilator
-K52	coupling relay solenoid valve
-K55	coupling relay Oil return
-K60	EMERGENCY STOP (external/customer)
-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
-S1	EMERGENCY STOP pushbutton
-S9	REMOTE reset fault message
-T1	frequency converter
-T11	control transformer 230V-AC
-T21	control voltage supply 24V-DC
-T45	isolating amplifier
-X0	terminal strip, power supply
-X11	terminal strip, control
-X12	SC2-IOM digital outputs
-X15	SC2-IOM digital inputs
-X16	frequency converter analog signals
-X21	control voltage 24V-DC
-X22	frequency converter 24V-DC
-X100	EMERGENCY STOP (external/customer)

-K20 Main Control System SC2 MCS

-X1	Ethernet
-X2	IO-BUS
-X3	RS485-FC (USS-Bus)
-X4	communication module
-X5	SD card slot
-X6	ground connection

-K21 IO-Modul SC2 IOM-1

inside

-X1	*IO-Bus input*
-X2	*IO-Bus output*
-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

external

-X11...-X13	analog inputs 0-20mA
-X14...-X17	analog inputs PT100
-X18...-X29	digital inputs
-X30...-X32	digital outputs

c				Datum	05.02.2018		KAESER KOMPRESSOREN	component legend	=
b				Bearbeiter	M.Zeeh			Blower xFC+SC2	+
a				Geprüft	M.Zeeh				page 2
C	Änderung	Datum	Name	Norm		Ersatz durch:	Ersatz für:	Ursprung: component legend	UXB.XFC-U3020.04	11 Bl.

model	Common parts 5 - 175 hp / 4 - 132 kW
machine power supply	**460 V ±10 %, 60 Hz**
pressure transducer **-B1** **Huba Control**	894786.0 0.-1200mbar
pressure transducer **-B4** **Huba Control**	894787.0 0.1200mbar
differential pressure switch **-B5** **Dungs**	893307.00010 setting: 14,1 in.W.C.
temperature probe **-B40/-B43** **WIKA**	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 **-B70** **Wieland**	7.7631.0-P21 PT100
fuse **-1FU** **Gould**	(3x) - 7.3161.00190 ATQR 8 A - 600 V - class CC
fuse **-2FU** **Gould**	(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
fuse **-8FU** **Gould**	(1x) - 7.3304.00010 ATDR 2 A - 600 V - class CC
fuse **-10FU**	895637.0 5x20 0,315 A-T 250 VAC
fuse **-29FU** **Gould**	(3x) - 7.3161.00360 ATDR 1 A - 600 V - class CC
fuse socket **-1FU/-29FU** **-2FU** **-3FU/-8FU** **Wöhner**	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 **-K10** **bürkert**	895601.0 24V-DC 8W
Blower control **-K20** **Prodrive**	7.7601.0 SC2MCS
Blower control **-K21** **Prodrive**	7.7602.1 SC2IOM-1
phase sequence relay **-K29** **Siemens**	7.7830.00600 3UG4615
coupling relay **-K50/-K51** **Wieland**	7.3149.00660 24DC-1W-250V6A
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

Fortsetzung: nächstes Blatt

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electrical component parts list
Blower xFC+SC2
Common parts

KAESER KOMPRESSOREN

Ursprung:
Ersatz für:
Ersatz durch:

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

model	Common parts 5 - 175 hp / 4 - 132 kW
machine power supply	**460 V ±10 %, 60 Hz**
contactor **-Q4** **Siemens** interference suppressor . **Siemens**	7.8740.00310 3RT2016-1AK61 7.8740.05130 3RT2916-1CC00
control transformer **-T11** **Block**	7.2238.10090 USTE630 - 630 VA 208-600 V/2x 115 V+ 24 V
power supply **-T21** **Prodrive**	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
control line terminal **-X.** **11/12/15/16/21/22/100** **Handling**	895635.0 Wieland WTP fig. 1, Sht. 11

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UXB.XFC-U3020.04

electrical component parts list
Blower xFC+SC2
Common parts

KAESER KOMPRESSOREN
Ursprung:
Ersatz für:
Ersatz durch:

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

model	option BB	CB-DB-EB	FB	
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 **-B80/-B81** (option C5) **Elobau**	--- ---	894631.00010	894631.00010	
oil temperatur **-B55** (option C39) **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/GRD)	--- ---	--- ---	
coupling relay **-K52** **Wieland**	7.3149.00660 FLARE 24 V-DC 1W-250 V/6 A	--- --- ---	--- --- ---	

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electrical component parts list
Blower xFC+SC2
option

KAESER KOMPRESSOREN
Ursprung:
Ersatz für:
Ersatz durch:

	Datum	Name
Datum	05.02.2018	
Bearbeiter	M.Zeeh	
Geprüft	M.Zeeh	
Norm		

c
b
a
C Änderung Datum Name

model	performance-related components 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 -B24 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
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	894989.0 460 V-D/60 Hz 7 A, 3600U	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 -M4 soundproofing casing . 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 -M8 / (-M9) control cabinet . 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	7.7831.00310 6SL3203-0CE21-8AA0	7.7831.00310 6SL3203-0CE21-8AA0	7.7831.00310 6SL3203-0CE21-8AA0	7.7831.00320 6SL3203-0CE23-8AA0	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 ---	7.8832.10030 Schaffner FS33891-50-07	7.8832.10030 Schaffner FS33891-50-07
frequency converter -T1 control unit . instrument panel . Siemens	7.8833.01070 6SL3210-1PE21-1AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01080 6SL3210-1PE21-4AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01090 6SL3210-1PE21-8AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.00100 6SL3210-1PE22-7UL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.00110 6SL3210-1PE23-3UL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1
motor cable -W211	4x10 AWG / 4G6 mm² 600 V - 80°C - EMV	4x10 AWG / 4G6 mm² 600 V - 80°C - EMV	4x10 AWG / 4G6 mm² 600 V - 80°C - EMV	4x8 AWG / 4G10 mm² 600 V - 80°C - EMV	4x8 AWG / 4G10 mm² 600 V - 80°C - EMV
connection -W280.1/.2 -W281 -W282	10 AWG / 6 mm2 10 AWG / 6 mm2 10 AWG / 6 mm2 600 V - 90°C	10 AWG / 6 mm2 10 AWG / 6 mm2 10 AWG / 6 mm2 600 V - 90°C	10 AWG / 6 mm2 10 AWG / 6 mm2 10 AWG / 6 mm2 600 V - 90°C	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
supply terminals -X0: U1/V1/W1/GRD Handling Stripped length X supply 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	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	894864.00010 Wieland 14-4 AWG/2,5-16 mm² fig. 2, Sht. 12 16 mm fig. 1, Sht. 13

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UXB.XFC-U3020.04
electrical component parts list
BB+CB+DB
performance-related components
KAESER KOMPRESSOREN
Ursprung:
Ersatz für:
Ersatz durch:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
c b a C Änderung Datum Name

performance-related components

model	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 -B24 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
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 -M4 soundproofing casing . 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 -M8 / (-M9) control cabinet . 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 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) 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 control unit . instrument panel . Siemens	7.8833.01120 6SL3210-1PE23-8AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01130 6SL3210-1PE24-5AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01140 6SL3210-1PE26-0AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01150 6SL3210-1PE27-5AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01160 6SL3210-1PE28-8AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1
motor cable -W211	4x6 AWG / 4G16 mm² 600 V - 80°C - EMV	4x6 AWG / 4G16 mm² 600 V - 80°C - EMV	2x 4x8 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 supply 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 30 mm fig. 2, Sht. 13	3x 895314.0 3x 895314.00010 4x 895314.00040 Wago 8-1 AWG/10-50 mm² 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 mm² fig. 3, Sht. 12 30 mm fig. 2, Sht. 13

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electrical component parts list
CB+DB
performance-related components
KAESER KOMPRESSOREN
Ursprung: Ersatz für: Ersatz durch:
Datum 05.02.2018 Bearbeiter M.Zeeh Geprüft M.Zeeh Norm
c b a C Änderung Datum Name

performance-related components

model		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 . 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
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 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)
interference suppression filter	-R11 Siemens	integrated ---	integrated ---	integrated ---	integrated ---
frequency converter control unit instrument panel	-T1 . . Siemens	7.8833.01120 6SL3210-1PE23-8AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01130 6SL3210-1PE24-5AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01140 6SL3210-1PE26-0AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01140 6SL3210-1PE26-0AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1
motor cable	-W211	4x6 AWG / 4G16 mm² 600 V - 80°C - EMV	4x6 AWG / 4G16 mm² 600 V - 80°C - EMV	4x 4 AWG / 25 mm² 600 V - 90°C	4x 4 AWG / 25 mm² 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	6 AWG / 16 mm2 6 AWG / 16 mm2 6 AWG / 16 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
supply terminals supply	-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 30 mm fig. 2, Sht. 13	3x 895314.0 3x 895314.00010 4x 895314.00040 Wago 8-1 AWG/10-50 mm² fig. 3, Sht. 12 30 mm fig. 2, Sht. 13

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UXB.XFC-U3020.04
electrical component parts list
EB+FB
performance-related components
KAESER KOMPRESSOREN
Ursprung:
Ersatz für:
Ersatz durch:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
c b a C Änderung Datum Name

performance-related components

model	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 -B24 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	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	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	894979.1 460 V-D/60 Hz 78 A, 3600U
vent motor -M4 soundproofing casing . 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
vent motor -M8/-M9 control cabinet . 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 Magnetec	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 control unit . instrument panel . Siemens	7.8833.01150 6SL3210-1PE27-5AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01150 6SL3210-1PE27-5AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01160 6SL3210-1PE28-8AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01160 6SL3210-1PE28-8AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1
motor cable -W211	3x 2 AWG / 35 mm² 4 AWG / 25 mm² (GRD) 600 V - 90°C	3x 2 AWG / 35 mm² 4 AWG / 25 mm² (GRD) 600 V - 90°C	3x 1 AWG / 50 mm² 4 AWG / 25 mm² (GRD) 600 V - 90°C	3x 1 AWG / 50 mm² 4 AWG / 25 mm² (GRD) 600 V - 90°C
connection -W280.1/.2 -W281 -W282	2 AWG / 35 mm² 2 AWG / 35 mm² 2 AWG / 35 mm² 600 V - 90°C	2 AWG / 35 mm² 2 AWG / 35 mm² 2 AWG / 35 mm² 600 V - 90°C	2 AWG / 35 mm² 2 AWG / 35 mm² 2 AWG / 35 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 supply connection	3x 895314.0 3x 895314.00010 4x 895314.00040 Wago 8-1 AWG/10-50 mm² 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 mm² 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 mm² fig. 3, Sht. 12 36 mm fig. 2, Sht. 13	3x 894385.0 3x 894385.00010 4x 894385.00040 25-95 mm² Wago 4-4/0 AWG/25-95 mm² fig. 3, Sht. 12 36 mm fig. 2, Sht. 13

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UXB.XFC-U3020.04
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electrical component parts list
EB+FB
performance-related components
KAESER KOMPRESSOREN
Ursprung:
Ersatz für:
Ersatz durch:

Datum	05.02.2018
Bearbeiter	M.Zeeh
Geprüft	M.Zeeh
Norm	

C	Änderung	Datum	Name
a			
b			
c			

model	performance-related components 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 -B24 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	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	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	894719.11000 460 V-D/60 Hz 125 A, 3600U
vent motor -M4 soundproofing casing . 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
vent motor -M8/-M9 control cabinet . 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 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 control unit . instrument panel . Siemens	7.8833.01170 6SL3210-1PE31-1AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01170 6SL3210-1PE31-1AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01180 6SL3210-1PE31-5AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01180 6SL3210-1PE31-5AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1
motor cable -W211	3x 2/0 AWG / 70 mm² 2 AWG / 35 mm² (GRD) 600 V - 90°C	3x 2/0 AWG / 70 mm² 2 AWG / 35 mm² (GRD) 600 V - 90°C	3x 3/0 AWG / 95 mm² 1 AWG / 50 mm² (GRD) 600 V - 90°C	3x 3/0 AWG / 95 mm² 1 AWG / 50 mm² (GRD) 600 V - 90°C
connection -W280.1/.2 -W281 -W282	1 AWG / 50 mm² 1 AWG / 50 mm² 1 AWG / 50 mm² 600 V - 90°C	1 AWG / 50 mm² 1 AWG / 50 mm² 1 AWG / 50 mm² 600 V - 90°C	2/0 AWG / 70 mm² 2/0 AWG / 70 mm² 2/0 AWG / 70 mm² 600 V - 90°C	2/0 AWG / 70 mm² 2/0 AWG / 70 mm² 2/0 AWG / 70 mm² 600 V - 90°C
supply terminals -X0: U1/V1/W1/GRD Handling Stripped length X supply connection	3x 894385.0 3x 894385.00010 4x 894385.00040 Wago 4-4/0 AWG/25-95 mm² 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 mm² 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 mm² 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 mm² fig. 3, Sht. 12 36 mm fig. 2, Sht. 13

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UXB.XFC-U3020.04
electrical component parts list
EB+FB
performance-related components
KAESER KOMPRESSOREN
Ursprung: Ersatz für: Ersatz durch:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
c b a C Änderung Datum Name

performance-related components

model	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 -B24 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	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 -M4 soundproofing casing . 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 -M8/-M9 control cabinet . 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 Magnetec	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 control unit . instrument panel . Siemens	7.8833.01190 6SL3210-1PE31-8AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01190 6SL3210-1PE31-8AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01200 6SL3210-1PE32-1AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01200 6SL3210-1PE32-1AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1	7.8833.01210 6SL3210-1PE32-5AL0 7.7830.00710 6SL3244-0BB12-1BAx 7.7830.00100 6SL3255-0AA00-4CA1
motor cable -W211	3x 4/0 AWG / 120 mm² 2/0 AWG / 70 mm² (GRD) 600 V - 90°C	3x 4/0 AWG / 120 mm² 2/0 AWG / 70 mm² (GRD) 600 V - 90°C	3x 4/0 AWG / 120 mm² 2/0 AWG / 70 mm² (GRD) 600 V - 90°C	3x 4/0 AWG / 120 mm² 2/0 AWG / 70 mm² (GRD) 600 V - 90°C	3x 4/0 AWG / 120 mm² 2/0 AWG / 70 mm² (GRD) 600 V - 90°C
connection -W280.1/.2 -W281 -W282	3/0 AWG / 95 mm² 3/0 AWG / 95 mm² 3/0 AWG / 95 mm² 600 V - 90°C	3/0 AWG / 95 mm² 3/0 AWG / 95 mm² 3/0 AWG / 95 mm² 600 V - 90°C	4/0 AWG / 120 mm² 4/0 AWG / 120 mm² 4/0 AWG / 120 mm² 600 V - 90°C	4/0 AWG / 120 mm² 4/0 AWG / 120 mm² 4/0 AWG / 120 mm² 600 V - 90°C	2x 2/0 AWG / 70 mm² 4/0 AWG / 120 mm² 4/0 AWG / 120 mm² 600 V - 90°C
supply terminals -X0: U1/V1/W1 Handling Stripped length X	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0AWG / 25-95mm² fig. 3, Sht. 13 36 mm	6x 894385.0 3x 894385.00030 3x 894385.00040 Wago 4-4/0AWG / 25-95mm² fig. 3, Sht. 13 36 mm	6x 895545.0 3x 895545.00030 3x 895545.00040 Wago (50-185mm²) 1 AWG - 350 MCM fig. 3, Sht. 13 45 mm	6x 895545.0 3x 895545.00030 3x 895545.00040 Wago (50-185mm²) 1 AWG - 350 MCM fig. 3, Sht. 13 45 mm	6x 895545.0 3x 895545.00030 3x 895545.00040 Wago (50-185mm²) 1 AWG - 350 MCM fig. 3, Sht. 13 45 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	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	fig. 3, Sht. 15

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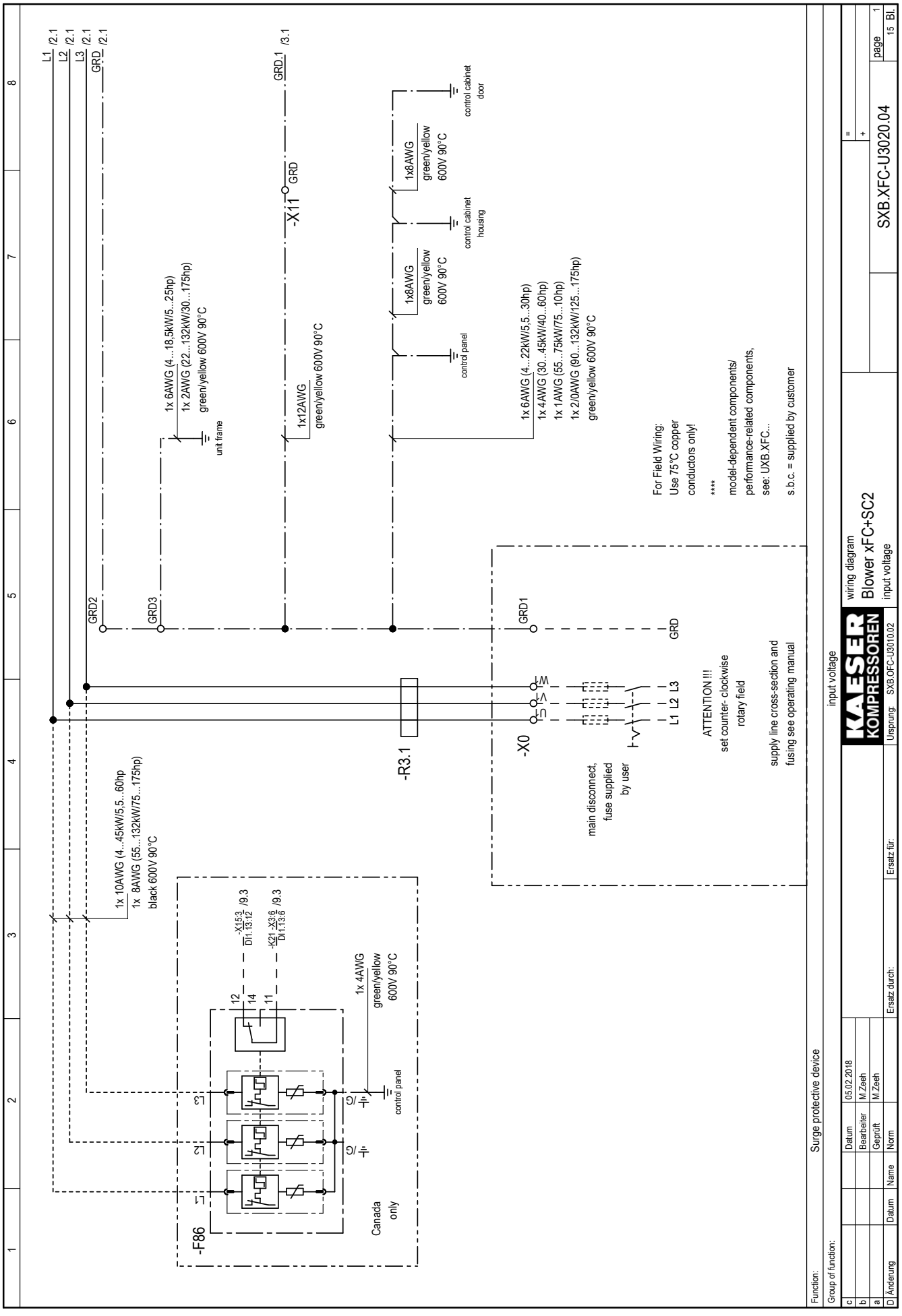
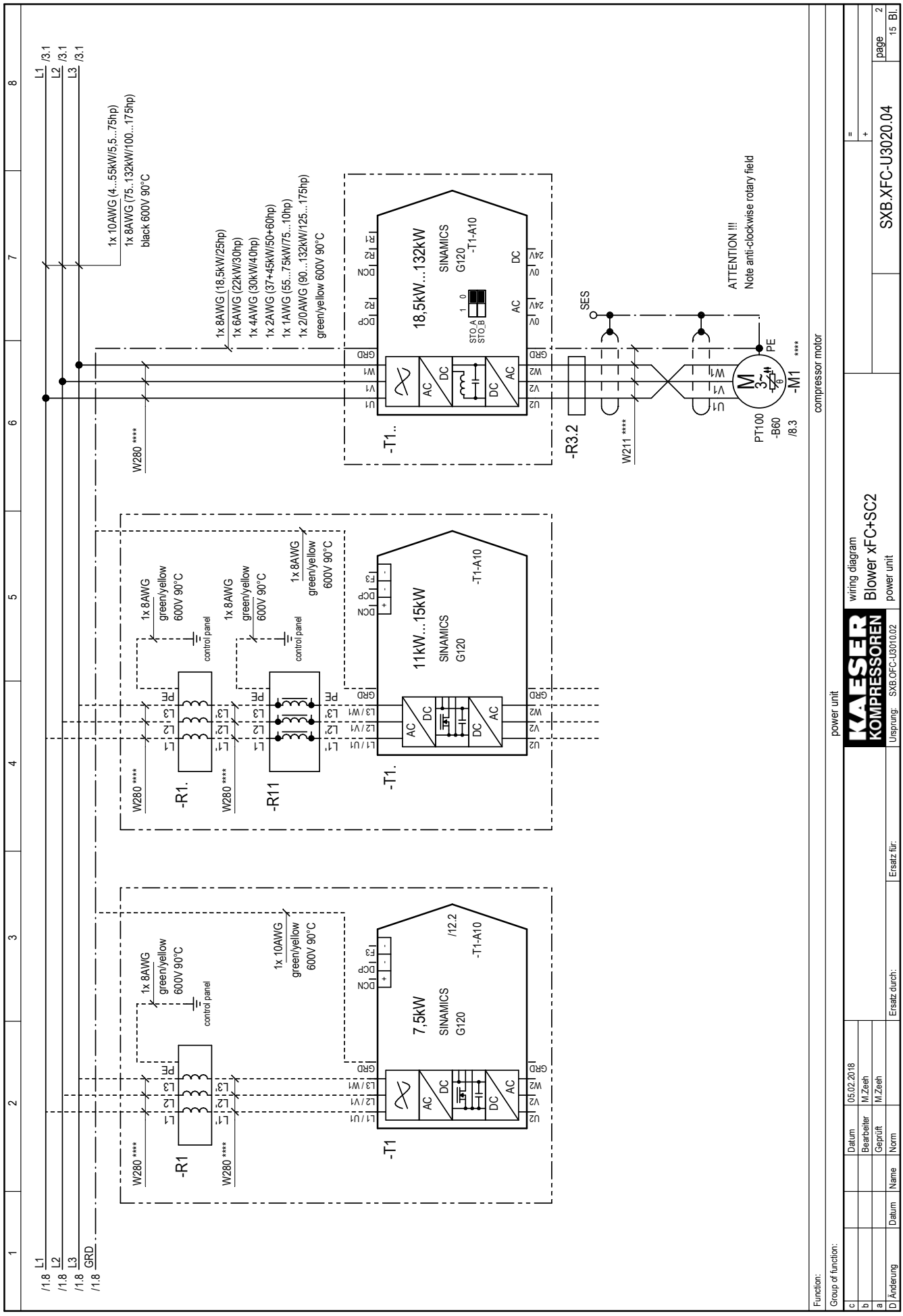
UXB.XFC-U3020.04
electrical component parts list
FB
performance-related components
KAESER KOMPRESSOREN
Ursprung:
Ersatz für:
Ersatz durch:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
Änderung Datum Name
a b c


L1 /2.1
L2 /2.1
L3 /2.1
GRD /2.1
GRD1 /3.1
-X11
GRD
1x 6AWG (4...18.5kW/5...25hp)
1x 2AWG (22...132kW/30...175hp)
green/yellow 600V 90°C
unit frame
1x12AWG
green/yellow 600V 90°C
control panel
1x8AWG
green/yellow
600V 90°C
control cabinet housing
control cabinet door
1x 6AWG (4...22kW/5,5...30hp)
1x 4AWG (30...45kW/40...60hp)
1x 1AWG (55...75kW/75...10hp)
1x 2/0AWG (90...132kW/125...175hp)
green/yellow 600V 90°C
GRD2
GRD3
GRD1
GRD
-X0
-R3.1
1x 10AWG (4...45kW/5,5...60hp
1x 8AWG (55...132kW/75...175hp)
black 600V 90°C
main disconnect, fuse supplied by user
L1 L2 L3
ATTENTION !!!
set counter- clockwise rotary field
supply line cross-section and fusing see operating manual
For Field Wiring:
Use 75°C copper conductors only!
****
model-dependent components/ performance-related components, see: UXB.XFC...
s.b.c. = supplied by customer
-F86
Canada only
-X1:5.3
DI1: 13:12 /9.3
-K21 -X3:6
DI1 13.6 /9.3
12
14
11
1x 4AWG
green/yellow
600V 90°C
control panel
L1
L2
L3
Function: Surge protective device
Group of function:
input voltage
KAESER KOMPRESSOREN
wiring diagram
Blower xFC+SC2
input voltage
SXB.XFC-U3020.04
page 1
15 Bl.
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Ersatz durch:
Ersatz für:
Ursprung: SXB.OFC-U3010.02
Änderung Datum Name Norm


L1 /3.1
L2 /3.1
L3 /3.1
1x 10AWG (4...55kW/5,5...75hp)
1x 8AWG (75..132kW/100...175hp)
black 600V 90°C
1x 8AWG (18,5kW/25hp)
1x 6AWG (22kW/30hp)
1x 4AWG (30kW/40hp)
1x 2AWG (37+45kW/50+60hp)
1x 1AWG (55...75kW/75...10hp)
1x 2/0AWG (90...132kW/125...175hp)
green/yellow 600V 90°C
W280 ****
-T1..
18,5kW...132kW
SINAMICS
G120
-T1-A10
STO_A
STO_B
-R3.2
SES
W211 ****
ATTENTION !!!
Note anti-clockwise rotary field
PT100
-B60
/8.3
-M1
PE
compressor motor
power unit
1x 8AWG
green/yellow
600V 90°C
control panel
-R1.
-R11
-T1.
11kW...15kW
1x 10AWG
-R1
-T1
7,5kW
/12.2
L1 /1.8
L2 /1.8
L3 /1.8
GRD /1.8
Function:
Group of function:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Ersatz durch:
Ersatz für:
Ursprung: SXB.OFC-U3010.02
wiring diagram
Blower xFC+SC2
power unit
SXB.XFC-U3020.04
page 2
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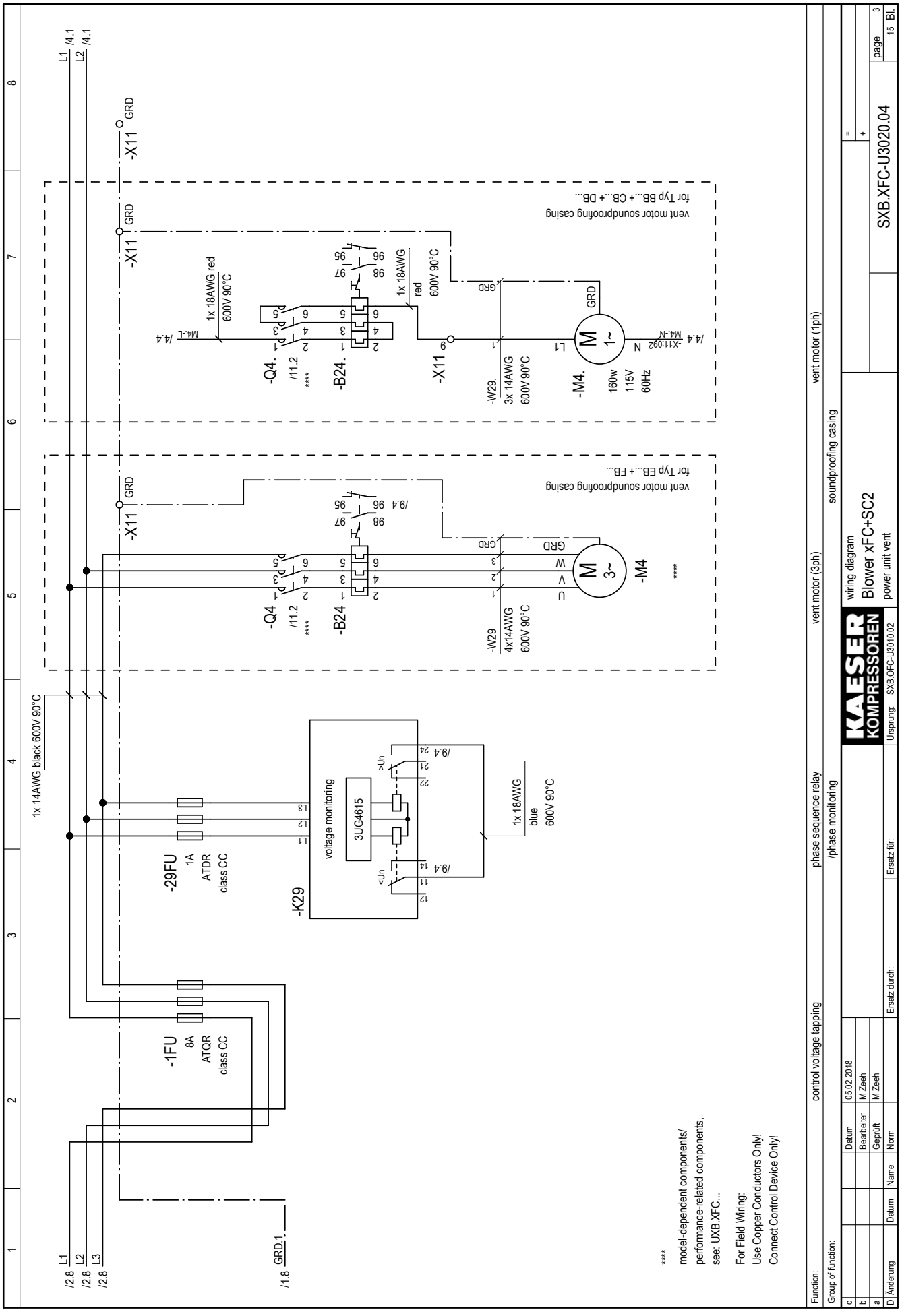
L1 /4.1
L2 /4.1
-X11 GRD
vent motor soundproofing casing
for Typ BB...+ CB...+ DB...
-Q4. /11.2 ****
-B24.
-X11
-W29. 3x 14AWG 600V 90°C
-M4. 160w 115V 60Hz
1x 18AWG red 600V 90°C
1x 18AWG red 600V 90°C
/4.4 -X11:09 2 M4:-N
M4:-L /4.4
for Typ EB...+ FB...
-Q4 /11.2 ****
-B24
-W29 4x14AWG 600V 90°C
-M4 ****
1x 14AWG black 600V 90°C
-29FU 1A ATDR class CC
-K29
voltage monitoring
3UG4615
>Un
<Un
/9.4 24
/9.4 14
1x 18AWG blue 600V 90°C
-1FU 8A ATQR class CC
L1 /2.8
L2 /2.8
L3 /2.8
GRD.1 /1.8
**** model-dependent components/ performance-related components, see: UXB.XFC...
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
Function: control voltage tapping phase sequence relay vent motor (3ph) vent motor (1ph)
Group of function: /phase monitoring soundproofing casing
KAESER KOMPRESSOREN
wiring diagram
Blower xFC+SC2
power unit vent
SXB.XFC-U3020.04
page 3
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Ersatz durch:
Ersatz für:
Ursprung: SXB.OFC-U3010.02
Änderung Datum Name Norm
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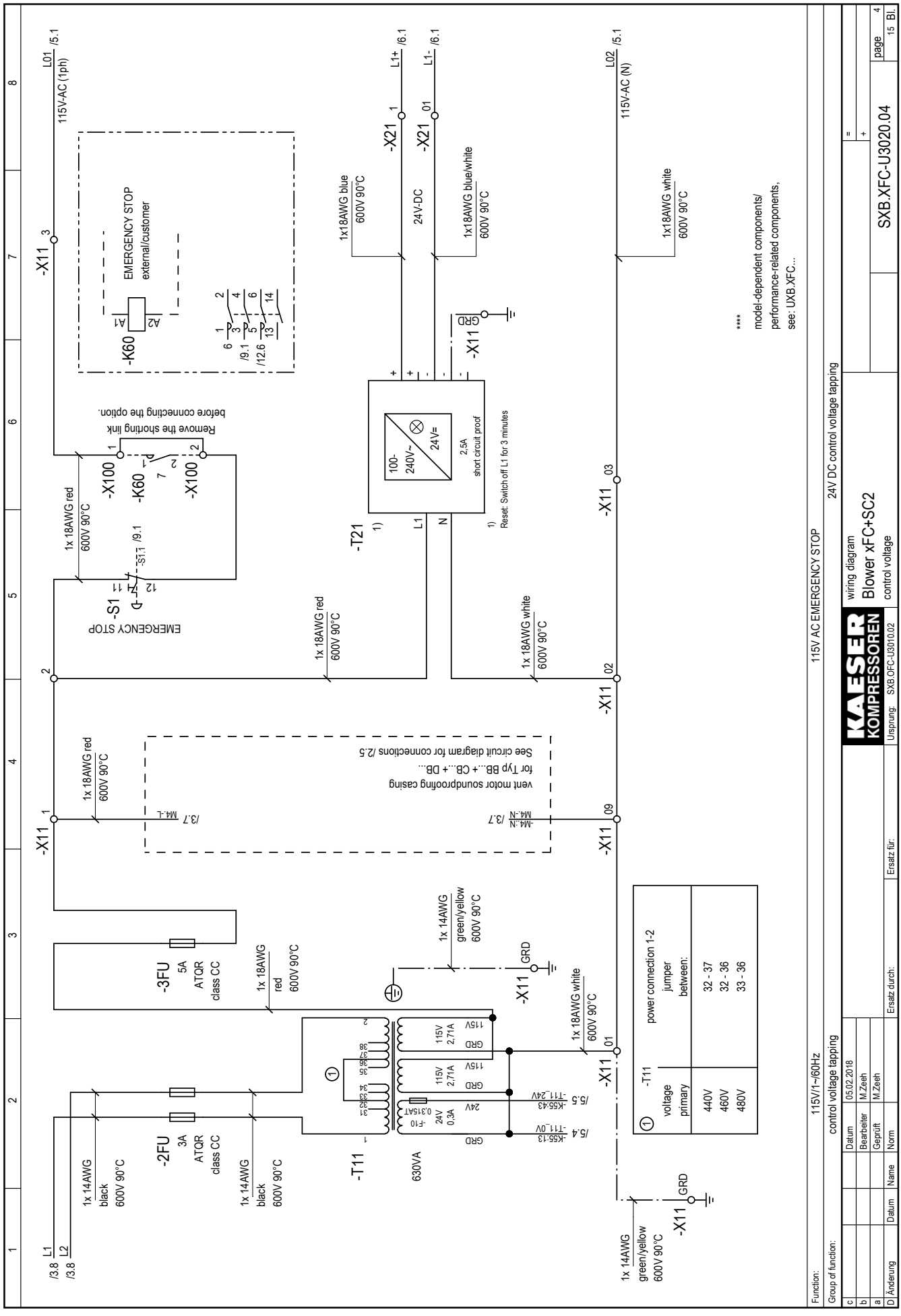
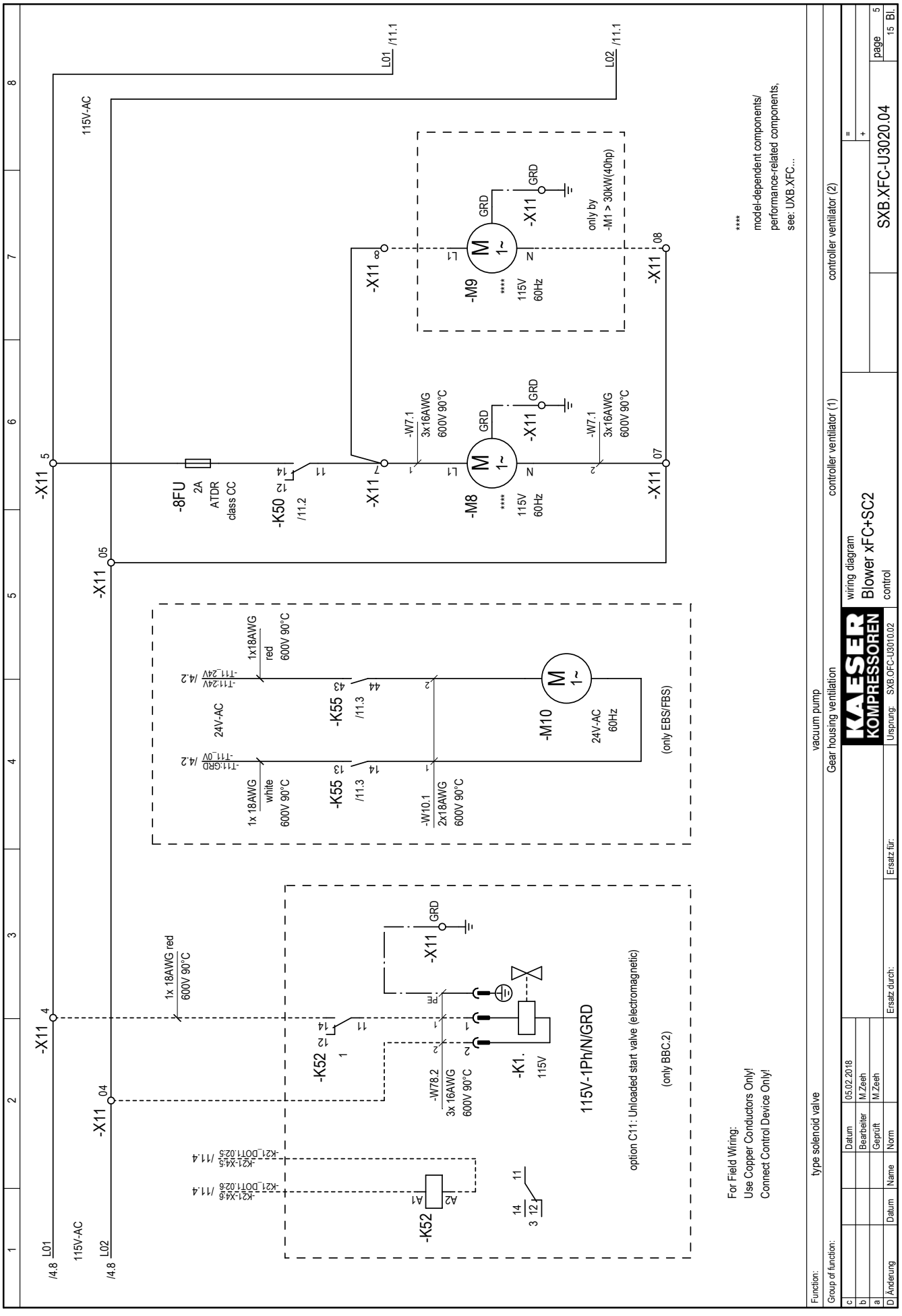
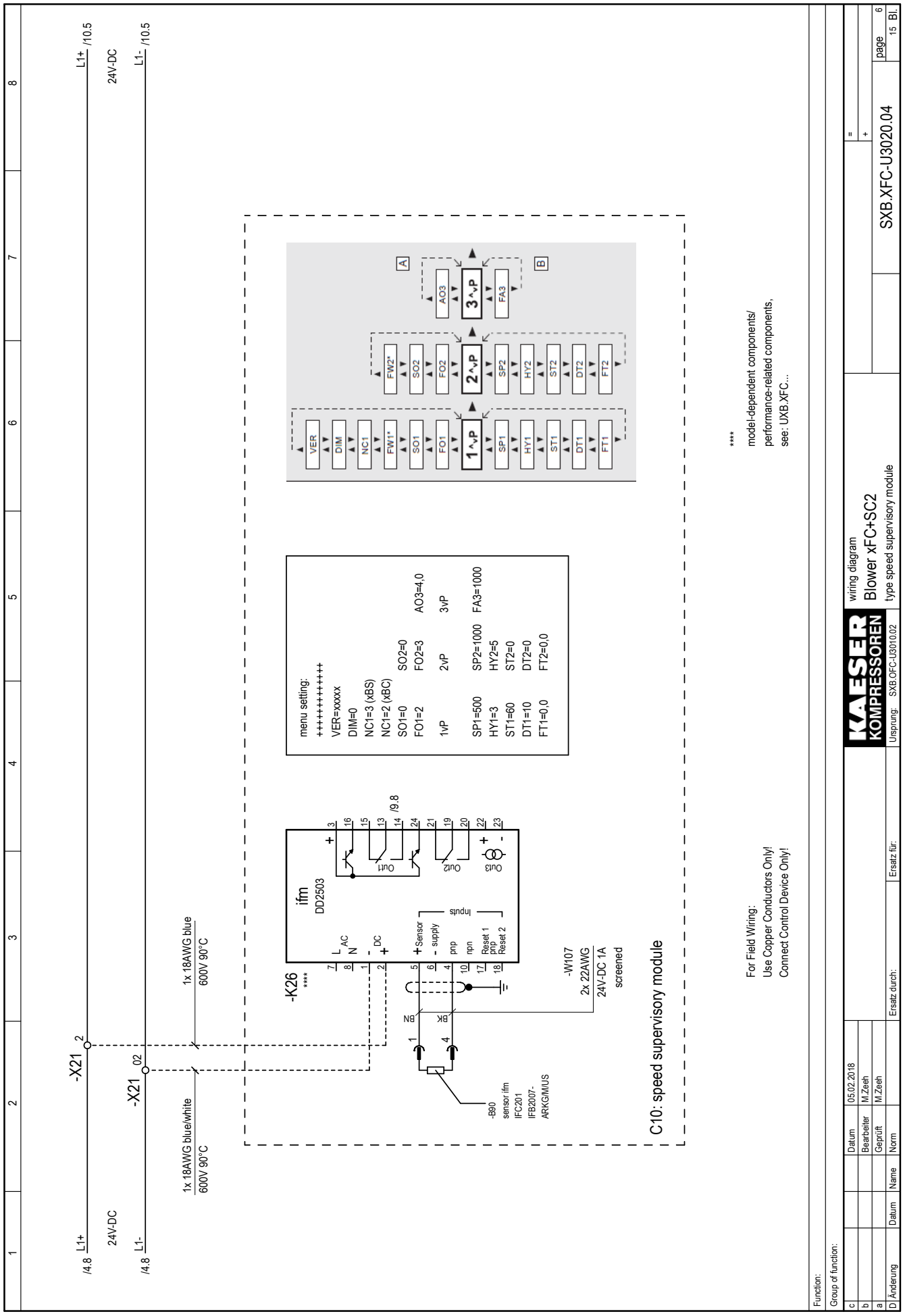
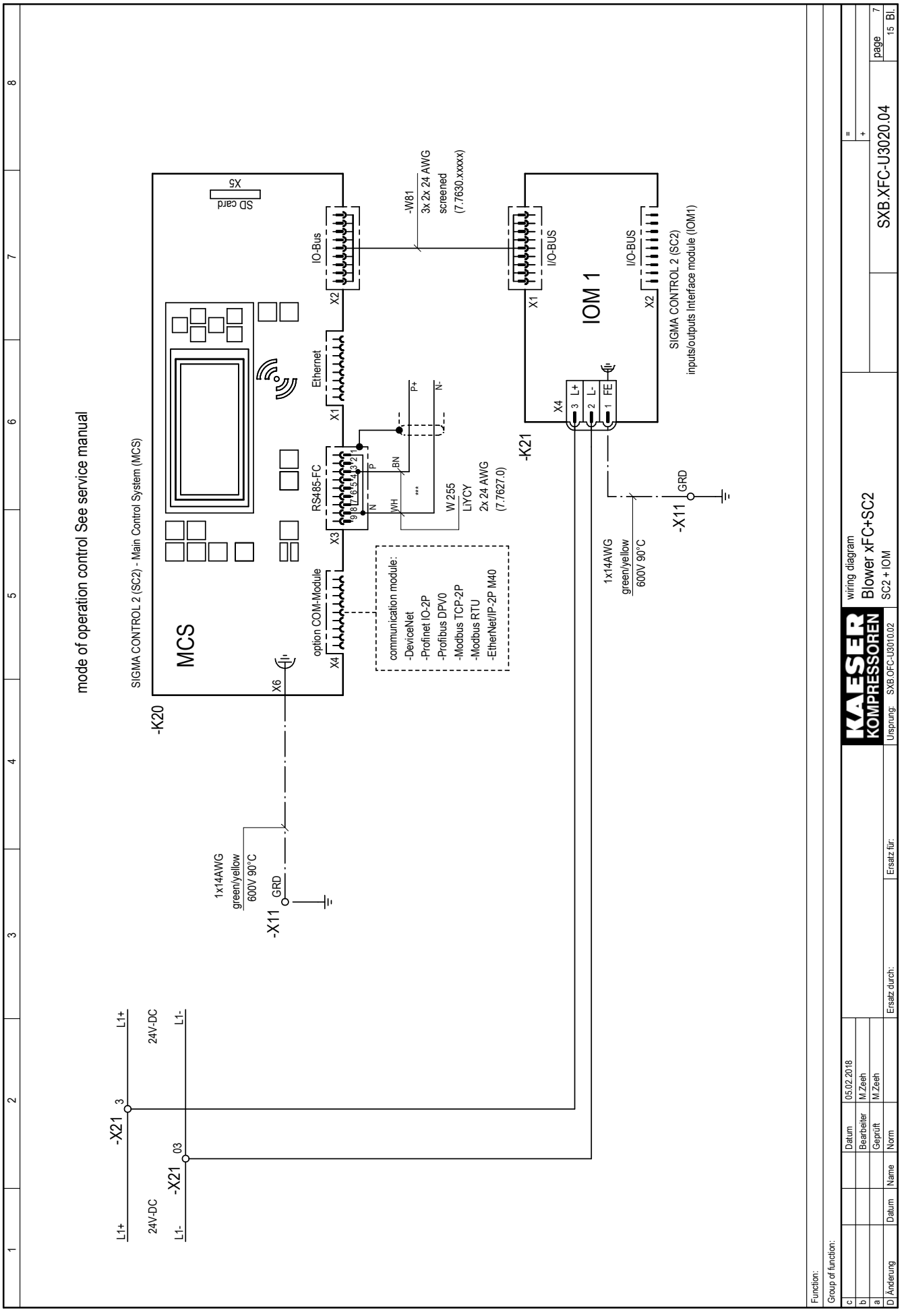
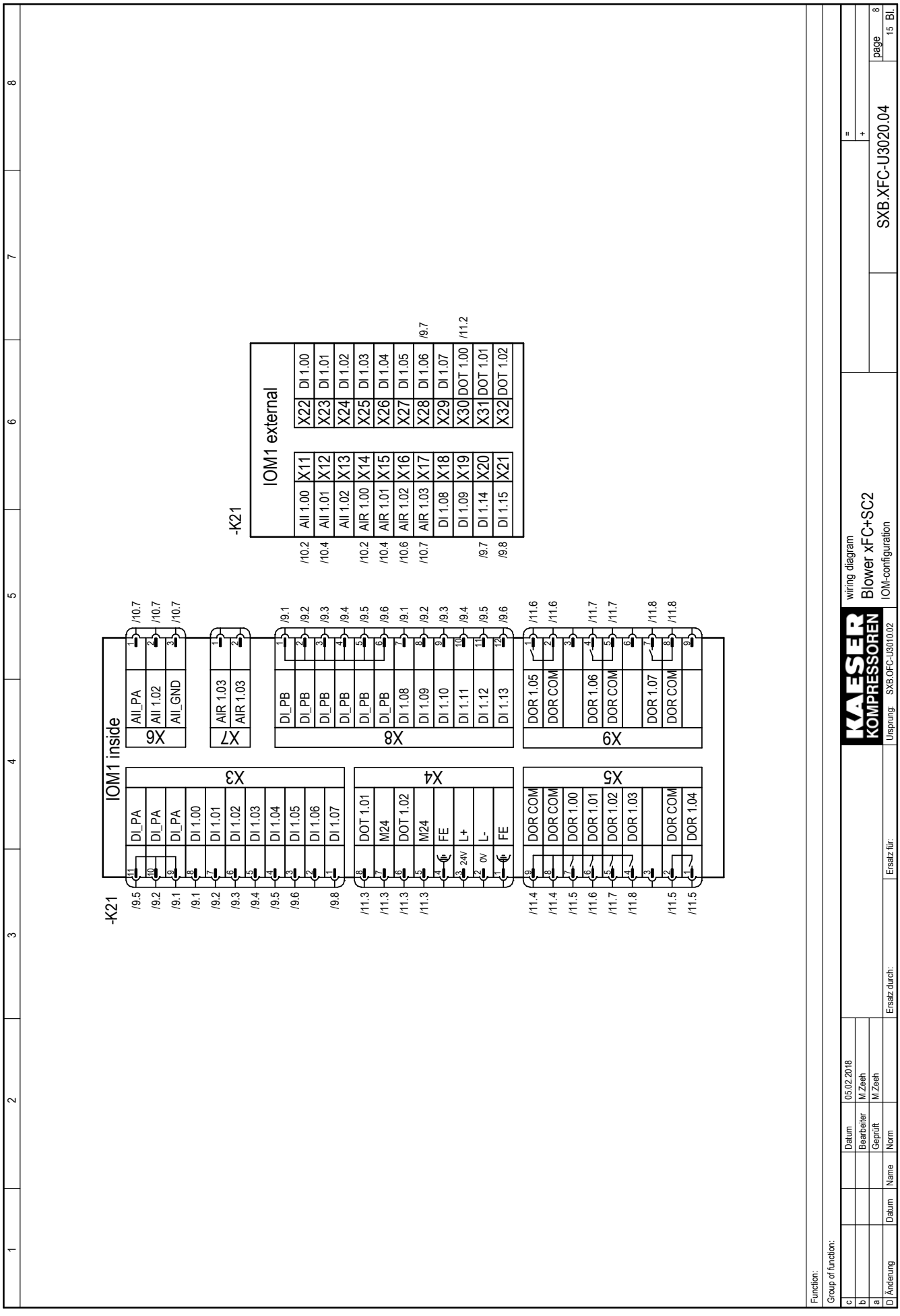
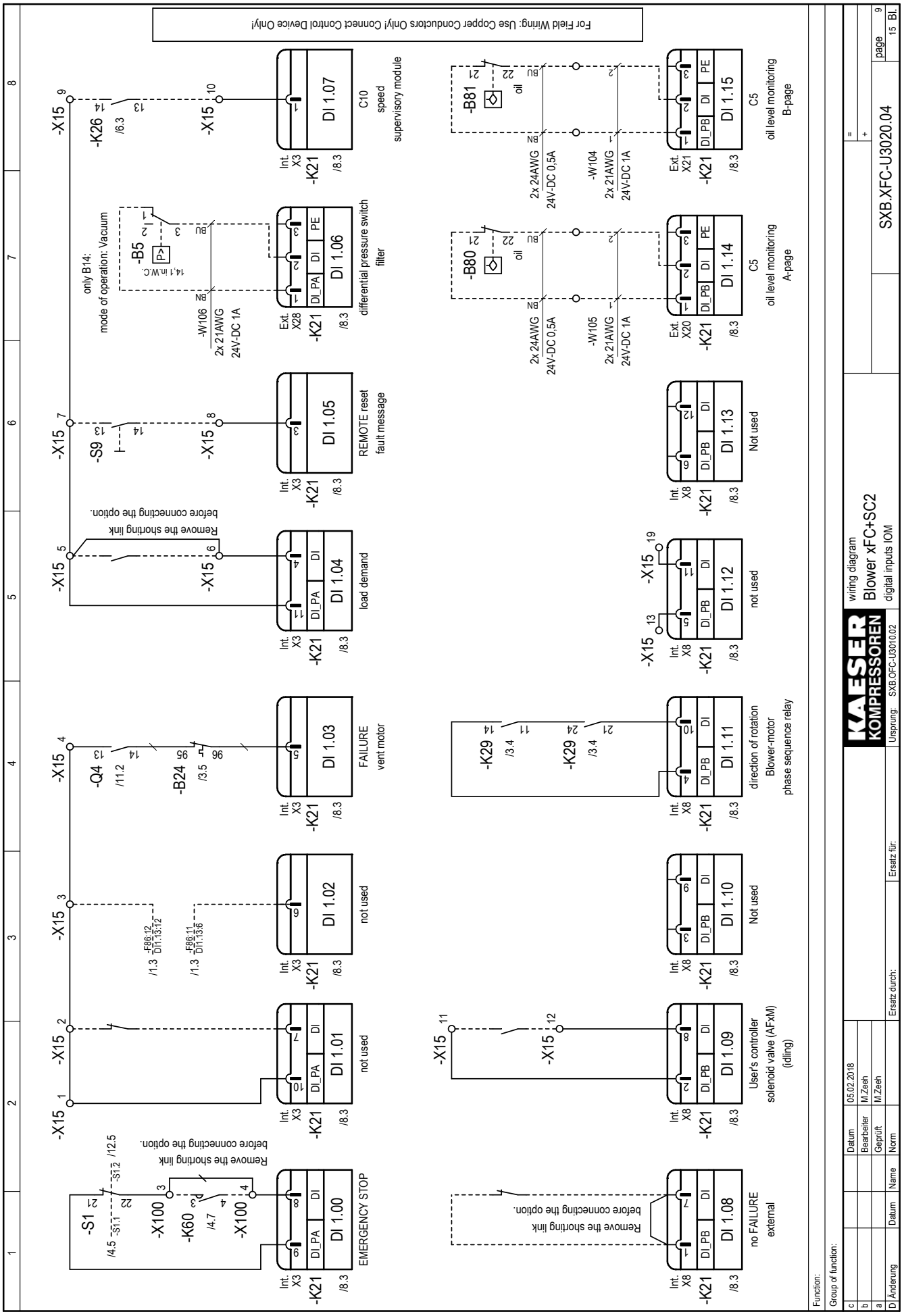

L01 /5.1
115V-AC (1ph)
-X11
EMERGENCY STOP
external/customer
-K60
A1
A2
-X21
L1+ /6.1
L1- /6.1
24V-DC
1x18AWG blue
600V 90°C
1x18AWG blue/white
600V 90°C
GRD
-X11
L02 /5.1
115V-AC (N)
1x18AWG white
600V 90°C
Remove the shorting link
before connecting the option.
-X100
-K60
-X100
1x 18AWG red
600V 90°C
-S1
EMERGENCY STOP
-S1.1 /9.1
-T21
100-240V~
24V=
2,5A
short circuit proof
L1
N
Reset: Switch off L1 for 3 minutes
1x18AWG red
600V 90°C
1x 18AWG white
600V 90°C
-X11
vent motor soundproofing casing
for Typ BB...+ CB...+ DB...
See circuit diagram for connections /2.5
-M4.-L /3.7
-M4.-N /3.7
-3FU
5A
ATQR
class CC
1x 14AWG
green/yellow
600V 90°C
-2FU
3A
ATQR
class CC
1x 14AWG
black
600V 90°C
-T11
630VA
115V
2,71A
24V
0,3A
-F10
0,315AT
-K55:43
-T11_24V
-K55:13
-T11_0V
power connection 1-2
jumper
between:
voltage
primary
440V
460V
480V
32 - 37
32 - 36
33 - 36
L1 /3.8
L2 /3.8
model-dependent components/
performance-related components,
see: UXB.XFC...
Function: 115V/1~/60Hz
115V AC EMERGENCY STOP
Group of function: control voltage tapping
24V DC control voltage tapping
KAESER KOMPRESSOREN
wiring diagram
Blower xFC+SC2
control voltage
SXB.XFC-U3020.04
page 4
15 BL
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
Ersatz durch:
Ersatz für:
Ursprung: SXB.OFC-U3010.02
Änderung Datum Name

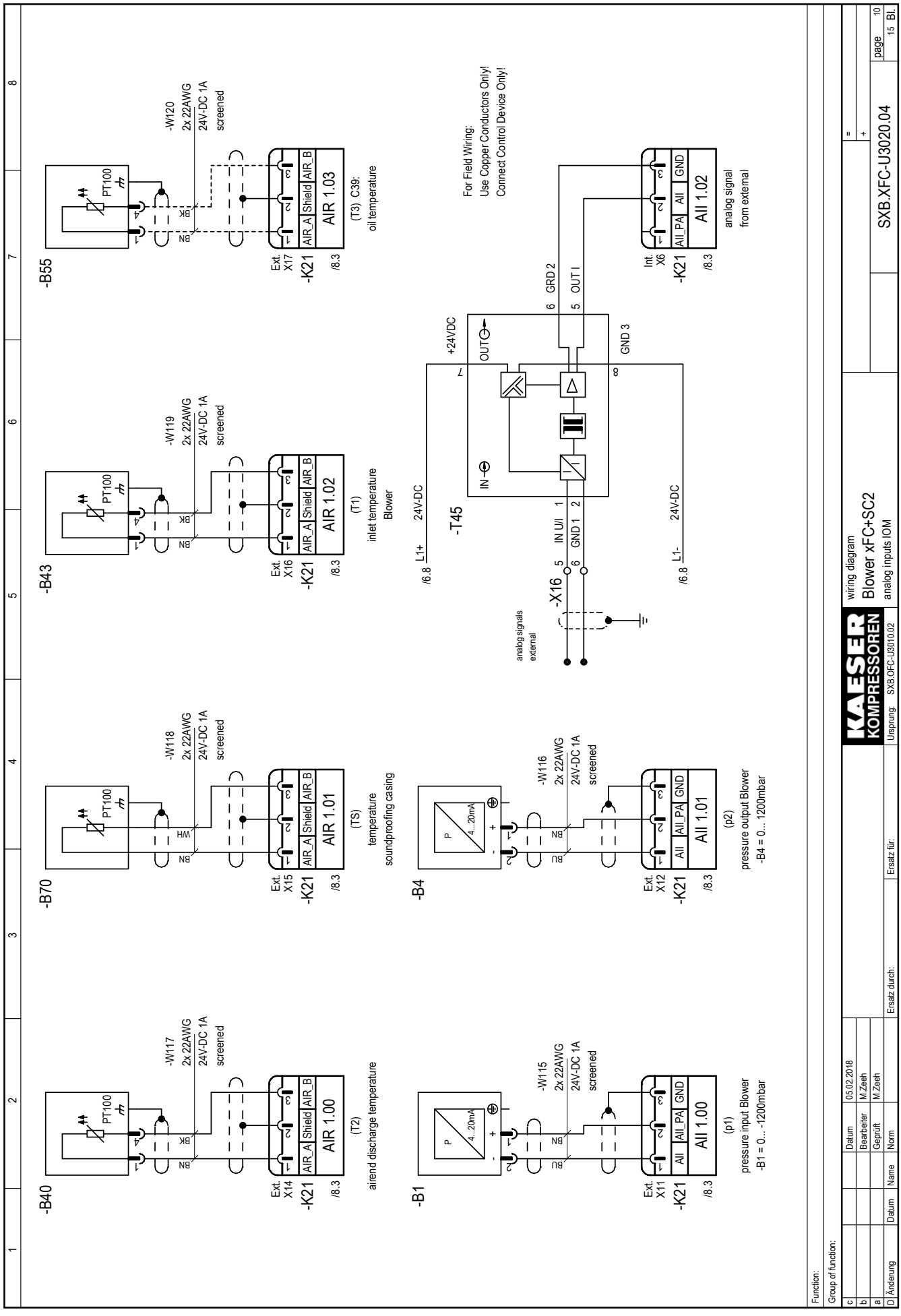

L01 /11.1
L02 /11.1
115V-AC
-X11 5
-X11 05
-X11 04
-X11 4
-8FU 2A ATDR class CC
-K50 /11.2
-X11 7
-X11 08
-X11 07
-W7.1 3x16AWG 600V 90°C
-M8 **** 115V 60Hz
-M9 **** 115V 60Hz
only by -M1 > 30kW(40hp)
GRD
-K55 /11.3
-K52
-K1. 115V
-M10 24V-AC 60Hz
24V-AC
1x 18AWG white 600V 90°C
1x18AWG red 600V 90°C
-W10.1 2x18AWG 600V 90°C
-W78.2 3x 16AWG 600V 90°C
1x 18AWG red 600V 90°C
115V-1Ph/N/GRD
option C11: Unloaded start valve (electromagnetic)
(only BBC.2)
(only EBS/FBS)
**** model-dependent components/ performance-related components, see: UXB.XFC...
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
Function: type solenoid valve
Group of function: vacuum pump
Gear housing ventilation
controller ventilator (1)
controller ventilator (2)
KAESER KOMPRESSOREN
wiring diagram
Blower xFC+SC2
control
SXB.XFC-U3020.04
page 5
15 Bl.
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Name Norm
Ersatz durch:
Ersatz für:
Ursprung: SXB.OFC-U3010.02
Änderung Datum

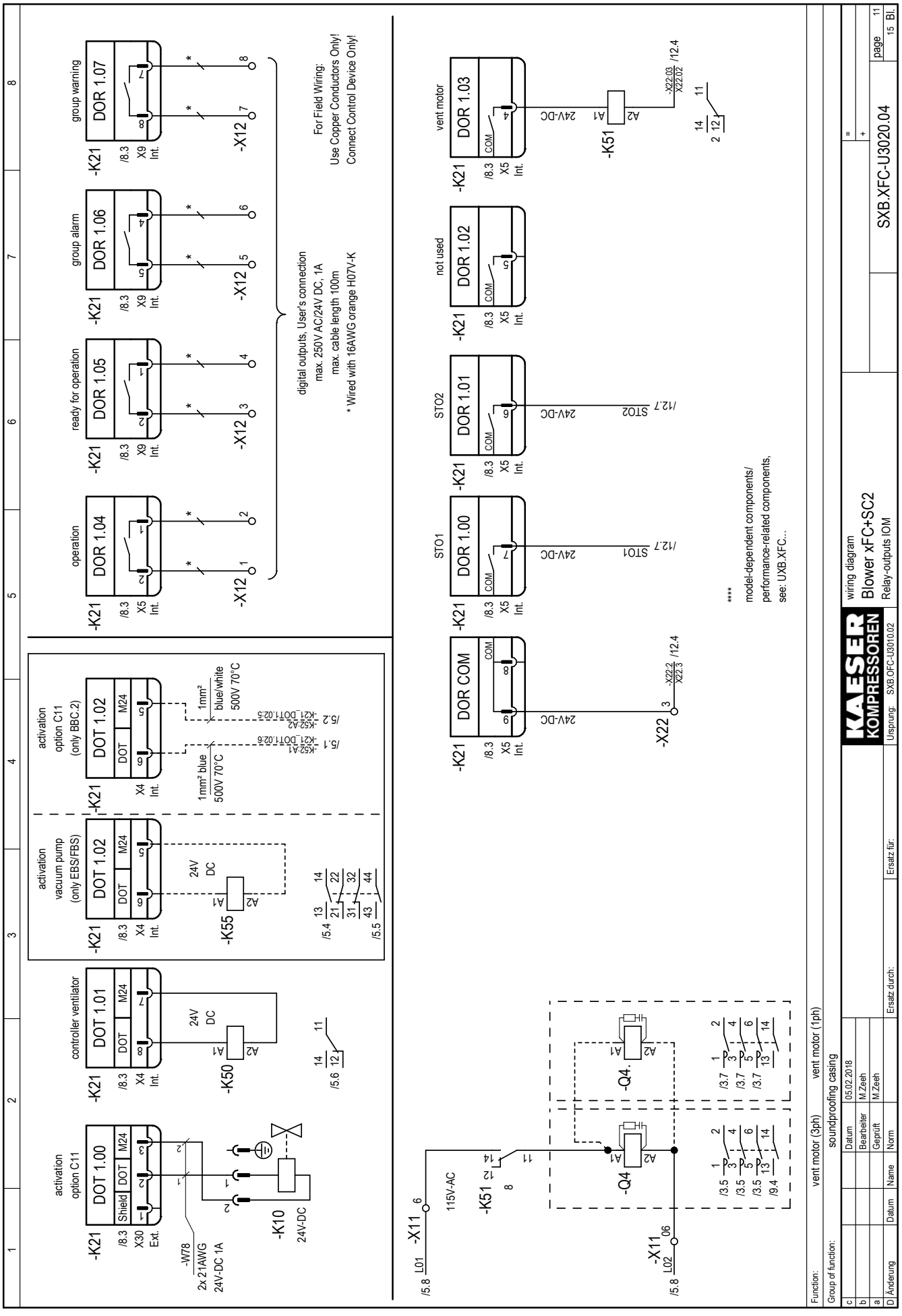

L1+ /10.5
24V-DC
L1- /10.5
-X21 2
-X21 02
1x 18AWG blue
600V 90°C
1x 18AWG blue/white
600V 90°C
L1+ /4.8
24V-DC
L1- /4.8
-K26 ****
ifm
DD2503
menu setting:
++++++++++++
VER=xxxxx
DIM=0
NC1=3 (xBS)
NC1=2 (xBC)
SO1=0 SO2=0
FO1=2 FO2=3 AO3=4,0
1vP 2vP 3vP
SP1=500 SP2=1000 FA3=1000
HY1=3 HY2=5
ST1=60 ST2=0
DT1=10 DT2=0
FT1=0,0 FT2=0,0
VER DIM NC1 FW1* SO1 FO1 1^vP SP1 HY1 ST1 DT1 FT1
FW2* SO2 FO2 2^vP SP2 HY2 ST2 DT2 FT2
AO3 3^vP FA3
A
B
Out1
Out2
Out3
Inputs
Sensor
- supply
pnp
npn
Reset 1
pnp
Reset 2
/9.8
-W107
2x 22AWG
24V-DC 1A
screened
BN
BK
-B90
sensor ifm
IFC201
IFB2007-
ARKG/M/US
C10: speed supervisory module
****
model-dependent components/
performance-related components,
see: UXB.XFC...
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
Function:
Group of function:
KAESER KOMPRESSOREN
wiring diagram
Blower xFC+SC2
type speed supervisory module
SXB.XFC-U3020.04
page 6
15 BL
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Name Norm
Ersatz durch:
Ursprung: SXB.OFC-U3010.02
Ersatz für:
D Änderung Datum

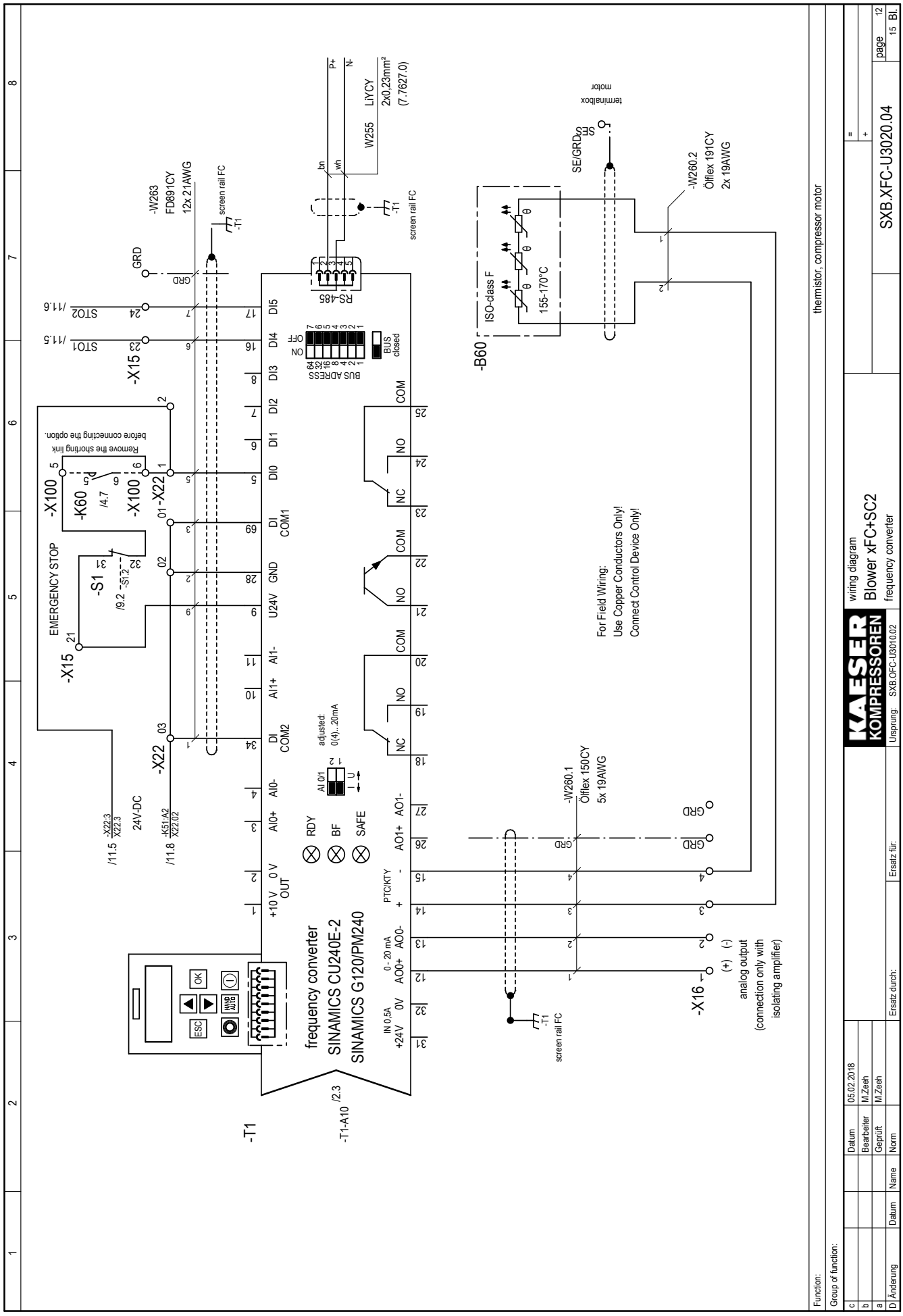

mode of operation control See service manual
SIGMA CONTROL 2 (SC2) - Main Control System (MCS)
MCS
-K20
SD card
X5
IO-Bus
X2
Ethernet
X1
RS485-FC
X3
option COM-Module
X4
X6
-W81
3x 2x 24 AWG
screened
(7.7630.xxxxx)
communication module:
-DeviceNet
-Profinet IO-2P
-Profibus DPV0
-Modbus TCP-2P
-Modbus RTU
-EtherNet/IP-2P M40
W 255
LiYCY
2x 24 AWG
(7.7627.0)
1x14AWG
green/yellow
600V 90°C
GRD
-X11
-K21
IOM 1
I/O-BUS
X1
X2
X4
L+
L-
FE
SIGMA CONTROL 2 (SC2)
inputs/outputs Interface module (IOM1)
1x14AWG
green/yellow
600V 90°C
GRD
-X11
24V-DC
L1+
L1-
-X21
3
03
wiring diagram
Blower xFC+SC2
SC2 + IOM
SXB.XFC-U3020.04
page 7
15 Bl.
Function:
Group of function:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
Name
Datum
Ersatz durch:
Ersatz für:
Ursprung: SXB.OFC-U3010.02
Änderung


IOM1 inside
-K21
X6
AII_PA
AII 1.02
AII_GND
X7
AIR 1.03
AIR 1.03
X8
DI_PB
DI 1.08
DI 1.09
DI 1.10
DI 1.11
DI 1.12
DI 1.13
X9
DOR 1.05
DOR COM
DOR 1.06
DOR COM
DOR 1.07
DOR COM
X3
DI_PA
DI 1.00
DI 1.01
DI 1.02
DI 1.03
DI 1.04
DI 1.05
DI 1.06
DI 1.07
X4
DOT 1.01
M24
DOT 1.02
M24
FE
L+
L-
FE
24V
0V
X5
DOR COM
DOR 1.00
DOR 1.01
DOR 1.02
DOR 1.03
DOR COM
DOR 1.04
-K21
IOM1 external
AII 1.00
AII 1.01
AII 1.02
AIR 1.00
AIR 1.01
AIR 1.02
AIR 1.03
DI 1.08
DI 1.09
DI 1.14
DI 1.15
X11
X12
X13
X14
X15
X16
X17
X18
X19
X20
X21
X22
X23
X24
X25
X26
X27
X28
X29
X30
X31
X32
DI 1.00
DI 1.01
DI 1.02
DI 1.03
DI 1.04
DI 1.05
DI 1.06
DI 1.07
DOT 1.00
DOT 1.01
DOT 1.02
KAESER KOMPRESSOREN
wiring diagram
Blower xFC+SC2
IOM-configuration
SXB.XFC-U3020.04
page 8
15 Bl.
Function:
Group of function:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Name
Norm
Ersatz durch:
Ersatz für:
Ursprung: SXB.OFC-U3010.02
Änderung


For Field Wiring: Use Copper Conductors Only! Connect Control Device Only!
-X15
-K21
DI 1.00
EMERGENCY STOP
-S1
-X100
-K60
DI 1.01
not used
DI 1.02
not used
DI 1.03
FAILURE
vent motor
-Q4
-B24
DI 1.04
load demand
DI 1.05
REMOTE reset
fault message
-S9
DI 1.06
differential pressure switch
filter
-B5
only B14:
mode of operation: Vacuum
DI 1.07
C10
speed
supervisory module
-K26
DI 1.08
no FAILURE
external
DI 1.09
User's controller
solenoid valve (AFxM)
(idling)
DI 1.10
Not used
DI 1.11
direction of rotation
Blower-motor
phase sequence relay
-K29
DI 1.12
not used
DI 1.13
Not used
DI 1.14
C5
oil level monitoring
A-page
-B80
DI 1.15
C5
oil level monitoring
B-page
-B81
Remove the shorting link
before connecting the option.
-W104
-W105
-W106
2x 24AWG
24V-DC 0,5A
2x 21AWG
24V-DC 1A
Int. X3
Int. X8
Ext. X20
Ext. X21
Ext. X28
DI_PA
DI_PB
DI
PE
oil
Function:
Group of function:
Datum
Bearbeiter
Geprüft
Ersatz durch:
Ersatz für:
Ursprung:
SXB.OFC-U3010.02
wiring diagram
Blower xFC+SC2
digital inputs IOM
SXB.XFC-U3020.04
page
15


-B40
PT100
-W117
2x 22AWG
24V-DC 1A
screened
Ext. X14
-K21
AIR 1.00
(T2)
airend discharge temperature
-B70
PT100
-W118
2x 22AWG
24V-DC 1A
screened
Ext. X15
-K21
AIR 1.01
(TS)
temperature
soundproofing casing
-B43
PT100
-W119
2x 22AWG
24V-DC 1A
screened
Ext. X16
-K21
AIR 1.02
(T1)
inlet temperature
Blower
-B55
PT100
-W120
2x 22AWG
24V-DC 1A
screened
Ext. X17
-K21
AIR 1.03
(T3) C39:
oil temperature
-B1
P
4...20mA
-W115
2x 22AWG
24V-DC 1A
screened
Ext. X11
-K21
AII 1.00
(p1)
pressure input Blower
-B1 = 0... -1200mbar
-B4
P
4...20mA
-W116
2x 22AWG
24V-DC 1A
screened
Ext. X12
-K21
AII 1.01
(p2)
pressure output Blower
-B4 = 0... 1200mbar
-T45
+24VDC
OUT
IN
GND 3
GRD 2
OUT I
IN U/I
GND 1
L1+ 24V-DC
L1- 24V-DC
-X16
analog signals external
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
Int. X6
-K21
AII 1.02
analog signal from external
KAESER KOMPRESSOREN
wiring diagram
Blower xFC+SC2
analog inputs IOM
SXB.XFC-U3020.04
page 10
15 BL
Ursprung: SXB.OFC-U3010.02
Ersatz durch:
Ersatz für:
Function:
Group of function:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
Name
Datum
Änderung


activation option C11
DOT 1.00
-K21
/8.3 X30 Ext.
-W78
2x 21AWG
24V-DC 1A
-K10
24V-DC
controller ventilator
DOT 1.01
/8.3 X4 Int.
-K50
24V DC
/5.6 14 12
activation vacuum pump (only EBS/FBS)
DOT 1.02
-K55
/5.4 13 14
21 22
31 32
43 44
/5.5
activation option C11 (only BBC.2)
DOT 1.02
1mm² blue
500V 70°C
1mm² blue/white
500V 70°C
/5.1 -K52:A1 -K21_DOT1.02:6
/5.2 -K52:A2 -K21_DOT1.02:5
operation
DOR 1.04
/8.3 X5 Int.
-X12 1 2
ready for operation
DOR 1.05
/8.3 X9 Int.
-X12 3 4
group alarm
DOR 1.06
-X12 5 6
group warning
DOR 1.07
-X12 7 8
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
digital outputs, User's connection
max. 250V AC/24V DC, 1A
max. cable length 100m
* Wired with 16AWG orange H07V-K
STO1
DOR 1.00
DOR COM
/12.7 STO1
STO2
DOR 1.01
/12.7 STO2
not used
DOR 1.02
vent motor
DOR 1.03
24V-DC
-X22 3 -X22.2 -X22.3 /12.4
-K51 A1 A2 -X22.03 -X22.02 /12.4
14 11
2 12
****
model-dependent components/
performance-related components,
see: UXB.XFC...
-X11 L01 6 /5.8
115V-AC
-K51 14 12 11 8
-Q4 A1 A2
-X11 L02 06 /5.8
/3.5 /3.7 /9.4
Function: vent motor (3ph) vent motor (1ph)
Group of function: soundproofing casing
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Ersatz durch:
Ersatz für:
Ursprung: SXB.OFC-U3010.02
KAESER KOMPRESSOREN
wiring diagram
Blower xFC+SC2
Relay-outputs IOM
SXB.XFC-U3020.04
page 11
15 Bl.


frequency converter
SINAMICS CU240E-2
SINAMICS G120/PM240
-T1
-T1-A10
/2.3
-X15
-X22
-X100
-K60
-S1
EMERGENCY STOP
24V-DC
-W263
FD891CY
12x 21AWG
screen rail FC
GRD
STO2
STO1
RS-485
BUS ADRESS
BUS closed
-W255
LiYCY
2x0,23mm²
(7.7627.0)
-B60
ISO-class F
155-170°C
SE/GRD
terminalbox
motor
-W260.2
Ölflex 191CY
2x 19AWG
-W260.1
Ölflex 150CY
5x 19AWG
-X16
analog output
(connection only with
isolating amplifier)
For Field Wiring:
Use Copper Conductors Only!
Connect Control Device Only!
Remove the shorting link
before connecting the option.
RDY
BF
SAFE
thermistor, compressor motor
wiring diagram
Blower xFC+SC2
frequency converter
SXB.XFC-U3020.04
SXB.OFC-U3010.02
page 12
15 BL

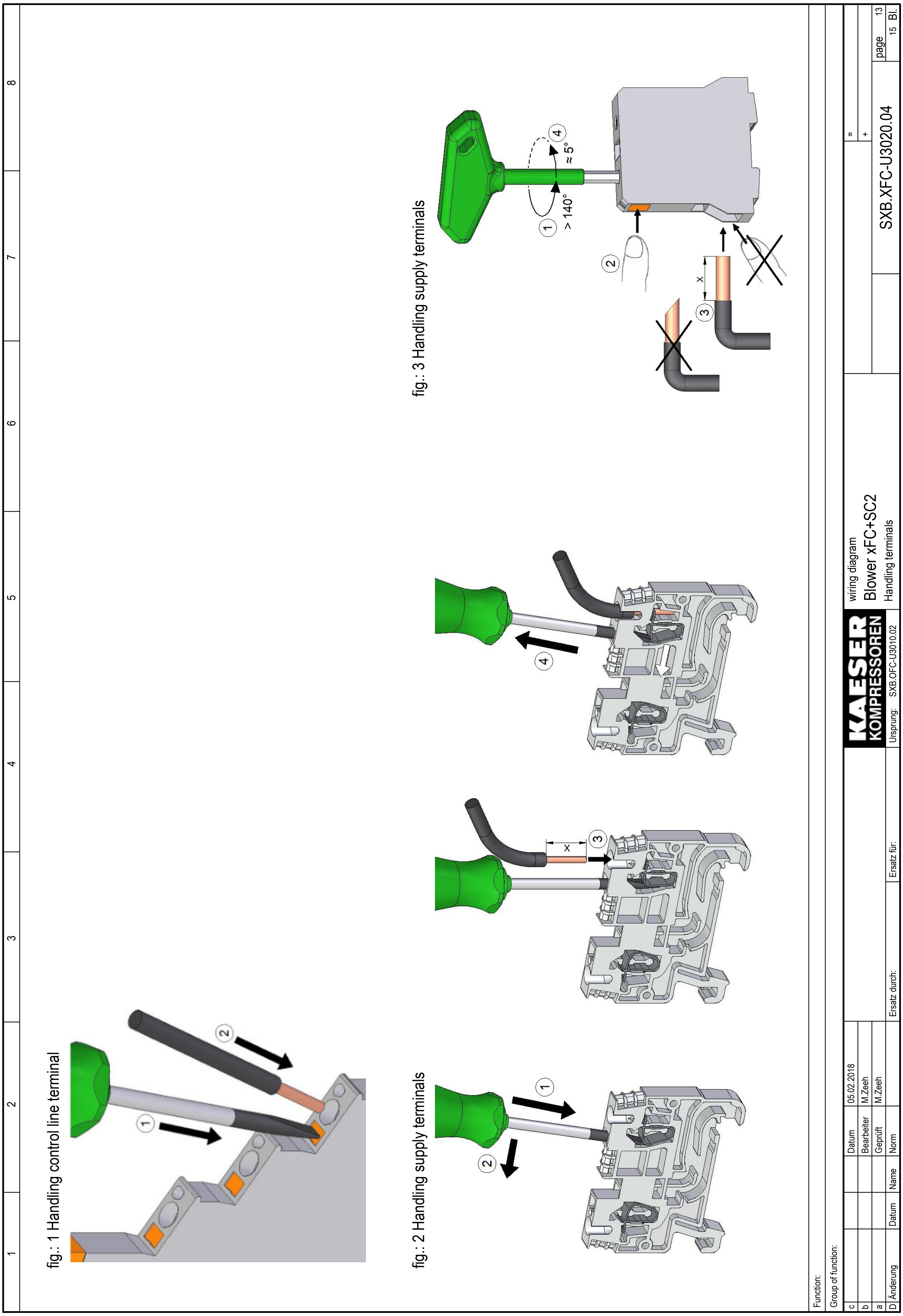


fig.: 1 Handling control line terminal
fig.: 2 Handling supply terminals
fig.: 3 Handling supply terminals
> 140°
≈ 5°
x
Function:
Group of function:
Datum
05.02.2018
Bearbeiter
M.Zeeh
Geprüft
M.Zeeh
Norm
Änderung
Datum
Name
Ersatz durch:
Ersatz für:
Ursprung: SXB.OFC-U3010.02
KAESER KOMPRESSOREN
wiring diagram
Blower xFC+SC2
Handling terminals
SXB.XFC-U3020.04
page 13
15 Bl.

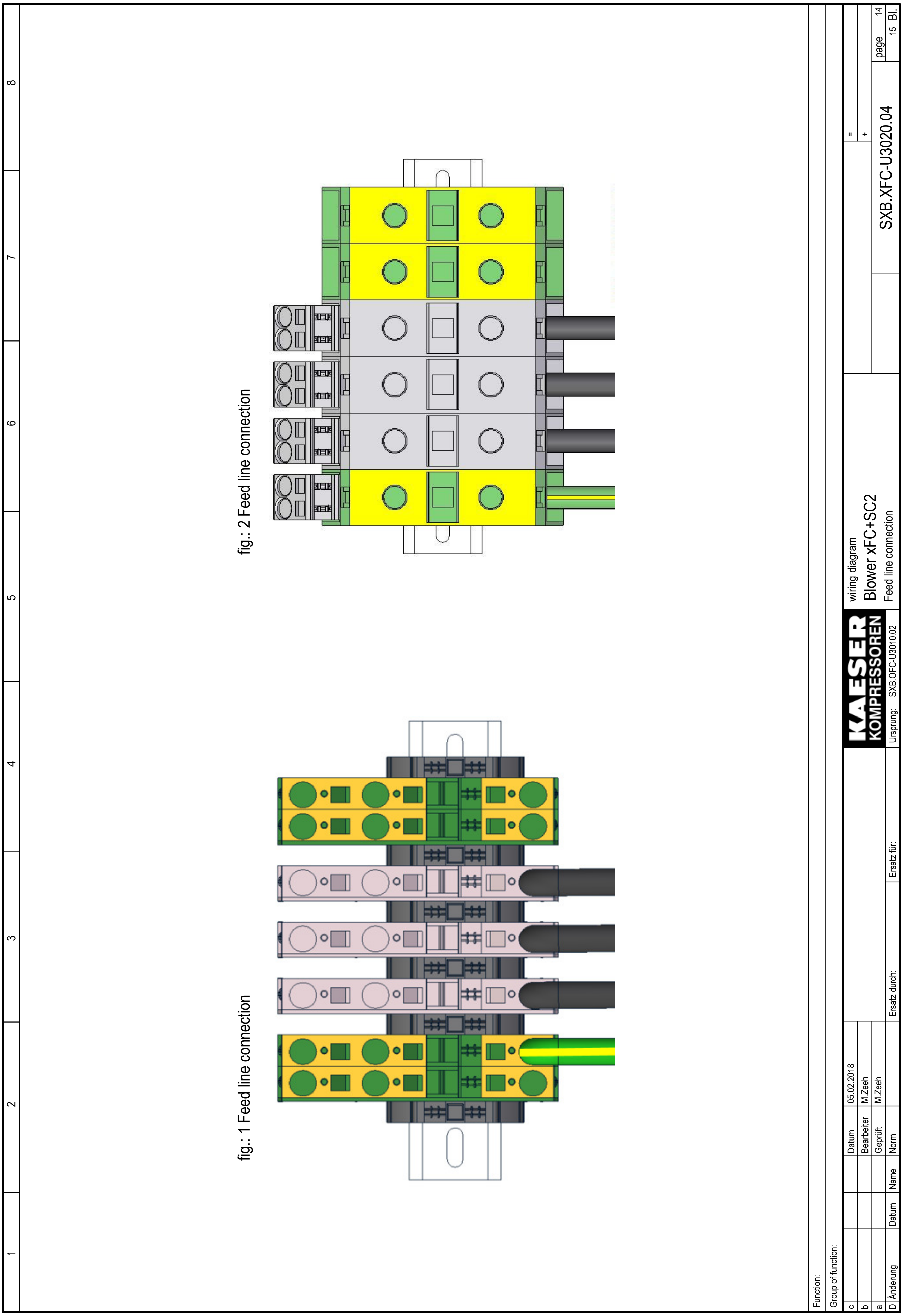


fig.: 2 Feed line connection
fig.: 1 Feed line connection
Function:
Group of function:
wiring diagram
Blower xFC+SC2
Feed line connection
SXB.XFC-U3020.04
page 14
15 Bl.
KAESER KOMPRESSOREN
Ursprung: SXB.OFC-U3010.02
Ersatz für:
Ersatz durch:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
Änderung Datum Name

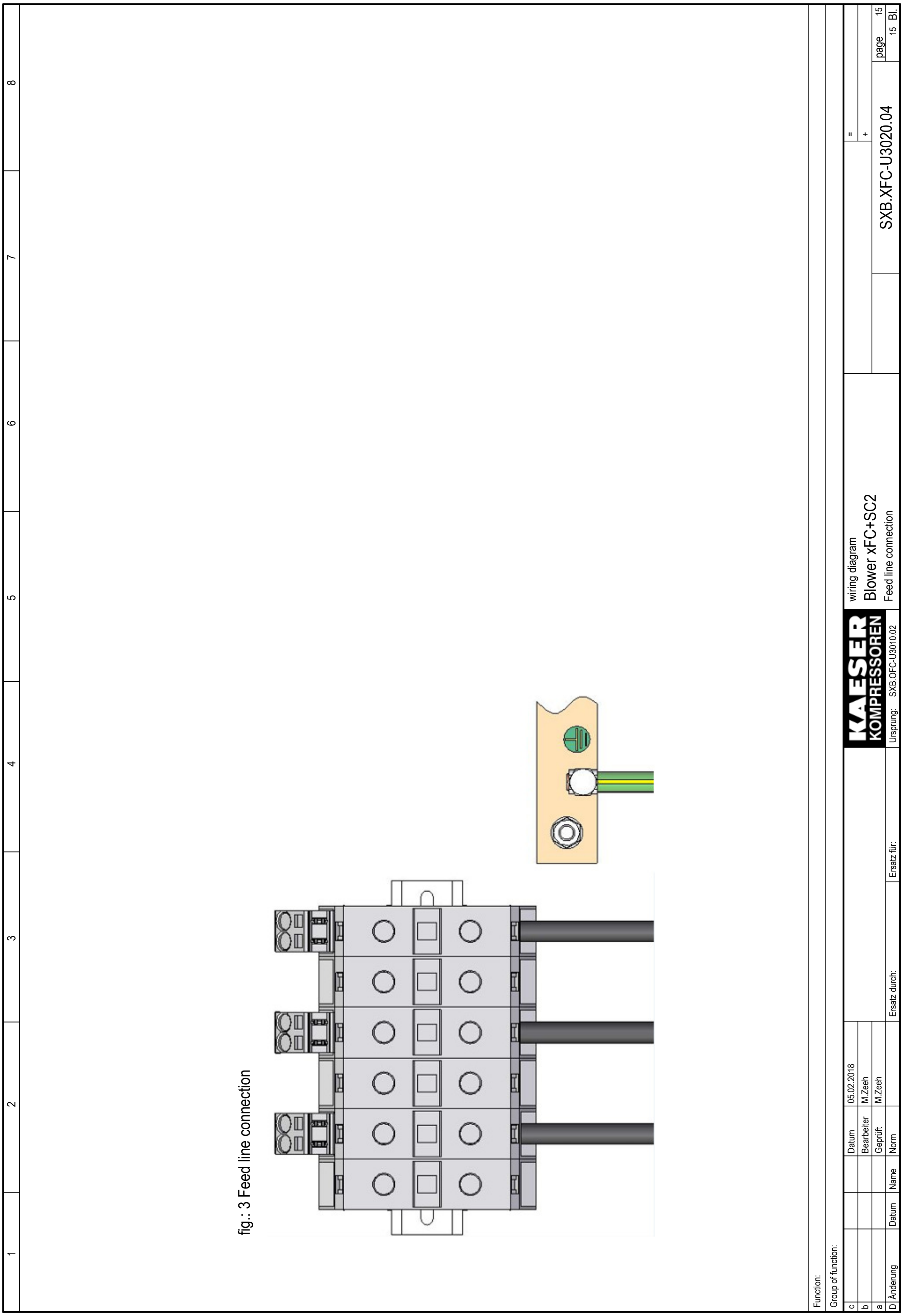
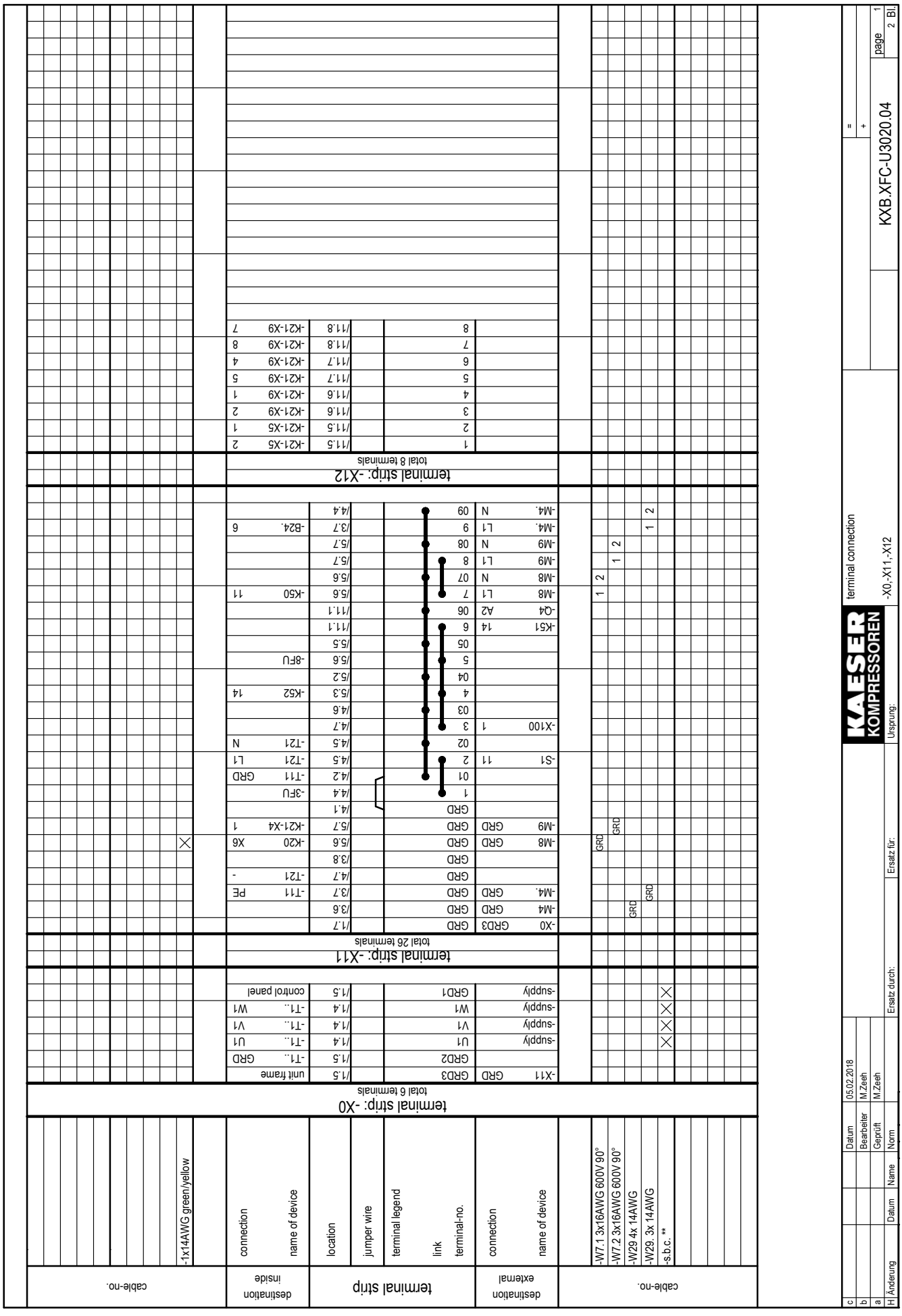
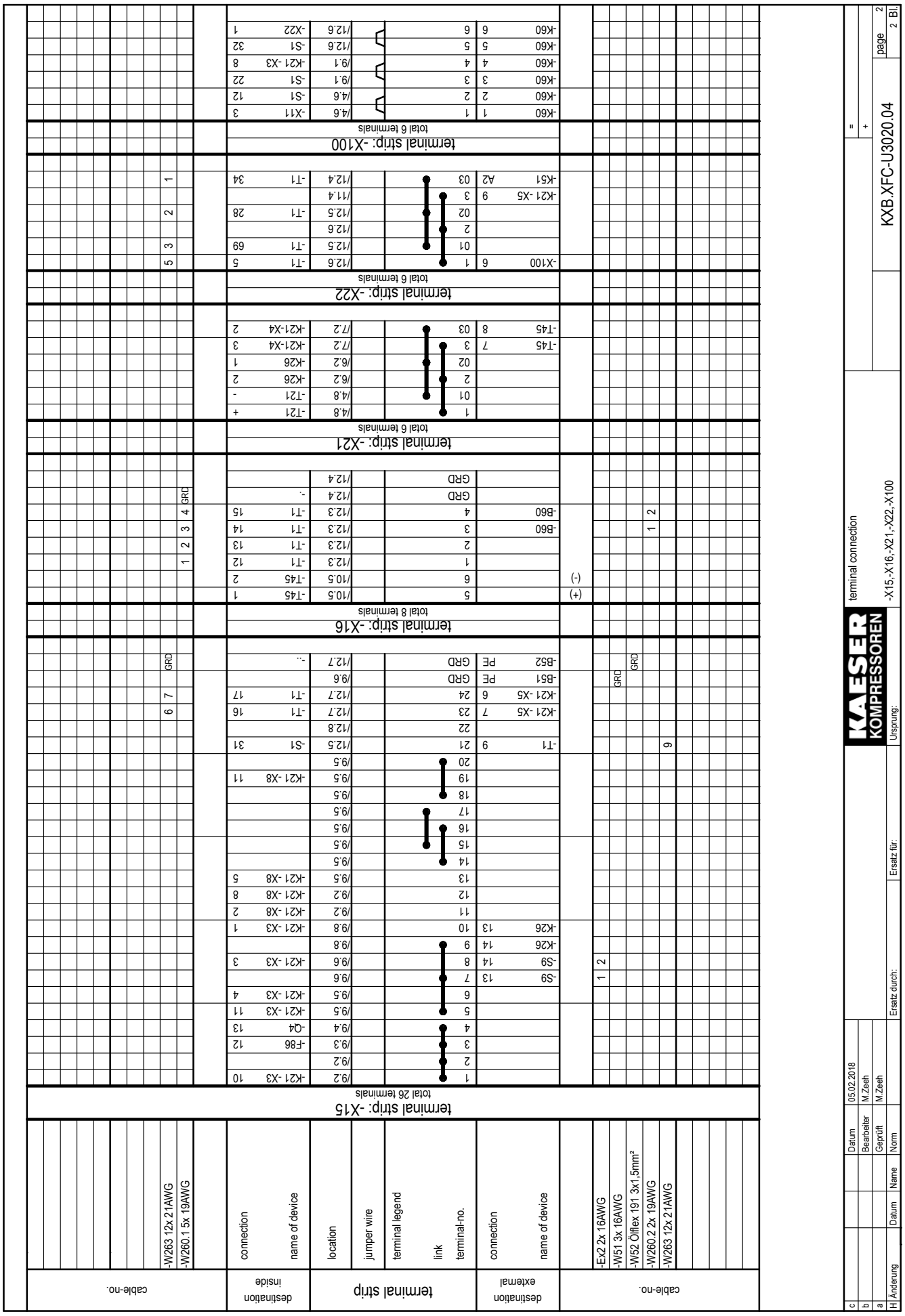
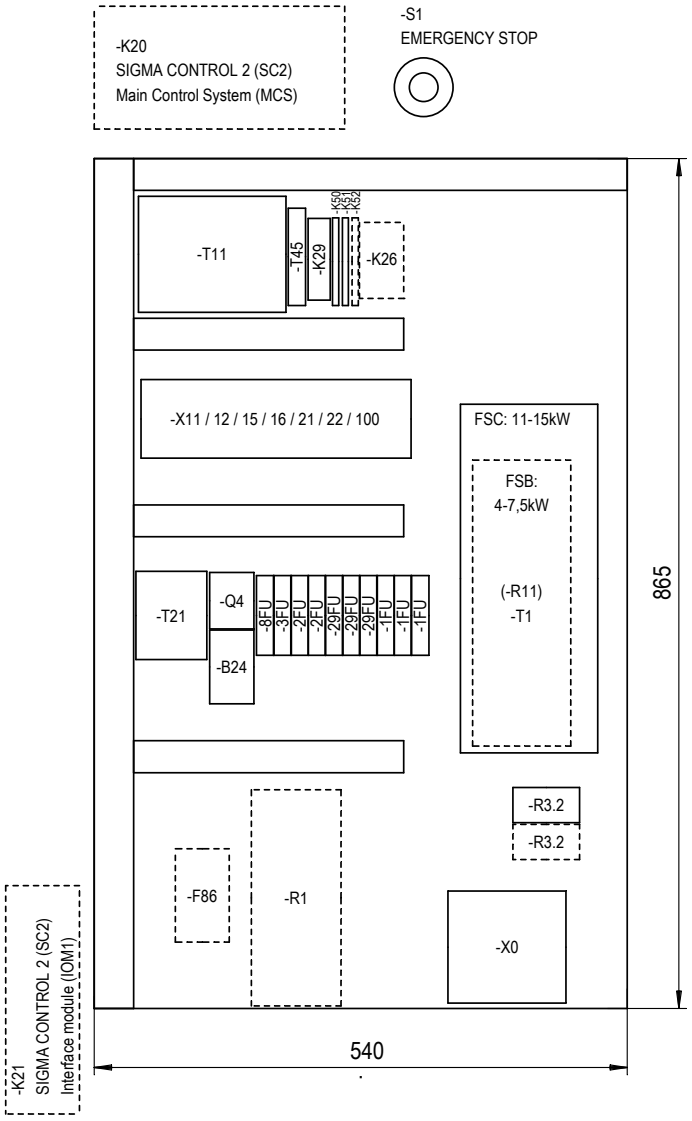


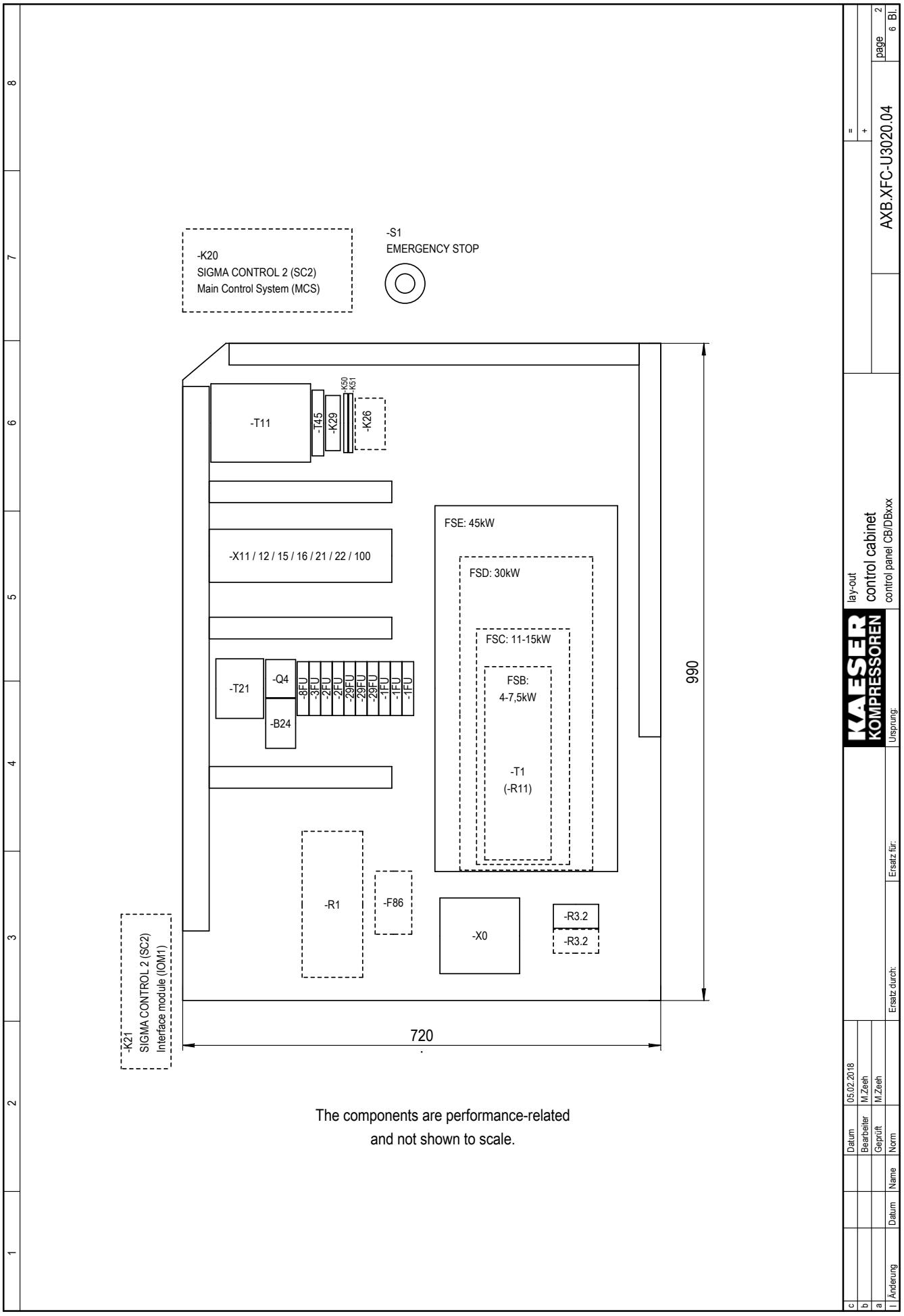
fig.: 3 Feed line connection

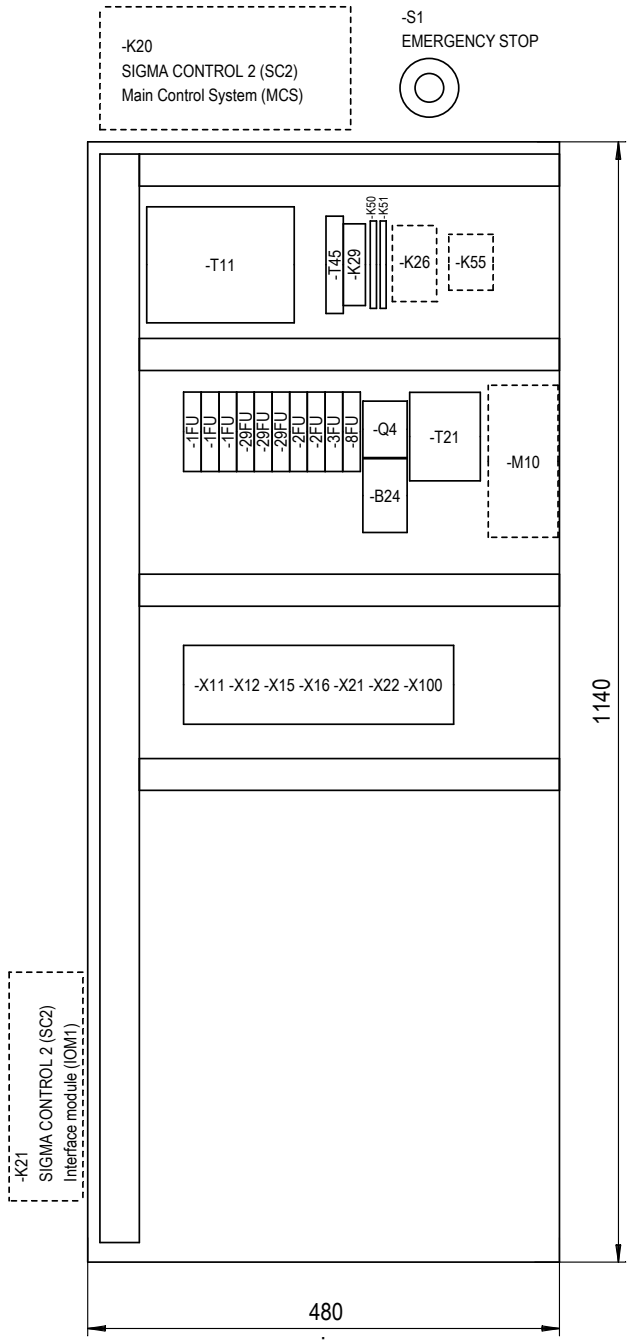

terminal strip: -X0
total 6 terminals
terminal strip: -X11
total 26 terminals
terminal strip: -X12
total 8 terminals
cable-no.
destination external
terminal strip
destination inside
cable-no.
name of device
connection
terminal-no.
link
terminal legend
jumper wire
location
name of device
connection
-W7.1 3x16AWG 600V 90°
-W7.2 3x16AWG 600V 90°
-W29 4x 14AWG
-W29. 3x 14AWG
-s.b.c. **
-1x14AWG green/yellow
KXB.XFC-U3020.04
terminal connection
-X0,-X11,-X12
KAESER KOMPRESSOREN
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
Name
Datum
Änderung
Ersatz durch:
Ersatz für:
Ursprung:
page 1
2 Bl


terminal strip: -X15
total 26 terminals
terminal strip: -X16
total 8 terminals
terminal strip: -X21
total 6 terminals
terminal strip: -X22
total 6 terminals
terminal strip: -X100
total 6 terminals
cable-no.
destination inside
terminal strip
destination external
cable-no.
-W263 12x 2 1AWG
-W260.1 5x 19AWG
connection
name of device
location
jumper wire
terminal legend
link
terminal-no.
connection
name of device
-Ex2 2x 16AWG
-W51 3x 16AWG
-W52 Oflex 191 3x1,5mm²
-W260.2 2x 19AWG
-W263 12x 2 1AWG
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Ersatz durch:
Ersatz für:
Ursprung:
KAESER KOMPRESSOREN
terminal connection
-X15,-X16,-X21,-X22,-X100
KXB.XFC-U3020.04
page 2
2. Bl.
Änderung Datum Name
Norm

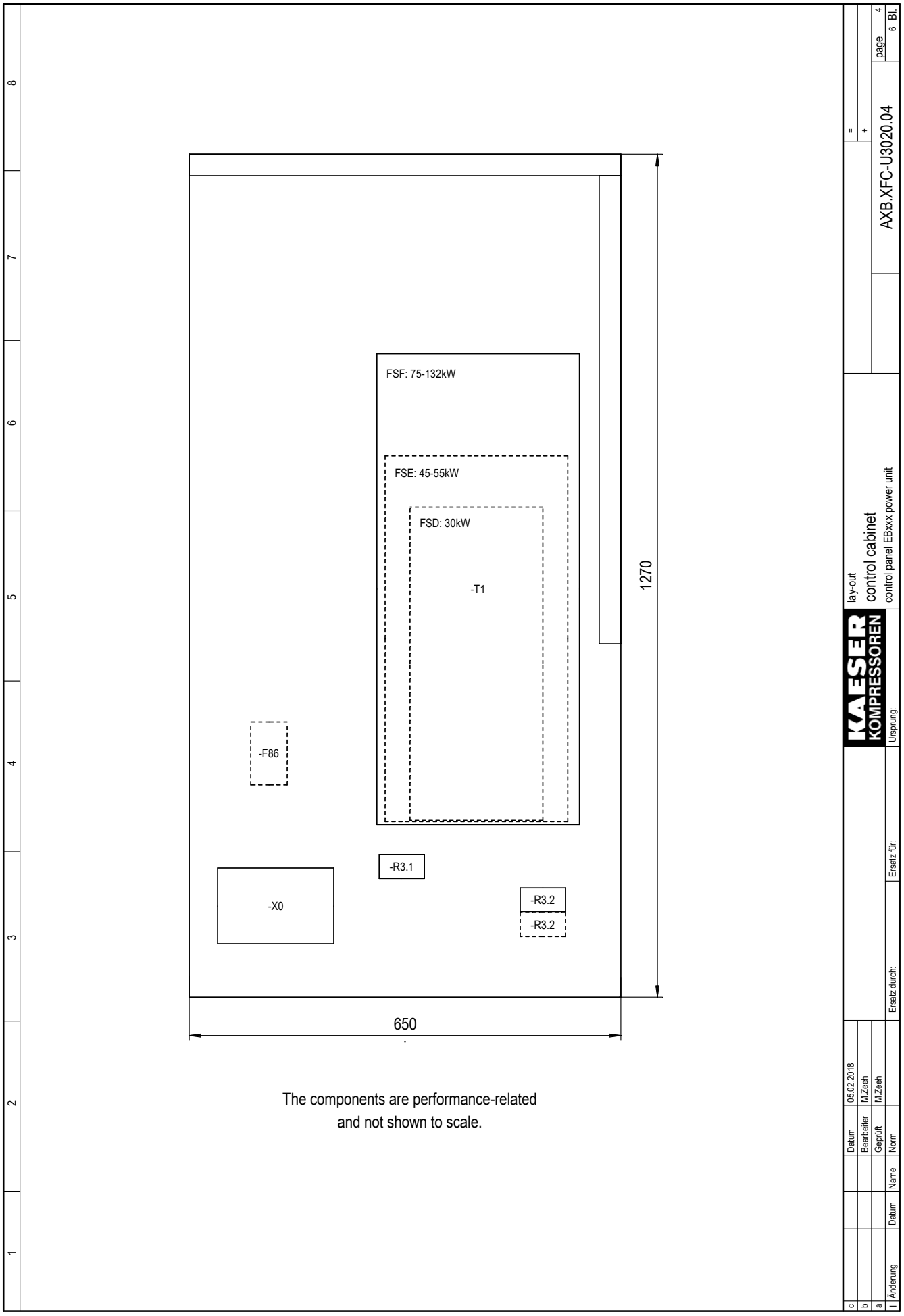


The components are performance-related and not shown to scale.

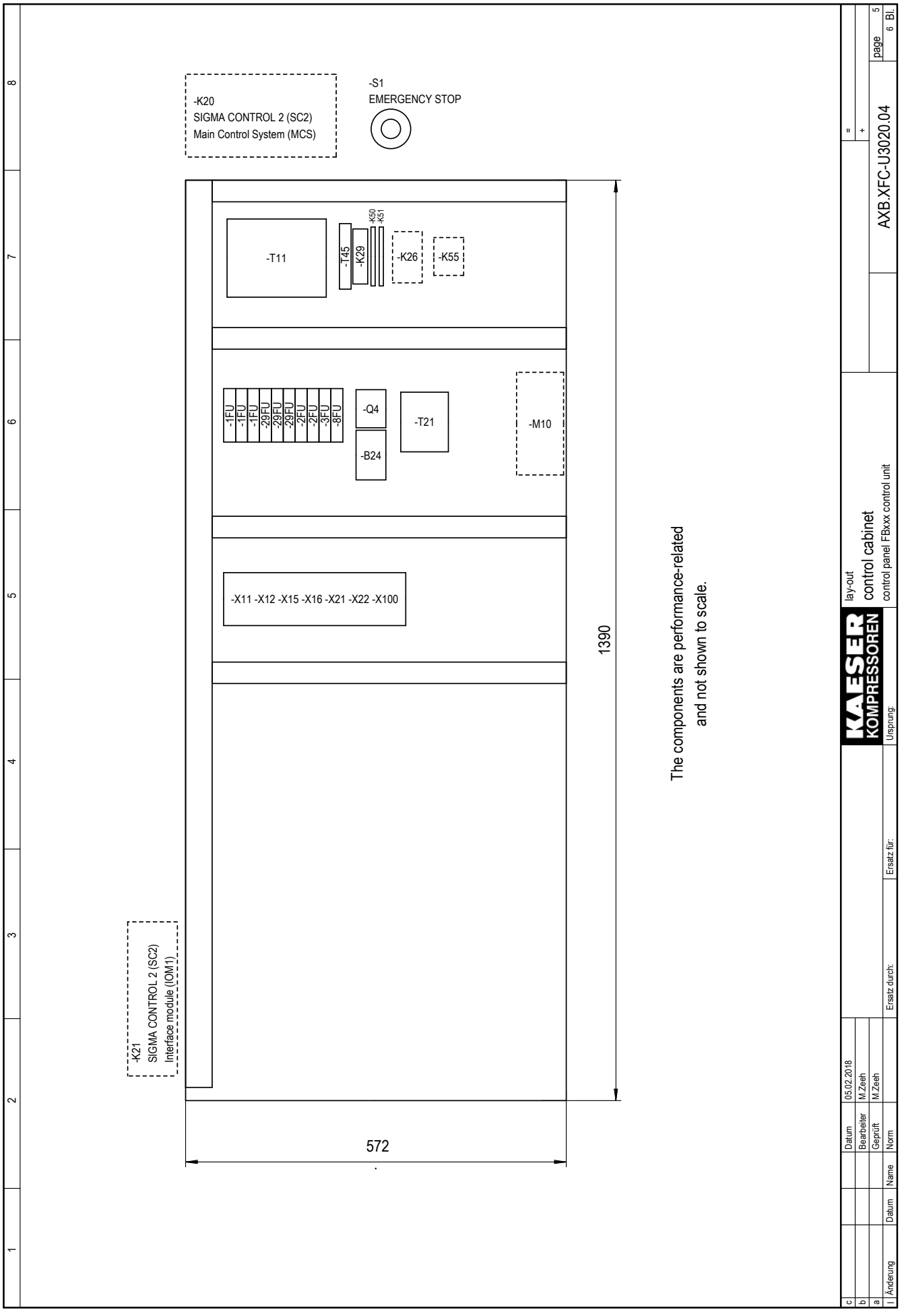

-K20
SIGMA CONTROL 2 (SC2)
Main Control System (MCS)
-S1
EMERGENCY STOP
-T11
-T45
-K29
K50
K51
-K26
-X11 / 12 / 15 / 16 / 21 / 22 / 100
FSE: 45kW
FSD: 30kW
FSC: 11-15kW
FSB:
4-7,5kW
-T1
(-R11)
-T21
-Q4
-B24
-8FU
-3FU
-2FU
-2FU
-29FU
-29FU
-29FU
-1FU
-1FU
-1FU
990
-R1
-F86
-X0
-R3.2
-R3.2
-K21
SIGMA CONTROL 2 (SC2)
Interface module (IOM1)
720
The components are performance-related
and not shown to scale.
AXB.XFC-U3020.04
page 2
6 Bl.
lay-out
control cabinet
control panel CB/DBxxx
KAESER KOMPRESSOREN
Ursprung:
Ersatz für:
Ersatz durch:
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
Name
Datum
Änderung

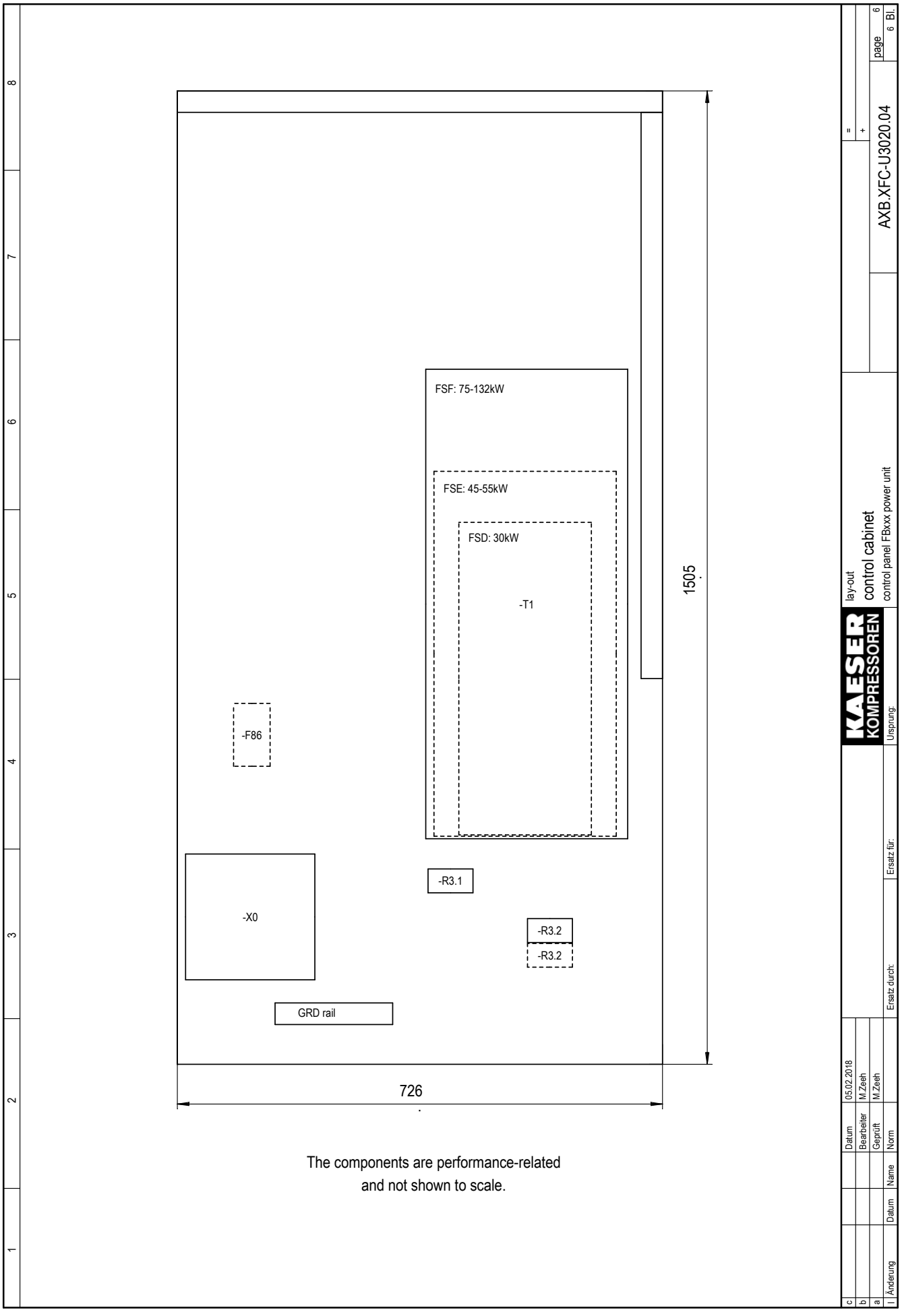


The components are performance-related and not shown to scale.



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


-K20
SIGMA CONTROL 2 (SC2)
Main Control System (MCS)
-S1
EMERGENCY STOP
-T11
-T45
-K29
-K50
-K51
-K26
-K55
-1FU
-1FU
-1FU
-29FU
-29FU
-29FU
-2FU
-2FU
-3FU
-8FU
-Q4
-B24
-T21
-M10
-X11 -X12 -X15 -X16 -X21 -X22 -X100
-K21
SIGMA CONTROL 2 (SC2)
Interface module (IOM1)
1390
572
The components are performance-related
and not shown to scale.
KAESER KOMPRESSOREN
lay-out
control cabinet
control panel FBxxx control unit
AXB.XFC-U3020.04
page 5
6 Bl.
Datum 05.02.2018
Bearbeiter M.Zeeh
Geprüft M.Zeeh
Norm
Name
Datum
Änderung
Ersatz durch:
Ersatz für:
Ursprung:



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

13.5 Project planning data