



[EN/ASSEMBLY INSTRUCTIONS](#)

PCK3

MARKET SEGMENTS



CONSTRUCTION



AGRICULTURE/
FORESTRY



RV



PUBLIC SAFETY



UTILITY/CARGO



PERSONAL
TRANSPORT



AMBULANCE

1 PRIOR INFORMATION

1.1	Instructions for use	5
1.1.1	Intended Use	5
1.1.2	Unauthorised use	5
1.2	Installation instructions	5
1.3	Legal regulation	5
1.4	Type approval	5
1.5	CE declaration of conformity	6
1.6	UKCA declaration of conformity	6
1.7	Cleaning and maintenance instructions	6
1.8	Note on environmental protection	6
1.9	Technical Support	6

2 FIELD OF USE PCK 3

3 GLOSSARY

4 DESIGNATION OF PCK 3

5 LIST OF EQUIPMENT CONCERNED

6 PRODUCT INFORMATION

6.1	Technical data	13
6.2	Main Dimensions	13
6.2.1	Versions with potentiometer	13
6.2.2	Versions with proportional valve	14
6.2.3	Versions with switches	14
6.2.4	Versions with axial remote control	15

7 INSTALLATION

7.1	Cutting	16
7.2	Fan control	16
7.3	Water heater control	16
7.4	Checking the electric heater	17
7.5	Air conditioning	17
7.6	Recycling	17

8 ELECTRICAL CONNECTION

8.1	Electrical schematic frame 8300.34030464	18
8.2	Electrical schematic frame 8300.34030635	19
8.3	Electrical schematic frame 8300.34030465	20
8.4	Electrical schematic frame 8300.34030458	21
8.5	Electrical schematic frame 8300.34030466	22
8.6	Electrical schematic frame 8300.34030459	23
8.7	Electrical schematic frame 8300.34030451	24
8.8	Electrical schematic frame 8300.34030462	25
8.9	Electrical schematic frame 8300.34030453	26
8.10	Electrical schematic frame 8300.34030460	27
8.11	Electrical schematic frame 8300.34030474	28
8.12	Electrical schematic frame 8300.34030471	29
8.13	Electrical schematic frame 8300.34030473	30
8.14	Electrical schematic frame 8300.34030625	31
8.15	Electrical schematic frame 8300.34030472	32

8.16	Electrical schematic frame 8300.34030480	33
8.17	Electrical schematic frame 8300.34030636	34
8.18	Electrical schematic frame 8300.34030479	35
8.19	Electrical schematic frame 8300.34030452	36
8.20	Electrical schematic frame 8300.34030461	37
8.21	Electrical schematic frame 8300.34030475	38
8.22	Electrical schematic frame 8300.34030477	39

9 MAINTENANCE

10 CE - DECLARATION OF CONFORMITY & DECLARATION OF INCORPORATION OF A QUASI-MACHINE

11 UKCA - DECLARATION OF CONFORMITY & DECLARATION OF INCORPORATION OF A QUASI-MACHINE

Refer to the safety information sheet supplied with the product, and to the risks and preventive measures indicated in the form of pictograms.

1 Prior information

1.1 Instructions for use

This document contains information necessary to operate your equipment.

Please print and store this documentation in a safe place for future reference.

1.1.1 Intended Use

Eberspächer Kalori equipment is designed to ventilate, heat and/or cool passenger compartments and cabins, or to de-ice the windscreen and windows of the vehicle.

The equipment is intended for professional use in L, M, N, O, T, C, R and S vehicles and in machines such as construction engineering machines, forestry machines, handling machines, tower cranes, mining machines or airport vehicles.

For all other professional uses, the installation must be carried out by a professional installer, who verifies that the equipment corresponds to the application.

1.1.2 Unauthorised use

Modification of the equipment is strictly prohibited. Any unintended use and any other use of the equipment beyond or different from the intended use is considered to be misuse. The warranty becomes null and void and Eberspächer Kalori is no longer liable.

This product is not intended for domestic use.

Eberspächer Kalori equipment is not intended for the following applications:

- Long-term operation, for example for air conditioning or heating of dwellings, garage or container

1.2 Installation instructions

Failure to comply with the warnings and safety instructions invalidates the warranty and means that Eberspächer Kalori cannot be held liable.

The equipment must not be installed and used:

- in extremely dusty environments
- in an aggressive environment
- in the event of excessive vibrations of the machine or the vehicle
- in a way that does not comply with the regulations in force
- without full or partial compliance with the operating or assembly instructions
- without maintenance and/or use of original spare parts
- in such a way as to damage its environment

- so as not to be damaged by the environment.

The equipment should only be installed in the position indicated in the instruction manual.

The installation of this equipment in the vehicle or machine must ensure that it is protected against reasonably foreseeable impacts (e.g. kicking, etc.).

The installation, use and maintenance of the equipment must comply with the regulations in force in the country of use.

The equipment should be stored in a dry place.

Electrical parts that are not sealed must be protected against water and dust.

Ensure that all electrical components involved in the installation of the equipment are correctly sized.

Complete the electrical connections necessary for the wiring of the equipment, carefully following the instructions in the manual. Provide electrical protection upstream of the equipment.

Electrical protections (disconnecting device, fuses) are not supplied with the equipment.

Dual voltage equipment must be powered by 2 different power sources. 12Vdc and 24Vdc products must be powered by batteries.

Power cables upstream of the equipment should be clamped.

This equipment is intended for indoor mounting and must not be subjected to weather or dust.

1.3 Legal regulation

Legal regulations are mandatory and must also be complied with in countries where there are no special regulations.

The manufacturer follows a policy of continuous development and, in this respect, reserves the right to make changes and improvements to the documentation and equipment without prior notice.

Compliance with legal provisions and all instructions and instructions contained in this document, as well as with the safety information supplied with the product, is a prerequisite to any warranty and liability claim.

Repairs by unauthorized third parties and/or with non-original spare parts are not permitted. This will result in the expiration of the equipment approval and may result in the expiration of the vehicle or machine operating license.

1.4 Type approval

For some components, the Centre National de Réception des

Véhicules (National Vehicle Approval Centre) has issued a type approval according to ECE-R10 for installation in motor vehicles, with an official type approval marking noted on the component's nameplate.

Eberspächer Kalori products should only be used in vehicles fully approved by the manufacturer.

1.5 CE declaration of conformity

We hereby declare that the version of the product we are placing on the market complies with the applicable provisions of the following European directives:

- CEM Directive 2014/30/EU



1.6 UKCA declaration of conformity

We hereby declare that the version of the product we are placing on the market complies with the applicable provisions of the following UKCA directives:

- The Electromagnetic Compatibility Regulations 2016



1.7 Cleaning and maintenance instructions

Wash with a damp cloth.

1.8 Note on environmental protection



WEEE Directive 2012/19/EU

Electrical and electronic devices should not be disposed of with household waste. Consumers are required by law to return electrical and electronic equipment at the end of its life to the public collection points provided for this purpose or to the point of sale. The details of this obligation are defined by the national legislation of the country concerned. The symbol on the product, the instruction manual or the packaging indicates that a product is subject to these regulations.

1.9 Technical Support

If you have any technical questions or problems with the equipment, please contact your dealer.

2 Field of use PCK 3

The control element PCK3 is used to control the following equipment:

- VAC
- HVAC
- EHVAC
- HV
- EHV

Depending on the configuration, PCK3 can control:

- the fan in 3 speeds
- Fan in 0-5V / 0-10V (requires PWM box)
- On/off the air conditioning system installed in the vehicle
- heating temperature with proportional valve
- The heating temperature with PTC resistor
- a recirculation flap



Example:

No	Description
1	Fan control in 3 speeds
2	Temperature control with proportional valve
3	Air conditioning switch
4	Recirculation switch

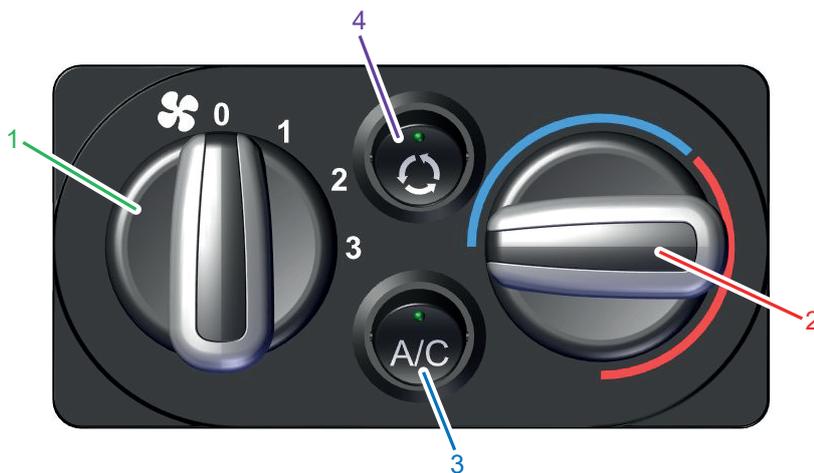
3 Glossary

V0-5V	Ventilation 0-5 volts
V4 POS	Ventilation 4 positions
TVP	Proportional valve temperature
T3 POS	Temperature 3 positions
T4 POS	Temperature 4 positions
TTA	Axial remote control temperature
T2 POS	Temperature 2 positions
AC 2POS	A/C 2 positions
12-24V	12 Volts and 24 Volts
ECO	Eco Mode
RE	Recycling
12V	12 Volts
24V	24 Volts
AC	Air conditioning
HV	Fan/Radiator
HVAC	Fan/Radiator/Evaporator
VAC	Fan/Evaporator
EHV	Fan/PTC elements
EHVAC	Fan/PTC elements/Evaporator

4 Designation of PCK 3

Reading the designations of PCK3 :

1
 2
 3
 4
 5
PCK3 V4 POS / TVP / AC+RE / 12-24V



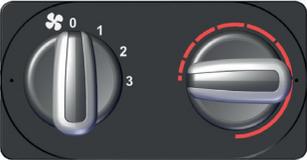
No	Description
1	Left button
2	Right button
3	Bottom switch (air conditioning / recirculation)
4	Top switch (recirculation)
5	Application voltage

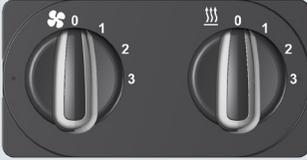
5 List of equipment concerned

If your equipment is not described in the table below, please contact your dealer for specific documentation.
The attached installation manual is for the following part numbers:

Visual	Part number	Description	Type					Ventilation control		Water heater control		Checking the electric heater			Voltage		Brushless motor controller compatibility		
			HV	VAC	HVAC	EHV	EHVAC	Potentiometer 0-100%	3 speeds	Proportional valve	Axial telecom	ON/OFF	3 positions	4 positions	AC	Recycling		12-24V	24V
	8300 34030464	PCK3 V0-5V / TVP / AC+RE / 24V			•			•		•					•	•		•	•
	8300 34030635	PCK3 V0-5V / TVP / AC / 24V			•			•		•					•			•	•
	8300 34030465	PCK3 V4 POS / T3 POS / 12-24V				•											•		
	8300 34030458	PCK3 V4 POS / T3 POS / AC / 12-24V					•								•		•		

Visual	Part number	Description	Type					Ventilation control		Water heater control		Checking the electric heater			Voltage		Brushless motor controller compatibility	
			HV	VAC	HVAC	EHV	EHVAC	Potentiometer 0-100%	3 speeds	Proportional valve	Axial telecom	ON/OFF	3 positions	4 positions	AC	Recycling		12-24V
	8300 34030466	PCK3 V4 POS / T3 POS / RE / 12-24V				•			•				•		•			
	8300 34030459	PCK3 V4 POS / T3 POS / AC+RE / 12-24V					•		•				•		•	•		
	8300 34030451	PCK3 V4 POS / TVP / AC / 12-24V			•			•	•						•		•	
	8300 34030462	PCK3 V4 POS / TTA / AC / 12-24V			•			•		•					•		•	
	8300 34030453	PCK3 V4 POS / TVP / AC+RE / 12-24V			•			•	•						•	•	•	
	8300 34030460	PCK3 V4 POS / TTA / AC+RE / 12-24V			•			•		•					•	•	•	
	8300 34030474	PCK3 V4 POS / AC 2POS / 12-24V		•				•							•		•	

Visual	Part number	Description	Type					Ventilation control		Water heater control		Checking the electric heater			Voltage		Brushless motor controller compatibility	
			HV	VAC	HVAC	EHV	EHVAC	Potentiometer 0-100%	3 speeds	Proportional valve	Axial telecom	ON/OFF	3 positions	4 positions	AC	Recycling		12-24V
	8300 34030471	PCK3 V4 POS / TTA / 12-24V	•					•		•						•		
	8300 34030473	PCK3 V4 POS / TVP / 12-24V	•					•	•							•		
	8300 34030625	PCK3 V4 POS / T2 POS / 12-24V				•		•			•					•		
	8300 34030472	PCK3 V0-5V / T3 POS / AC / 24V					•	•				•		•			•	•
	8300 34030480	PCK3 V0-5V / AC 2POS / 24V		•				•						•			•	•
	8300 34030636	PCK3 V0-5V / T 2POS / 24V				•		•				•					•	•

Visual	Part number	Description	Type					Ventilation control		Water heater control		Checking the electric heater			Voltage		Brushless motor controller compatibility	
			HV	VAC	HVAC	EHV	EHVAC	Potentiometer 0-100%	3 speeds	Proportional valve	Axial telecom	ON/OFF	3 positions	4 positions	AC	Recycling		12-24V
	8300 34030479	PCK3 V0-5V / TVP / 24V	●					●		●							●	●
	8300 34030452	PCK3 V 4POS / TVP / RE 12-24V	●						●	●								
	8300 34030461	PCK3 V 4POS / TTA / RE 12-24V	●						●		●							
	8300 34030475	PCK3 V4 POS / T4 POS / 12-24V				●			●						●			
	8300 34030477	PCK3 V4 POS / T4 POS / AC / 12-24V					●		●					●	●		●	

6 Product information

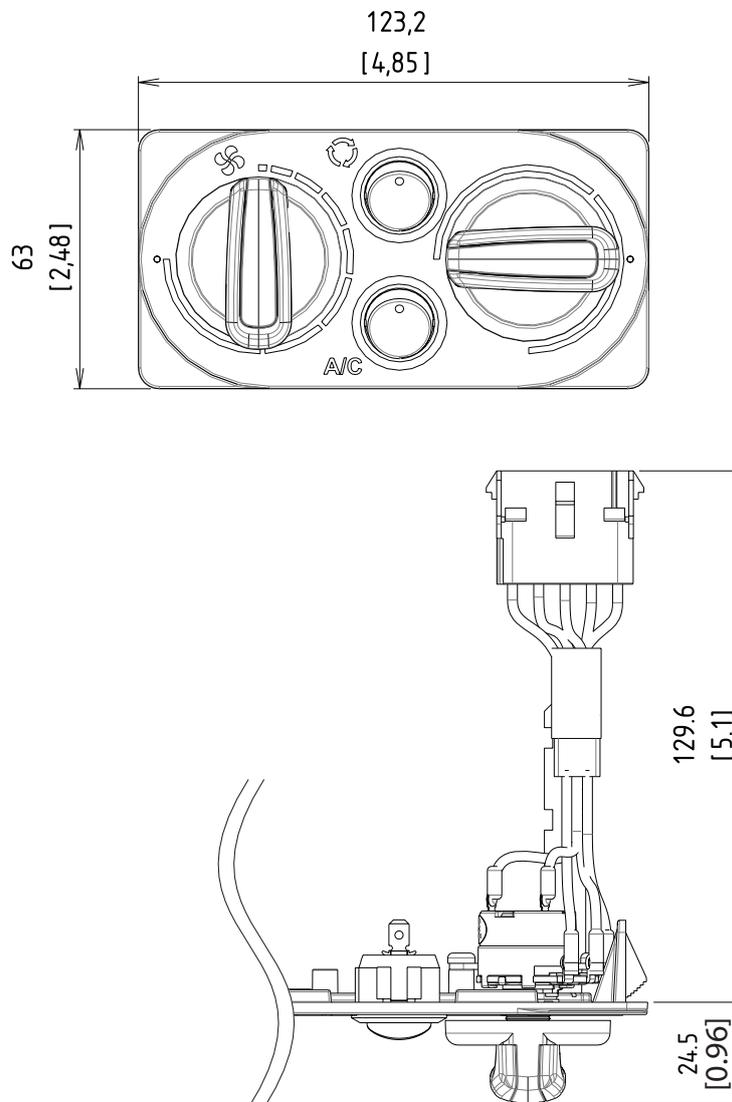
6.1 Technical data

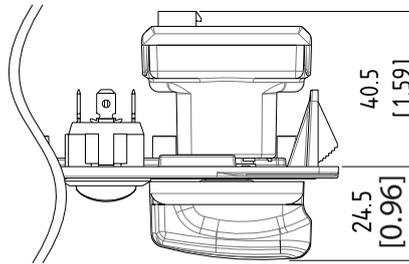
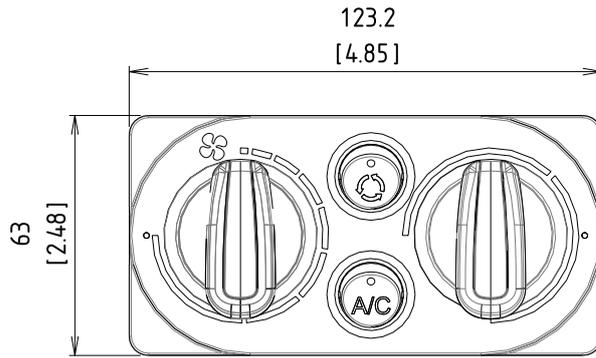
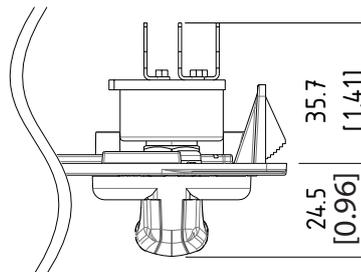
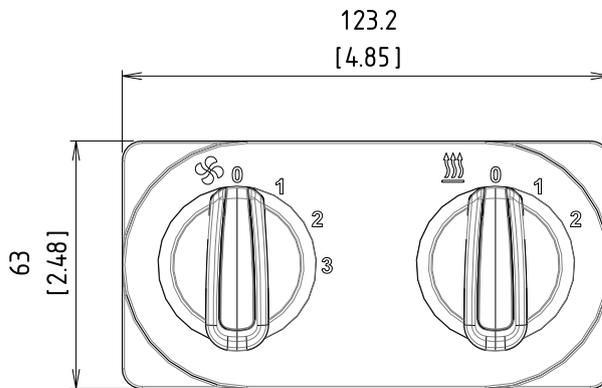
MODEL	PCK3
Nominal voltage (+/- 10%)	12V / 24V
Operating / storage temperature	-40 / +70°C [-40 / +158°F]
Protection rating	IP20

Use of the equipment outside the specified technical data may result in malfunctions.
The technical data must be observed at all times.

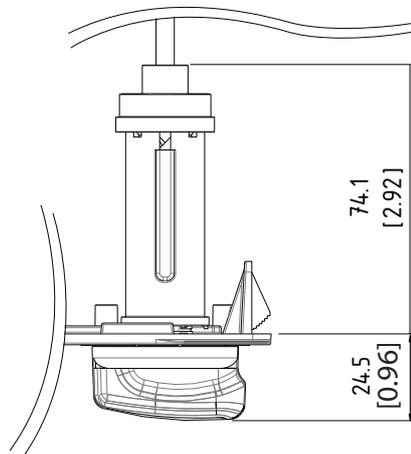
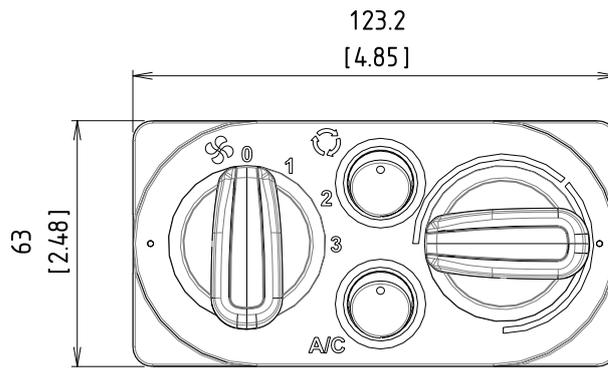
6.2 Main Dimensions

6.2.1 Versions with potentiometer



6.2.2 Versions with proportional valve

6.2.3 Versions with switches


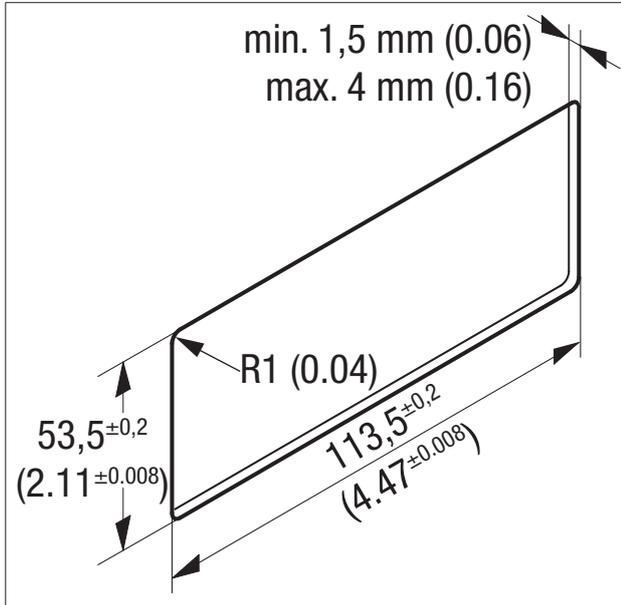
6.2.4 Versions with axial remote control



7 Installation

- Install the control component PCK3 in a suitable place and level on the instrument panel in the vehicle passenger compartment.

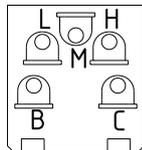
7.1 Cutting



The PCK3 is fixed by clips allowing attachment on instrument panels ranging from 1.5 to 4mm thick.

7.2 Fan control

- With switch:

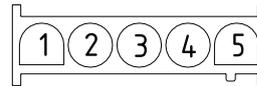


Wire side view

Opposite connector 5-track connector 754C-3

No	Description
L	Fan speed, level 1
M	Fan speed, level 2
H	Fan speed, level 3
B	12/24V power supply
C	Common

- With potentiometer:



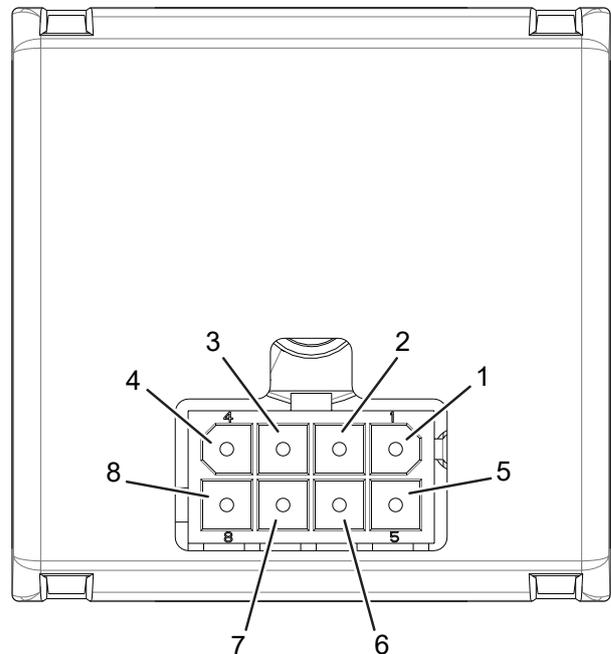
Wire side view

Opposite connector 5-WAY MATE-N-LOCK MALE CONNECTOR 480763

No	Description
1	+24V power supply
2	Return 0-5V.
3	Earth
4	ON/off switch output
5	ON/off switch input

7.3 Water heater control

- With proportional valve:



Wire side view

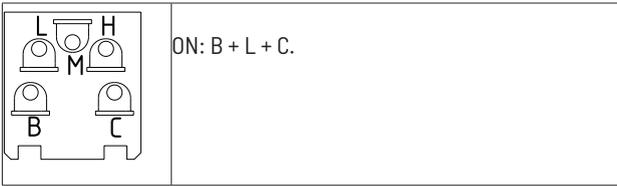
Opposite connector 8-WAY MATE-N-LOCK CONNECTOR 770579-1

No	Description
1	+12V/+24V
2	+5V potentiometer
3	0V potentiometer
4	Analog 0 / 5V potentiometer
5	Earth
6	+12V-24V / 0V
7	0V / +12V-24V
8	∅

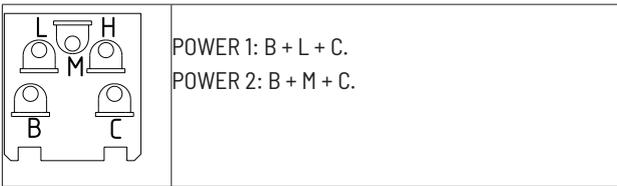
7.4 Checking the electric heater

Opposite connector 5-track connector 754C-3

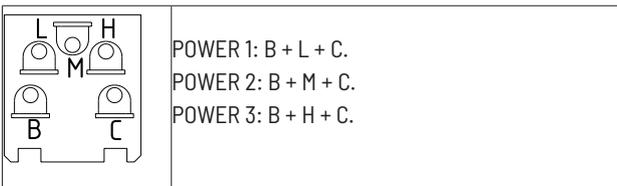
- With ON/off switch:



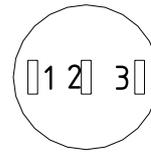
- 3 positions:



- 4 positions:



7.6 Recycling

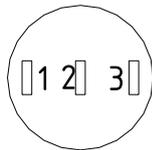


Wire side view

Opposite connector CLIP 4.8 STOCKO EH 650,200 WITH INSULATOR

No	Description
1	+12V/+24V
2	Command
3	Earth

7.5 Air conditioning



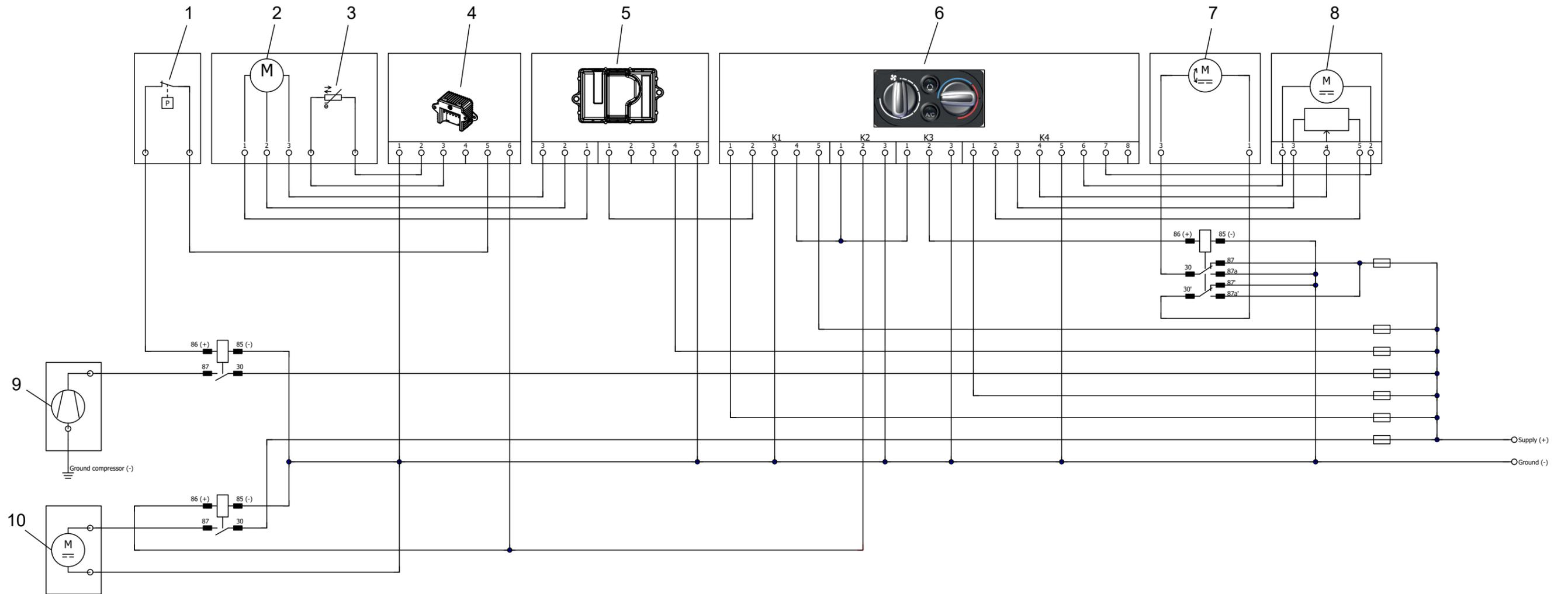
Wire side view

Opposite connector CLIP 4.8 STOCKO EH 650,200 WITH INSULATOR

No	Description
1	+12V/+24V
2	Command
3	Earth

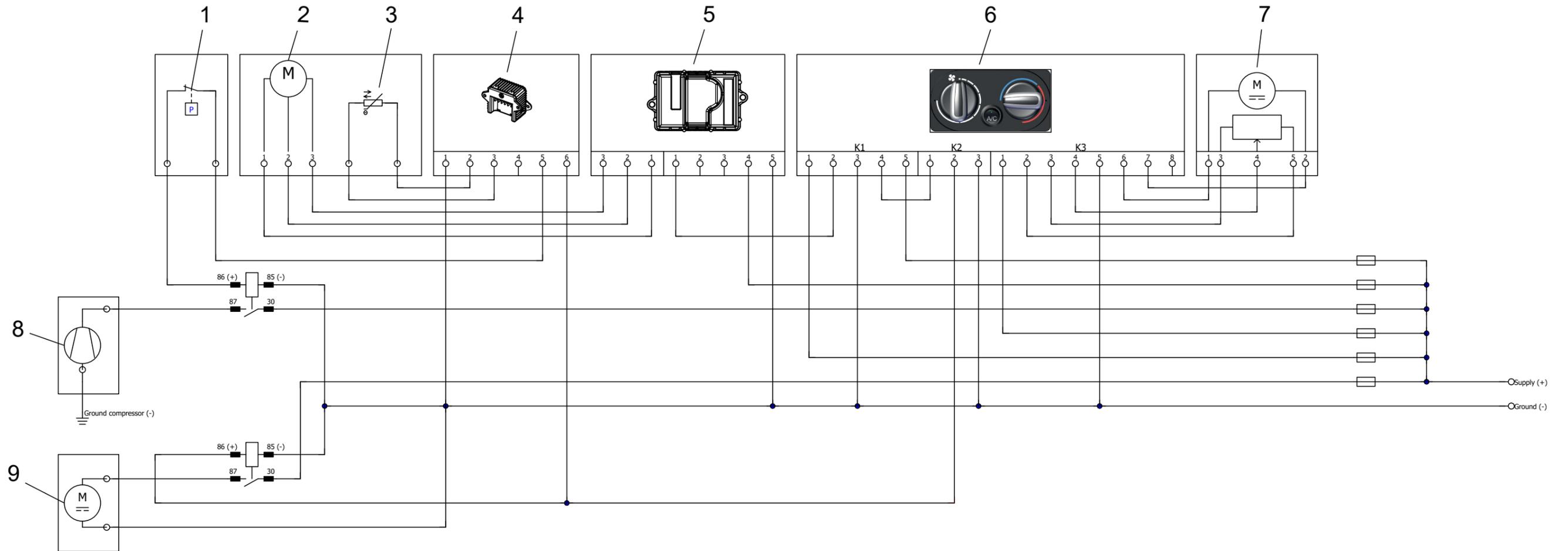
8 Electrical connection

8.1 Electrical schematic frame 8300.34030464



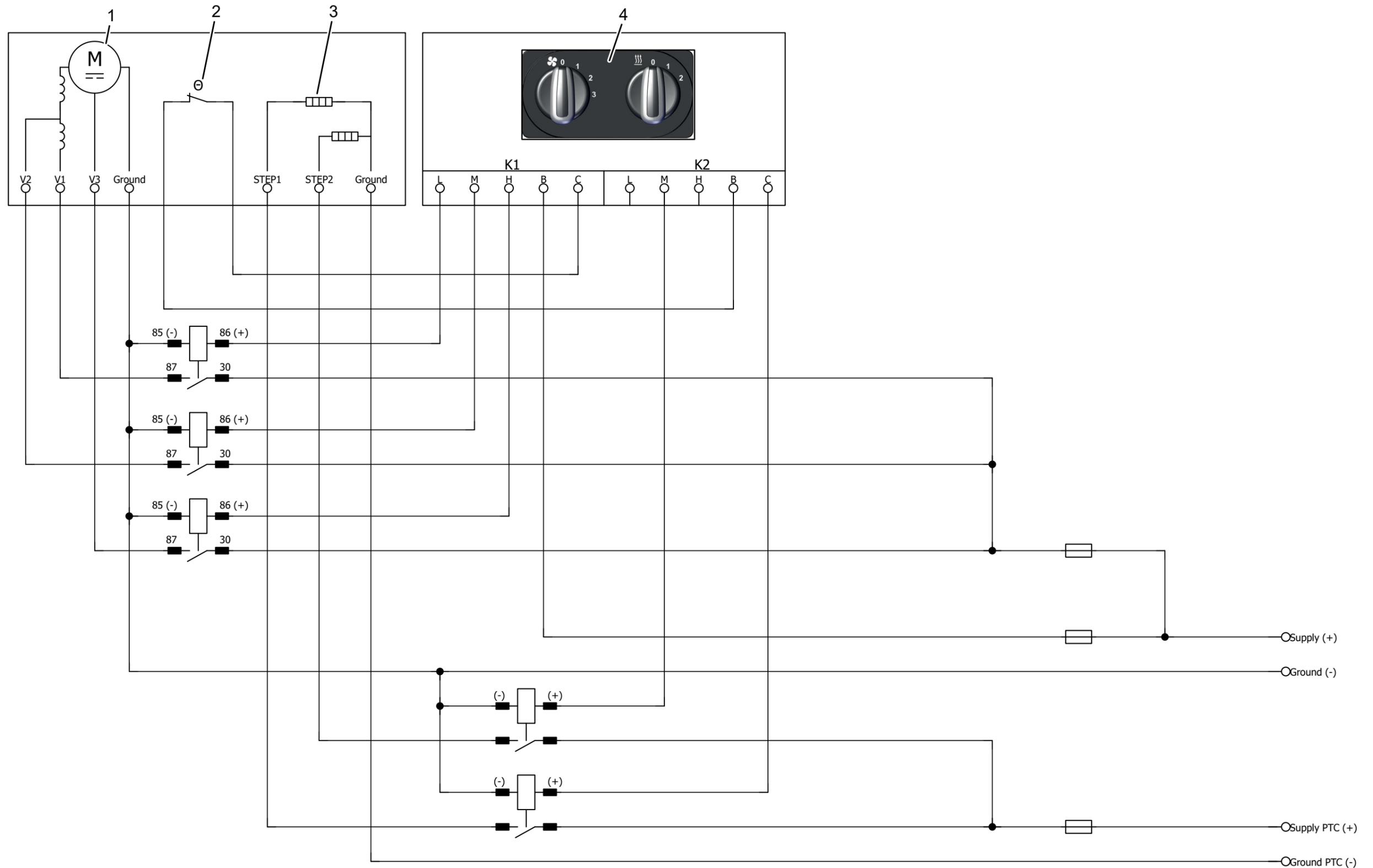
No	Description	No	Description	No	Description	No	Description	No	Description
K1	Potentiometer connection	K4	Proportional valve connection	3	Antifreeze probe	6	PCK3	9	Compressor
K2	A/C switch connection	1	Pressure switch	4	Thermostat	7	Recirculation flap motor	10	Condenser
K3	Recirculation switch connection	2	Fan	5	Brushless PWM controller	8	Proportional valve motor		

8.2 Electrical schematic frame 8300.34030635



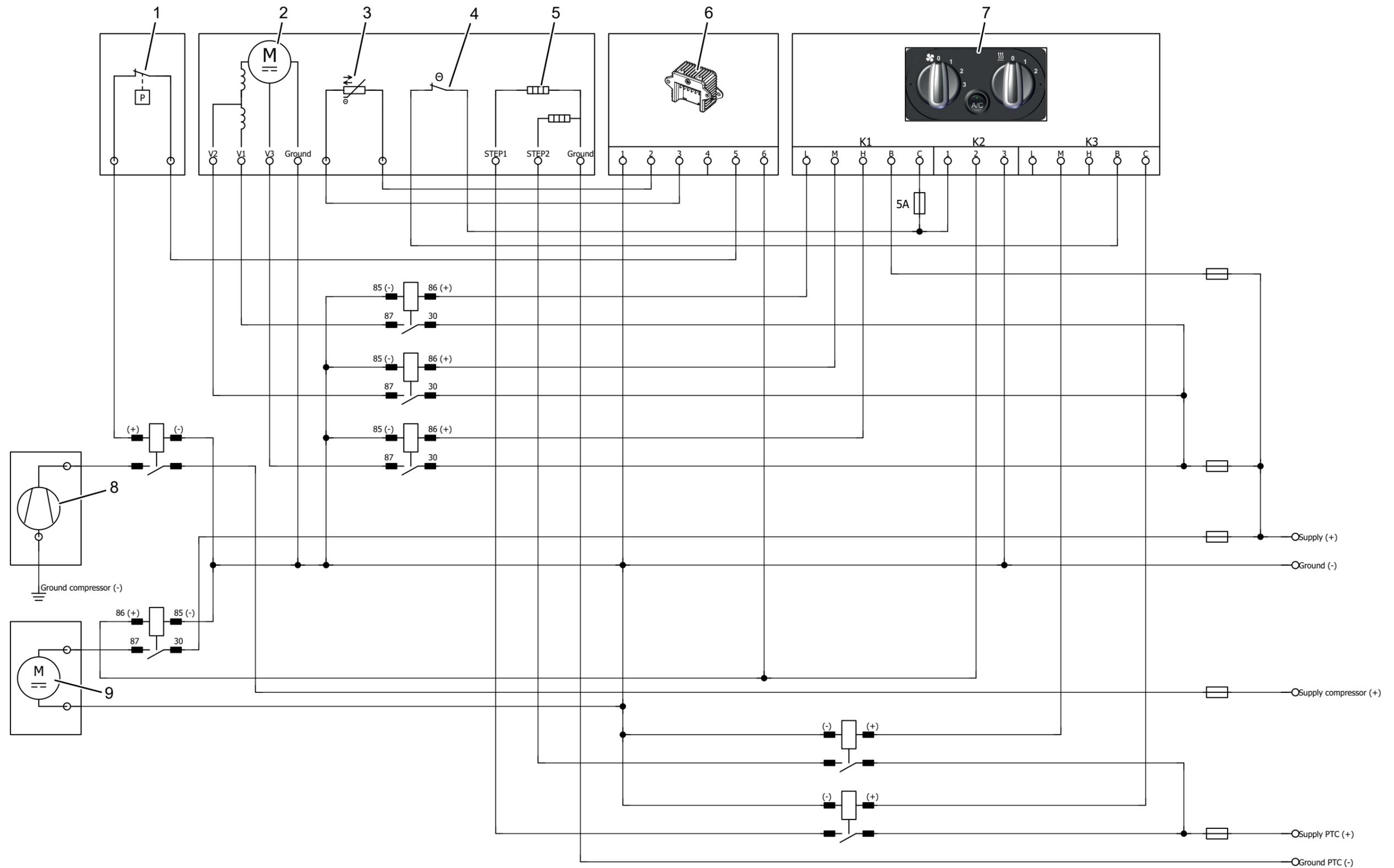
No	Description	No	Description	No	Description	No	Description
K1	Potentiometer connection	1	Pressure switch	4	Thermostat	7	Proportional valve motor
K2	A/C switch connection	2	Fan	5	Brushless PWM controller	8	Compressor
K3	Proportional valve connection	3	Antifreeze probe	6	PCK3	9	Condenser

8.3 Electrical schematic frame 8300.34030465



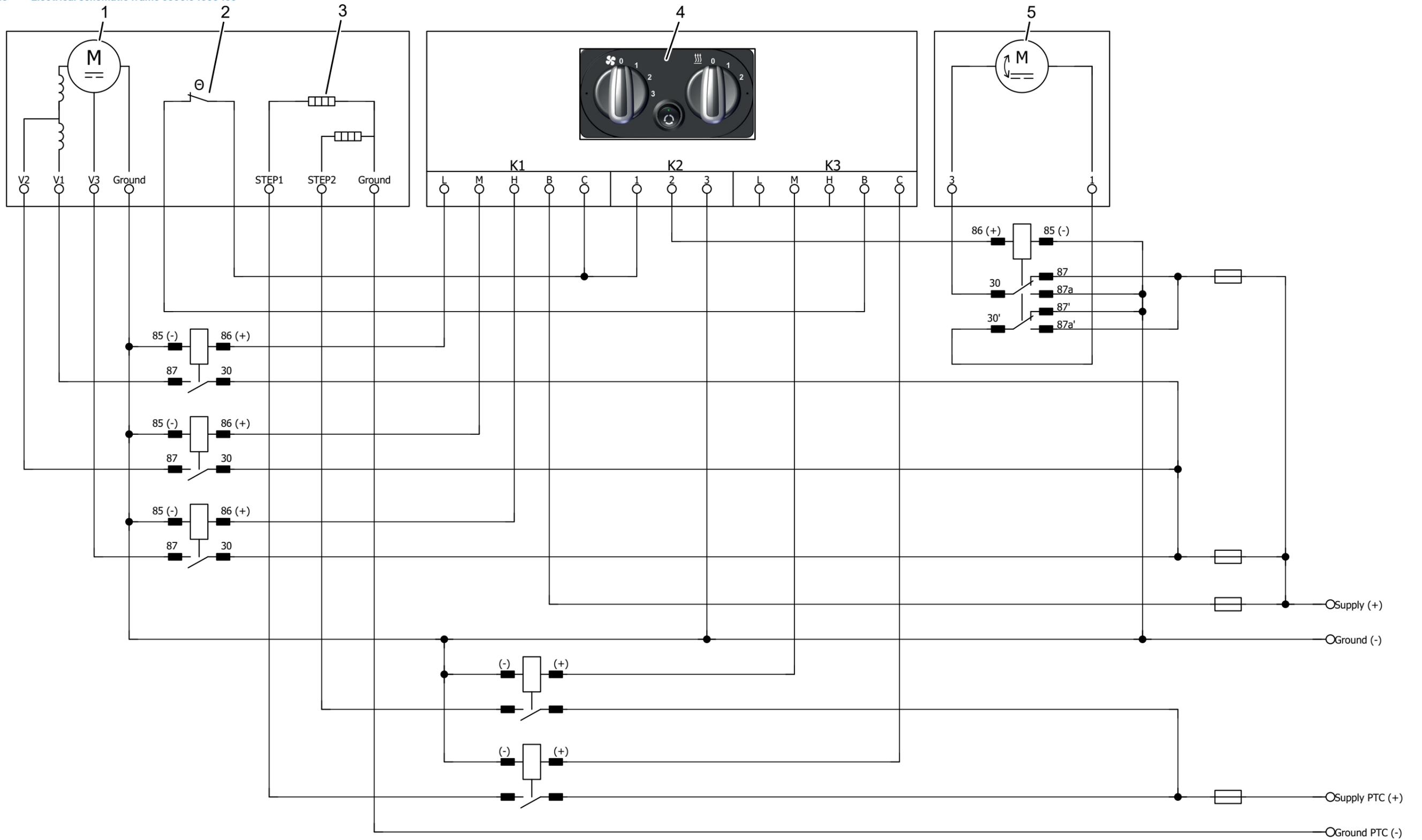
No	Description	No	Description
K1	4 position switch connection	2	Thermal switch
K2	3 position switch connection	3	Heating resistor
1	Fan	4	PCK3

8.4 Electrical schematic frame 8300.34030458



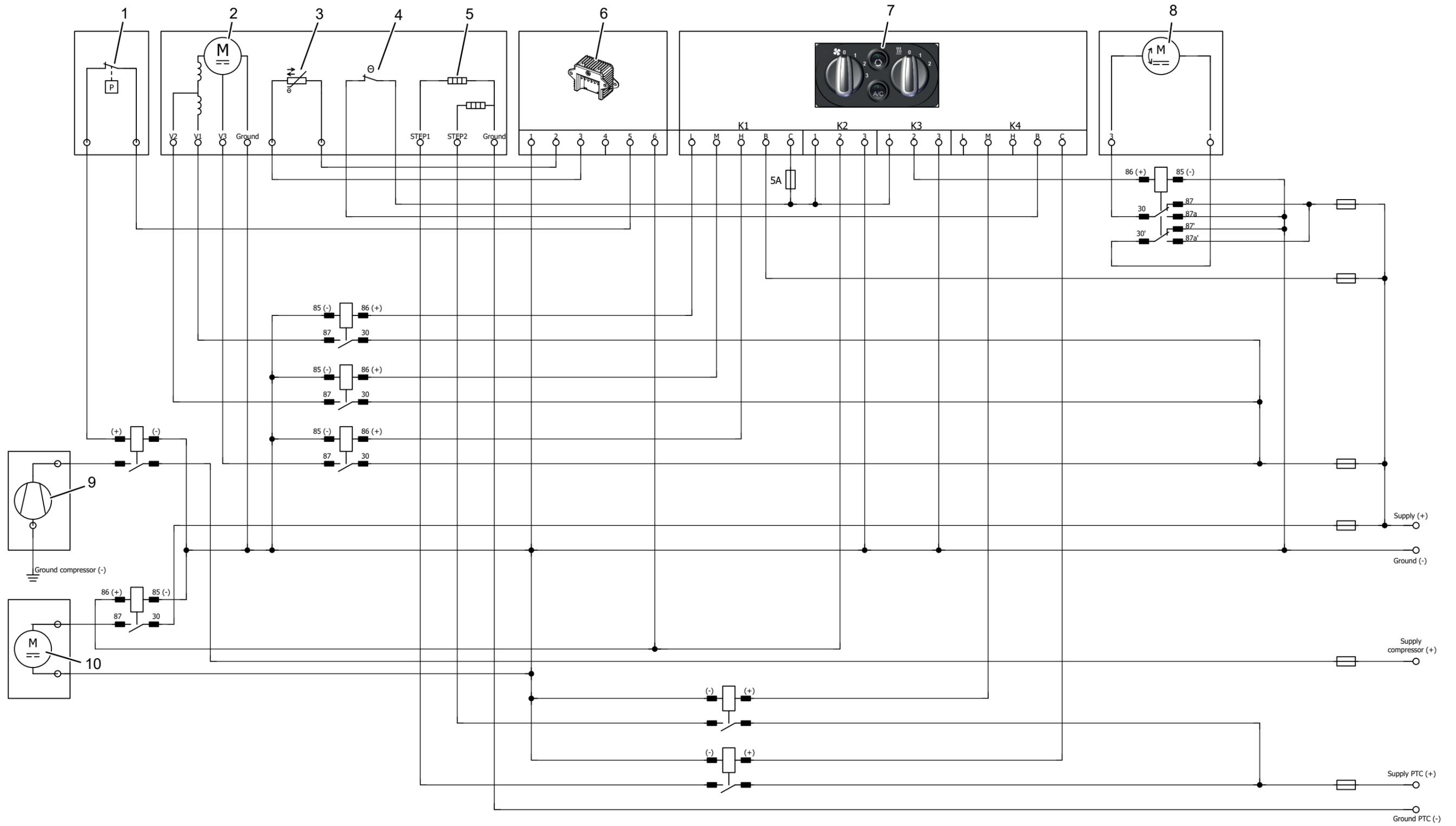
No	Description	No	Description	No	Description	No	Description
K1	4 position switch connection	1	Pressure switch	4	Thermal switch	7	PCK3
K2	A/C switch connection	2	Fan	5	Heating resistor	8	Compressor
K3	3 position switch connection	3	Antifreeze probe	6	Thermostat	9	Condenser

8.5 Electrical schematic frame 8300.34030466



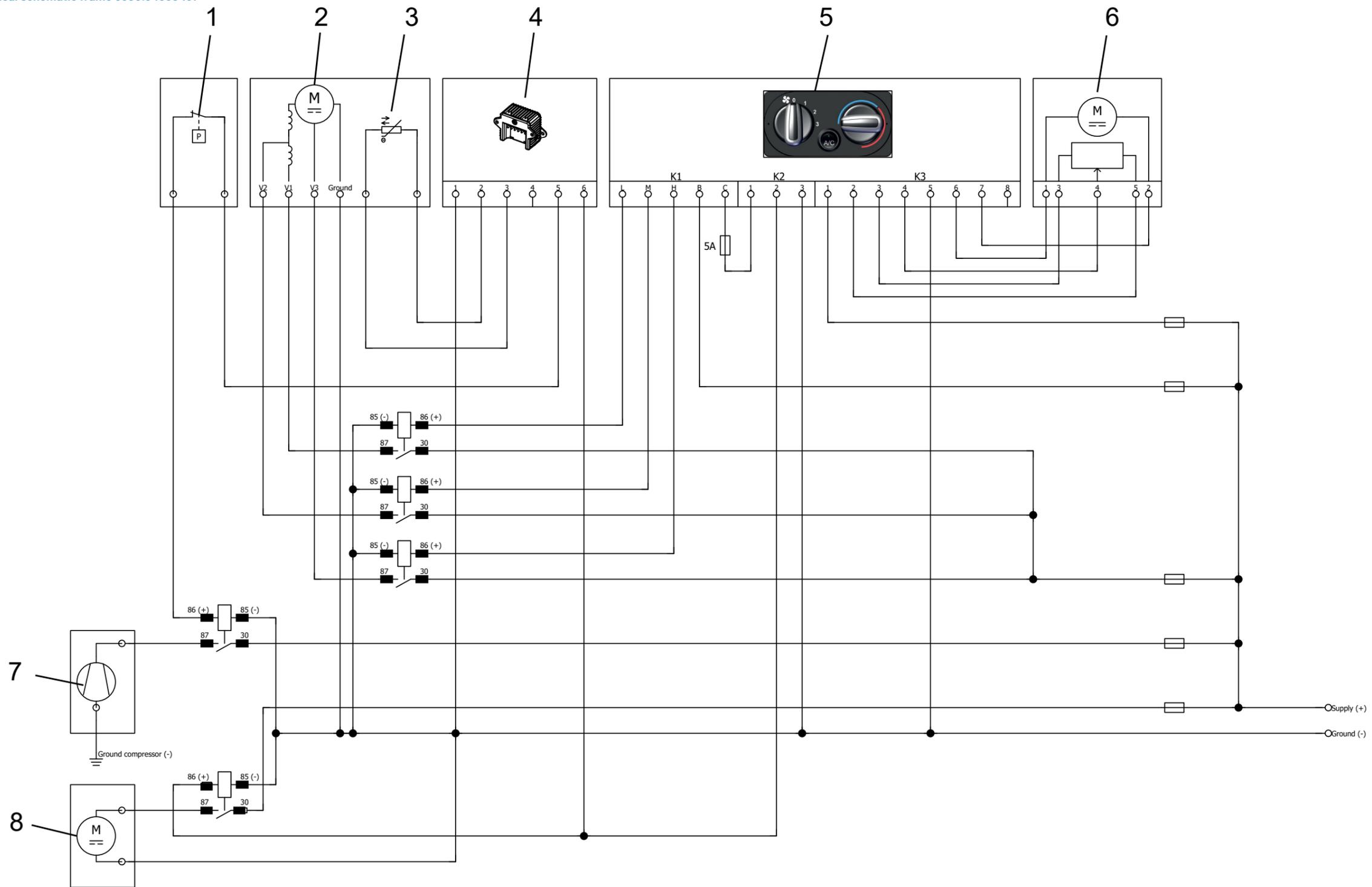
No	Description	No	Description	No	Description
K1	4 position switch connection	1	Fan	4	PCK3
K2	Recirculation switch connection	2	Thermal switch	5	Recirculation flap motor
K3	3 position switch connection	3	Heating resistor		

8.6 Electrical schematic frame 8300.34030459



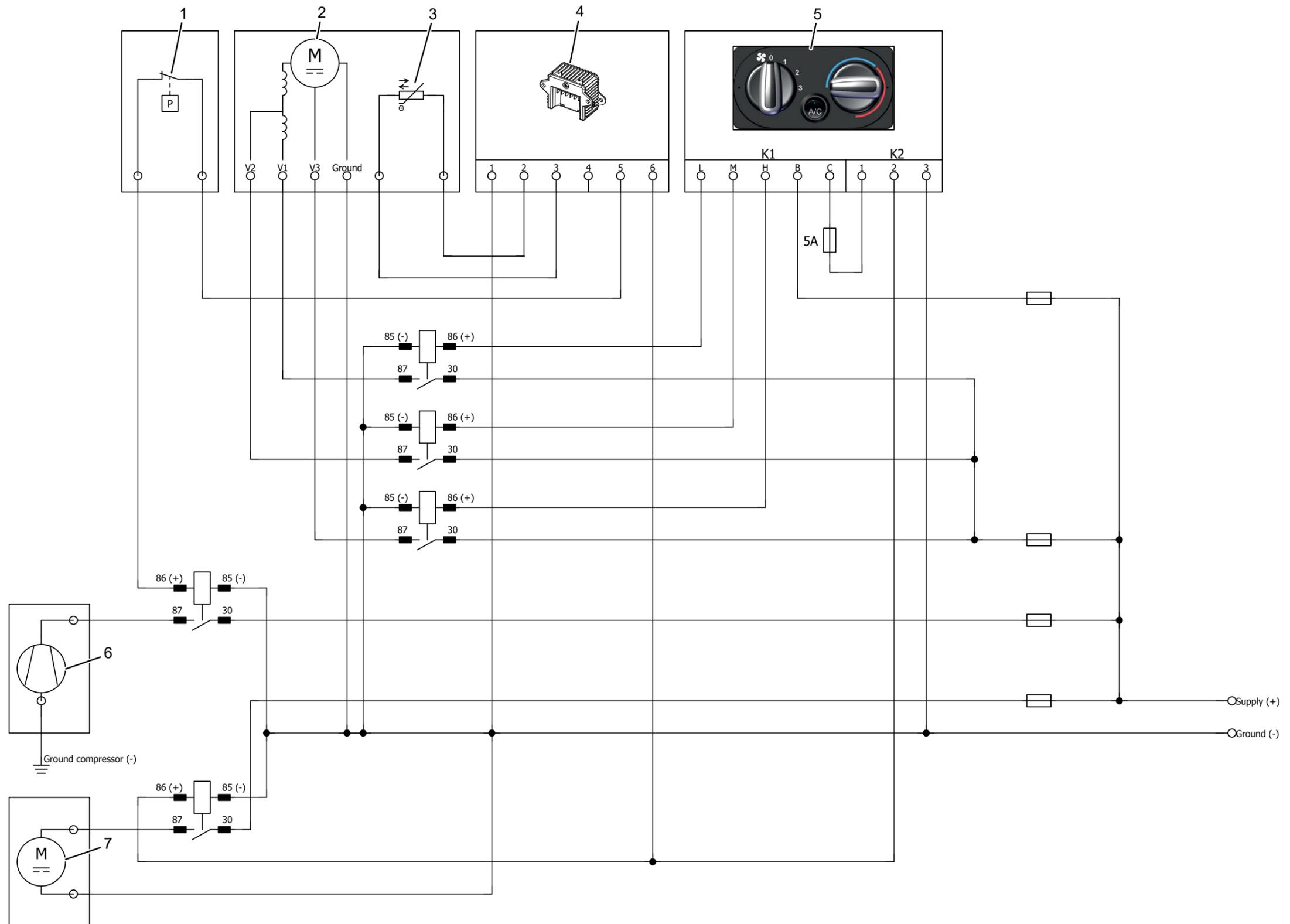
No	Description	No	Description	No	Description	No	Description	No	Description
K1	4 position switch connection	K4	3 position switch connection	3	Antifreeze probe	6	Thermostat	9	Compressor
K2	A/C switch connection	1	Pressure switch	4	Thermal switch	7	PCK3	10	Condenser
K3	Recirculation switch connection	2	Fan	5	Heating resistor	8	Recirculation flap motor		

8.7 Electrical schematic frame 8300.34030451



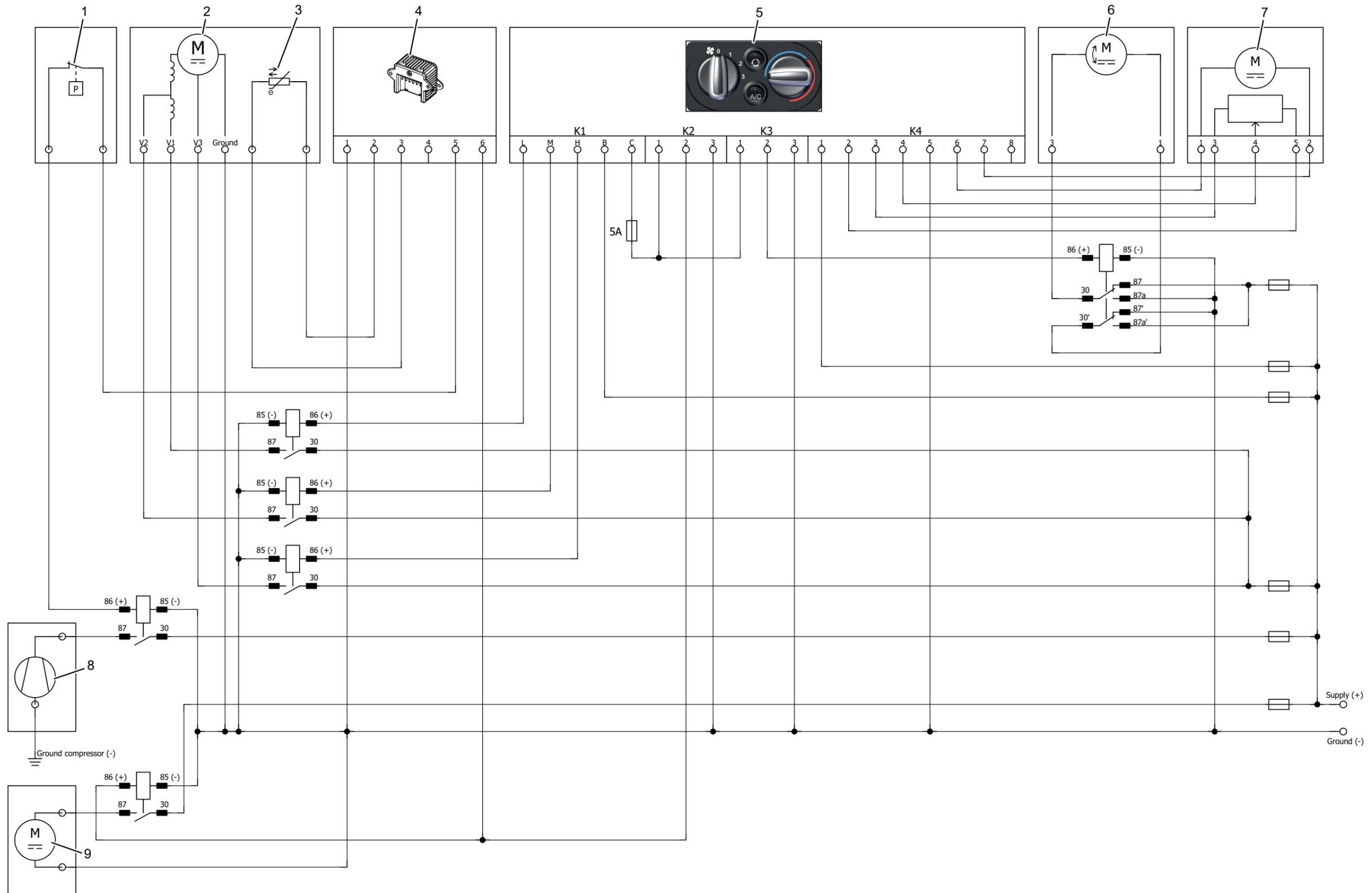
No	Description	No	Description	No	Description	No	Description
K1	4 position switch connection	1	Pressure switch	4	Thermostat	7	Compressor
K2	A/C switch connection	2	Fan	5	PCK3	8	Condenser
K3	Proportional valve connection	3	Antifreeze probe	6	Proportional valve motor		

8.8 Electrical schematic frame 8300.34030462



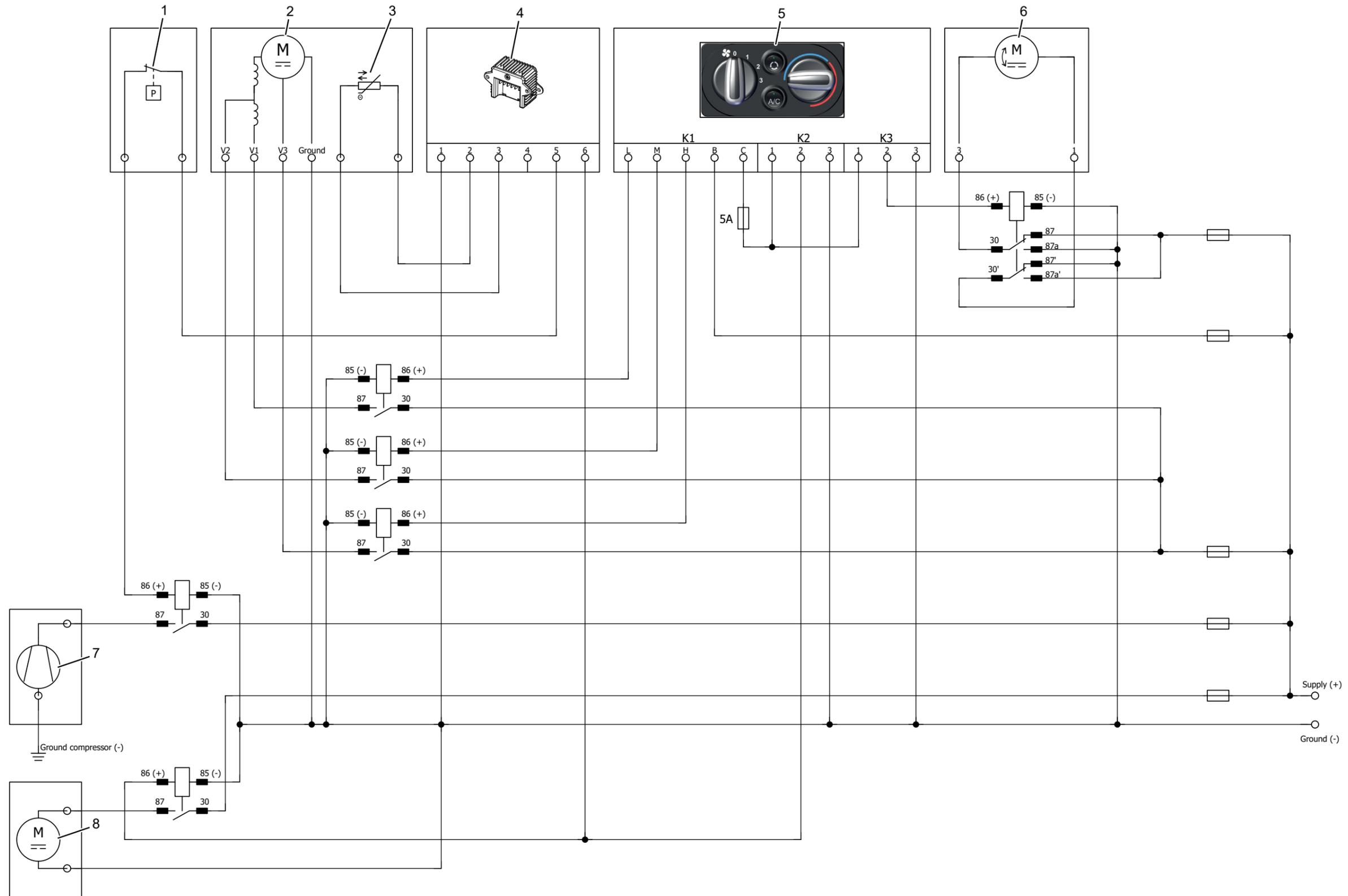
No	Description	No	Description	No	Description
K1	4 position switch connection	2	Fan	5	PCK3
K2	A/C switch connection	3	Antifreeze probe	6	Compressor
1	Pressure switch	4	Thermostat	7	Condenser

8.9 Electrical schematic frame 8300.34030453



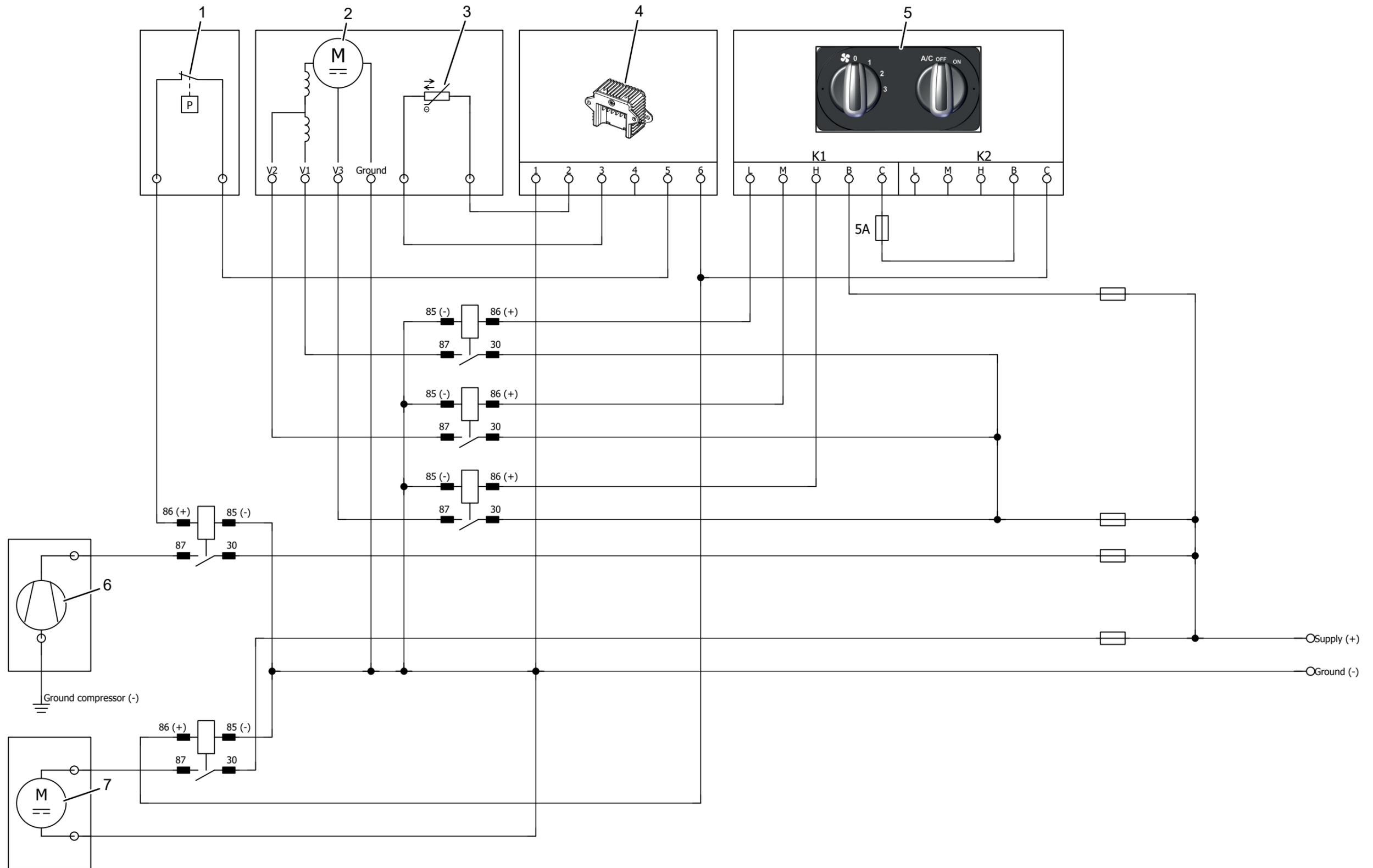
No	Description	No	Description	No	Description	No	Description	No	Description
K1	4 position switch connection	K4	Proportional valve connection	3	Antifreeze probe	6	Recirculation flap motor	9	Condenser
K2	A/C switch connection	1	Pressure switch	4	Thermostat	7	Proportional valve motor		
K3	Recirculation switch connection	2	Fan	5	PCK3	8	Compressor		

8.10 Electrical schematic frame 8300.34030460



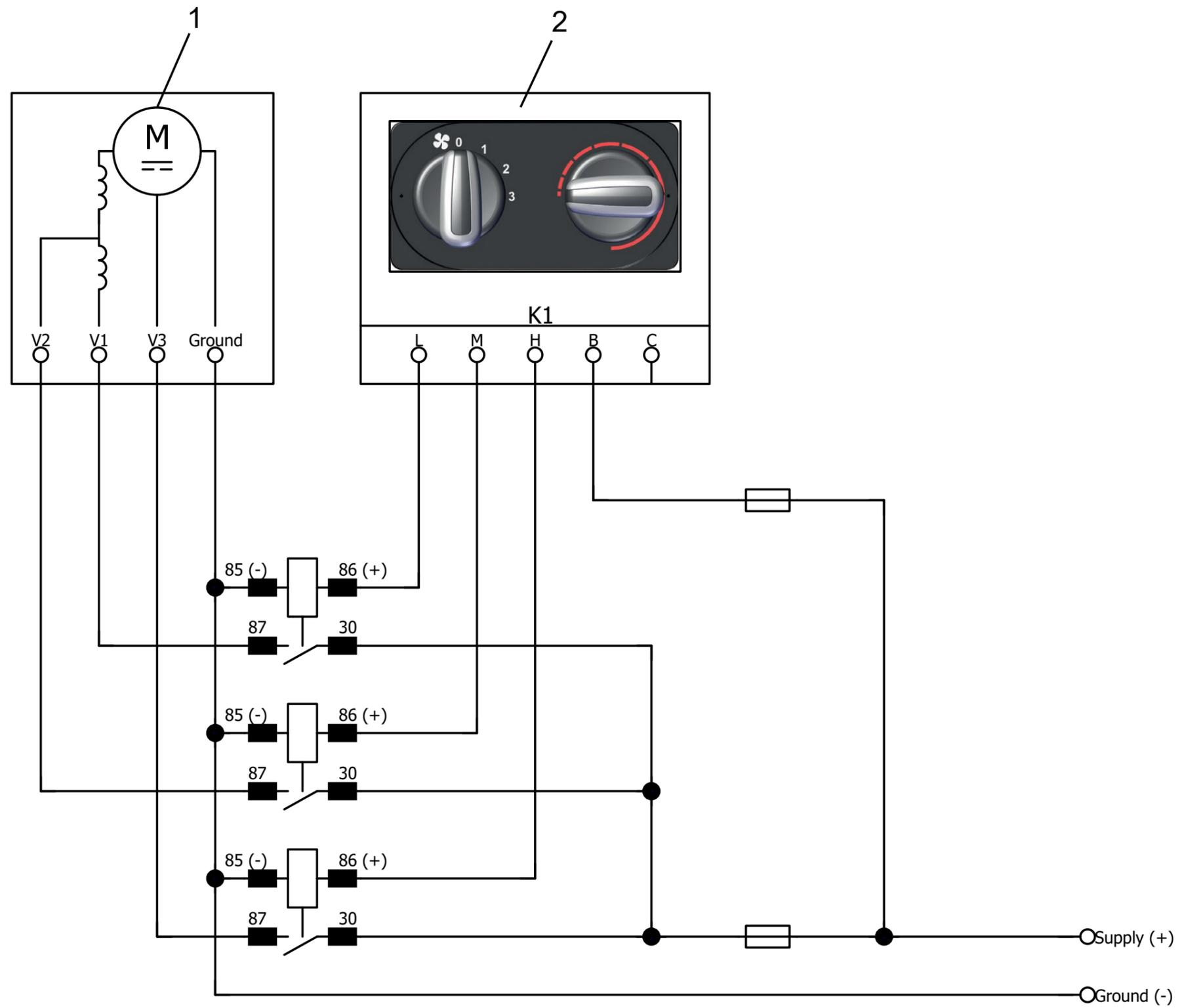
No	Description	No	Description	No	Description	No	Description
K1	4 position switch connection	1	Pressure switch	4	Thermostat	7	Compressor
K2	A/C switch connection	2	Fan	5	PCK3	8	Condenser
K3	Recirculation switch connection	3	Antifreeze probe	6	Recirculation flap motor		

8.11 Electrical schematic frame 8300.34030474



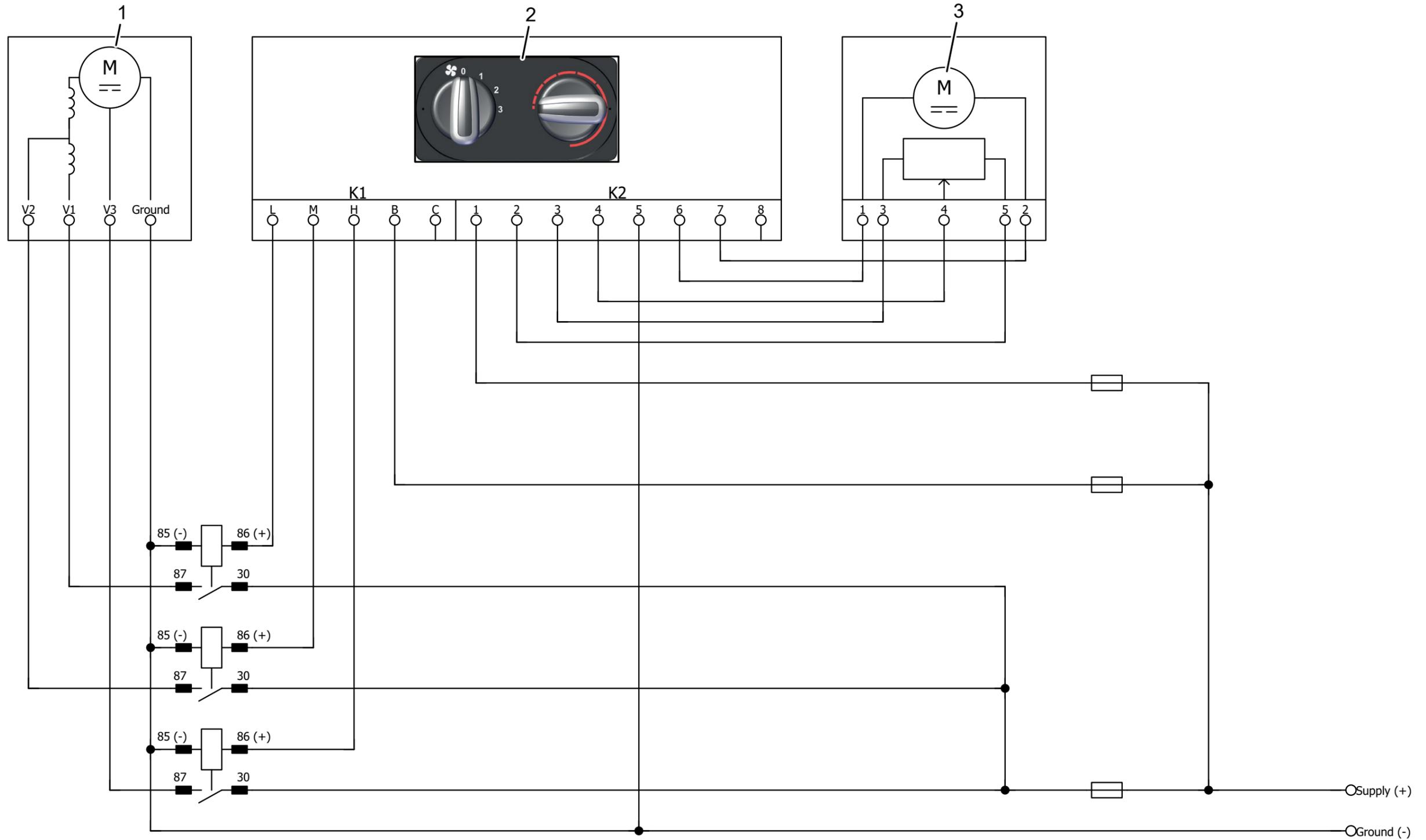
No	Description	No	Description	No	Description
K1	4 position switch connection	2	Fan	5	PCK3
K2	2 position switch connection	3	Antifreeze probe	6	Compressor
1	Pressure switch	4	Thermostat	7	Condenser

8.12 Electrical schematic frame 8300.34030471



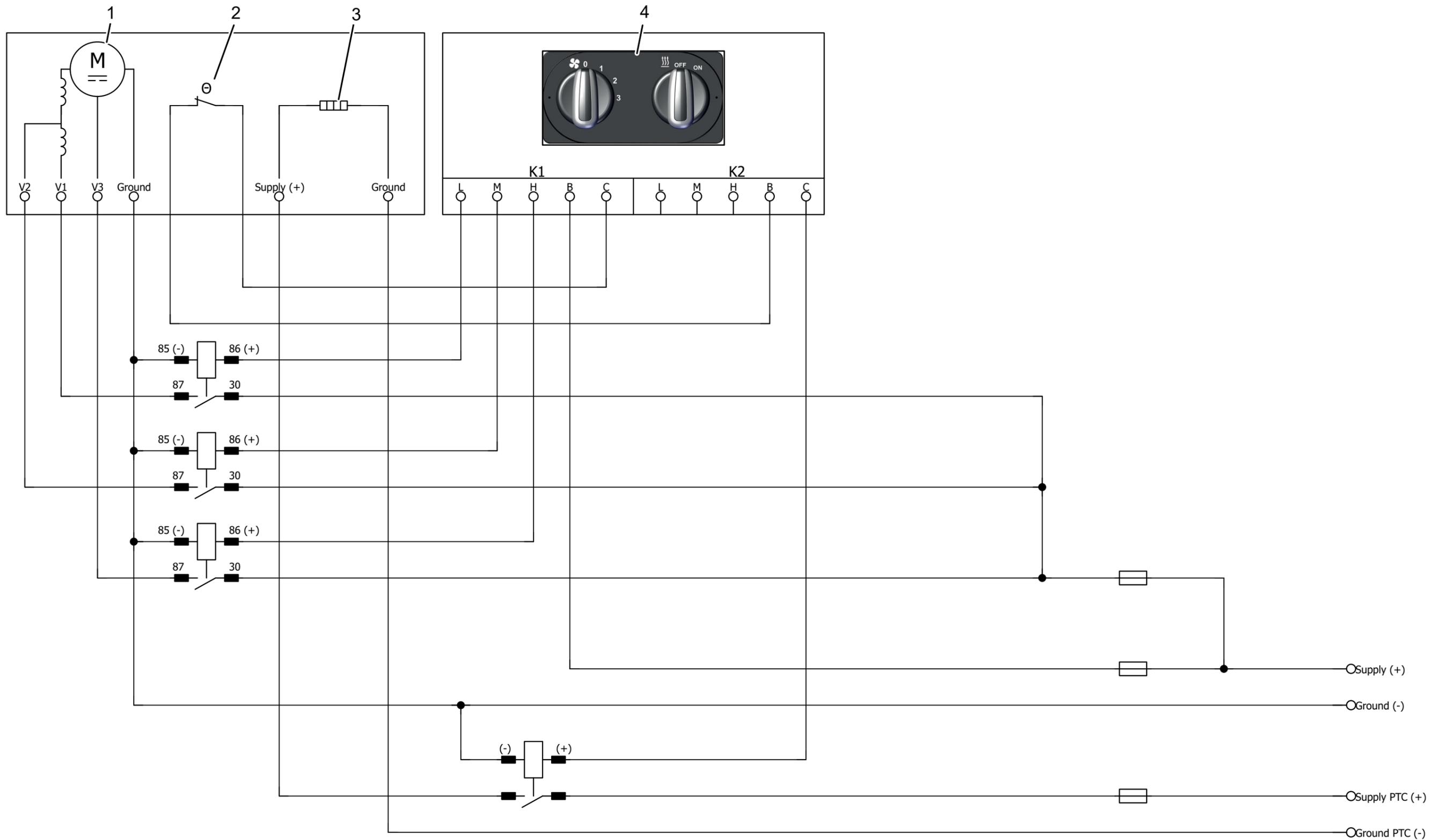
No	Description								
K1	4 position switch connection								
1	Fan								
2	PCK3								

8.13 Electrical schematic frame 8300.34030473



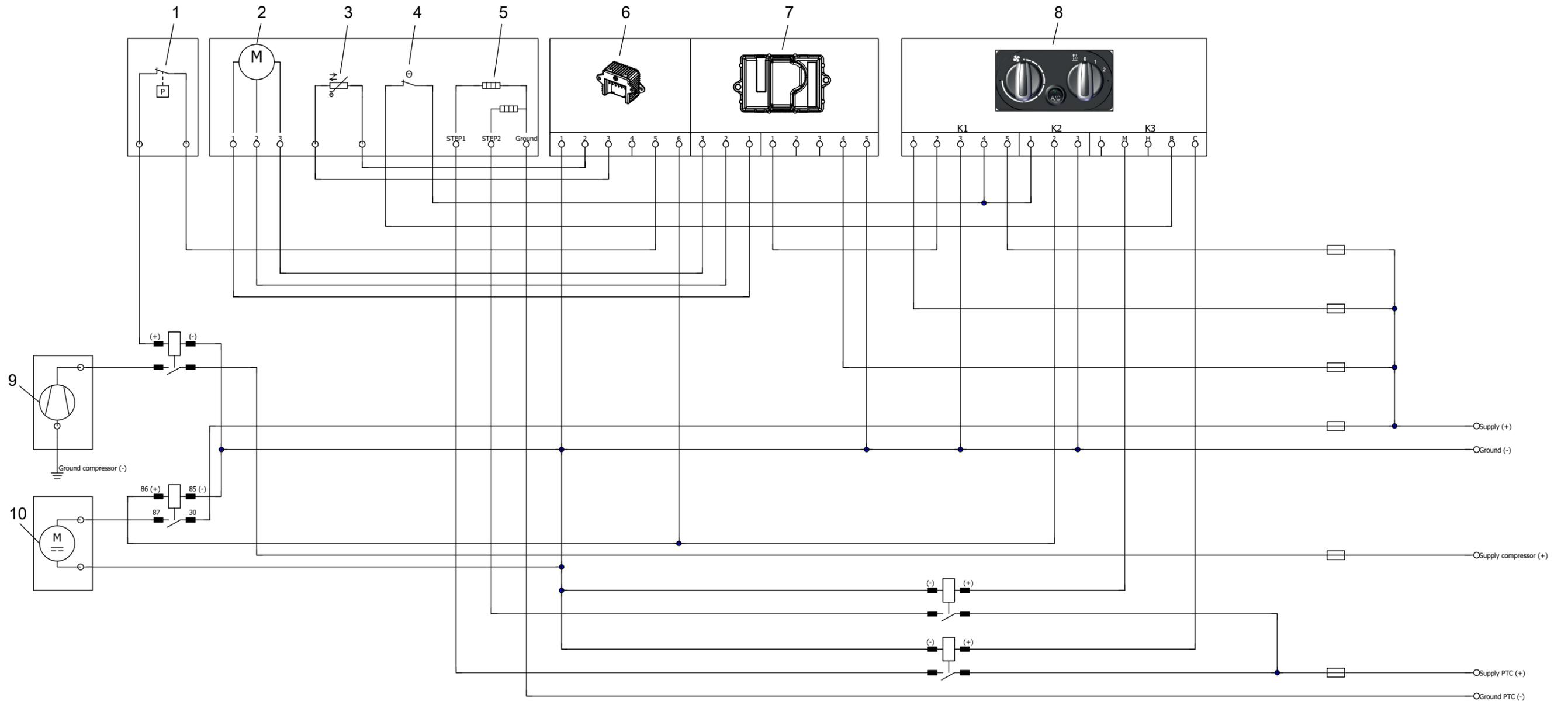
No	Description	No	Description
K1	4 position switch connection	2	PCK3
K2	Proportional valve connection	3	Proportional valve motor
1	Fan		

8.14 Electrical schematic frame 8300.34030625



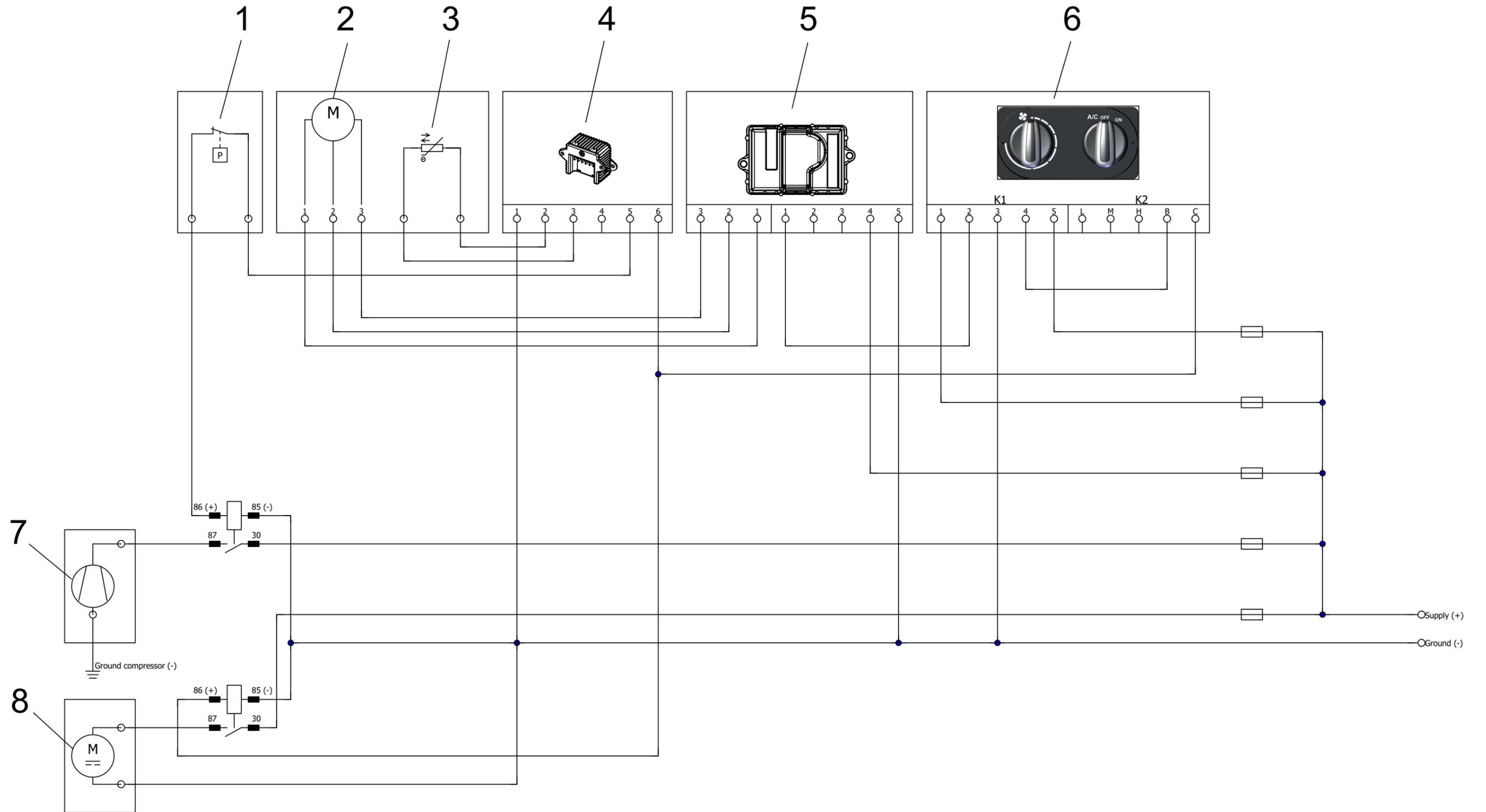
No	Description	No	Description
K1	4 position switch connection	2	Thermal switch
K2	2 position switch connection	3	Heating resistor
1	Fan	4	PCK3

8.15 Electrical schematic frame 8300.34030472



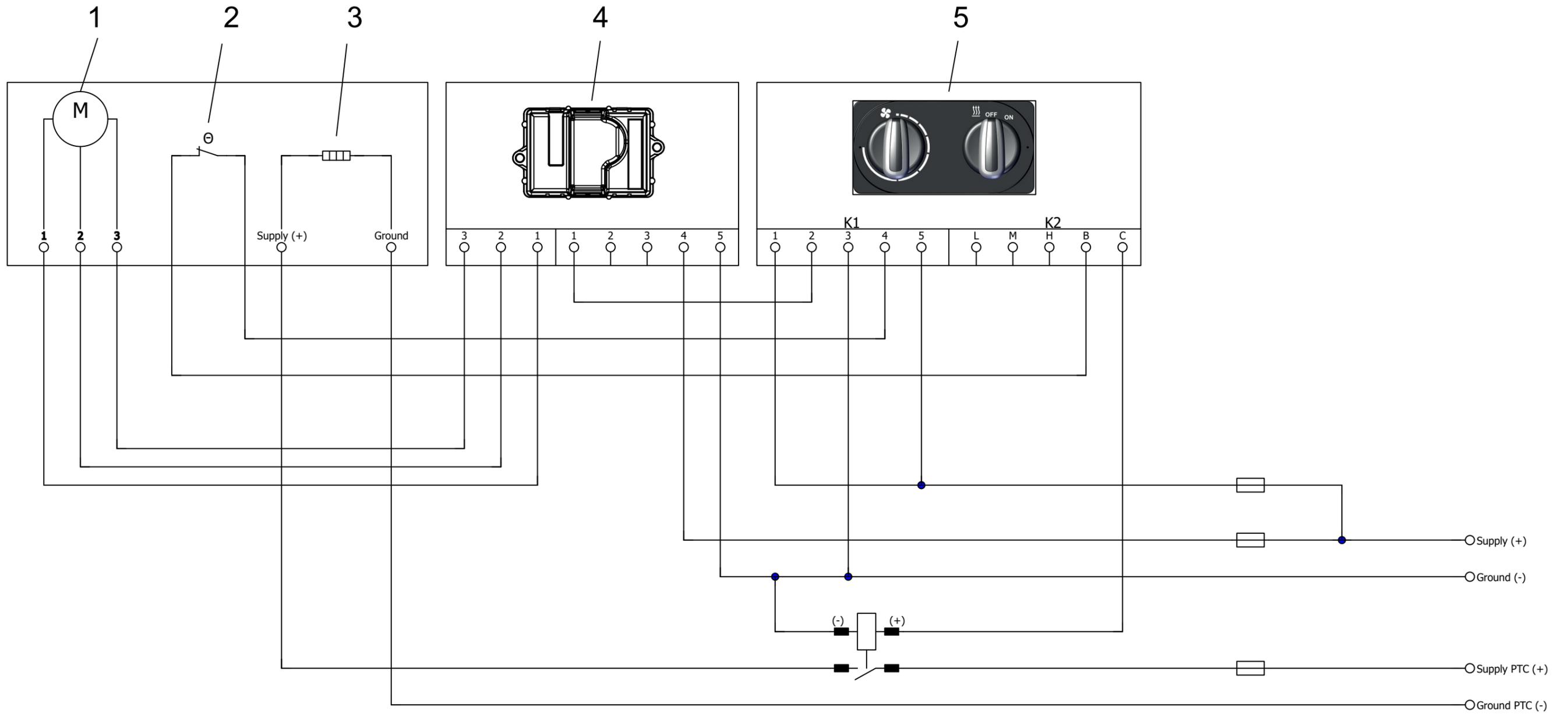
No	Description	No	Description	No	Description	No	Description	No	Description
K1	Potentiometer connection	1	Pressure switch	4	Thermal switch	7	Brushless PWM controller	10	Condenser
K2	A/C switch connection	2	Fan	5	Heating resistor	8	PCK3		
K3	3 position switch connection	3	Antifreeze probe	6	Thermostat	9	Compressor		

8.16 Electrical schematic frame 8300.34030480



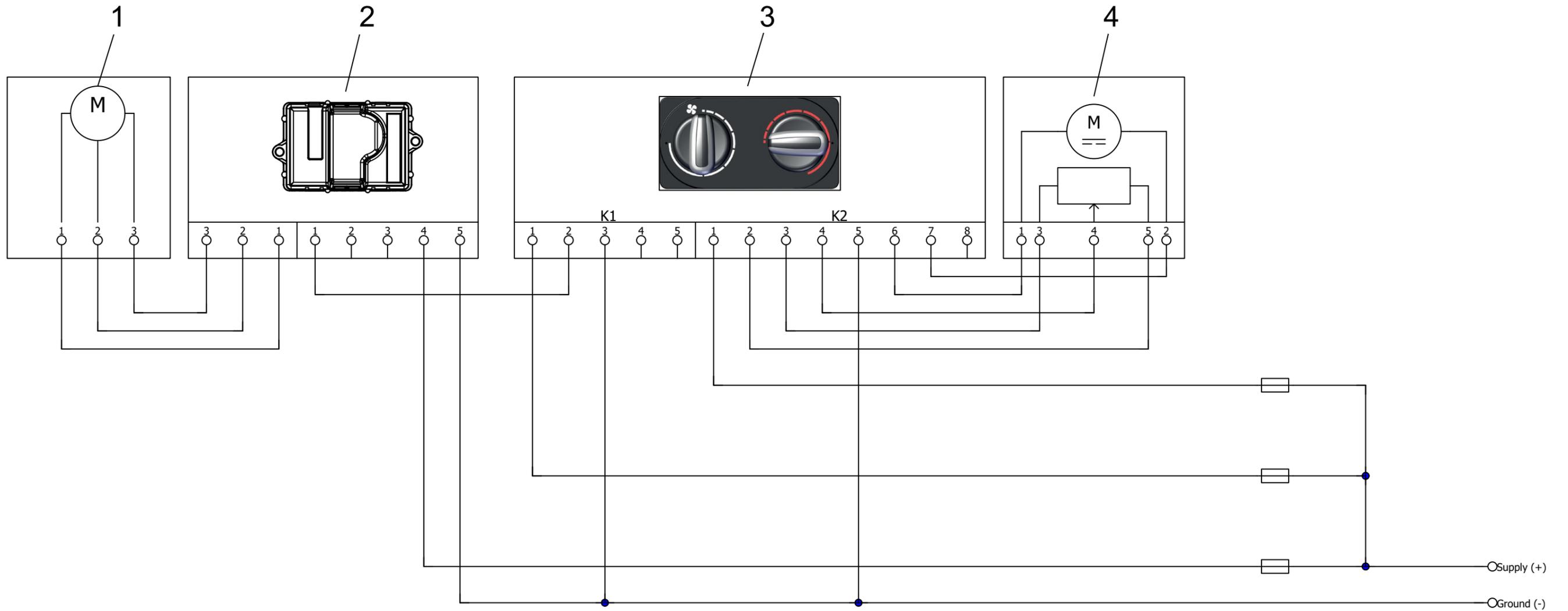
No	Description	No	Description	No	Description	No	Description
K1	Potentiometer connection	2	Fan	5	Brushless PWM controller	8	Condenser
K2	2 position switch connection	3	Antifreeze probe	6	PCK3		
1	Pressure switch	4	Thermostat	7	Compressor		

8.17 Electrical schematic frame 8300.34030636



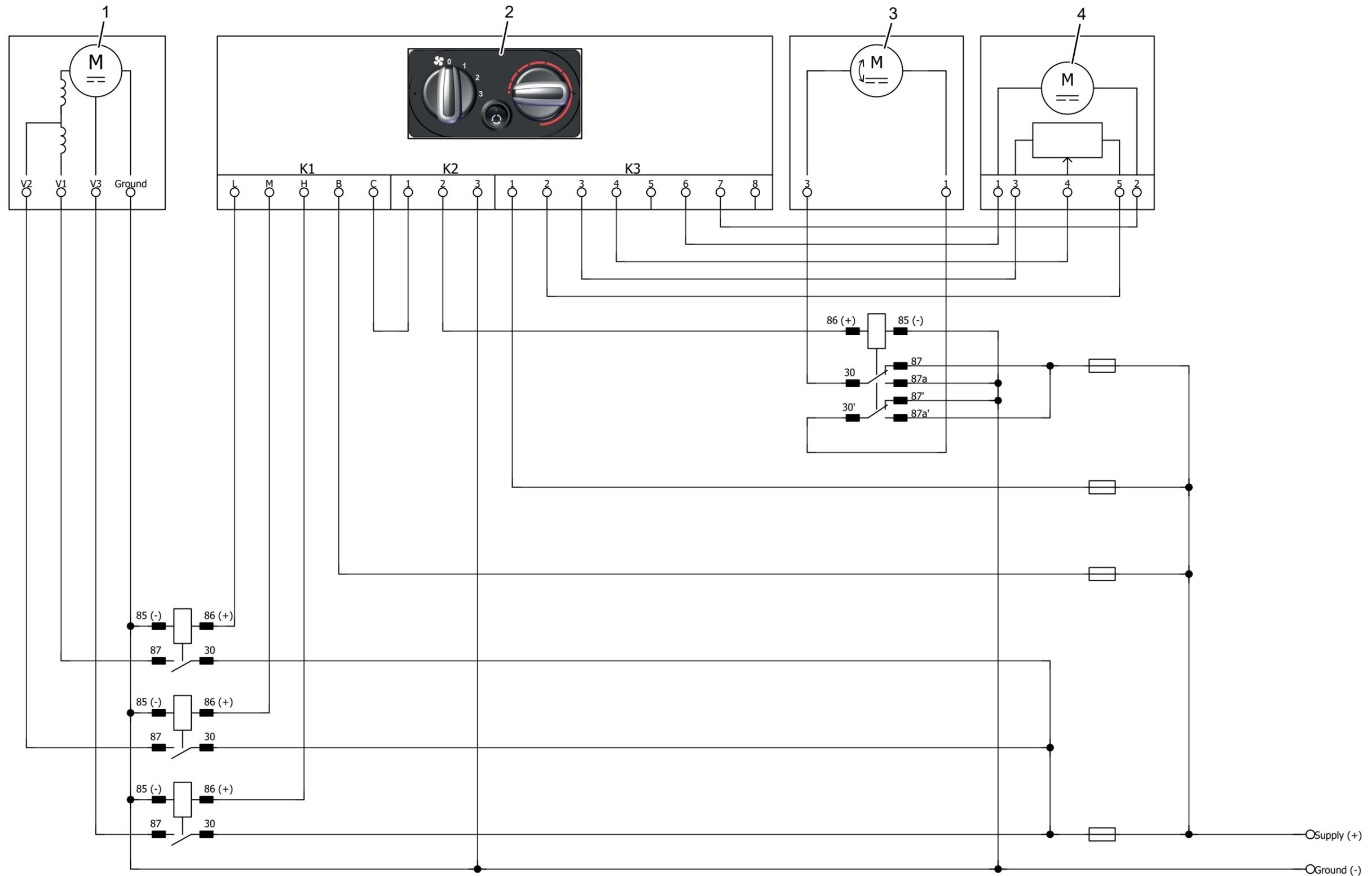
No	Description	No	Description	No	Description
K1	Potentiometer connection	2	Thermal switch	5	PCK3
K2	2 position switch connection	3	Heating resistor		
1	Fan	4	Brushless PWM controller		

8.18 Electrical schematic frame 8300.34030479



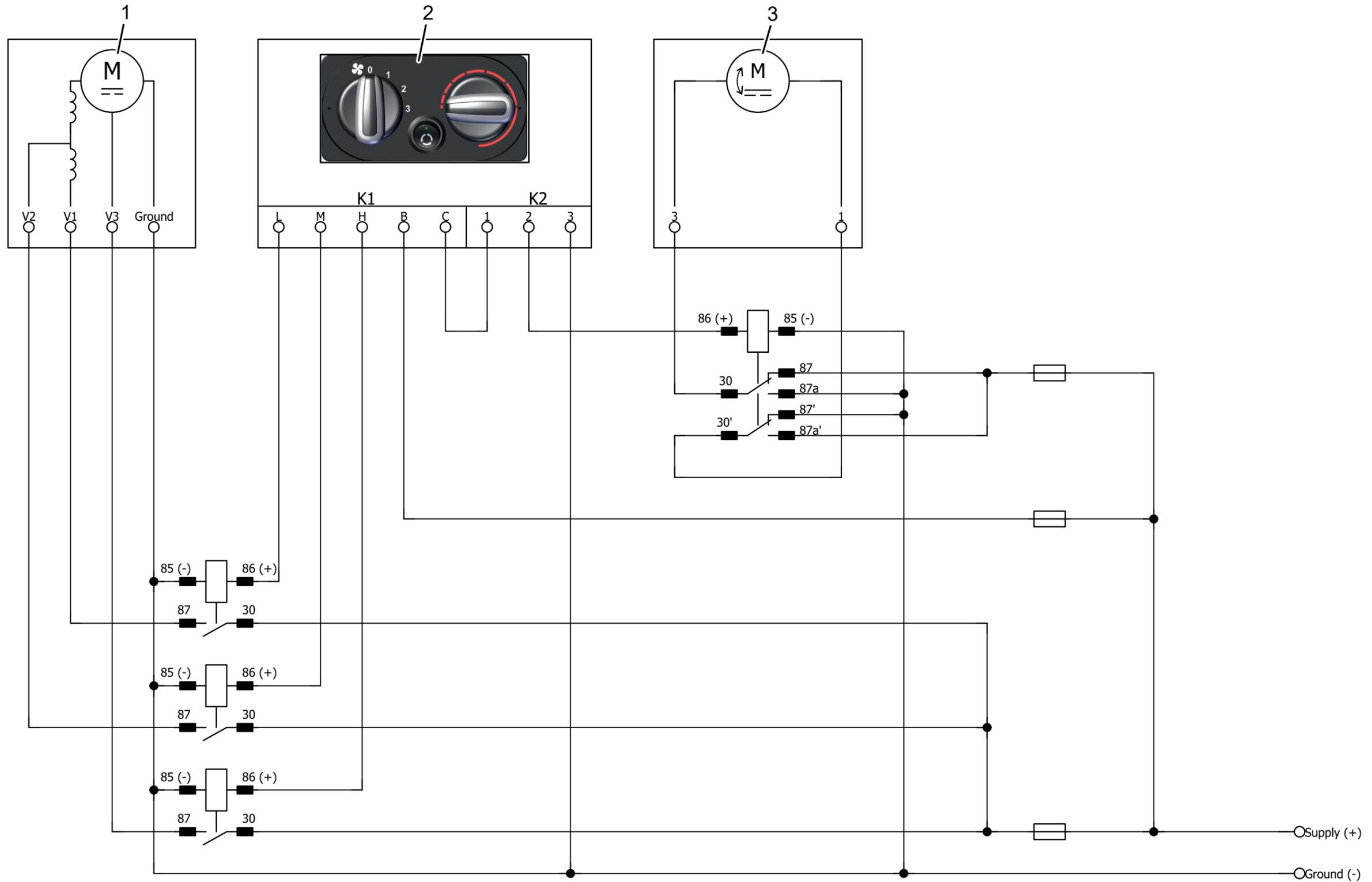
No	Description	No	Description
K1	Potentiometer connection	2	Brushless PWM controller
K2	Proportional valve connection	3	PCK3
1	Fan	4	Proportional valve motor

8.19 Electrical schematic frame 8300.34030452



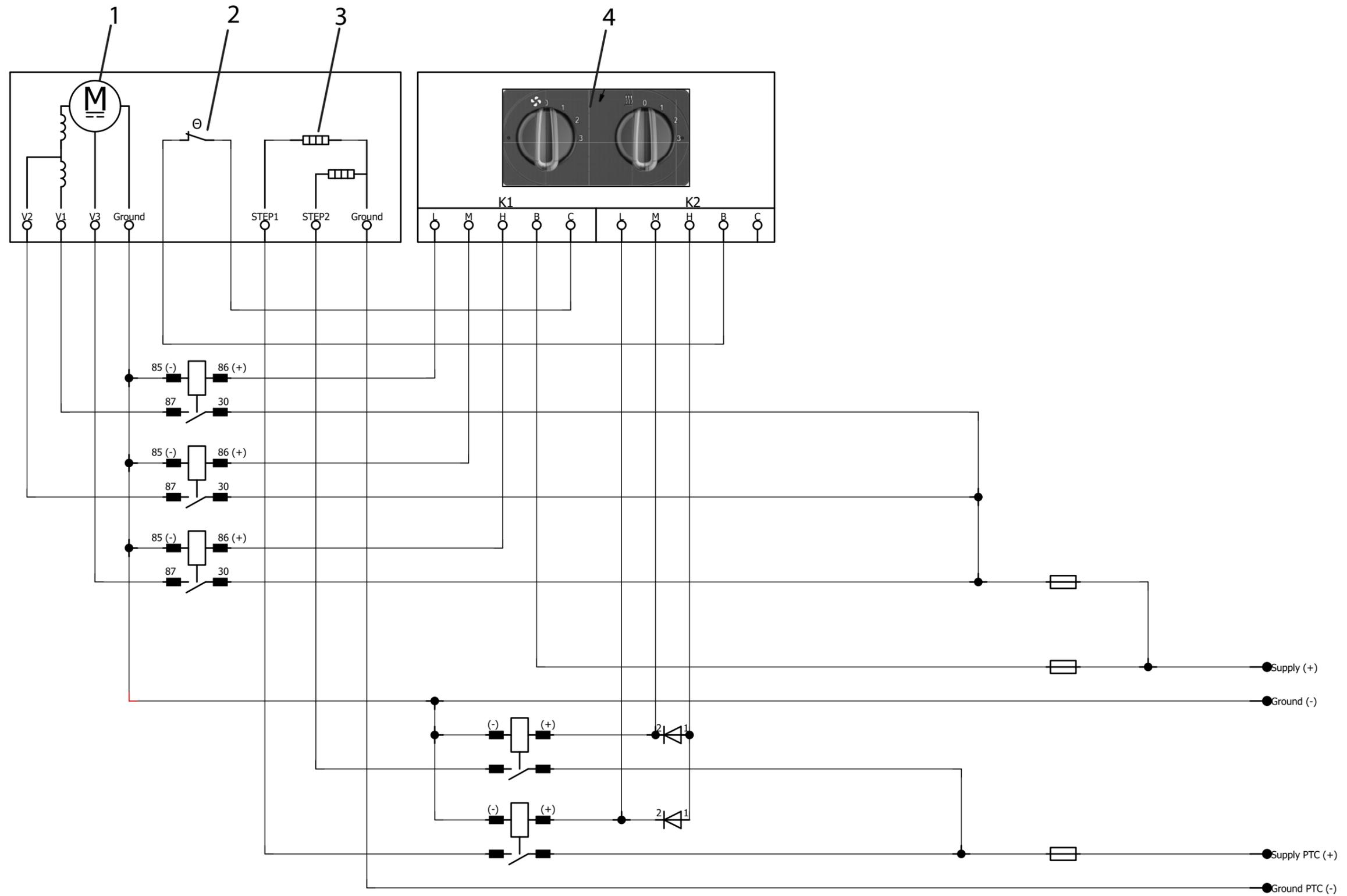
No	Description	No	Description	No	Description
K1	4 position switch connection	1	Fan	4	Proportional valve motor
K2	Recirculation switch	2	PCK3		
K3	Proportional valve connection	3	Recirculation flap motor		

8.20 Electrical schematic frame 8300.34030461



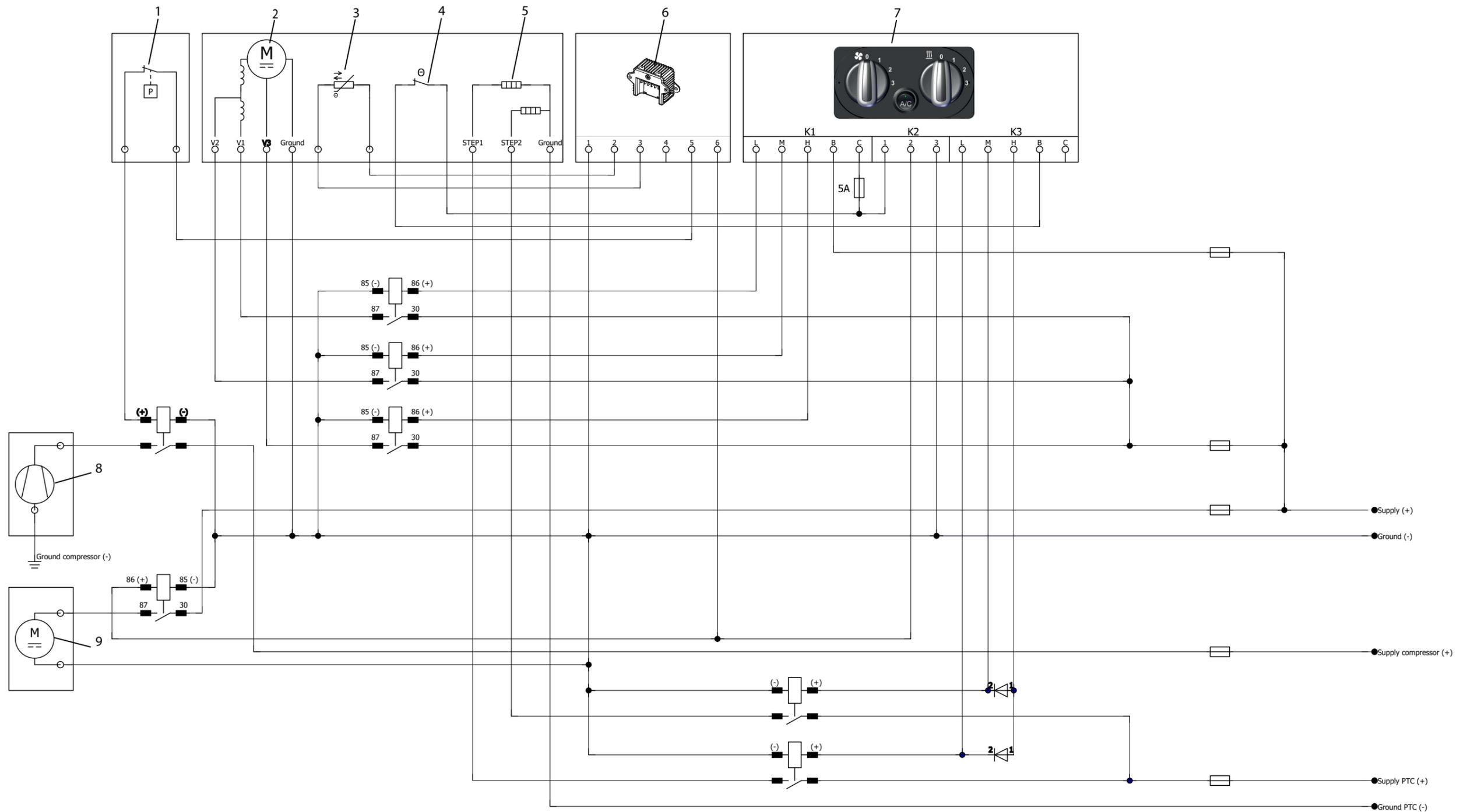
No	Description	No	Description
K1	4 position switch connection	2	PCK3
K2	Recirculation switch	3	Recirculation flap motor
1	Fan		

8.21 Electrical schematic frame 8300.34030475



No	Description	No	Description
K1	4 position switch connection	2	Thermal switch
K2	3 position switch connection	3	Heating resistor
1	Fan	4	PCK3

8.22 Electrical schematic frame 8300.34030477



No	Description	No	Description	No	Description	No	Description
K1	4 position switch connection	1	Pressure switch	4	Thermal switch	7	PCK3
K2	A/C switch connection	2	Fan	5	Heating resistor	8	Compressor
K3	3 position switch connection	3	Antifreeze probe	6	Thermostat	9	Condenser

9 Maintenance

Maintenance free.

10 CE - Declaration of conformity & Declaration of incorporation of a quasi-machinePusignan, **24/03/22**

REFERENCE 8300.40130049 OD / EN / 08.2021

CE declaration of conformity**The products of the family** PCK 3 xx TVP xx / PCK 3 HYDRONIC / KIT PCK 3 HYDRONIC

- **are compliant with the directive** CEM 2014/30/UE :
ISO 13766, EN 50498, EN 13309, EN 14982
EN 61000-6-2 / EN 61000-4-3

The products are delivered with A CE marking for this purpose.**Technical Manager:** Stéphanie LE FAUCHEUR - **Engineering manager****BONTEMPS Olivier**
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SIRET 443 021 522 00018
APE 2932Z No intracommunautaire FR66 443 021 522
RCS LYON 443 021 522

11 UKCA - Declaration of conformity & Declaration of incorporation of a quasi-machine



Pusignan, 06/04/22

PART NUMBER 8300 40135052 0B / EN / 04.2022

UKCA declaration of conformity

The products of the family PCK 3 xx TVP xx / PCK 3 HYDRONIC / KIT PCK 3 HYDRONIC

- **are compliant with the directive** "Electromagnetic Compatibility Regulations 2016" :
ISO 13766, EN 50498, EN 13309, EN 14982
EN 61000-6-2 / EN 61000-4-3

The products are delivered with A UKCA marking for this purpose.

Technical Manager: Stéphanie LE FAUCHEUR - **Engineering manager**

BONTEMPS Olivier
General Manager

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