

Data sheets

SBR Small Sewage Treatment Plant GRAF Klaro

Control unit

KLbasic

KLplus

KL24base

KL24plus



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1. Technical data for controls

1. Technical data for controls

1.1 Technical data for KL control

Microcontroller with internal FLASH, RAM, ADC.
Electrical isolation between internal circuit and outputs.
Outputs: Relay outputs for 230 VAC consumers: - Compressor: Total current max. 6 A - 4 solenoid valves, metering pump, UV module, fan: Total current max. 2 A, Additional potential-free fault-signalling contact: - Break contact: 230 VAC / max. 2 A or 24 VDC / max. 2 A. A max. of 7 outputs (relays) may be switched simultaneously. The phosphate pump, UV lamp and fan outputs only occur in the KL plus.
Cable failure monitoring for outputs (compressor, solenoid valves, UV lamp) by measuring the output currents.
Contactor monitoring by detecting the switched voltage, 230 V AC.
Faults are indicated by an LED (red/green), buzzer (at least 8 h in the event of mains failure during operation) and relay contact up to 230 V AC.
Display (graphics display for KLplus with 128x32 pixels, text display for KLbasic with 2x8 characters).
Keypad: 14 keys for KLplus: Numbers 0 to 9, Esc, Enter, page forwards and backwards, plus 2 reset keys, 4 keys for KLbasic: Set, UP, DOWN, Esc.
Serial RS232 interface with 9600 baud via jack bush.
Real-time clock with deviation of 5 min./a and capacitor buffering.
EEPROM for logbook, resistant to zero voltage.
Temperature monitoring with precision of 2 K.
Buffering by Super CAPS for limited operation in the event of failure of operating voltage.
Operating temperature range 0 °C ... +55 °C.
Permissible temperature range without operation -20 °C ... +85 °C.
Inside the device: Relative air humidity 10...95 %, no condensation ¹⁾ ¹⁾ The control's inherent heating prevents condensation by means of continuous operation.
IP54 protection, on the front (with correctly fitted SD card cover and glued-on front film).
Operating voltage 230 V AC, ± 20 %, 50 Hz.
Power consumption < 10 VA.
Two microfuses can be replaced from outside: 8 A medium slow blow and 2 A slow blow.

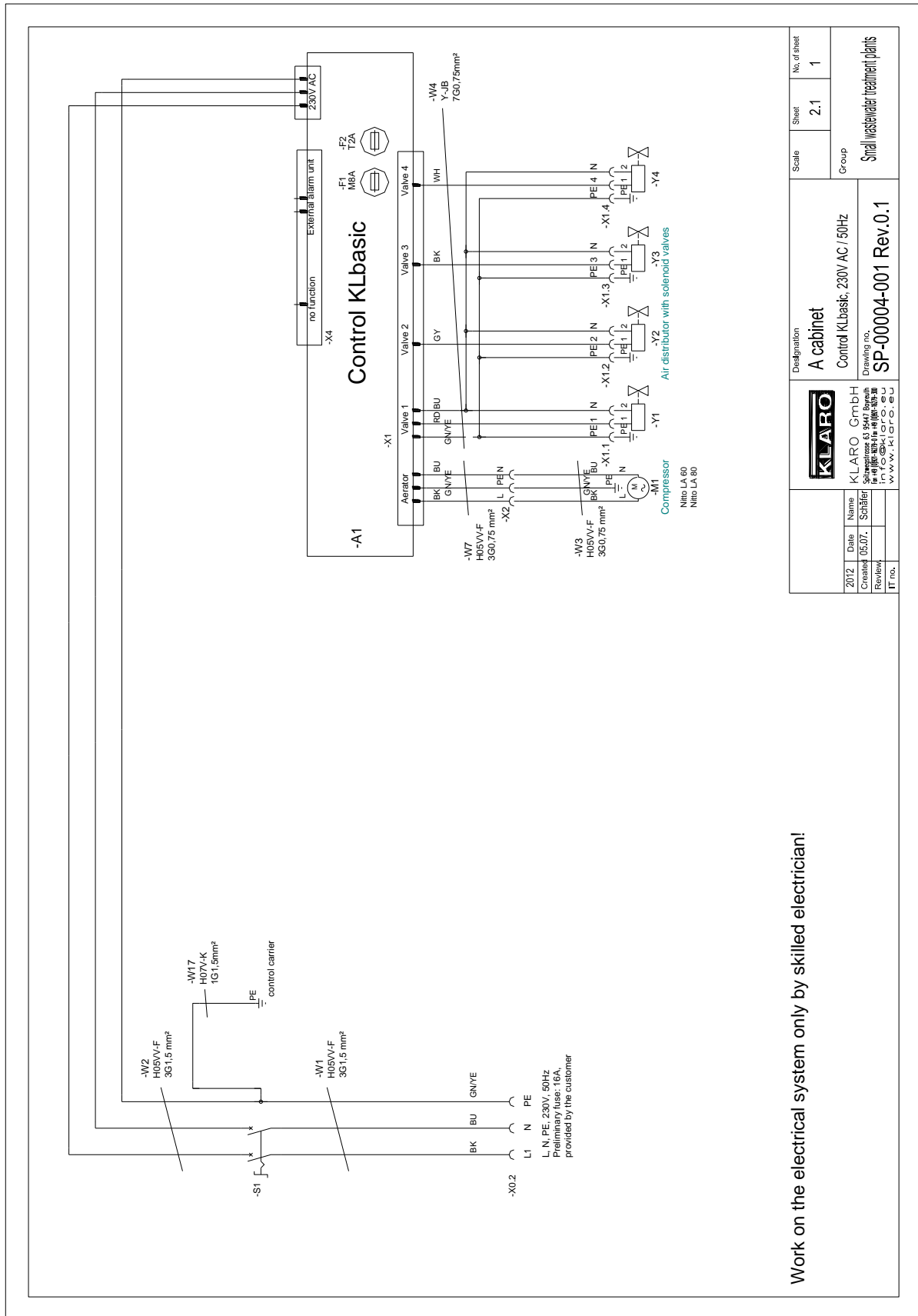
1. Technical data for controls

1.2 Technical data for KL24 control

Microcontroller with internal FLASH, RAM, ADC.
Electrical isolation between internal circuit and outputs.
<p>Outputs:</p> <p>Relay outputs for 230 VAC consumers:</p> <ul style="list-style-type: none"> - Compressor: Total current max. 6 A - UV module: Total current max. 2 A <p>Semiconductor outputs for 24 VDC consumers:</p> <ul style="list-style-type: none"> - 4 valves, stepped motors max. 0.4A/winding - Metering pump, fan, external warning indicator, output current max. 0.4A per output; Total current across all outputs < 0.7A <p>The phosphate pump, UV lamp and fan outputs only occur in the KL24plus.</p>
Cable failure monitoring for outputs (compressor, stepped motors, hose pump, UV lamp) by measuring the output currents.
Faults are indicated by an LED (red/green), buzzer (at least 8 h in the event of mains failure during operation) and relay contact up to 230 V AC.
Display (graphics display for KLplus with 128x32 pixels, text display for KLbasic with 2x8 characters).
<p>Keypad:</p> <p>14 keys for KLplus: Numbers 0 to 9, Esc, Enter, page forwards and backwards, plus 2 reset keys, 4 keys for KLbasic: Set, UP, DOWN, Esc.</p>
Serial RS232 interface with 9600 baud via jack bush.
Real-time clock with deviation of 5 min./a and capacitor buffering.
EEPROM for logbook, resistant to zero voltage.
Temperature monitoring with precision of 2 K.
Buffering by 3.6 V lithium-ion battery for limited operation in the event of failure of operating voltage.
Operating temperature range 0 °C ... +55 °C.
Permissible temperature range without operation -20 °C ... +85 °C.
<p>Inside the device:</p> <p>Relative air humidity 10...95 %, no condensation ¹⁾</p> <p>¹⁾ The control's inherent heating prevents condensation by means of continuous operation.</p>
IP54 protection, on the front (with correctly fitted SD card cover and glued-on front film).
Operating voltage 230 V AC, ± 20 %, 50 Hz.
Power consumption < 6 VA without connected 24V consumers.
Microfuses can be replaced from outside: KL24plus - 6.3 A slow blow and 2 A slow blow; KL24base - 6,3 A slow blow.

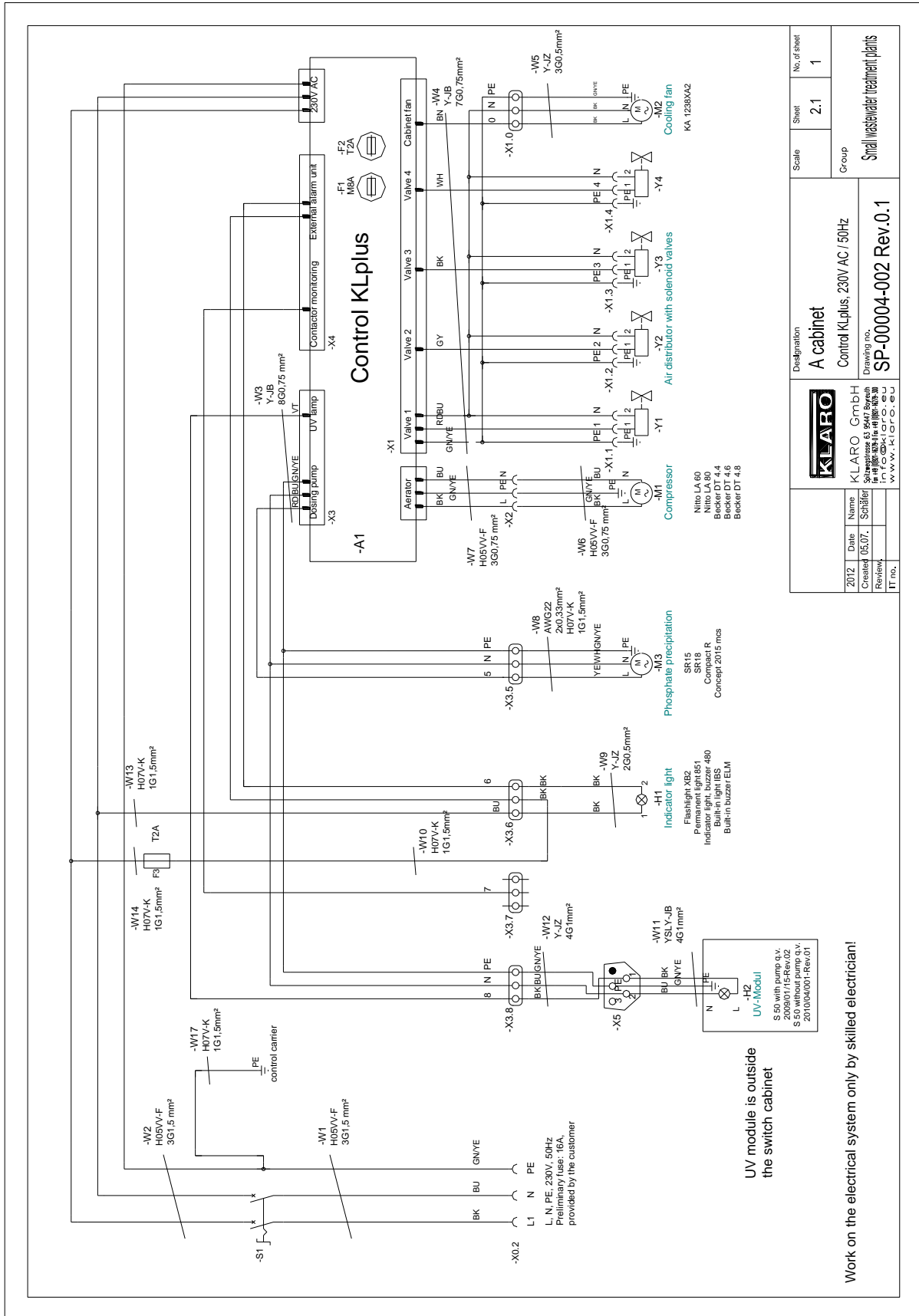
2. Circuit diagrams

2.5 Circuit diagram – A-column with KLbasic controller



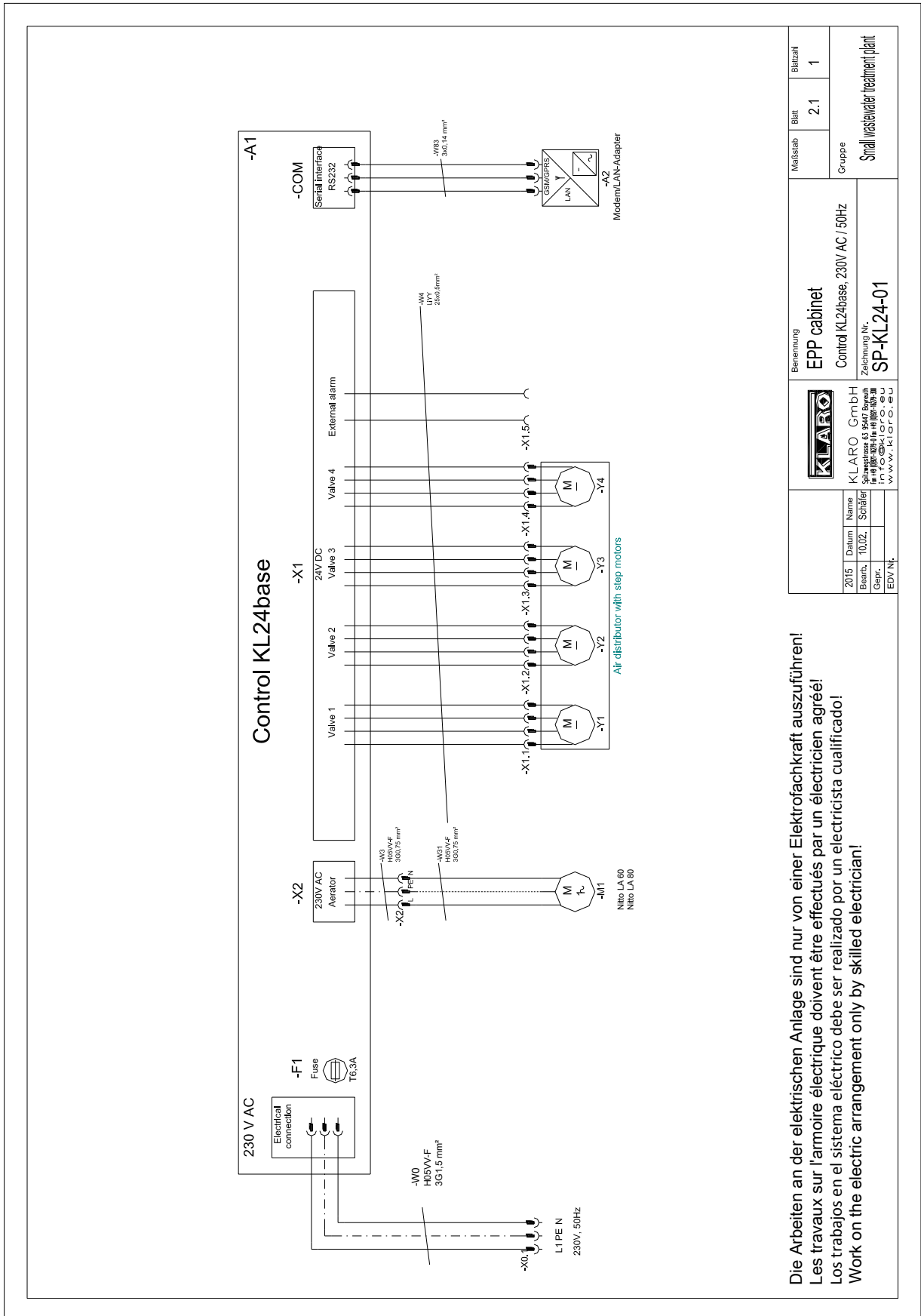
2. Circuit diagrams

2.6 Circuit diagram – A-column with KLplus controller



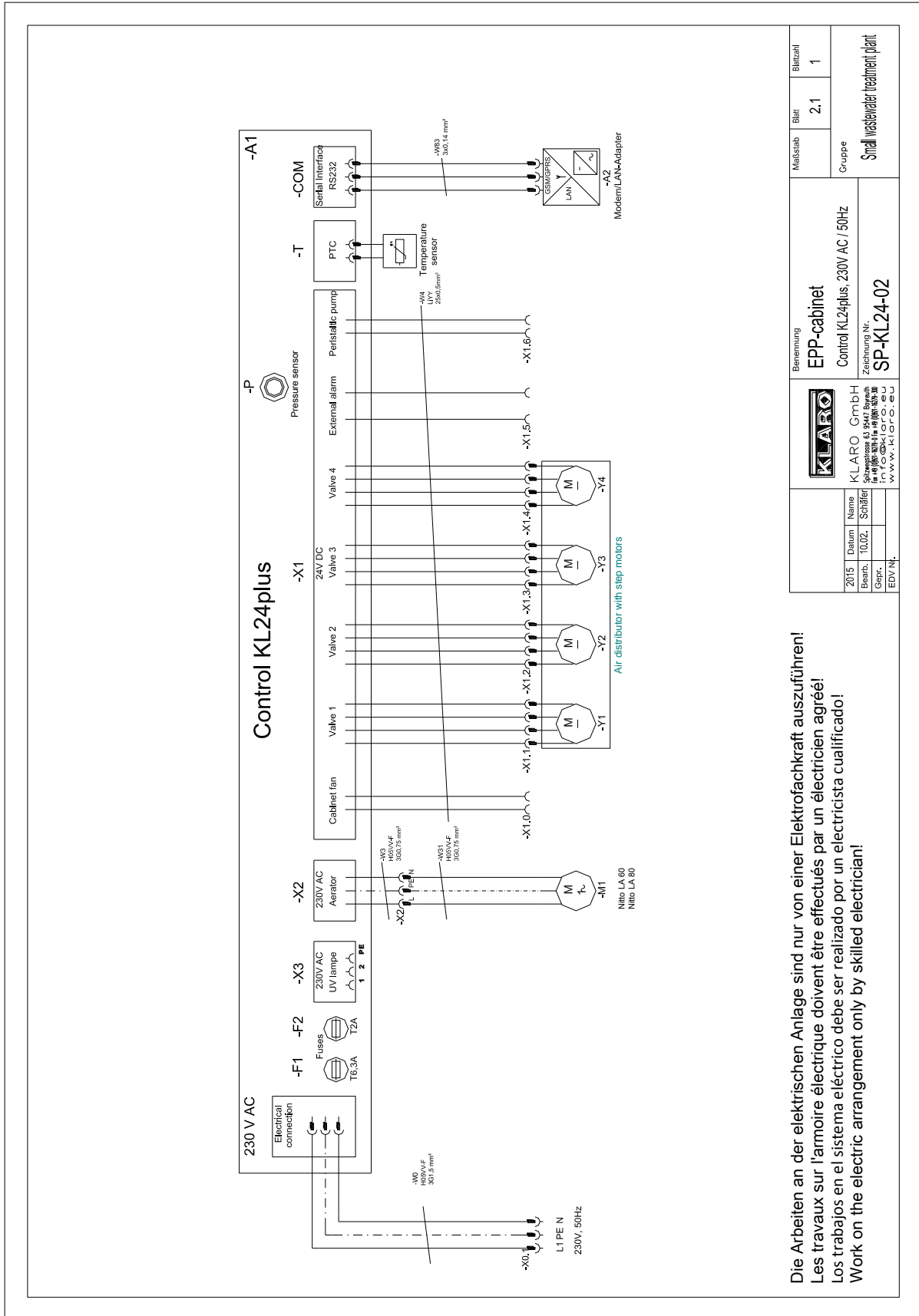
2. Circuit diagrams

2.8 Circuit diagram – EPP cabinet with KL24base controller



2. Circuit diagrams

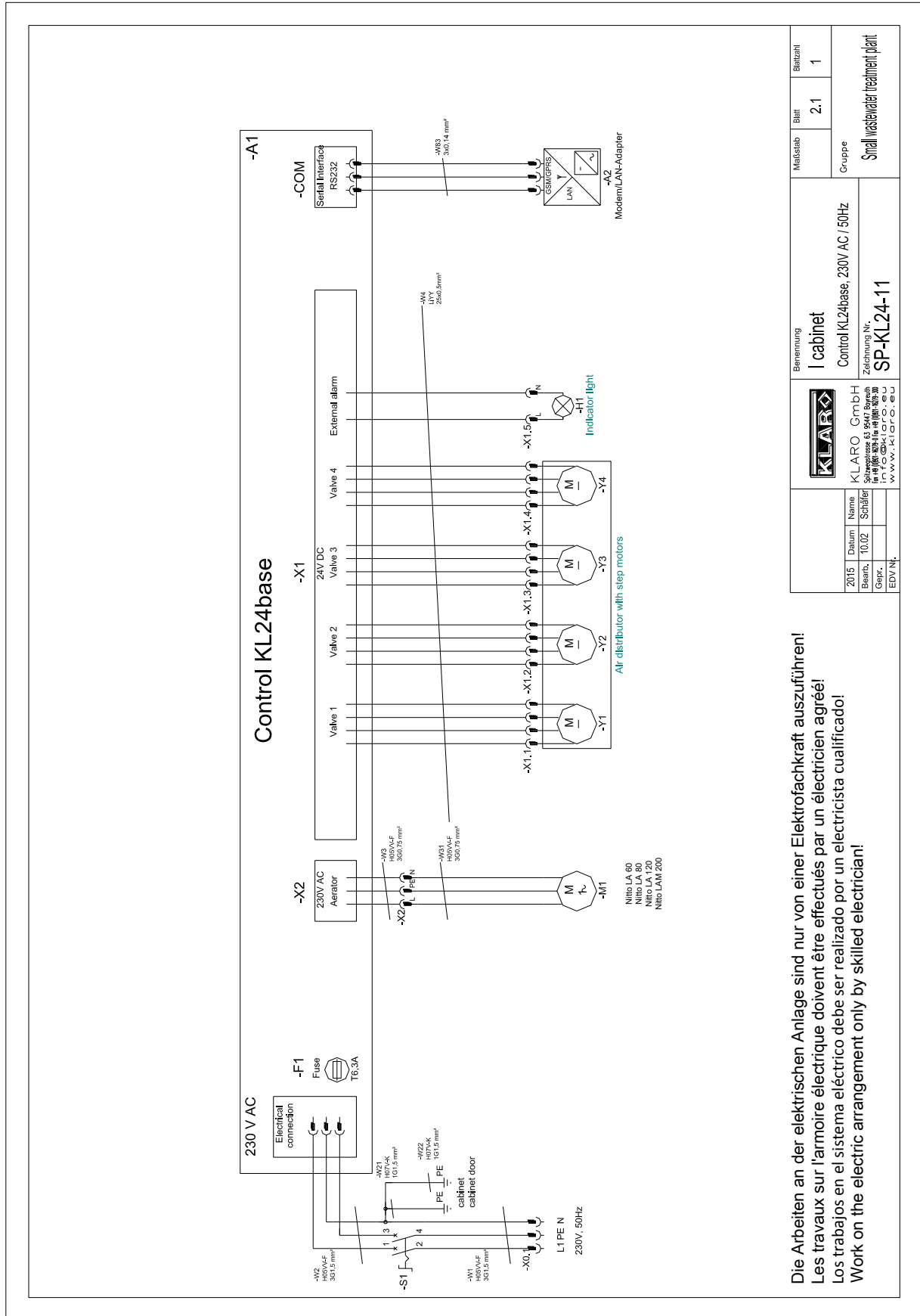
2.9 Circuit diagram – EPP cabinet with KL24plus controller



Die Arbeiten an der elektrischen Anlage sind nur von einer Elektrofachkraft auszuführen!
 Les travaux sur l'armoire électrique doivent être effectués par un électricien agréé!
 Los trabajos en el sistema eléctrico debe ser realizado por un electricista cualificado!
 Work on the electric arrangement only by skilled electrician!

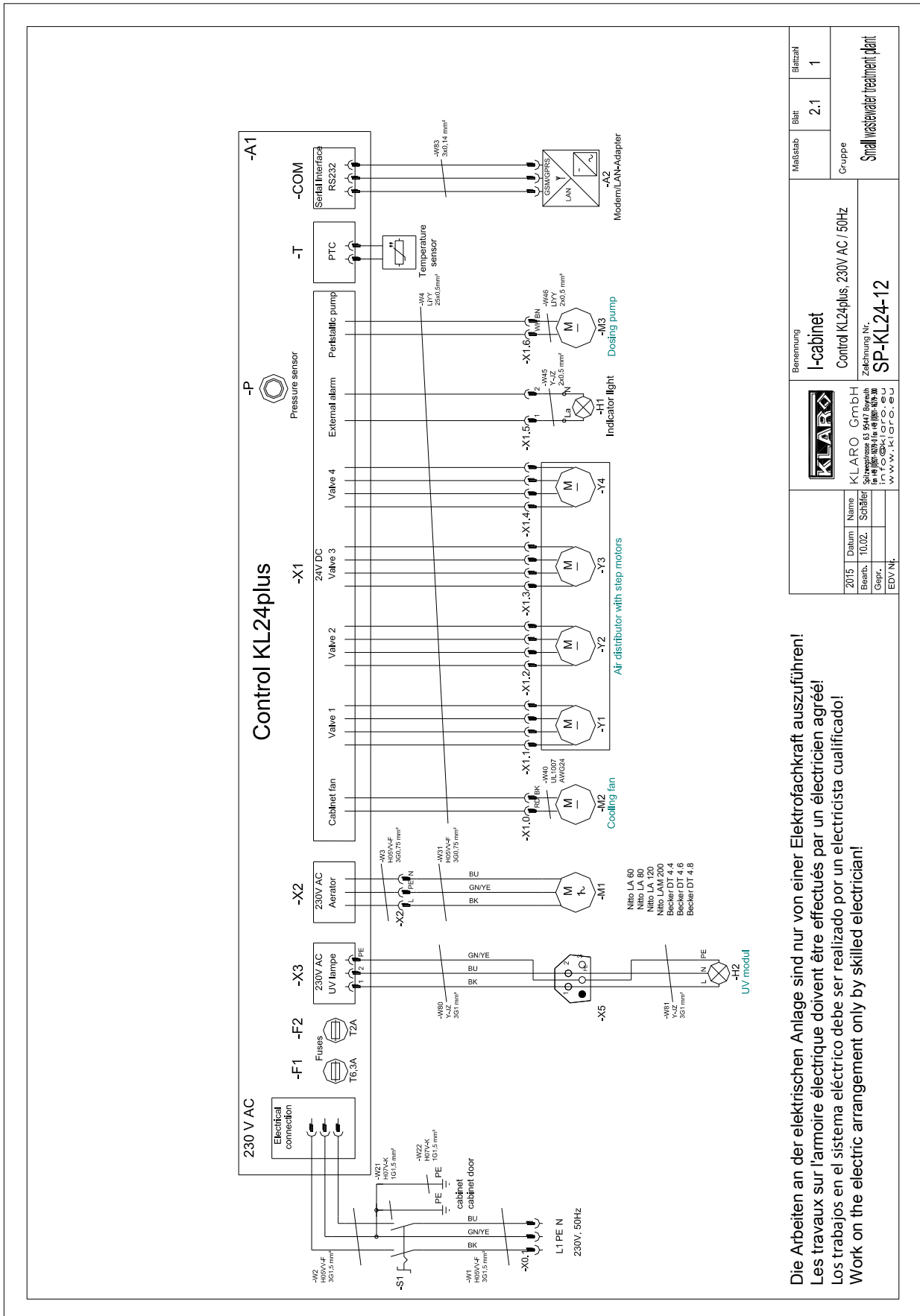
2. Circuit diagrams

2.10 Circuit diagram – I-cabinet with KL24base controller



2. Circuit diagrams

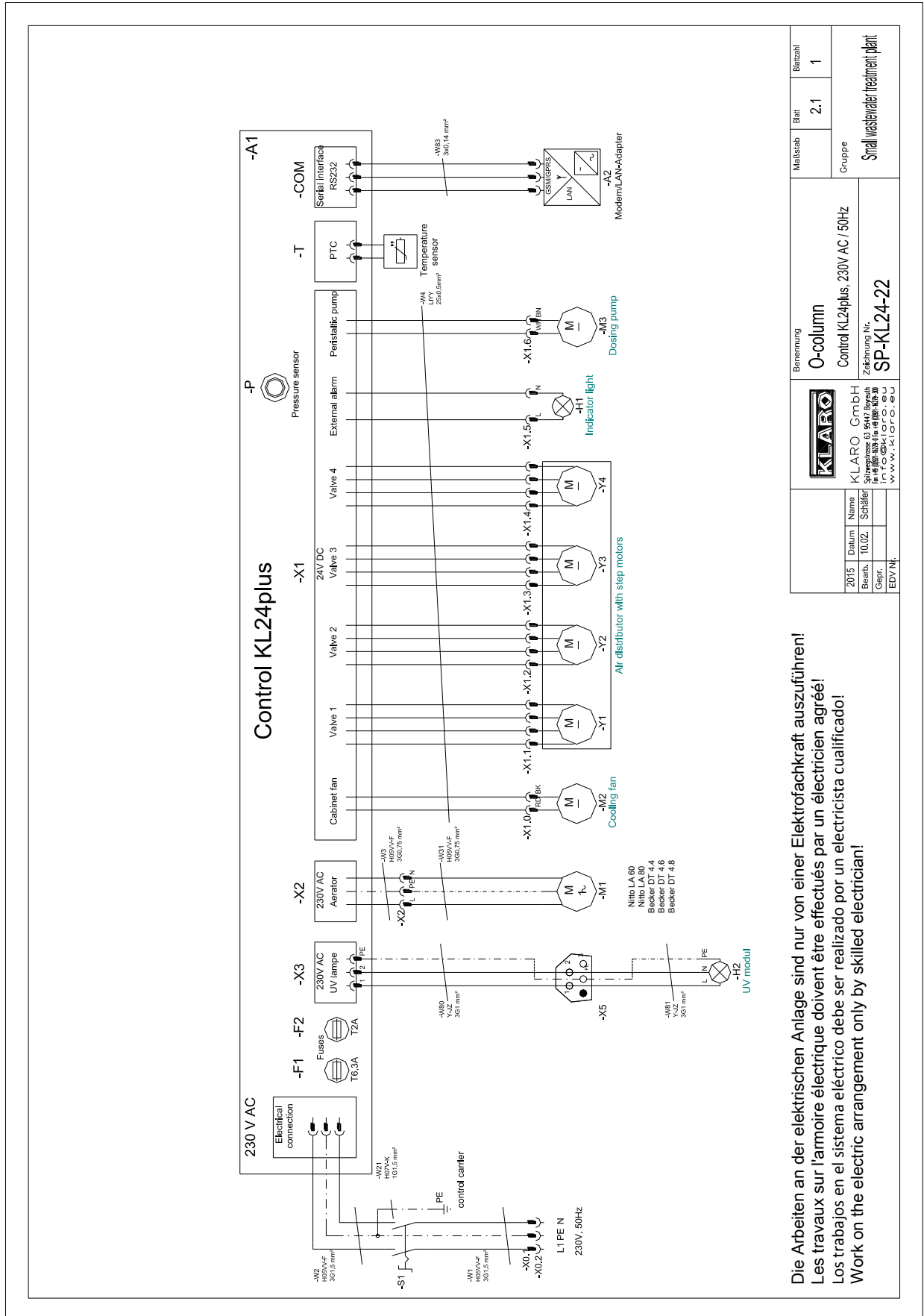
2.11 Circuit diagram – I-cabinet with KL24plus controller



Die Arbeiten an der elektrischen Anlage sind nur von einer Elektrofachkraft auszuführen!
 Les travaux sur l'armoire électrique doivent être effectués par un électricien agréé!
 Los trabajos en el sistema eléctrico debe ser realizado por un electricista cualificado!
 Work on the electric arrangement only by skilled electrician!

2. Circuit diagrams

2.13 Circuit diagram – A-column with KL24plus controller



3. Data sheets

Data sheets, operating and service instructions for:

- Nitto piston compressor
- Becker rotary vane compressor
- Rietschle DLT 40 rotary vane compressor

Note:

The Becker rotary vane compressors used by us are equipped with a relief valve, which is factory preset to a maximum pressure of 0.5 bar.

The normal operating pressure of our systems is < 0.3 bar. If the pressure in the system should exceed 0.5 bar (e.g. due to a kinked air hose), part of the air is blown off via the relief valve. This protects the compressor against damage or excessive wear.

MEDO LA BLOWER
INSTRUCTION MANUAL
INSTALLATION & MAINTENANCE



! This instruction manual should be read and understood thoroughly before any installation and maintenance work is executed.

After reading this instruction manual, please keep it handy for reference.

CONTENTS

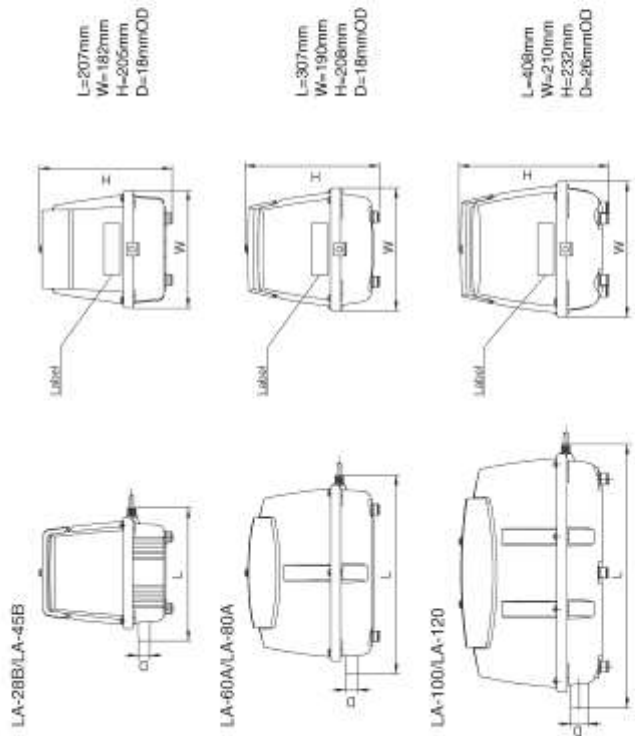
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1. Model and Specifications

Model	LA-28B	LA-45B	LA-60A 120V AC DR 230V AC	LA-80A	LA-100	LA-120
Standard Voltage *			50-Hz/60Hz			
Rated Frequency						
Rated Pressure	0.011MPa(0.13kgf/cm ²)	0.015MPa(0.15kgf/cm ²)	0.018MPa(0.18kgf/cm ²)			
Operating Pressure	0.005 ~ 0.02MPa (0.05 ~ 0.2kgf/cm ²)	0.005 ~ 0.02MPa (0.05 ~ 0.2kgf/cm ²)	0.005 ~ 0.02MPa (0.05 ~ 0.2kgf/cm ²)			
Rated Airflow	28L/min, 45L/min	60L/min, 86L/min	100L/min, 120L/min			
Power Consumption	29/26W	47/45W	66/60W	100/95W	130/118W	
Weight	2.9kg	3.0kg	5.0kg	5.3kg	9.4kg	

* The unit must only be operated at the voltage as indicated on the outer casing of the blower.

2. Dimensions



3. Safety Instruction

Explanation of Diagrammatic Expressions

The term "Attention" used in this manual is to alert you to dangers such as the following:

Term

Degree of Danger Indicated by The Term

This term indicates the possibility that continuing to work while ignoring this "Attention", or working incorrectly without full understanding, may cause personal injury or physical damage.



ATTENTION

The Meaning of the Symbols

Symbols

This symbol advises you of an item which should **BE NOTED** (including Danger and Warning) and the general notes will be shown by a picture, word or explanatory text inside or along the symbol mark.



This symbol advises you of an action which must **NOT BE TAKEN (IS PROHIBITED)** in order to avoid danger. The general actions which must not be taken will be shown by a picture or explanatory text inside or along the symbol mark.



This symbol advises you of an action which must **BE TAKEN (IS MANDATORY)** in order to avoid danger and the general emphasis of the action which must be taken will be shown by a picture or explanatory text inside or along the symbol mark.



Safety and Operating Instructions

The following safety precautions should always be followed to reduce the risk of breakdown and/or accident.

ATTENTION ●●● To Prevent Electric Shock And Fire

- 1 Don't install the blower where it will be flooded with water. ☹
 - 2 Electrical work must be done by a qualified electrician. ⚡
 - 3 The power supply should be the rated voltage shown on the label on the blower and be fitted with an earth leakage breaker and over current breaker. ⚡
 - 4 The power outlet used should be waterproof and include an earth connected to ground. ⚡
 - 5 If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or similarly qualified person in order to avoid a hazard. ⚡
 - 6 Don't place any objects on the electric cable. ☹
 - 7 Be sure to unplug the blower before starting maintenance. ⚡
 - 8 Be sure to put the Upper Case back after maintenance. ⚡
 - 9 Don't touch the metal part of the blower until it is cooled down as the blower runs very hot. ☹
- Ignoring any of the above may cause an electric shock, a fire or a burn.

4. Installation (Septic Tank Application)

1. Installation site selection

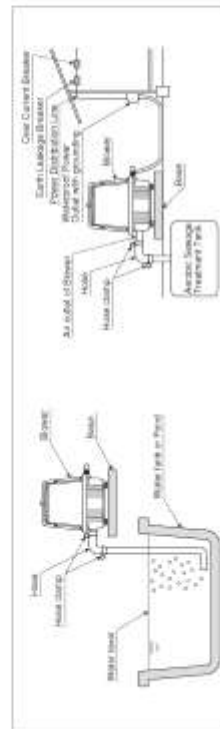
- 1) Install near the septic tank.
- If the pipeline is long, the sewage treatment may not perform well due to an insufficient airflow.
- 2) Install in a place which is convenient for maintenance.
- 3) Don't install over a manhole or on soft ground.
- 4) Avoid areas where wind-blown leaves and dust gathers.
- 5) Install in a well ventilated place.
- 6) Install at least 30cm away from the wall of a house.
- 7) Installation in the shade is recommended to suppress heat generation of the blower.
- 8) Don't install the blower where it will be flooded with water.
- 9) Don't install where there is excess moisture or humidity.

2. Method of Installation

- 1) The base should be made of concrete strong enough to bear the weight and block vibration from the blower.
- 2) The base should be at least 10cm above the ground level and 5cm larger than the external dimensions of the blower.
- 3) Provide a separate power outlet to be only used for the blower.
- 4) Electrical work must be done by a qualified electrician.
- 5) The power supply should be the rated voltage shown on the label on the blower and be fitted with an earth leakage breaker and over-current breaker.
- 6) The power outlet used should be waterproof and include an earth connected to ground.
- 7) Place the blower horizontally on the base.
- 8) A soft rubber hose must be used for connection between the air outlet of the blower and the pipe.
- 9) The rubber hose must be fastened with hose clamps.
- 10) When making the connection, level the air outlet and the pipe to ensure the hose is not kinked or blocked.
- 11) Before starting the operation of the blower, ensure that the water level in the septic tank is appropriate and the valves on the pipeline are properly opened.

3. Start operation

- Insert the power plug into the power outlet with full contact so that the plug itself does not wobble. Incomplete connection may cause an electric shock or a fire.
- After starting operation ensure that there is:
- No air leakage from the hose and the pipe connection;
 - No abnormal noise from the blower.
 - No vibration transmitted to the ground due to strained piping.



5. Maintenance (Refer the sketches on the next page)

1. Cautions

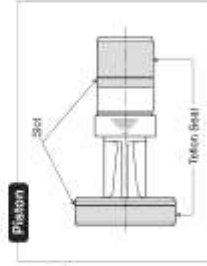
- 1) MEDO blowers are OILLESS. Never lubricate them.
 - 2) All blowers have already been precisely adjusted. Never disassemble them.
- (Do not try to loosen the Hex Bolts on the Endcap)

2. Replacement of Filter Element

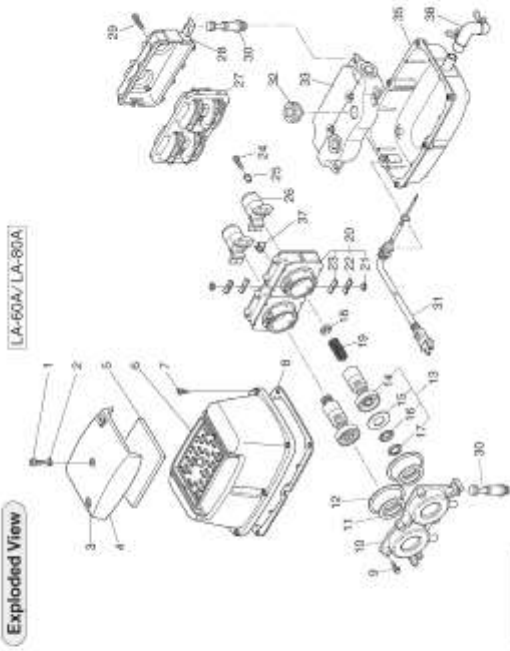
- 1) Be sure to unplug the blower before starting the replacement work.
 - 2) Loosen the Blind Screw 1 and remove the Filter Cover 4.
 - 3) Remove the Filter Element(s) 2 from the Upper Case 6 and replace with new One(s). At the same time, clean the air inlet of the Filter Cover 4 and the Upper Case 6.
 - 4) Assemble the Filter Cover 4 with the Filter Cover Gasket 3 securely positioned.
 - 5) Mount the Filter Cover 4 to the Upper Case 6, then tighten with the Blind Screw(s) 1.
 - 6) Time to replace the Filter Element
- It is recommended that the Filter Element(s) is cleaned or replaced with new one(s) depending on the extent of its deterioration as determined by the atmospheric conditions around the application. The filter element(s) should be checked every three months.

3. Replacement of Piston Set Assy

- 1) Be sure to unplug the blower before starting the maintenance work.
- 2) Remove the Upper Case 6, loosen all the Hex Bolts 9 on the Headcover 10 and remove it. In case it is hard to remove the Headcover 10 insert a flat head screwdriver to the slot(s) on the edge of the Headcover 10 and twist the screwdriver gently to open.
- 3) Take out the Piston Set Assy(s).
- 4) Replace all Piston Set Assys, Gasket A 11 and Gasket B 12 with new ones. Be sure to keep the Teflon Seal of the Piston 13 away from any dust, sweat, water, oil or grease. Try not to touch the Teflon Seal of the Piston 13 with your fingers.
- 5) Insert the Piston Set Assy(s) into the Pump Body. Install Gasket A 11 on the Headcover 10 and Gasket B 12 on the Pump Body, then fasten the Headcover 10 with the Hex Bolts 9. Tighten the Hex Bolts 9 evenly and alternately then gradually fully tighten.
- 6) Before putting the Upper Case 6 back, start the blower and check if there is any air leakage along the Headcover 10 or the Nozzle Seal(s) 14 by briefly blocking the air outlet. In case there is an air leakage along the Headcover 10, re-position Gasket A 11 and Gasket B 12 then re-tighten the Hex Bolts 9. In case there is an air leakage along the Nozzle Seal(s) 14 check if the nozzle seal is installed on the airtank properly and press the pump body down to allow the outlet port of the Headcover to catch the Nozzle Seal(s) correctly.
- 7) Put the Upper Case 6 back after installing Gasket C 8 on the Bottom Case properly. Fasten the Blind Screws/Torx Screws 7 evenly and alternately.
- 8) Time to replace the Piston Set Assy

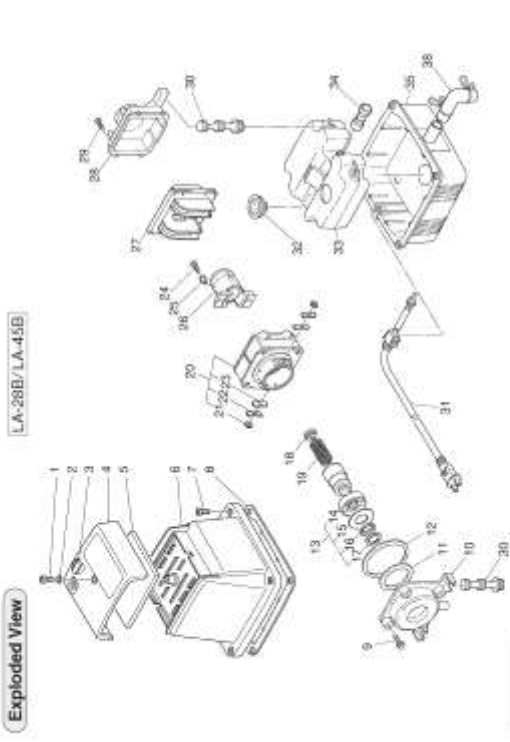


It is suggested that the Piston Set Assy is replaced every 12 to 24 months depending on the extent of pressure and airflow drop of the blower. There is a slot on each Teflon Seal of the Piston. The slot shows the degree of wear. If one or both slots have gone, the replacement of the Piston Set Assy is recommended.



LA-60A/LA-80A

Exploded View



LA-28B/LA-45B

Exploded View

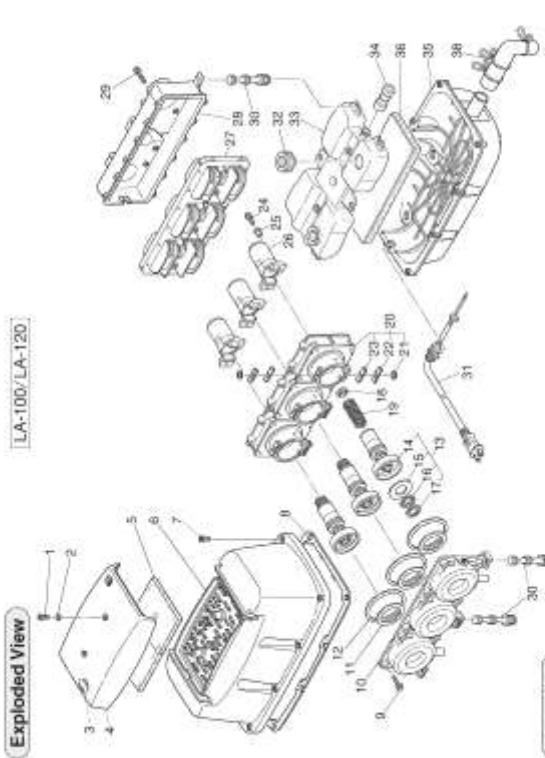
Partis List

No.	Part Name	LA60A Qty	LA80A Qty	No.	Part Name	LA60A Qty	LA80A Qty
1	Roll Screw	LP30581	1	27	Field Core Assy P	LB04951	1
2	Seal Washer	LP20035	2	28	Field Core Assy Q	LB04154	1
3	Filter Cover Gasket	LD00807	2	29	Field Core Assy E	LB04098	1
4	Filter Cover	LB03813	1	30	Hex Bolt	LD00707	1
5	Filter Element	LD00703	1	31	Roller Frame	LP11316	2
6	Upper Case	LB04597	1	32	Roller Frame	LD04556	4
7	Roll Screw UL	LP30381	6	33	Cable Assy JK	LB03341	1
8	Roll Screw OE	LD00600	8	34	Cable Assy D	LB03307	1
9	Gasket C	LD00706	1	35	Cable Assy A	LB03359	1
10	Hex Bolt	LP11316	6	36	Cable Assy J	LB03307	1
11	Hex Washer	LD00596	1	37	Cable Assy JL	LB04770	1
12	Gasket A	LD01043	2	38	Motor Assy	LD01037	1
13	Gasket B	LD01042	2				
14	Pinion	LB01132	2				
15	Pinion Sub Assy	LB01132	2				
16	Hex Washer	LD00716	2				
17	Valve Retainer A	LP11548	2				
18	Spring Ball	LP12548	2				
19	Spring	LP12155	2				
20	Hoody	LP30020	2				
21	SE Ring	LB01184	1				
22	Valve Retainer B	LP13735	4				
23	Outer Valve	LP10355	4				
24	Screw 5 x 20	LP12509	4				
25	Insulation Sheet	LP10355	4				
26	Power Cylinder	LB02443	2				

Partis List

No.	Part Name	LA28B Qty	LA45B Qty	No.	Part Name	LA28B Qty	LA45B Qty
1	Roll Screw	LP30581	1	27	Field Core Assy P	LB01598	1
2	Seal Washer	LP20035	2	28	Field Core Assy Q	LB04098	1
3	Filter Cover Gasket	LD00807	2	29	Field Core Assy E	LD00982	1
4	Filter Cover	LD00570	1	30	Hex Bolt	LP11316	4
5	Filter Element	LD00703	1	31	Roller Frame	LD04556	4
6	Upper Case	LB02897	1	32	Cable Assy JK	LB03341	1
7	Roll Screw UL	LP30381	4	33	Cable Assy D	LB03307	1
8	Roll Screw OE	LD00600	4	34	Cable Assy A	LB03359	1
9	Gasket C	LD00706	1	35	Cable Assy J	LB03307	1
10	Hex Bolt	LP11316	4	36	Cable Assy JL	LB04770	1
11	Hex Washer	LD02565	1	37	Motor Assy	LD01037	1
12	Gasket A	LD01043	1				
13	Gasket B	LD01042	1				
14	Pinion	LB01132	1				
15	Pinion Sub Assy	LB01132	1				
16	Hex Washer	LD00716	1				
17	Valve Retainer A	LP11548	1				
18	Spring Ball	LP12548	1				
19	Spring	LP12155	1				
20	Hoody	LP30020	1				
21	SE Ring	LB01184	1				
22	Valve Retainer B	LP13735	2				
23	Outer Valve	LP10355	2				
24	Screw 5 x 20	LP12509	2				
25	Insulation Sheet	LP10355	2				
26	Power Cylinder	LA21843	1				

3. Data sheets



LA-100/LA-120

Parts List

No.	Part Name	LA100 Qty	LA120 Qty	No.	Part Name	LA100 Qty	LA120 Qty
1	End Screw	2	2	27	Fast Core Assy P	1	1
2	Seal Washer	4	4	28	Fast Core Assy Q	1	1
3	Filter Cover Gasket	2	2	29	Fast Core Assy E	1	1
4	Filter Cover	1	1	30	End Bolt	1	1
5	Filter Element	2	2	31	Rubber Feet	6	6
6	Upper Case	1	1	32	Cable Assy UK	1	1
7	End Base UL	1	1	33	Cable Assy D	1	1
8	Gasket C	1	1	34	Cable Assy A	1	1
9	Hex Bolt	12	12	35	Cable Assy J	1	1
10	Headcover	1	1	36	Cable Assy UL	1	1
11	Gasket A	1	1	37	Head Plug	1	1
12	Gasket B	1	1	38	Head Assy	1	1
13	Pin	3	3				
14	Pin	3	3				
15	Pin	3	3				
16	Pin	3	3				
17	Pin	3	3				
18	Pin	3	3				
19	Pin	3	3				
20	Pin	3	3				
21	Pin	3	3				
22	Pin	3	3				
23	Pin	3	3				
24	Pin	3	3				
25	Pin	3	3				
26	Pin	3	3				



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3. Data sheets



1. Warning Notice			
	High Voltage Only qualified staff may work on electronic components		High Voltage according to ANSI American, National Standards Institute
	Qualified Staff Marked operations may only be executed by qualified electricians		Automatic Start-Up When servicing the device must be turned off
	Hot Surface will cause burns. Let device cool down before maintenance		Note Ignoring notices will cause severe damage to the pump
2. Interdiction			
	Pump works without oil Avoid absorption of oil fumes		Marked areas may not be subject to weight
	Liquids may not be conveyed		Explosive substances may not be conveyed
	Flammable Substances may not be conveyed		Toxic Substances may not be conveyed
	Assembly Incorrect fitting position		
3. Rules			
	Wear protective goggles		Wear protective gloves
	Wear protective earmuffs Sound level information e.g. 85 dB (A)		
4. Advice			
	Active principle Rotary vane pump Only air may be conveyed		Active principle side channel fan only air may be conveyed
	Maintenance Regularly execute the marked procedures		Storing / Assembly Protect pump from humidity
	Further Information (optional Data) - name plate - Internet		Assembly Characteristic data is valid up to 800m above sea level
	Specification Vacuum pump		Specification Compressor
	Safety valve		Factory-made Revolving field clockwise as pre-requisite for pump attachment
	Switch interval Not more than 10x per hour		Arrange Motor-circuit switch
	Blow out marked areas with air pressure		Maintenance interval Observe minimum gate valve measurement every 3.000 hours
	Filter Maintenance Service according to dust accumulation exchange old cartridge dispose old		

3. Data sheets

<p>9</p> <p>10 [m] 0 2 4 6 8 10 PRESSURE 1/2 1/4 1x</p> <p>MAX. +1,0 bar +29,5 in. HG</p>	<p>A</p>	<p>C</p>
<p>10</p>	<p>B</p>	<p>D</p>
<p>E.</p> <p>D: 25 mm H: 24 mm No.: 909580</p>	<p>G.</p>	
<p>F.</p> <p>A_{max} > 11mm A_{max} < 11mm DT 4,4 → No. 90138700005 (SET)</p>	<p>H.</p> <p>1- (DT 4,4 EW)</p>	<p>BECKER Gebr. Becker GmbH Hölkler Feld 29-31 D-42279 Wuppertal info@becker-international.com</p> <p>SERVICE www.becker-international.com Sales and service network</p>

www.becker-international.com

www.becker-international.com

3. Data sheets

BECKER

DT 4.6/0-61

Betriebsanleitung	Driftsainstruks
Operating Instructions	Driftsainstruktioner
Instrucciones de servicio	Käyttöohje
Istruzioni d'uso	Driftsvejledning
Handledning	Instrukcija obelugi
Instrucciones para el manejo	Kezelési útmutató
Manual de instrucciones	Návod k obsluze
Naudojimoai instrukcija	Návodio za uporabo
Kasutajuhend	Návod na obsluhu
Lietošanas instrukcija	EI Kitiabi
Объяснителен лист	Инструкция по эксплуатации
取扱説明書	使用说明书
사용설명서	

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CE

ULP

MAX. PRESSURE mbar

MAX. \dot{V} m³/h

DIN EN ISO 3744

$L_{pA} = 67$ dB(A) - 50Hz
 $L_{pA} = 69$ dB(A) - 60Hz
 $K_{pA} = 3$ dB(A)

A > 100mm
 A > 4"

max. 800mm

5°C/41°F
 -45°C/111°F

max. 30%

7 kg
 15.4 lbs

3

4

5

6

7

8

MAX. 10x/h

U2 - ON
 V2 - OFF

W1 - L3
 V1 - L1
 U1 - L2

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3. Data sheets

<p>3000 h</p>	<p> $A_{\text{set}} > 12.5\text{mm}$ $A_{\text{set}} < 12.5\text{mm}$ </p> <p>DT 4.6 — No. 90138800005 (SET)</p>

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<p> MAX. +0.5 bar +14.7 in.HG </p>	
<p> 10 bar PRESSURE </p>	

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3. Data sheets

BECKER

DT 4.8






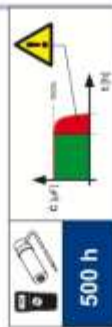

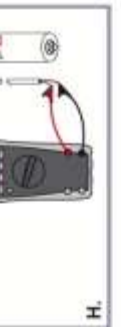




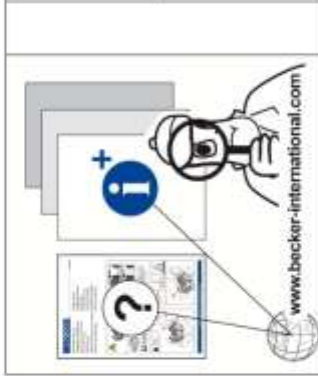
Betriebsanleitung	Driftsinstruks
Operating Instructions	Driftsinstruktioner
Instructions de service	Käyttöohje
Istruzioni d'uso	Driftsvejledning
Handledning	Instrukcja obsługi
Instrucciones para el manejo	Kozáči sk útmutató
Manual de Instruções	Návod k obsluze
Naudojamost instrukcija	Navodilo za uporabo
Kasutusjuhend	Navod na obsluhu
Lietošanas instrukcija	Ei Kĩabli
Объяснительная инструкция	Инструкция по эксплуатации
取扱説明書	使用说明书
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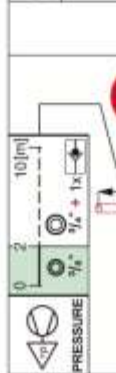









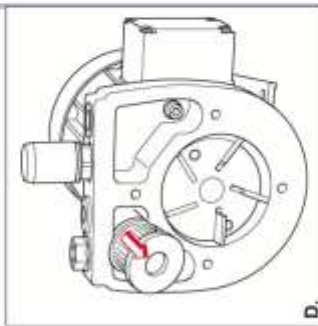
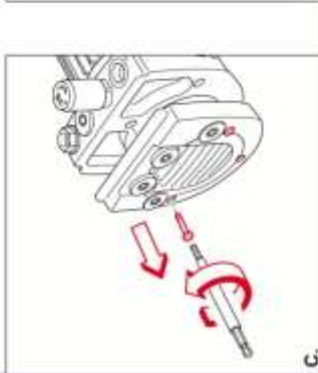
CE

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3. Data sheets

 <p>3000 h</p>	 <p>A max < 12.5mm A min < 12.5mm</p>	 <p>DT 4.8 → No. 90138800005 (SET)</p>
		<p>D: 30 mm H: 32 mm No.: 909581</p>
 <p>500 h</p>	 <p>1- (DT 4.8 EW)</p>	
		
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 <p>MAX. +1,0 bar +29,5 in.HG</p>	
	
	
	
	 <p>n=0min⁻¹ 2-3 Min</p>
	
	

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3. Data sheets

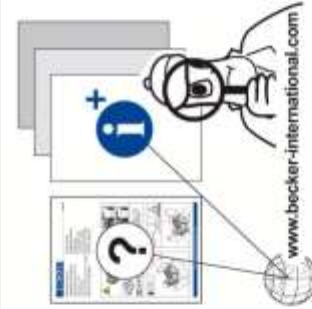
<p>F.</p>	<p>H.</p>	<p>F1 D: 58 mm H: 40 mm No.: 909519</p> <p>F2 D: 60 mm H: 40 mm No.: 909542</p> <p>E.</p>	<p>3000 h</p> <p>$A_{max} > 21\text{mm}$ $A_{max} < 21\text{mm}$</p> <p>DT 4.16 → No. 90134700007 (SET)</p> <p>G.</p>	<p>9</p>	<p>A.</p>	<p>10</p> <p>MAX. +1.0 bar +29.5 in.Hg</p>	<p>B.</p> <p>$n=0\text{min}^{-1}$</p>	<p>C.</p>	<p>D.</p>
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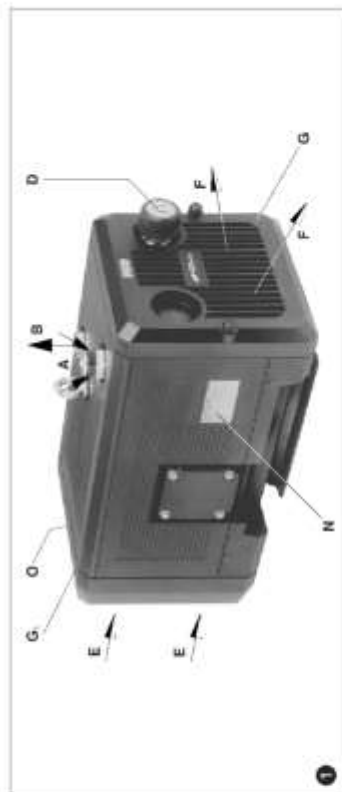
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DLT 6
DLT 10
DLT 15
DLT 25
DLT 40



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1

Ausführungen
Diese Betriebsanleitung gilt für folgende hochdrucktaugliche Verdichter: Typenreihe DLT 6 bis DLT 40. Sie liefern einen Nenn-Volumenstrom von 6, 10, 15, 25 und 40 m³/h bei 50 Hz. Der durchschnittliche Betriebsdruck (bar) wird auf dem Datenschild (NI) angegeben. Die Abtriebsleistung des Motors nimmt von dem Oberdruck steigt das Datenumfeld B.380.

Benutzung
Das Typenmodell Typenreihe ist ausschließlich für Antriebsaggregate und entsprechend seinen Geräuschleistungen. Die angesaugte Luft wird durch die angesaugte Mikro-Funktion geleitet. Der Motor des Antriebs ist als einstufige Kompressor mit einem einstufigen Kompressor ausgeführt. Die Verdichter sind für einen Schweißschutz aus Kunststoff. In der Luft befindet sich auch ein Vorfilter, durch den die Kühlung der Öl-T. erfolgt. Die Druckluft wird bei den Rückschlägen 15, 25 und 40 m³/h größerer Motorleistung durch ein Kälteelement geleitet. Motor und Verdichter haben eine getrennte Welle. Das Druck-Regulierungselement ist die Einstellung des Druckes auf gewünschte, jedoch nicht über den vorgeschriebenen Wert.

Zusätzlich: Bei Bedarf Rückschlagventil (ZSK), Motorschutzschalter (MS) und Schlauchanschluss (ZSA).

Verwendung

- ⚠ Die Verdichter DLT sind für den Einsatz im gewerblichen Bereich geeignet. Ich, die Schutzmaßnahmen entsprechen EN 12194 Tabelle 4 für Personen ab 14 Jahren.
- ⚠ Die DLT eignet sich zur Erzeugung von Überdruck zwischen 0 und 20 auf dem Datenschild (NI) angegebenen Höchstgrenze (bar). Daraufhin ist zu achten.
- ⚠ Die Umgebungstemperatur und die Ansaugtemperatur muss zwischen 5 und 40 °C liegen. Bei Temperaturen außerhalb dieses Bereichs können sich die Rückschläge bilden.
- ⚠ Diese Hochdruckverdichter sind für den Einsatz zum Füllen von Luft mit einer relativen Feuchte von 30 bis 90%.
- ⚠ Bei höheren Leistungen sind die Rückschläge für einen Ansaugdruck von 0,1 bis 0,2 bar zu berücksichtigen. Bei höheren Leistungen sind die Rückschläge für einen Ansaugdruck von 0,1 bis 0,2 bar zu berücksichtigen.
- ⚠ Bei Ansaugdrücken, die über dem zulässigen Bereich liegen, sind die Rückschläge für einen Ansaugdruck von 0,1 bis 0,2 bar zu berücksichtigen.
- ⚠ Einrichtungen für die Ansaugtemperatur sind entsprechend den Schutzmaßnahmen anzunehmen.

Handhabung und Aufstellung (Bild 1) und 2)
Die Verdichter sind für den Einsatz im gewerblichen Bereich geeignet. Ich, die Schutzmaßnahmen entsprechen EN 12194 Tabelle 4 für Personen ab 14 Jahren. Die DLT eignet sich zur Erzeugung von Überdruck zwischen 0 und 20 auf dem Datenschild (NI) angegebenen Höchstgrenze (bar). Daraufhin ist zu achten. Die DLT müssen nur in horizontaler Einbaulage (senkrecht) betrieben werden.

Die Aufstellung der Verdichter soll so erfolgen, dass sie eine Verringerung der Luftleistung ermöglichen. Bei der Aufstellung auf einem Untergrund, der nicht eben ist, ist eine Befestigung über elastische Pufferelemente. Die Verdichter dieser Druckluftverdichter sind sehr gering.

Installation (Bild 1)

- ⚠ Der Verdichter darf nicht ohne die anvermöglichen Regeln- und Bestimmungen betrieben werden, damit der zulässige Verdichtungsdruck (siehe Datenschild) nicht überschritten wird.
- ⚠ Bei der Aufstellung und dem Betrieb sind die aktuellen Installationsvorschriften zu beachten.
- 1. Druckanschluss bei (R).
- ⚠ Bei zu enger und/oder langer Druckleitung verändert sich die Volumenstrom des Verdichters.
- 2. Die elektrischen Anschlüsse sind auf dem Datenschild (NI) bzw. dem Motorschild angegeben. Die elektrischen Anschlüsse sind mit einem Schutzblech zu versehen. Das entsprechende Anschlussschema befindet sich im Datenblatt des Motors. Bei der Installation sind die elektrischen Anschlüsse zu beachten. Bei der Installation sind die elektrischen Anschlüsse zu beachten. Bei der Installation sind die elektrischen Anschlüsse zu beachten.
- 3. Nicht über Motorschutzschalter anzuschließen (für Absicherung gegen Motorschutzschalter und zur Zuerstleistung des Antriebs-Schalters ist eine Kabelführung erforderlich).
- ⚠ Wir empfehlen die Verwendung von Motorschutzschaltern, deren Anschaltung anzuhängen ist, abhängig von einem vor. Überprüfen Sie die elektrische Installation darf nur von einer Elektrofachkraft unter Einhaltung der EN 60204 vorgegeben werden. Der Hauptschalter muss durch den Betreiber vorgegeben werden.

