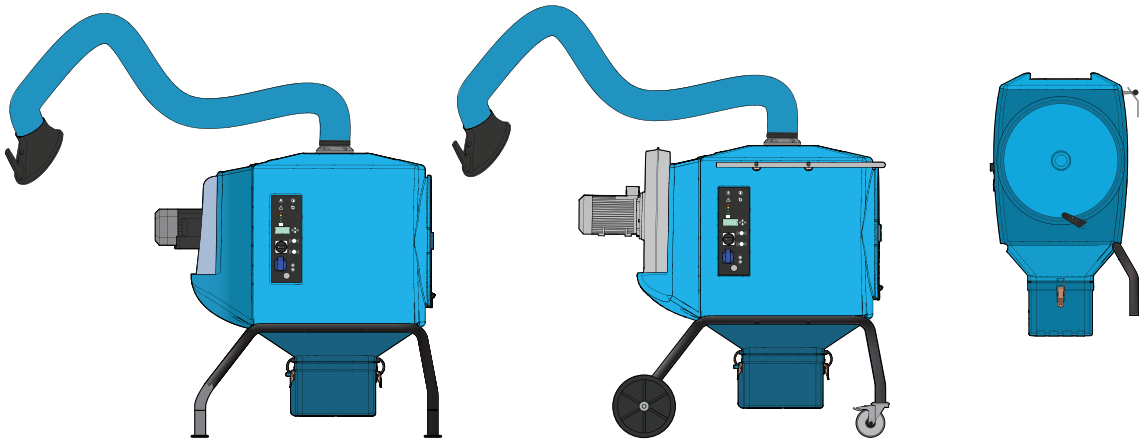
Nederman

Installation and service manual

Mobile Fume and Dust Extractors

FilterBox



Original installation and service manual

EN INSTALLATION AND SERVICE MANUAL

2020-05-06

144897 (04)

Trace back information:
Workspace Main version a6
Checked in 2020-05-06
Skribenta version 5.3.053

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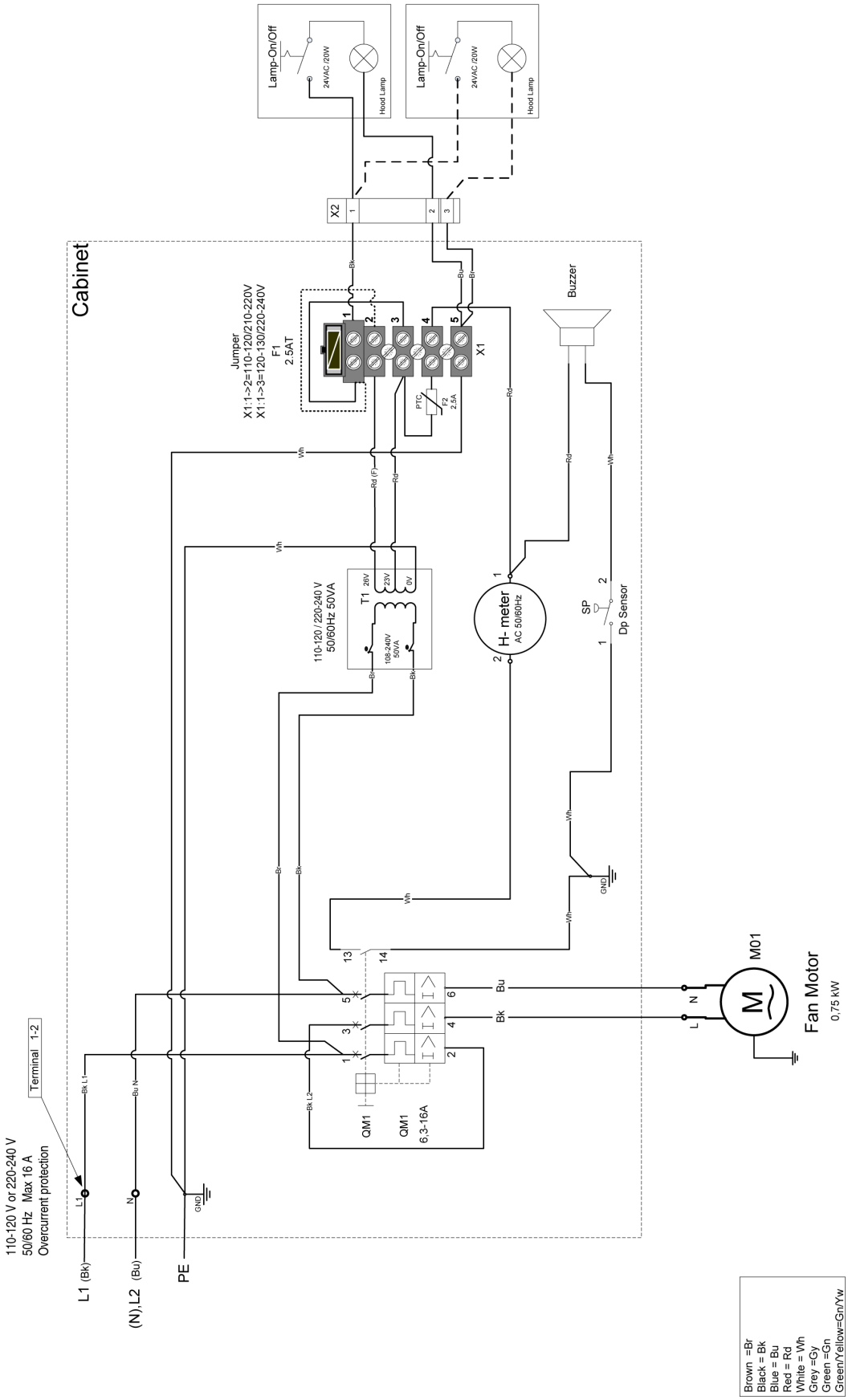

FilterBox Basic III, 1Phase 110-120/220-240V IEC

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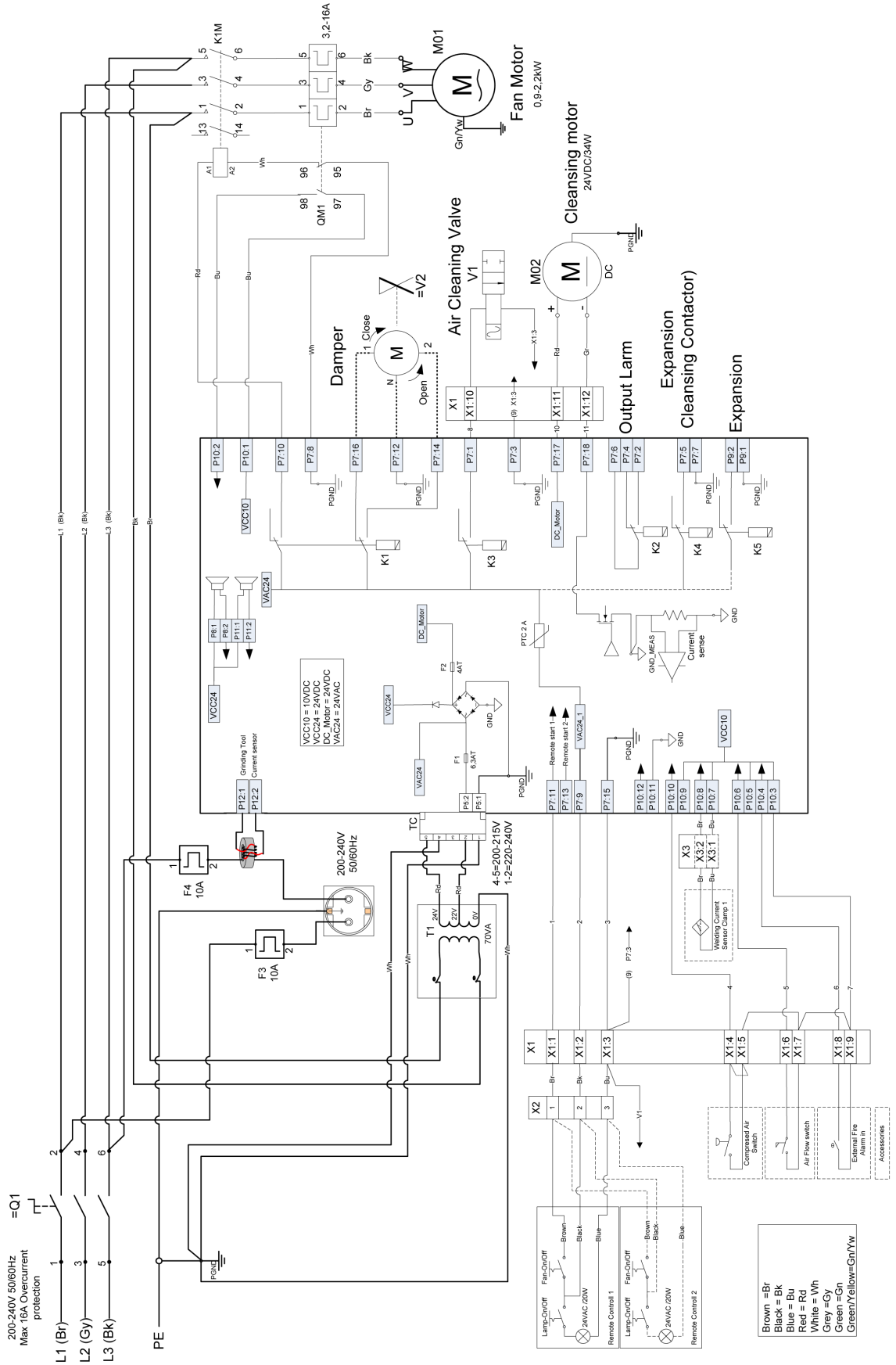

FilterBox Basic III, 3Phase 200-240V IEC

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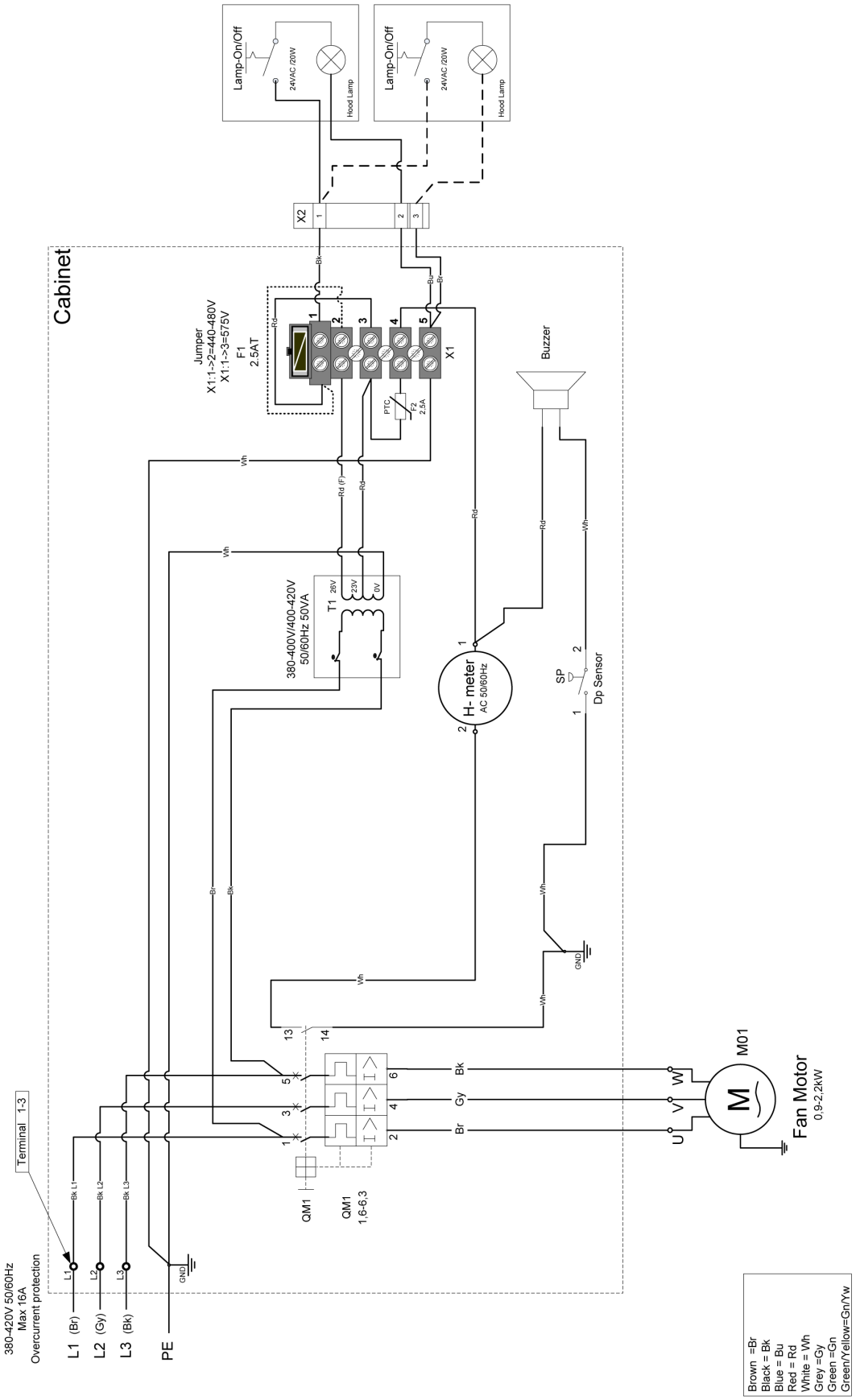

FilterBox Basic III, 3Phase 380-420V IEC

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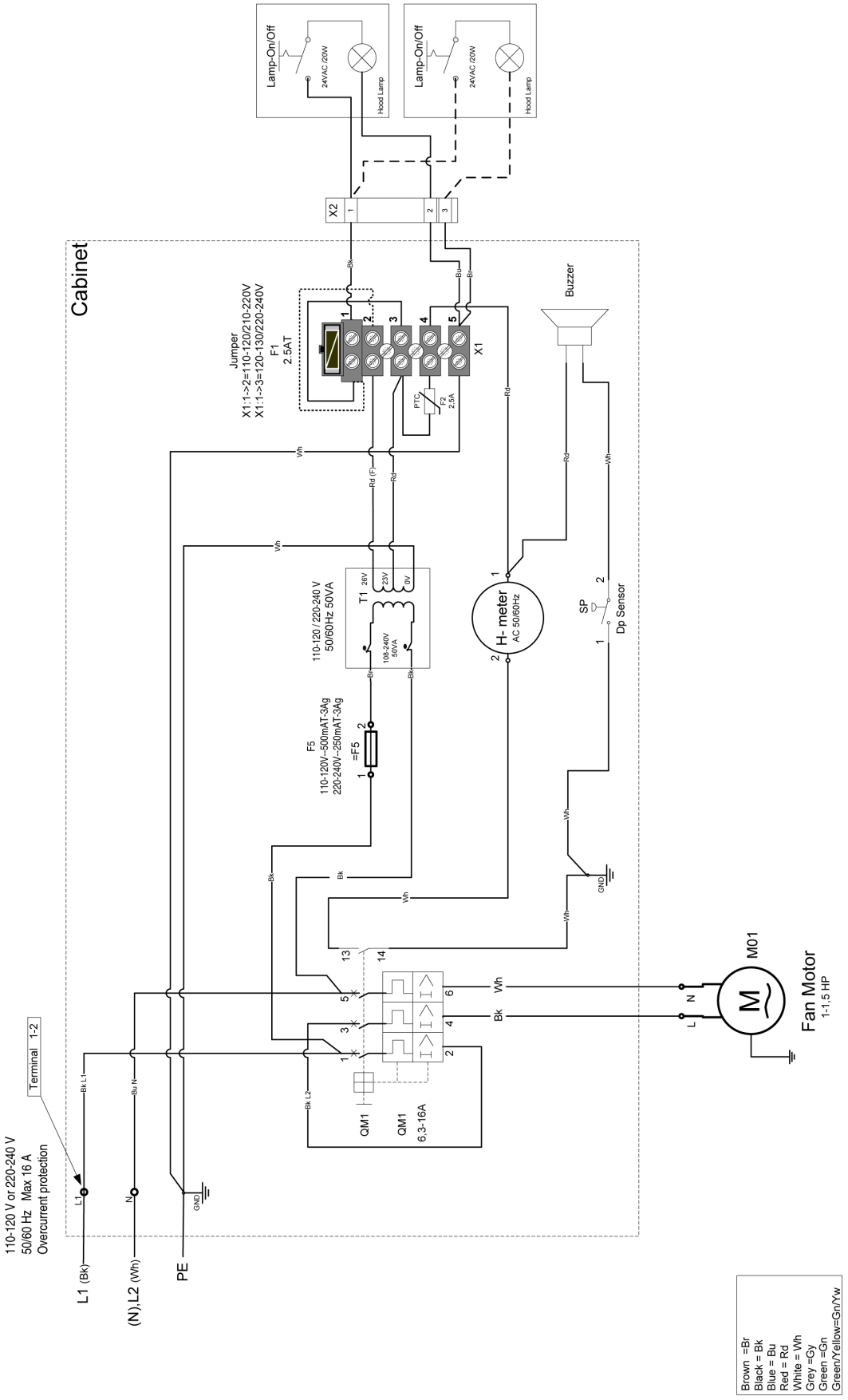

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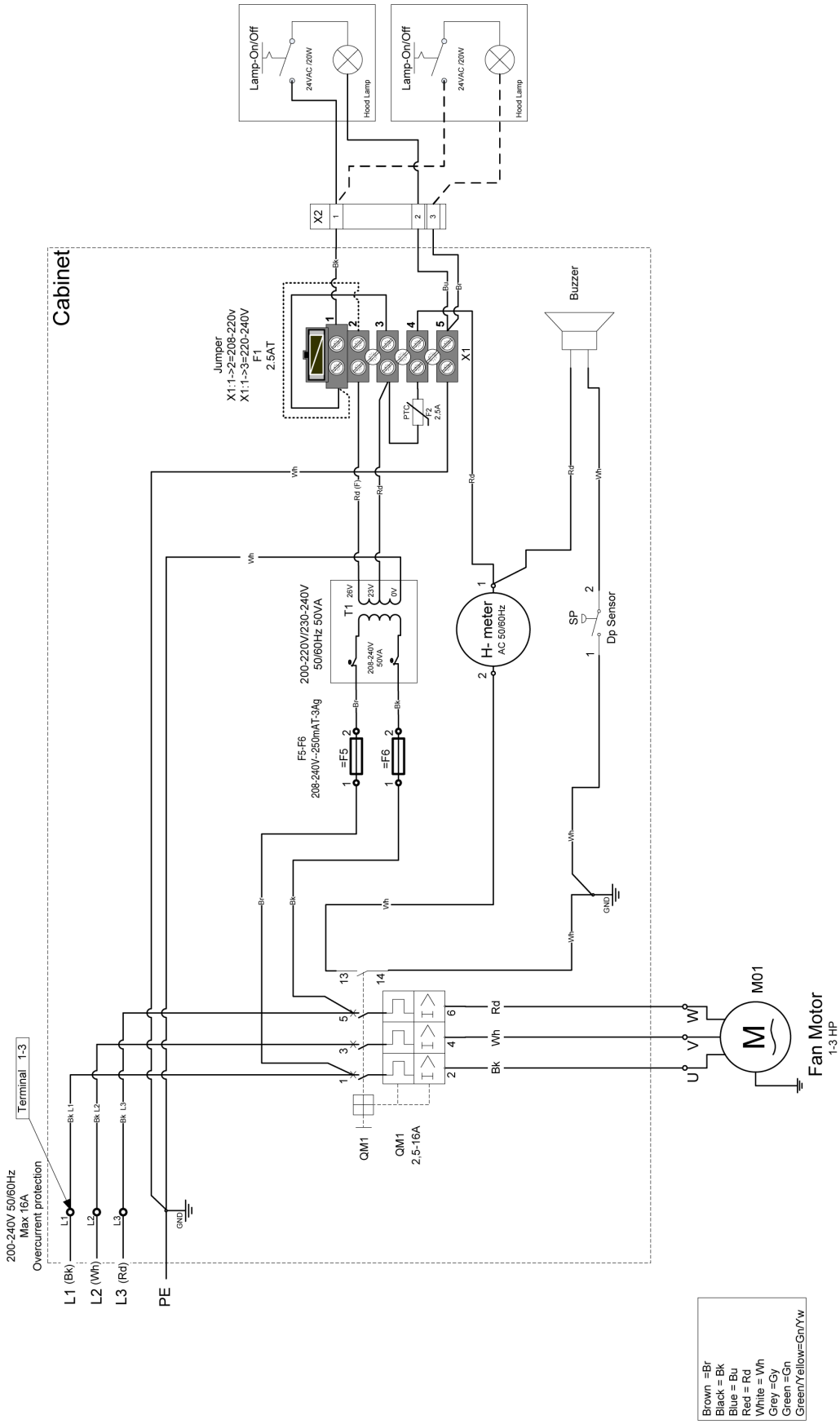

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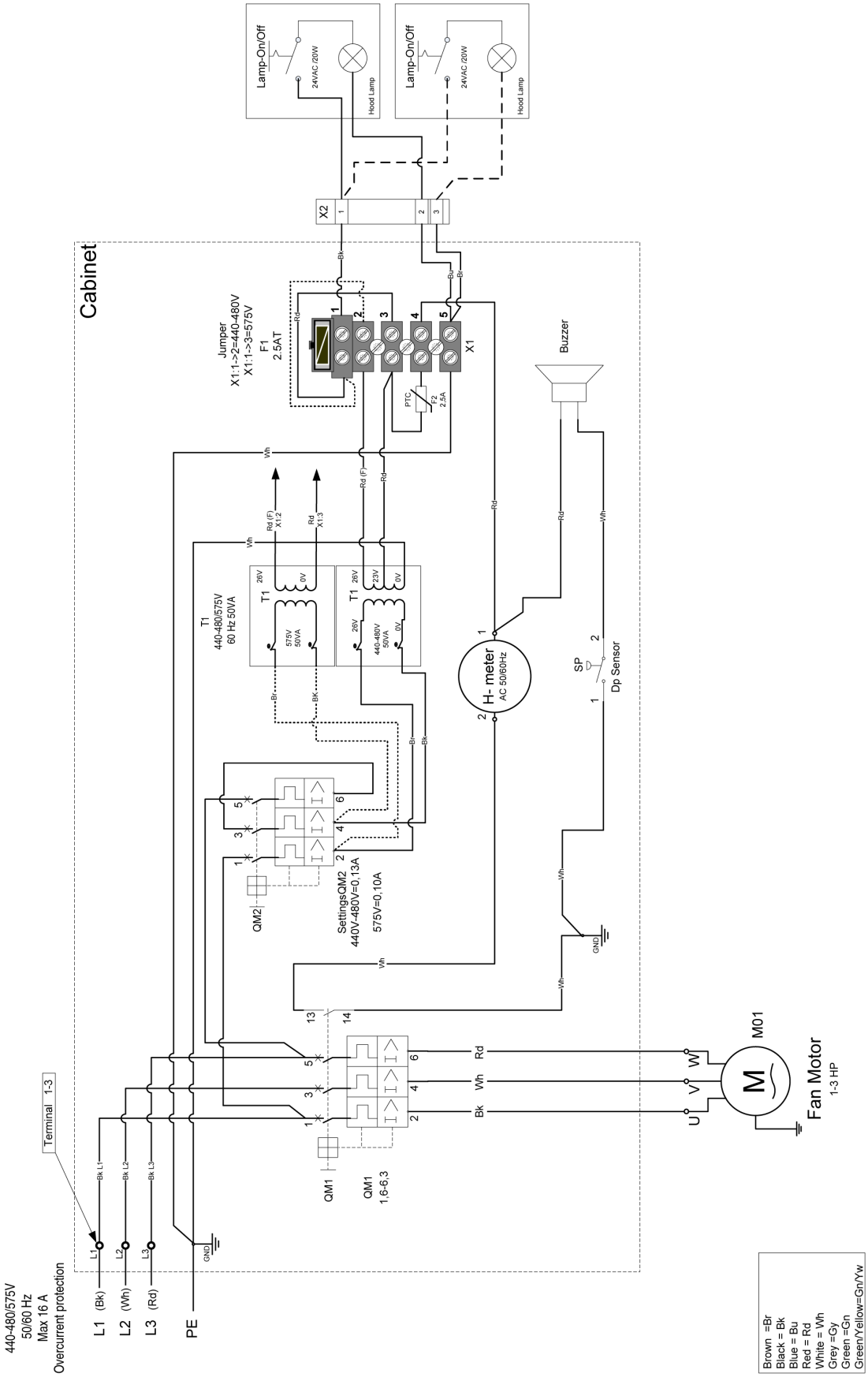

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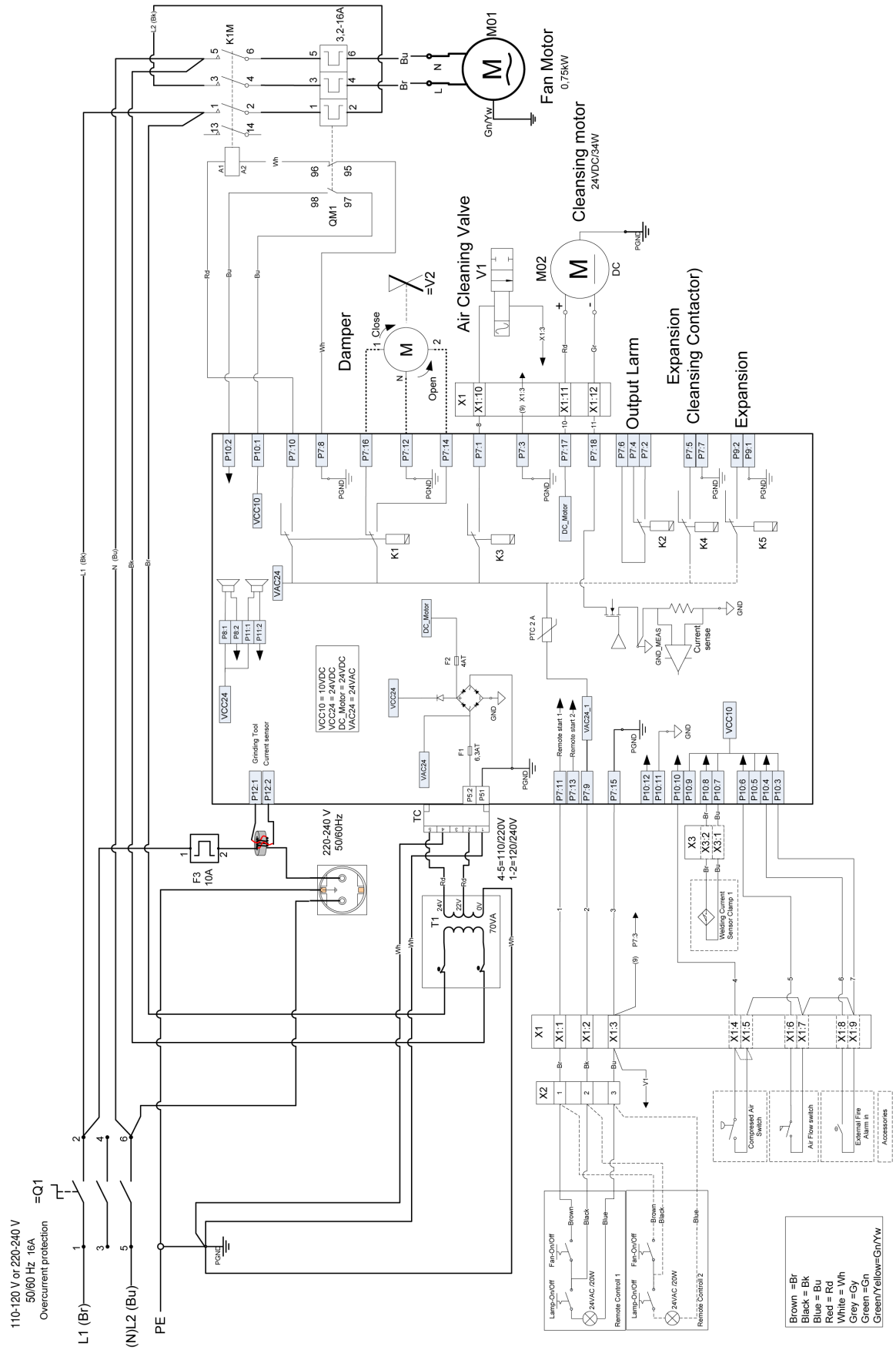

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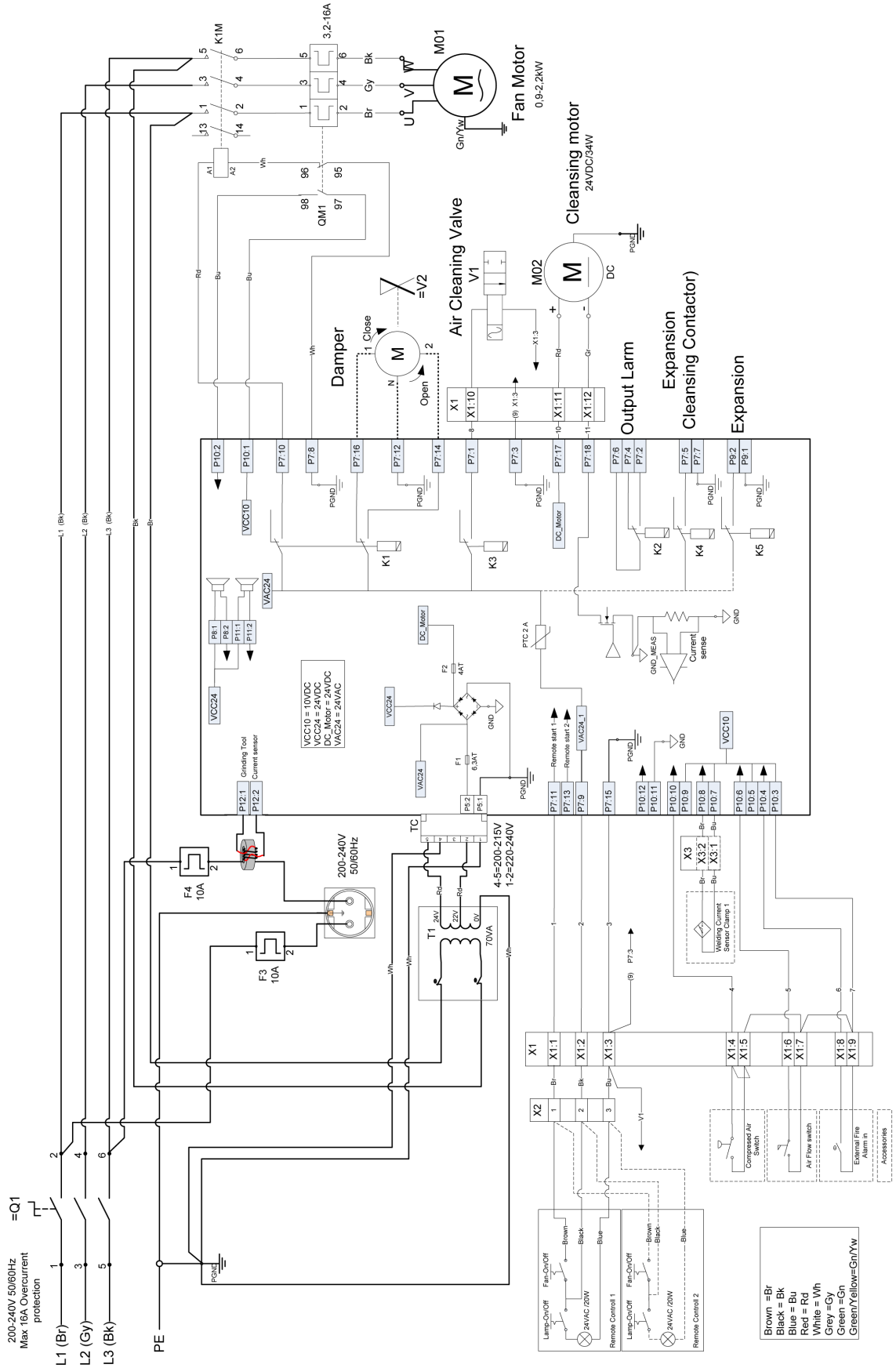

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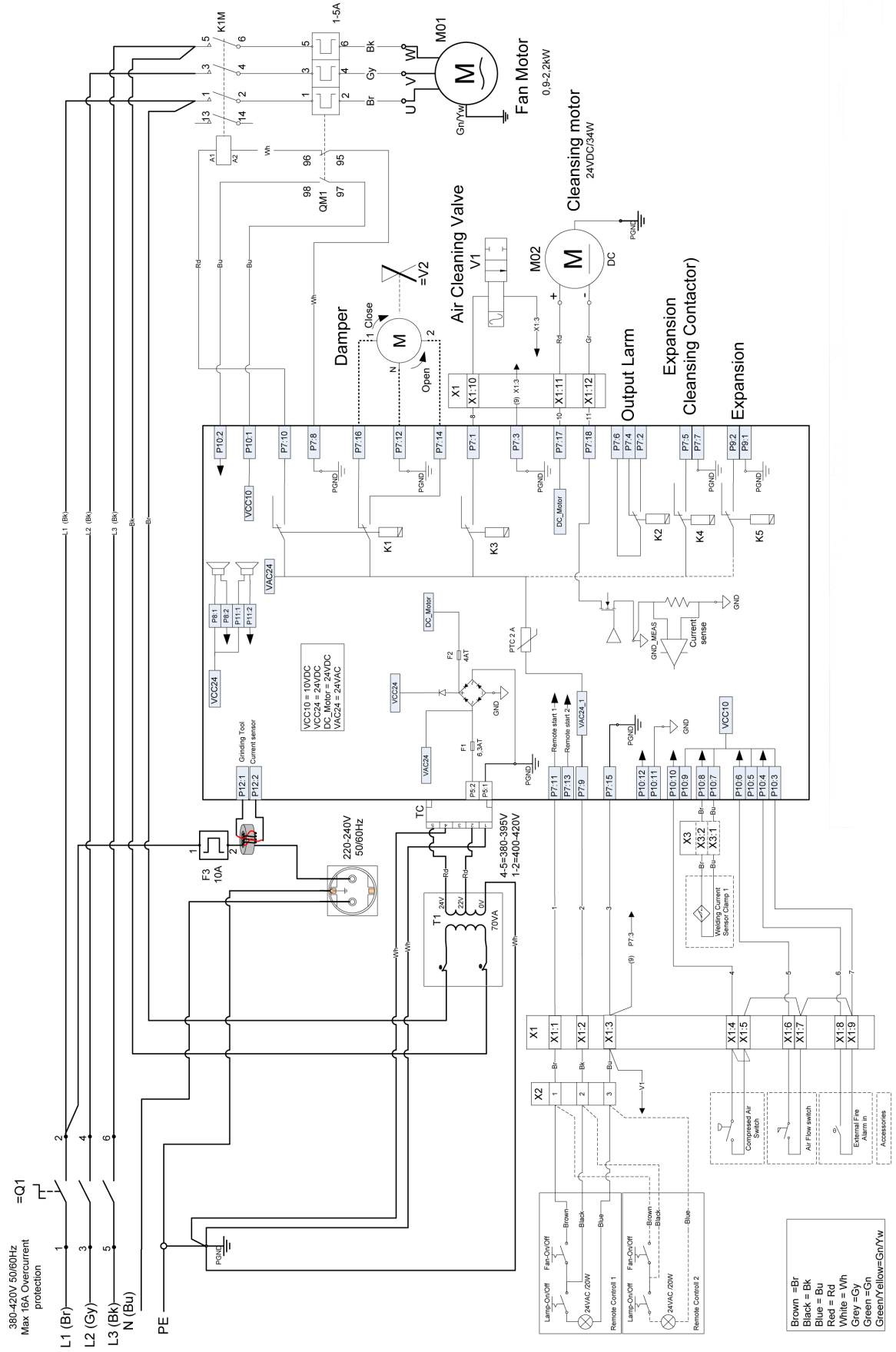

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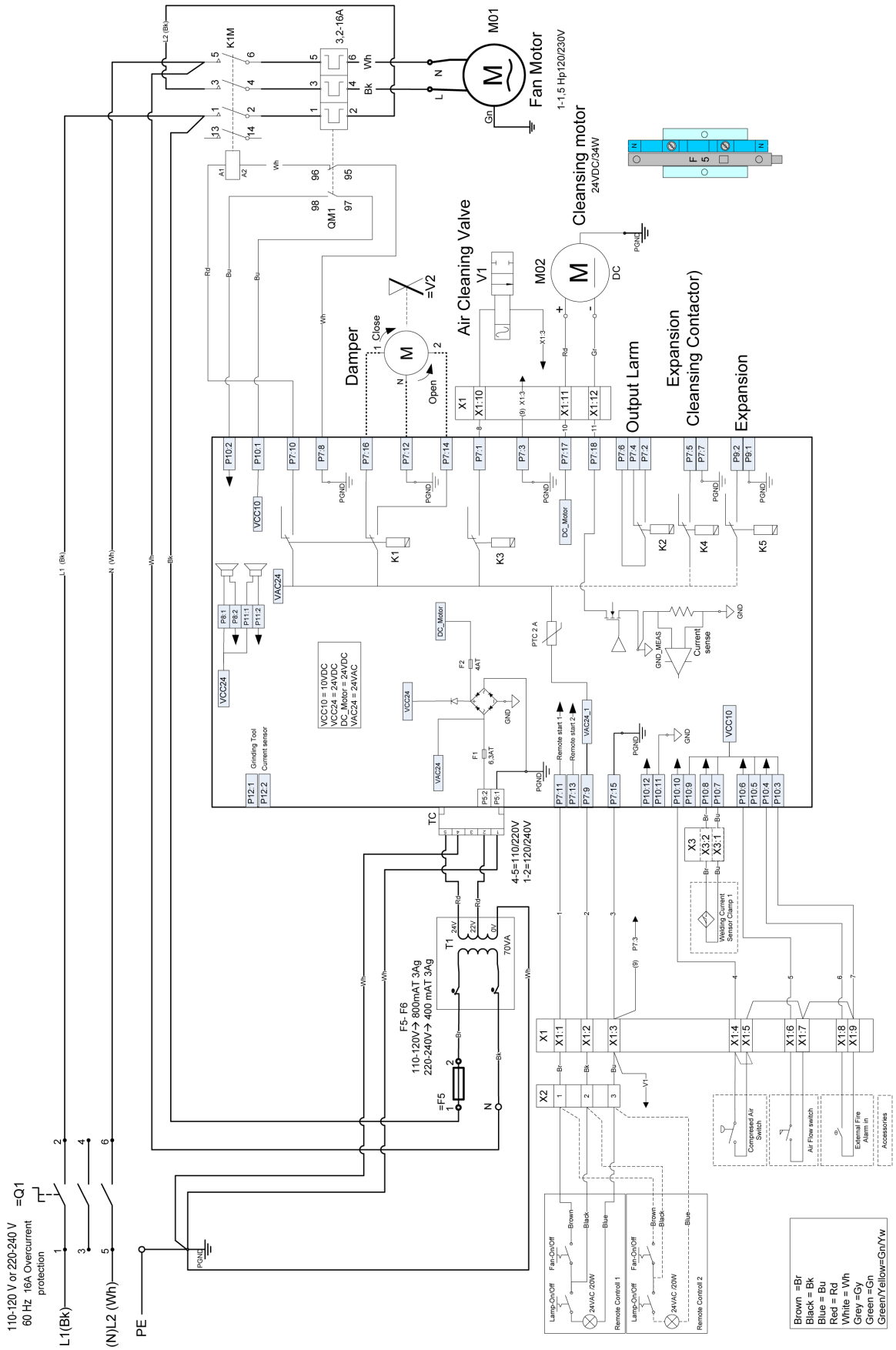

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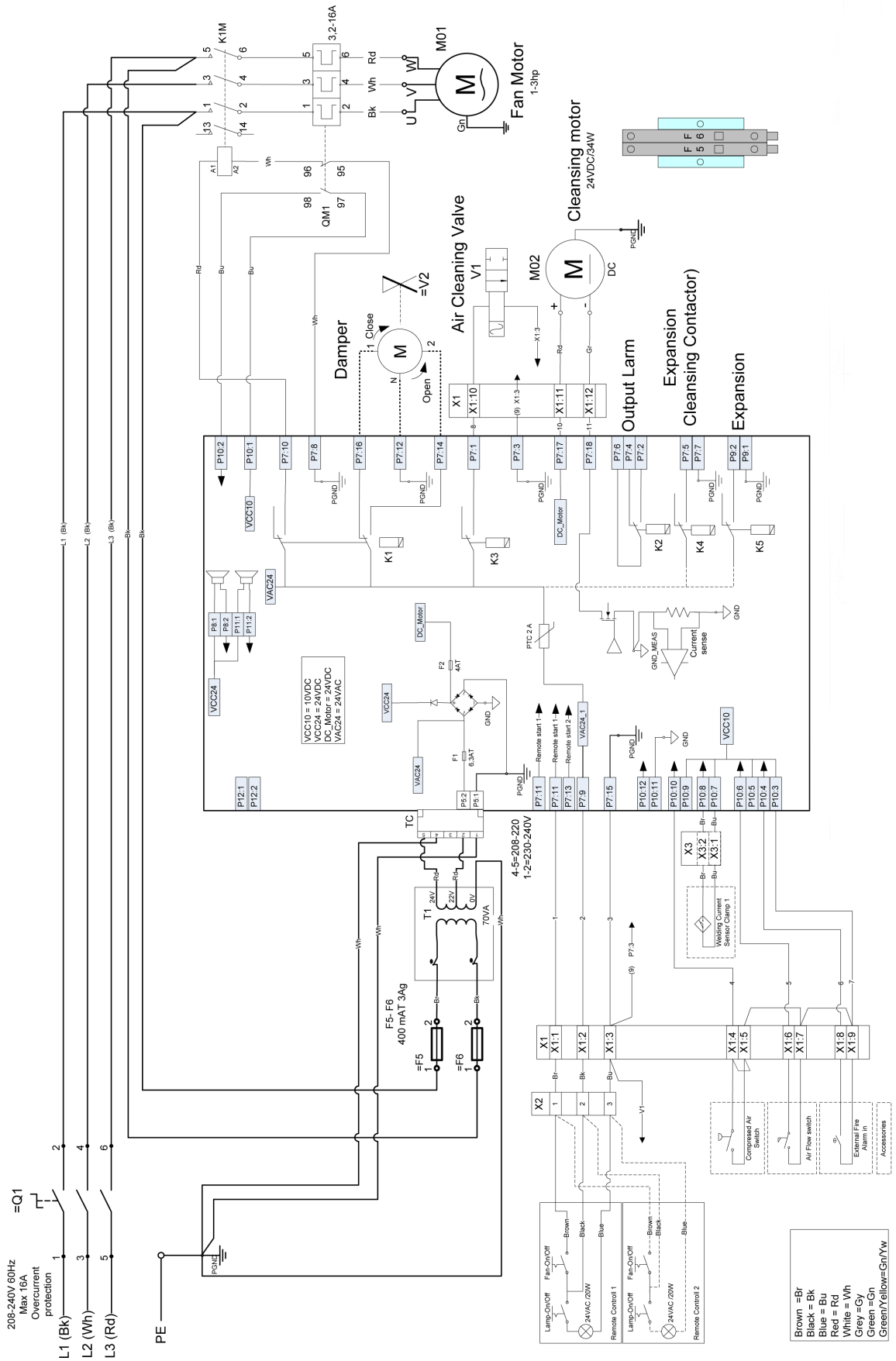

FilterBox Advanced III, 3Phase 208-240V UL-CSA

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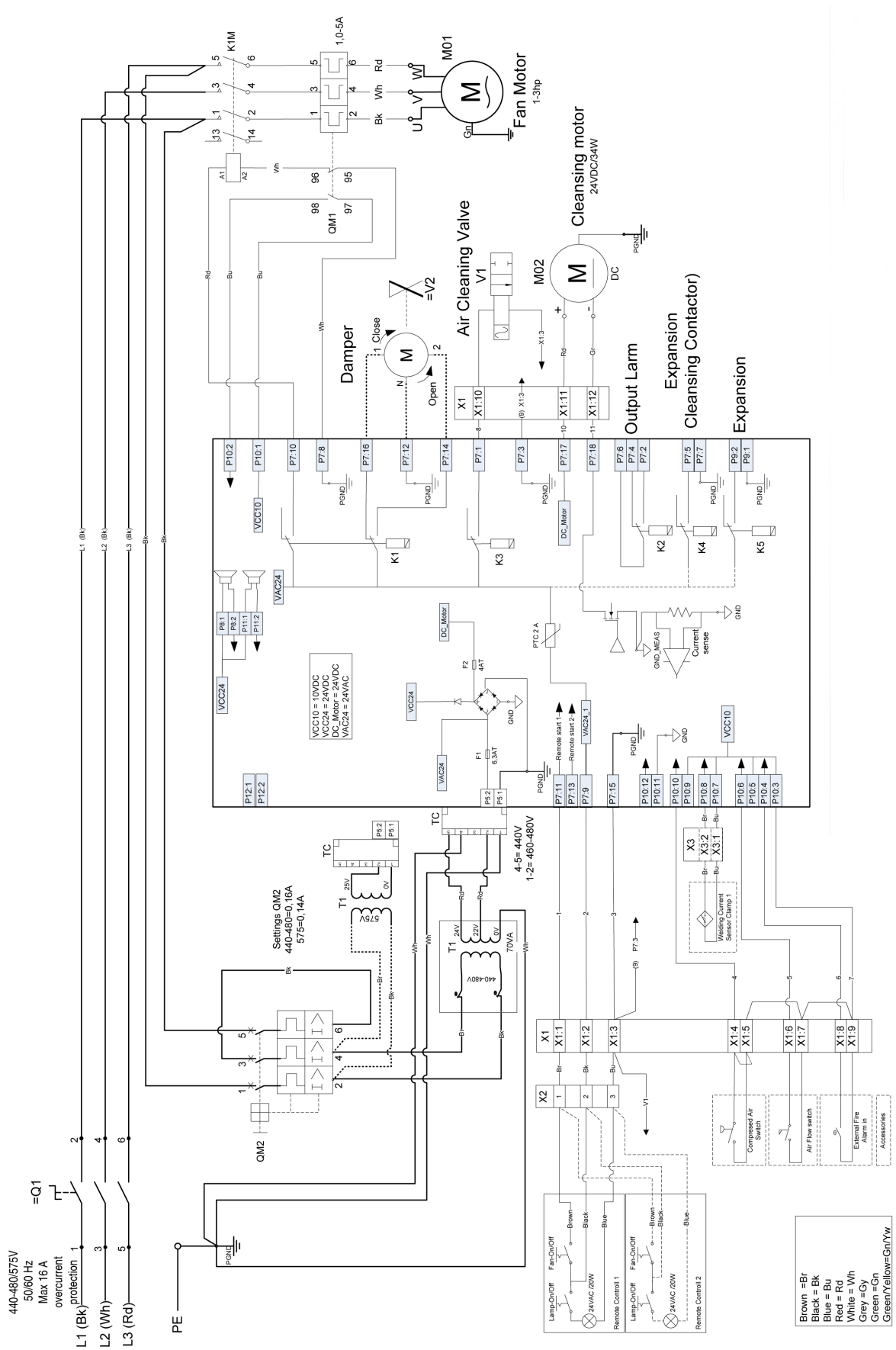

FilterBox Advanced III, 3Phase 440-480/575V UL-CSA

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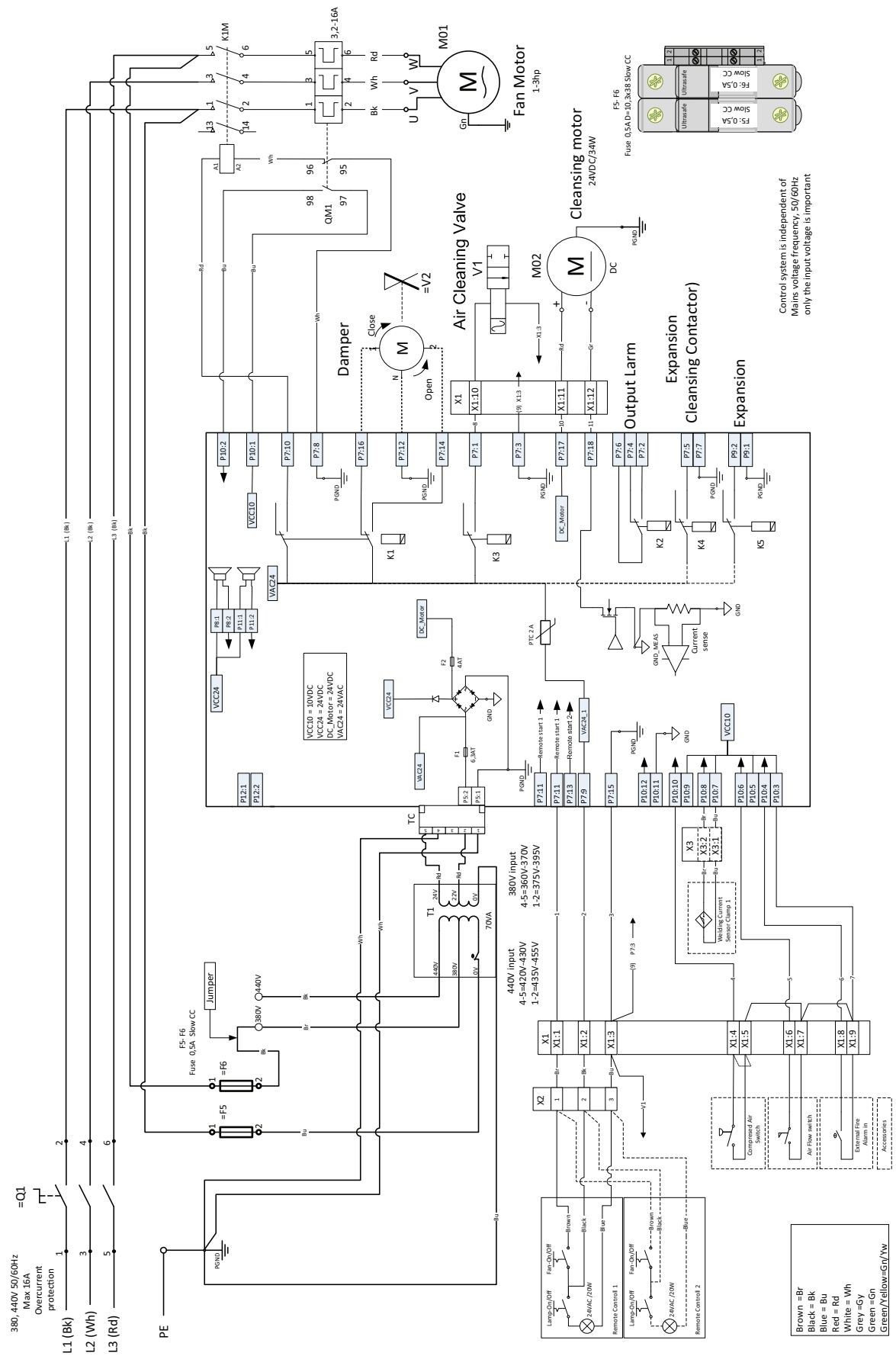

FilterBox Advanced III, 3Phase 380, 440V UL-CSA

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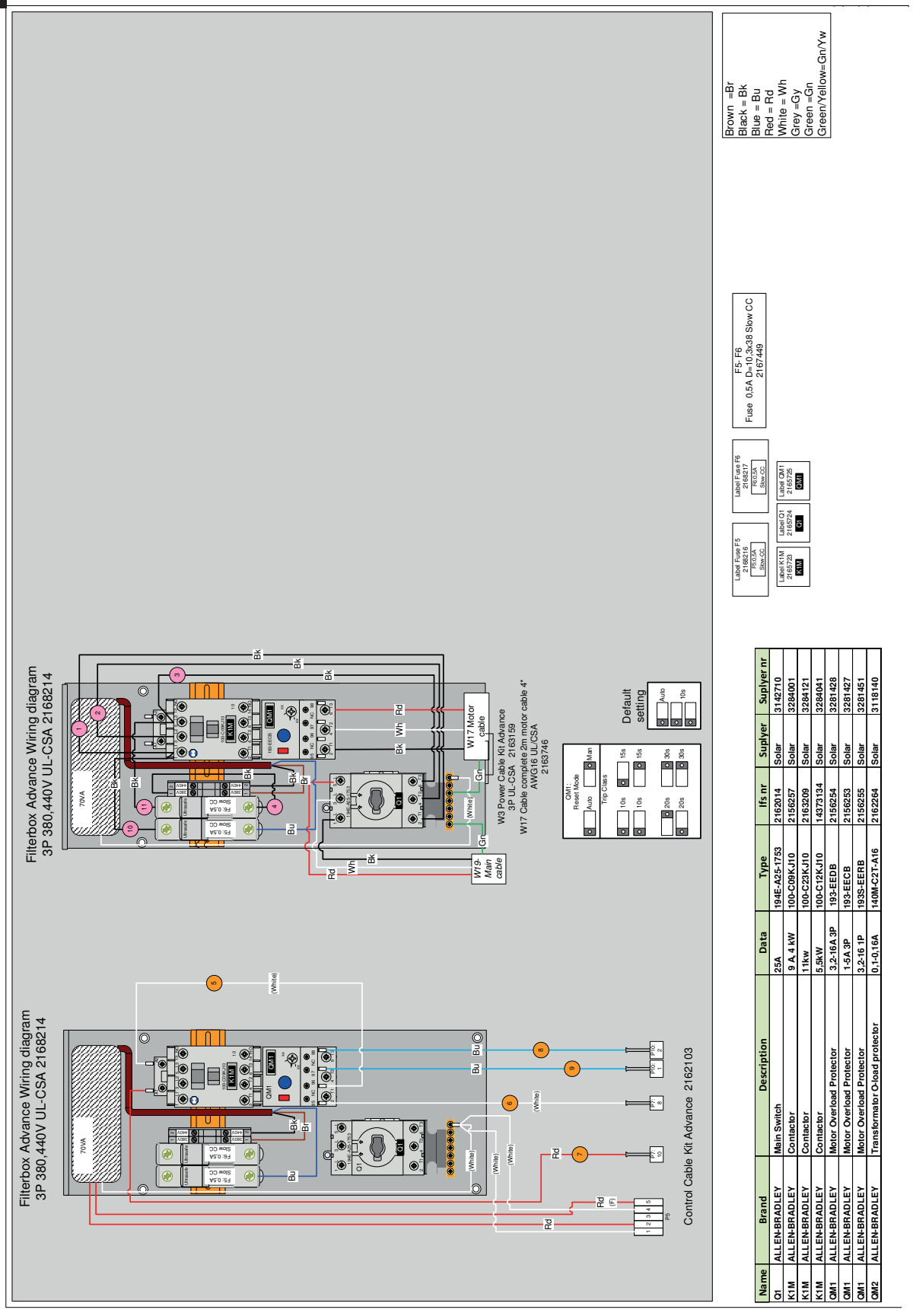

Name	Brand	Description	Data	Type	Ifs nr	Suplyer	Suplyer nr
Q1	ALLEN-BRADLEY	Main Switch	25A	194E-A25-1753	2162014	Solar	3142710
K1M	ALLEN-BRADLEY	Contactor	9 A, 4 kW	100-C09KJ10	2156257	Solar	3284001
K1M	ALLEN-BRADLEY	Contactor	11kw	100-C23KJ10	2163209	Solar	3284121
K1M	ALLEN-BRADLEY	Contactor	5,5kW	100-C12KJ10	14373134	Solar	3284041
QM1	ALLEN-BRADLEY	Motor Overload Protector	3,2-16A 3P	193-EEDB	2156254	Solar	3281428
QM1	ALLEN-BRADLEY	Motor Overload Protector	1-5A 3P	193-EECB	2156253	Solar	3281427
QM1	ALLEN-BRADLEY	Motor Overload Protector	3,2-16 1P	193S-EERB	2156255	Solar	3281451
QM2	ALLEN-BRADLEY	Transformator Oload protector	0,1-0,16A	140M-C2T-A16	2162264	Solar	3118140

FilterBox Advanced III, Wiring 380, 440V UL-CSA

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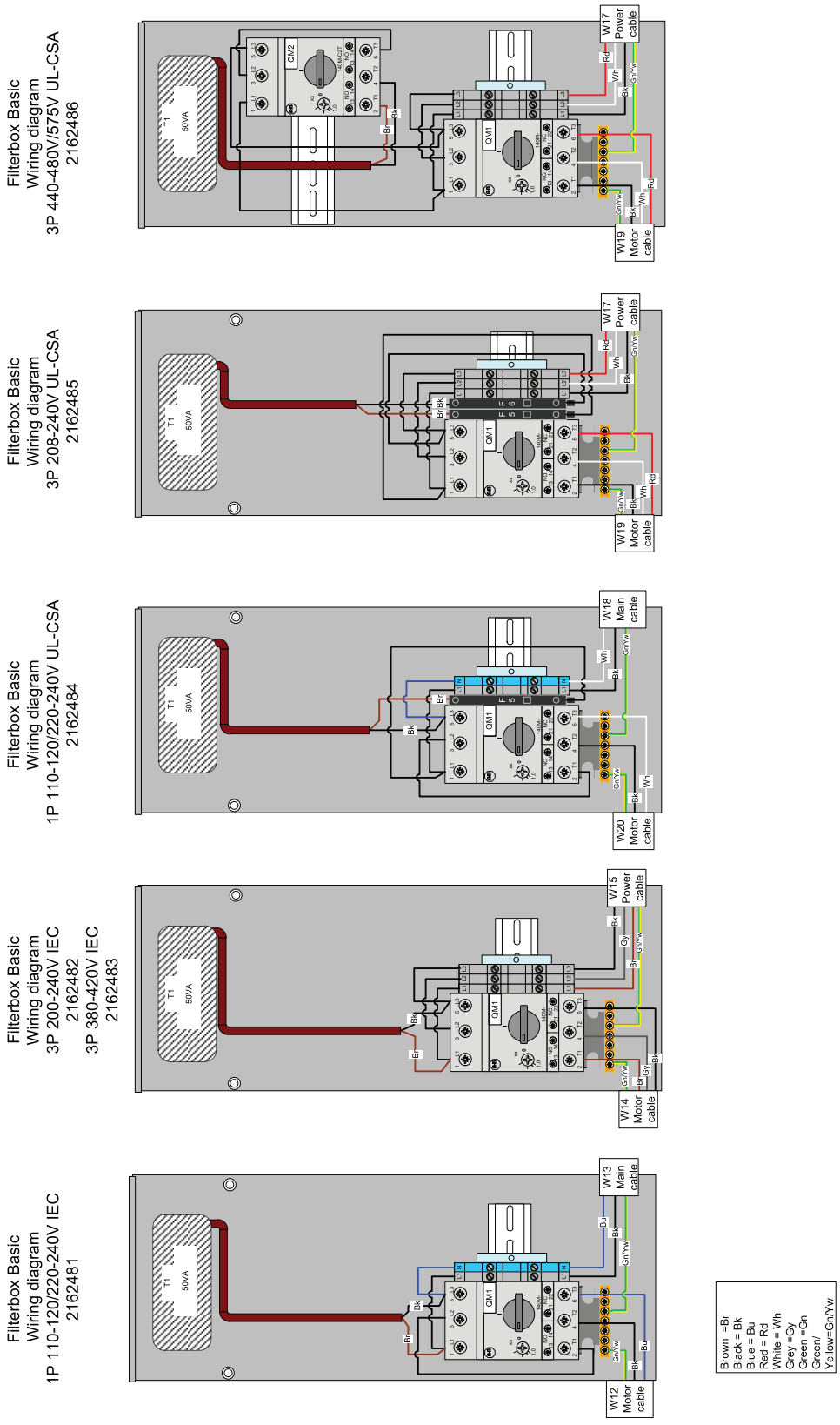

FilterBox Basic III, Layout Power Cable Basic IEC / UL-CSA

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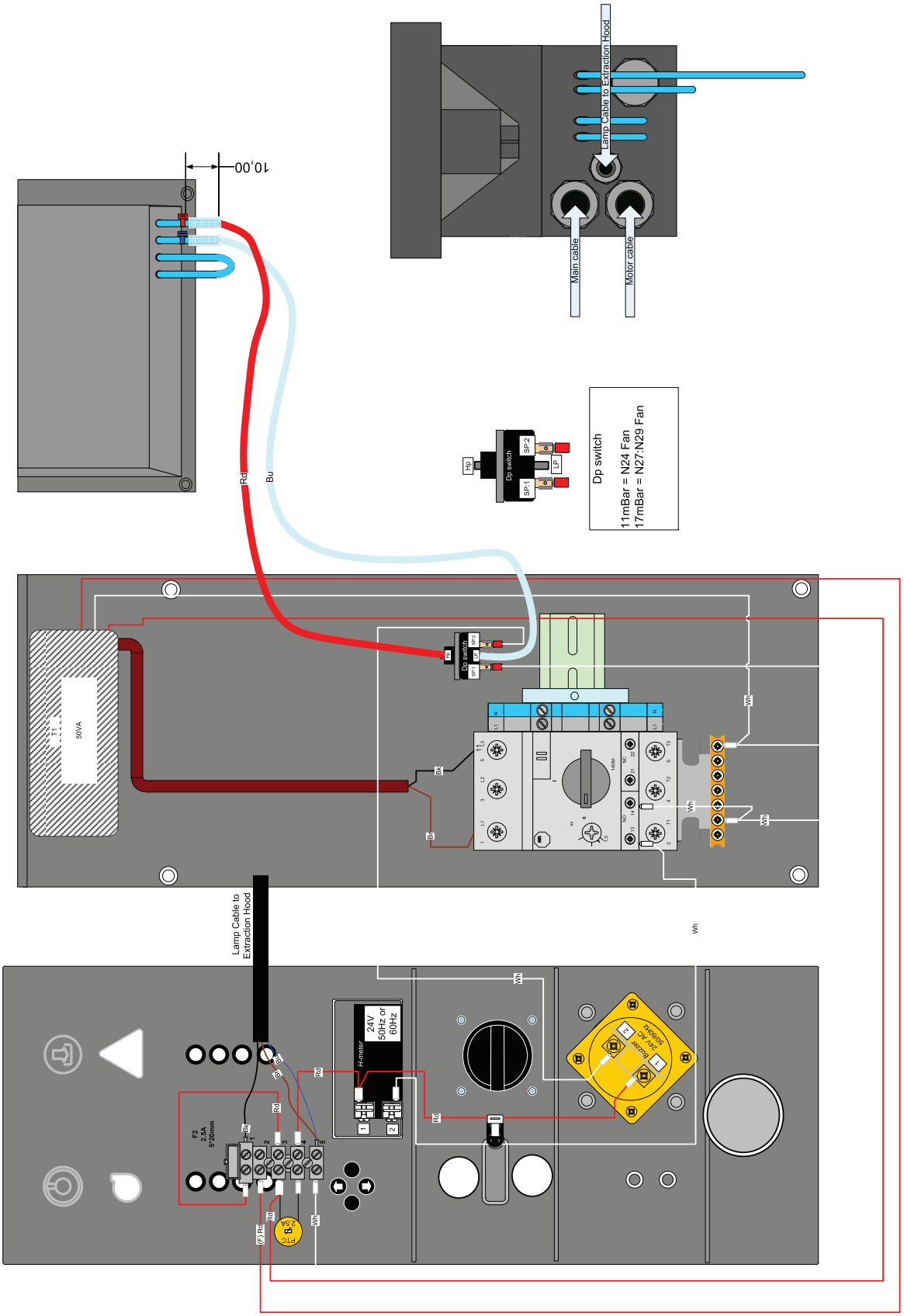

FilterBox Basic III, Layout Control Cable Basic IEC / UL-CSA

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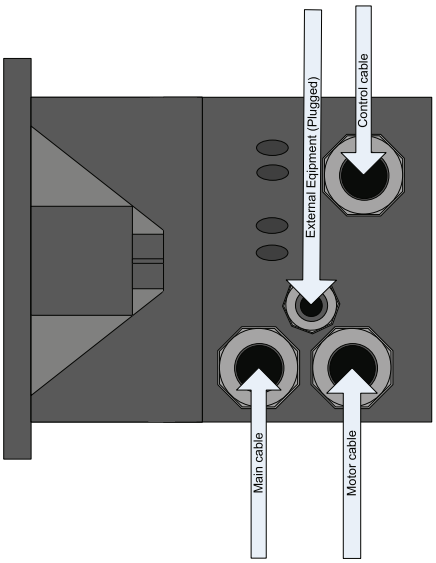

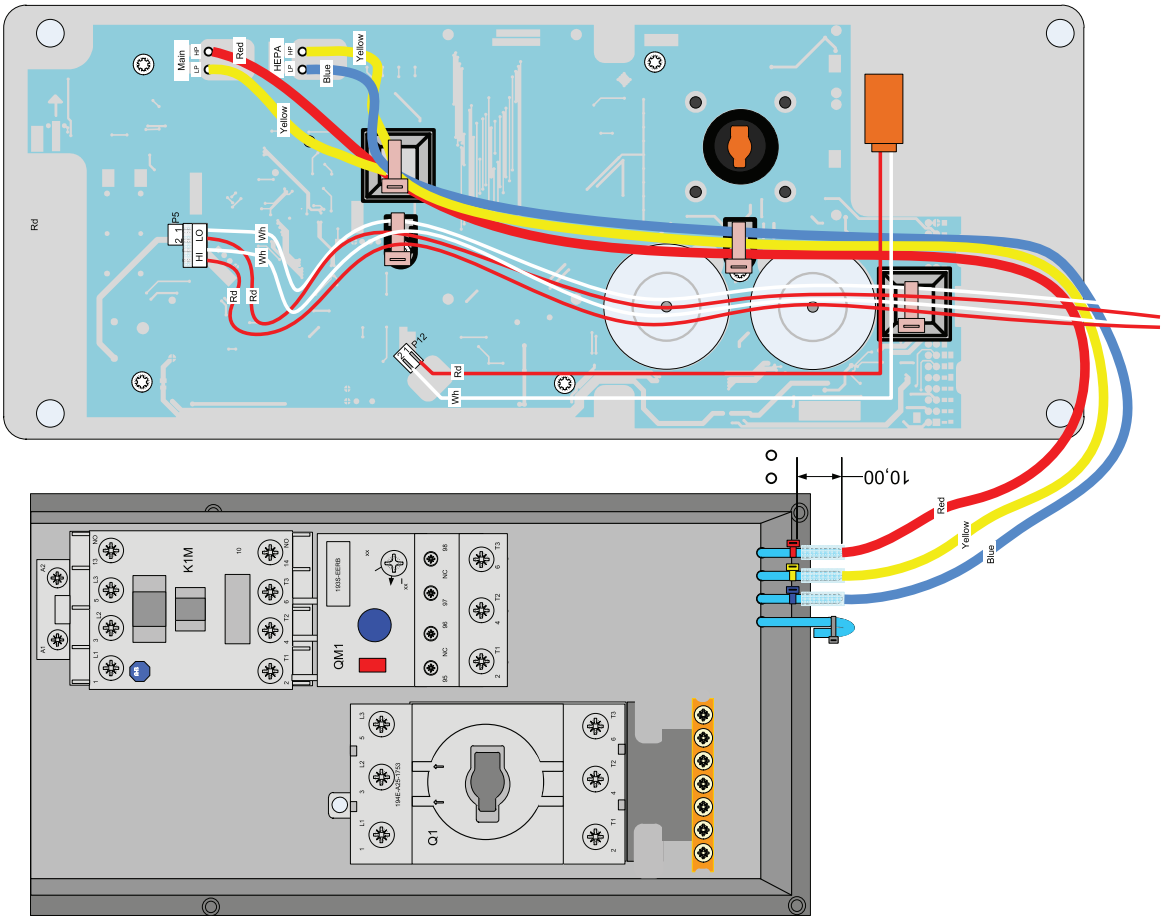

FilterBox Advanced III, Layout Dp Hose Advanced IEC / UL-CSA

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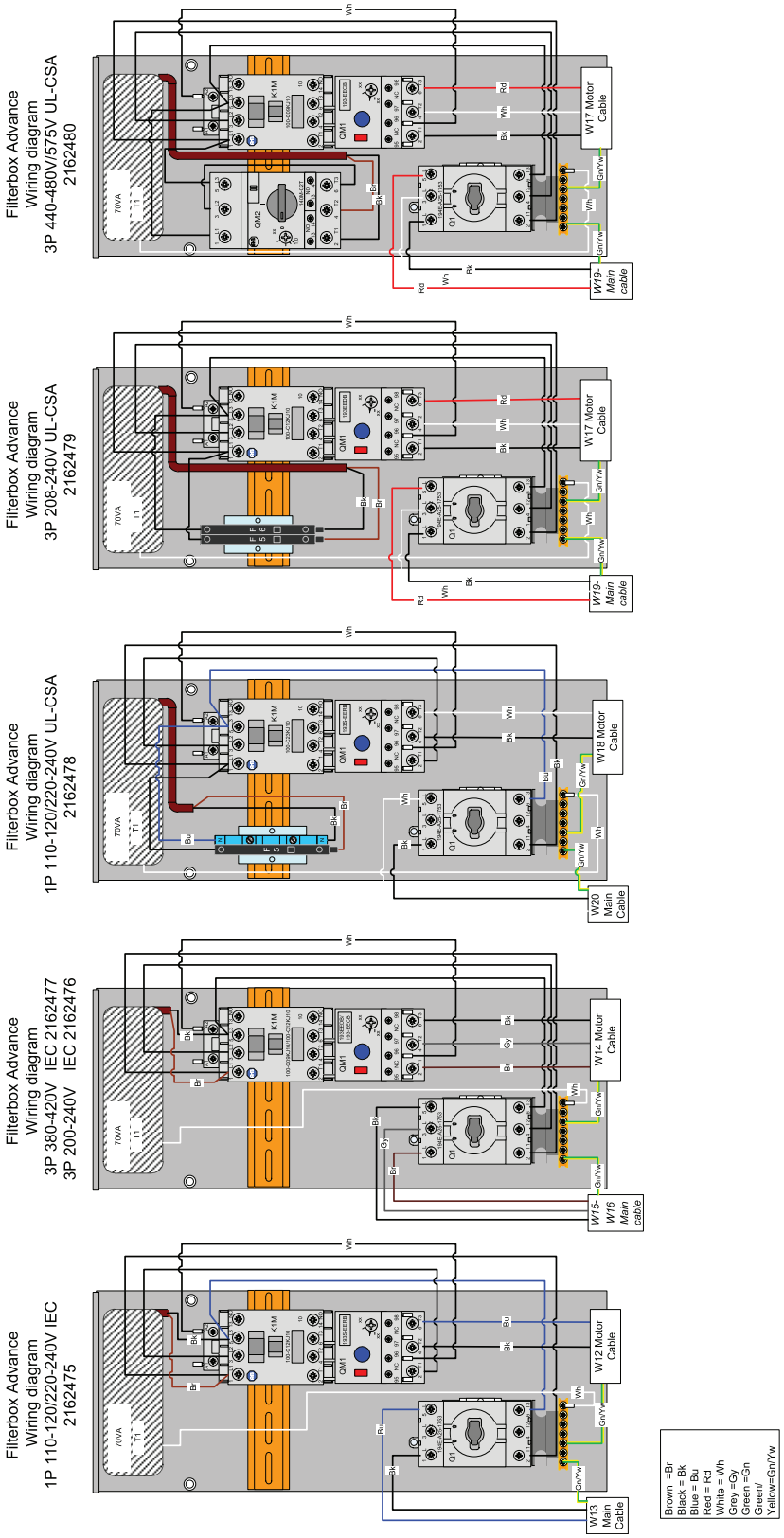

FilterBox Advanced III, Wiring IEC / UL-CSA

1 Preface

Thank you for using a Nederman product!

The Nederman Group is a world-leading supplier and developer of products and solutions for the environmental technology sector. Our innovative products will filter, clean and recycle in the most demanding of environments. Nederman's products and solutions will help you improve your productivity, reduce costs and also reduce the impact on the environment from industrial processes.

Read all product documentation and the product identification plate carefully before installation, use, and service of this product. Replace documentation immediately if lost. Nederman reserves the right, without previous notice, to modify and improve its products including documentation.

This product is designed to meet the requirements of relevant EC directives. To maintain this status, all installation, maintenance, and repair is to be done by qualified personnel using only Nederman original spare parts and accessories. Contact the nearest authorized distributor or Nederman for advice on technical service and obtaining spare parts. If there are any damaged or missing parts when the product is delivered, notify the carrier and the local Nederman representative immediately.

2 Troubleshooting

2.1 Download error log via USB

1 Open the lid to the control box.
2 Connect a USB memory stick or computer to the FilterBox USB contact, and close the lid to download the error log.
3 Wait 2 minutes and then open the lid and disconnect the computer, or remove the USB memory stick.

2.2 Update software via USB

Follow the same procedure in Section 2.1 Download error log via USB.

2.3 Troubleshooting guide

If the information in Table 2.1, Table 2.2 and Table 2.3 does not solve the problem, contact your nearest authorized distributor or Nederman for technical advice.

ⓘ If necessary, download the USB error log, see Section 2.1 Download error log via USB.

Table 2.1 Troubleshooting guide

Error	Solution
Overload protector is activated. See also the FilterBox User Manual.	• Check the power connections. • Make sure the amperage is set correctly according to the motor nameplate. • Check if the rubber springs are in the correct position.
Semi-automatic or manual adjustment does not work.	• Check that the springs are set in the up position. • Make sure the air cleansing is connected to compressed air at a pressure of 5-8 bar.
The fan will not start.	• Check the power connections. • Check the fuses. • Make sure the amps are set correctly according to the motor nameplate. • Make sure the fan is connected properly.
The air throughput is limited.	• Make sure the fan rotates correctly. • See if the filter needs to be cleaned. • Check if the extraction arm is damaged. • Check if the hood or the fan inlets and outlets are blocked.
The LEDs on the control panel are not lit.	Check the connections on the back of the control box.
Problem with compressed air.	• Check for leaks in compressed airlines. • The compressed air tube is too long.
Collector bin leaks.	• Check that the dust container is mounted correctly. • Empty the dust container.
The pressure is greater than 2300 Pa, but automatic cleaning has not started.	Contact Nederman for service.

2.4 Warnings

Table 2.2 Warnings

Error	Solution
Detect low cleaning efficiency	Check the cleaning motor (FilterBox A and eQ).
Cleaning interval too intermittent	Check the cleaning motor (FilterBox A and eQ).
Time to change Main Filter	Change the main filter.
HEPA Filter clogged (Hi dp)	Change the HEPA-filter.
Time To Service	Order service.
Compressed Air Pressure < 5 Bar	• Check the compressed air connection. • Check that compressed air is 5–8 bar.
PTC fuse Lamp is tripped	• Check maximum voltage for the main light bulb. (Maximum 20 W) • Check the connection of the main lighting.
Cleaning motor overheated	Check that motor and the main filter can rotate freely.

2.5 Errors

Table 2.3 Errors

Error	Solution
Fan Motor overloaded	• Check that the motor can rotate freely. • Check the 3-phase connection and fuses.
External Fire detected	• Check the external fire alarm.
V Control transformer overheated.	• Check the transformer voltage. • Check for a short circuit in the cable.
Overcurrent 10V DC circuits	• Check the transformer voltage. • Check for a short circuit in the cable. • Check for short circuits in digital input.
Overcurrent 24V AC lamp circuits PTC fuse Lamp tripped	• Check the transformer voltage and maximum power of the main light bulb. (Maximum 20 W) • Check for a short circuit in the main lighting.
Overcurrent 24V Power DC circuits	• Check the transformer voltage. • Check for a short circuit in the cable. • Check for short circuits in digital input.

3 Electrical diagrams

See at the beginning of this manual.

NOTE!
The electrical diagrams are general and some external equipment (e.g. Air cleaning valve V1) may not be installed depending on FilterBox model.

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