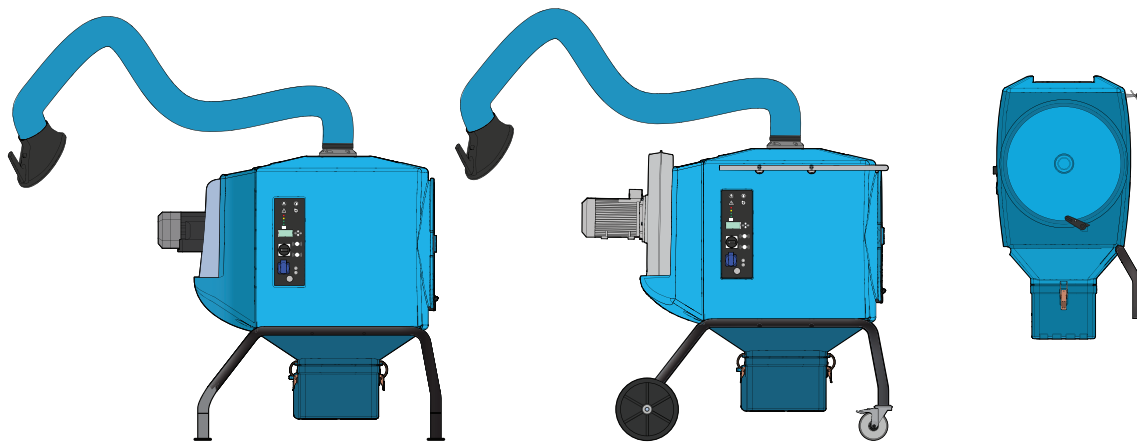


Mobile Fume and Dust Extractors

FilterBox



Original installation and service manual

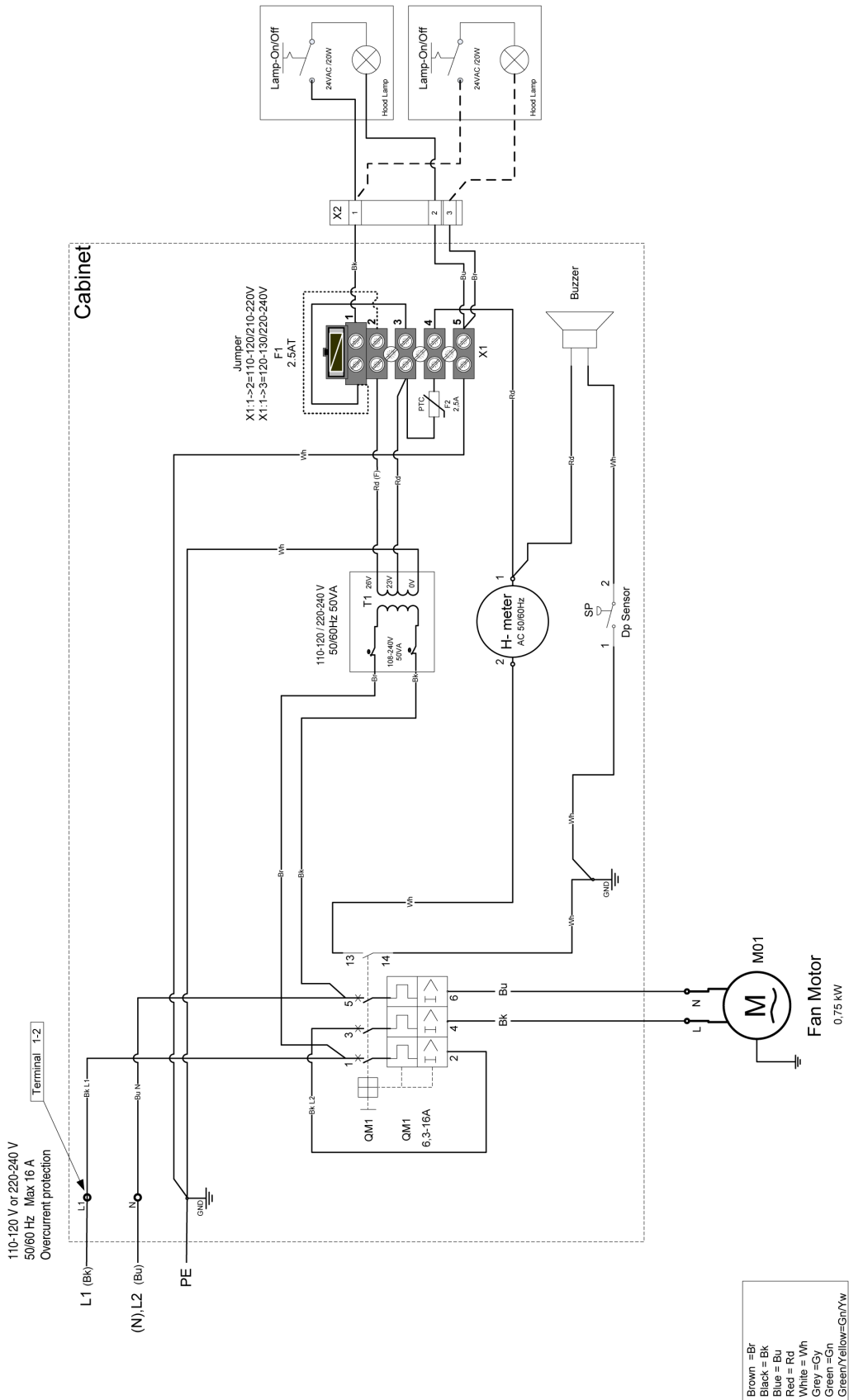
EN INSTALLATION AND SERVICE MANUAL

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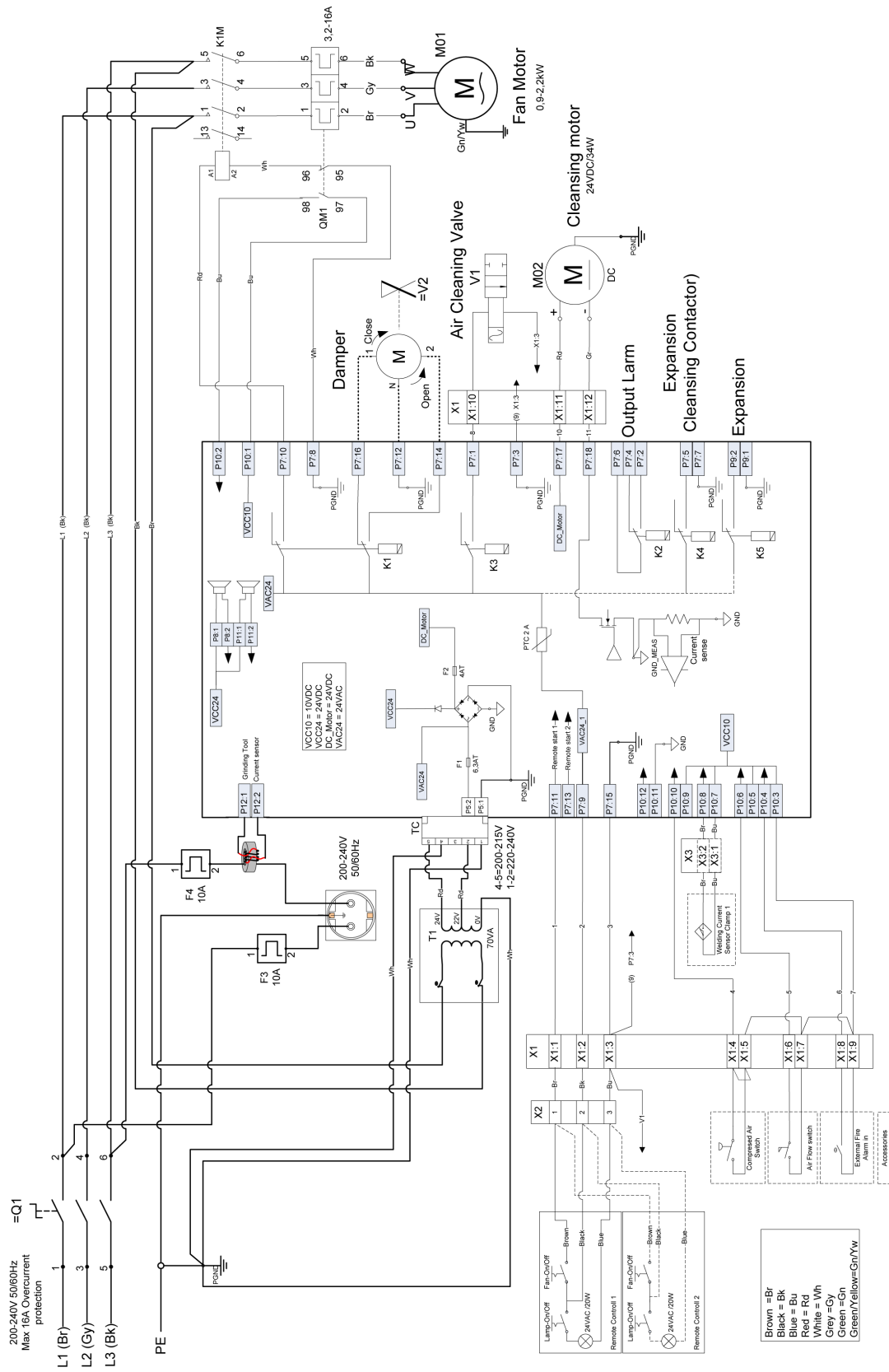
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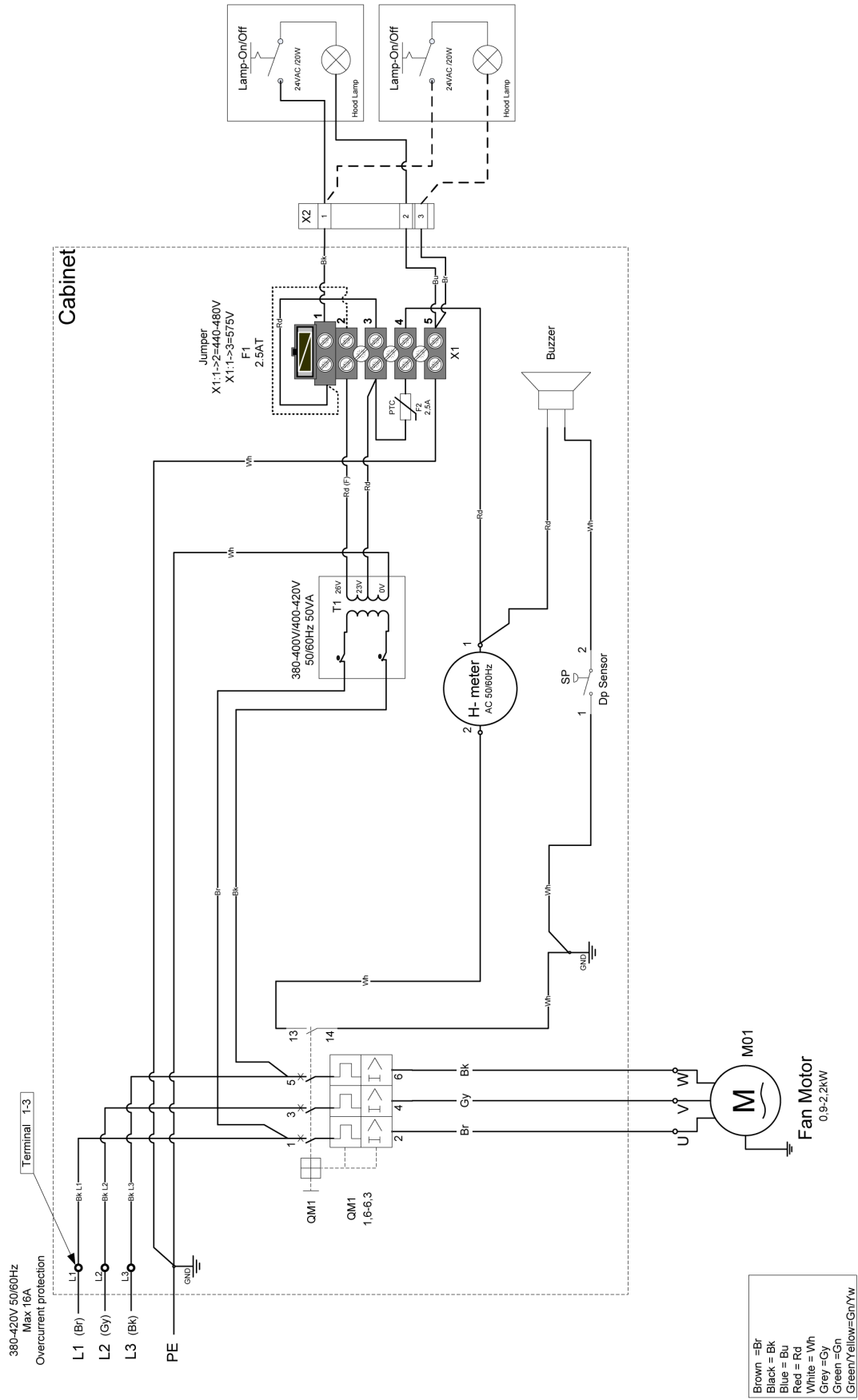
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FilterBox Basic III, 1Phase 110-120/220-240V IEC

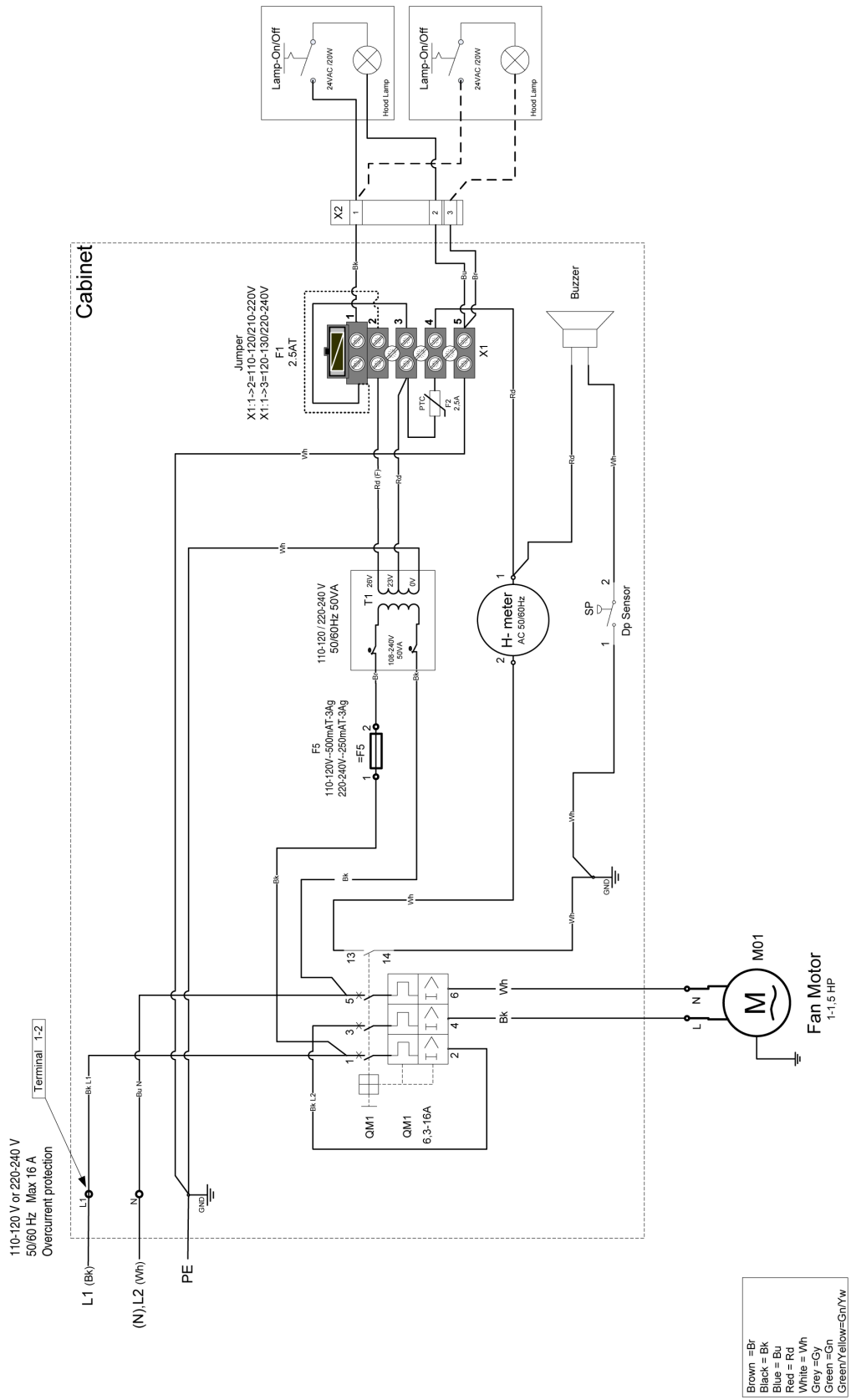


FilterBox Basic III, 3Phase 200-240V IEC

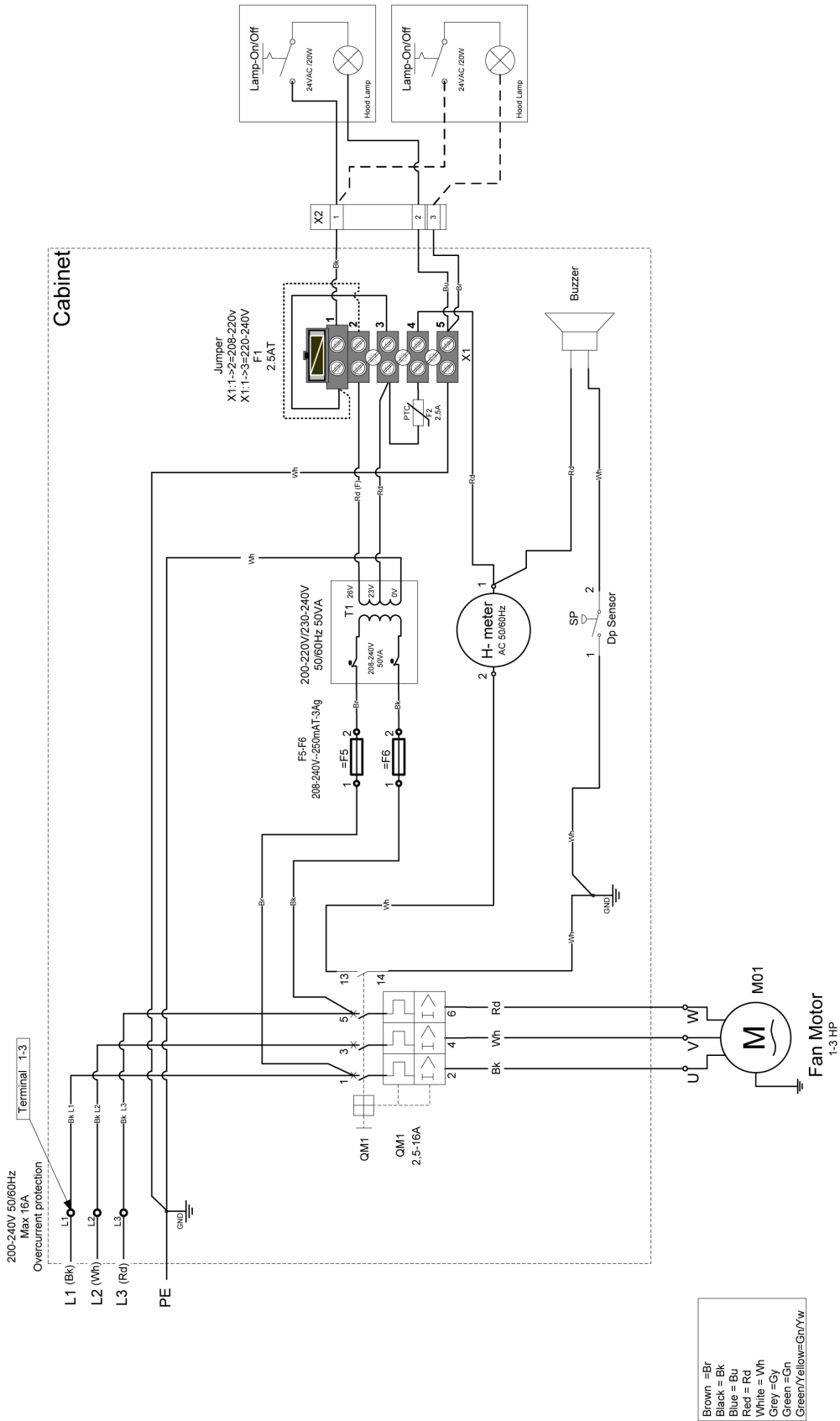


Cabinet

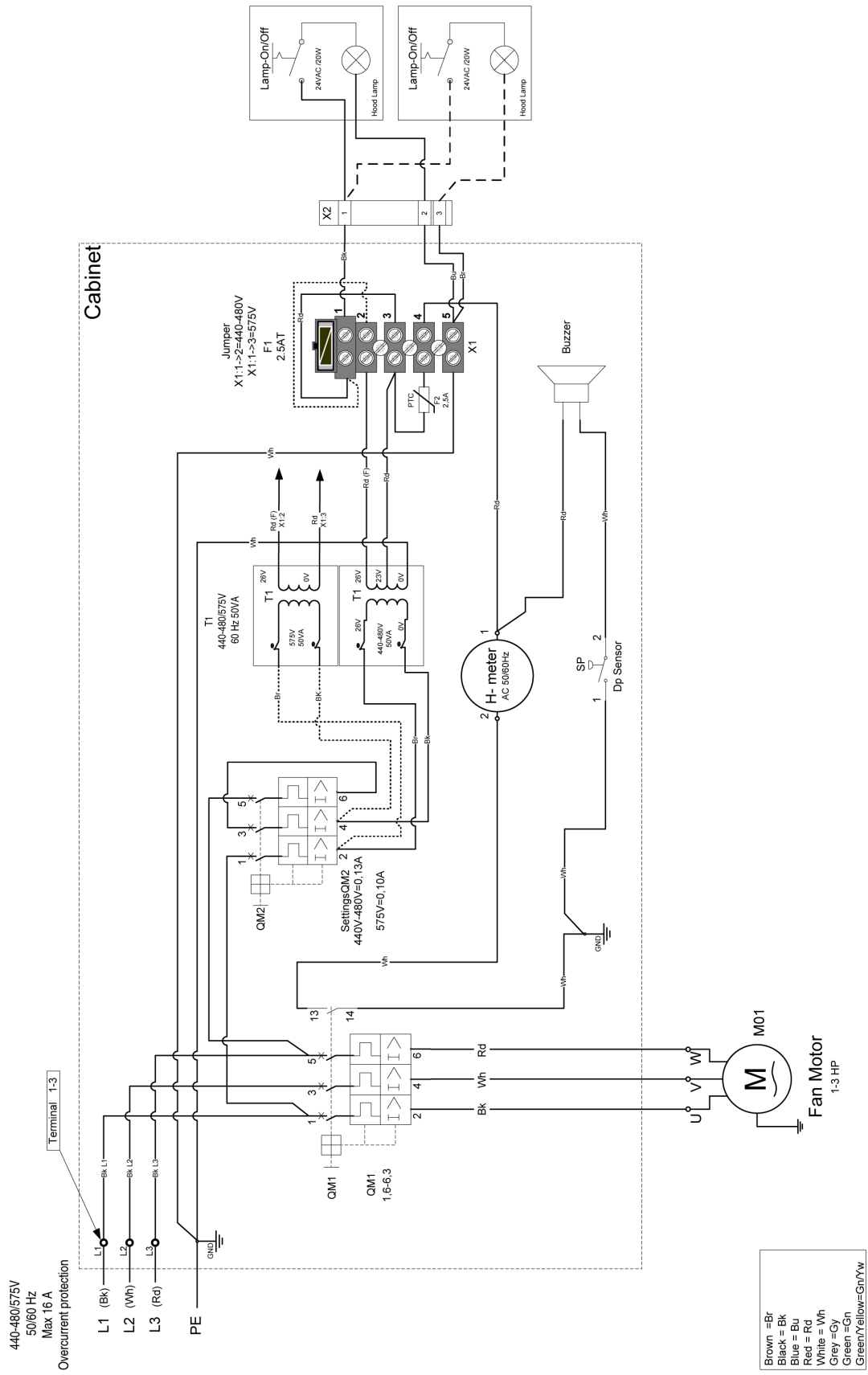
FilterBox Basic III, 3Phase 380-420V IEC



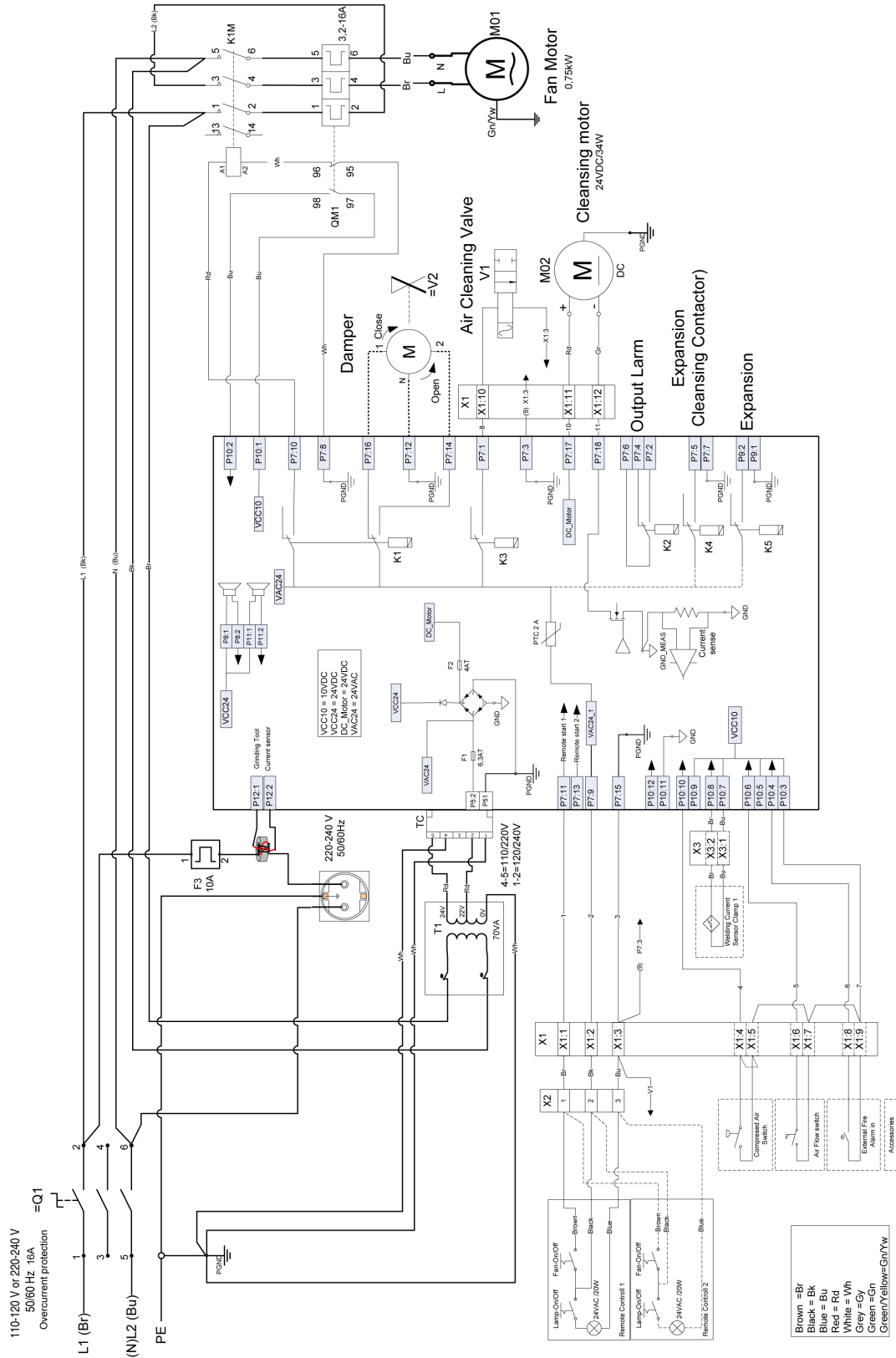
FilterBox Basic III, 1Phase 110-120 or 220-240V UL-CSA



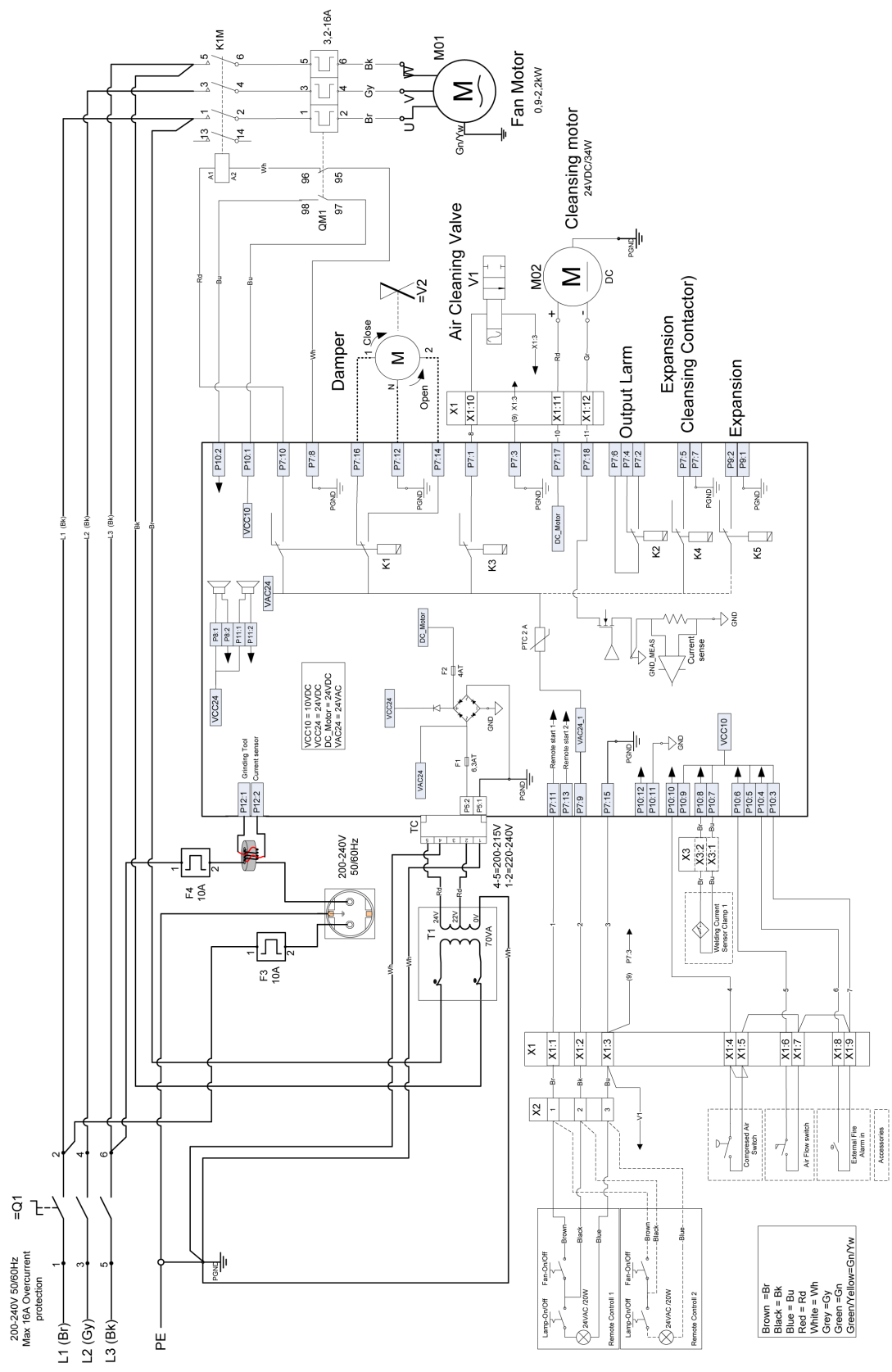
FilterBox Basic III, 3Phase 208-240V UL-CSA



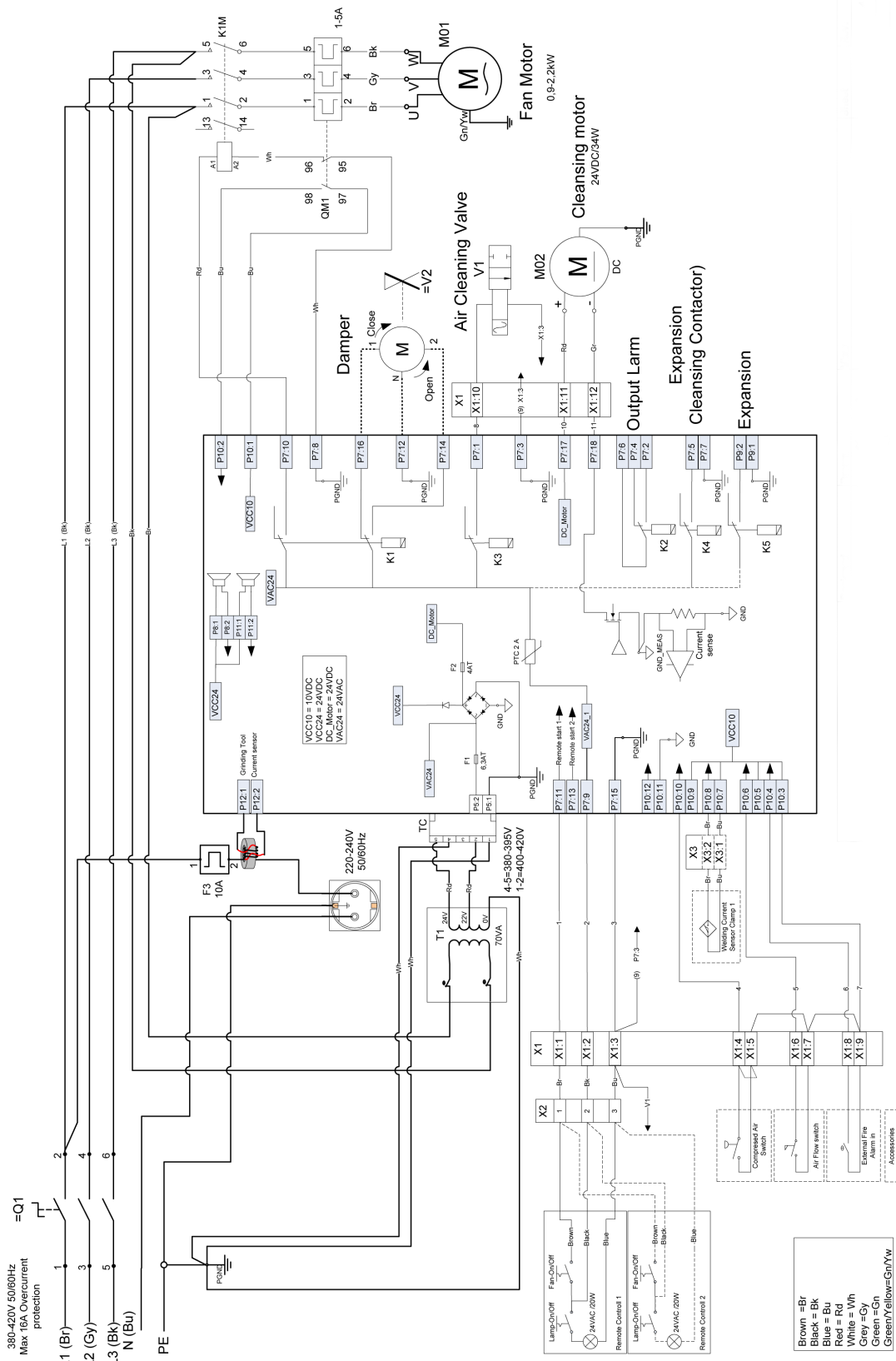
FilterBox Basic III, 3 Phase 440-480/575V UL-CSA



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

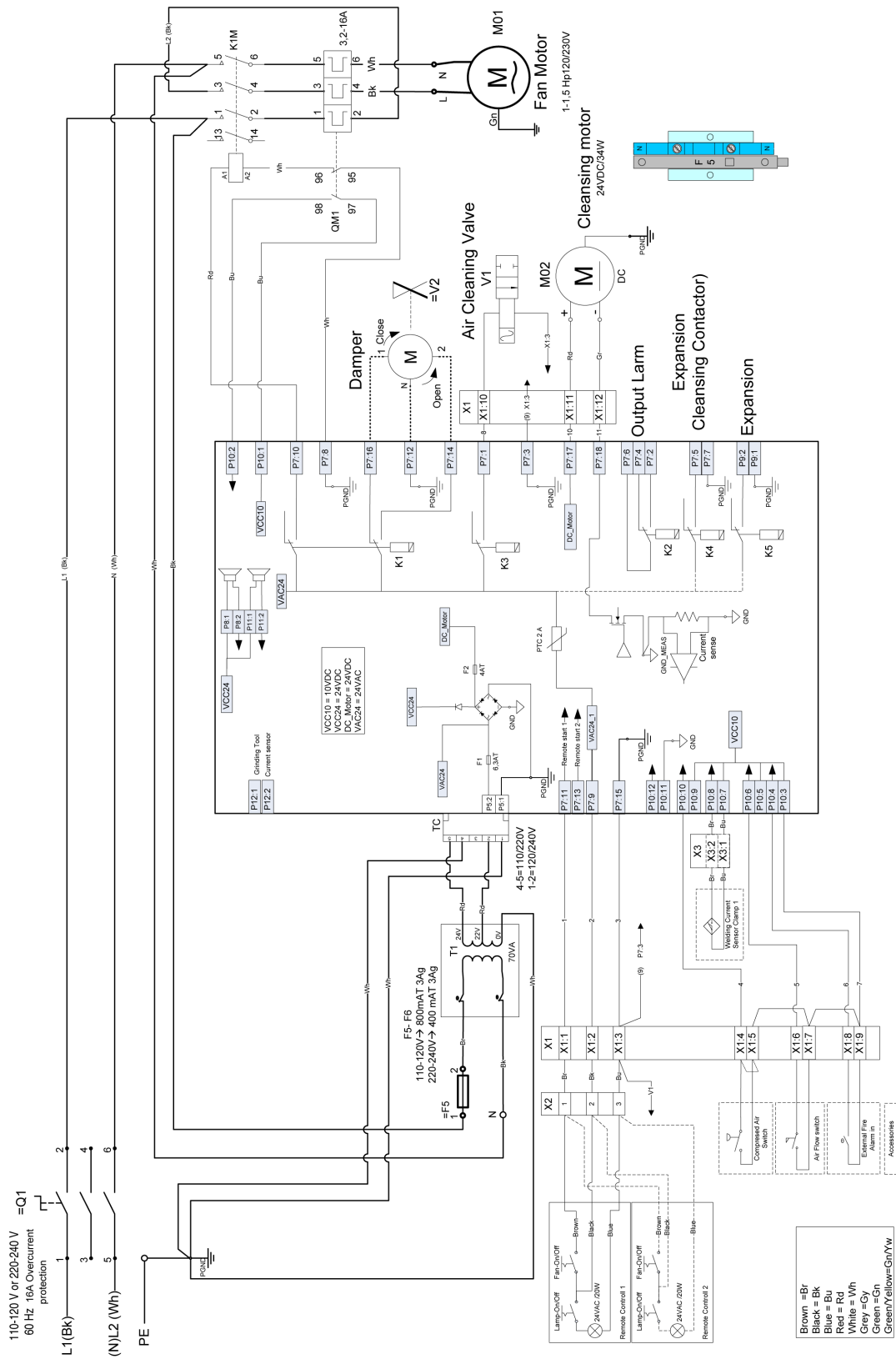


FilterBox Advanced III, 3Phase 200-240V IEC

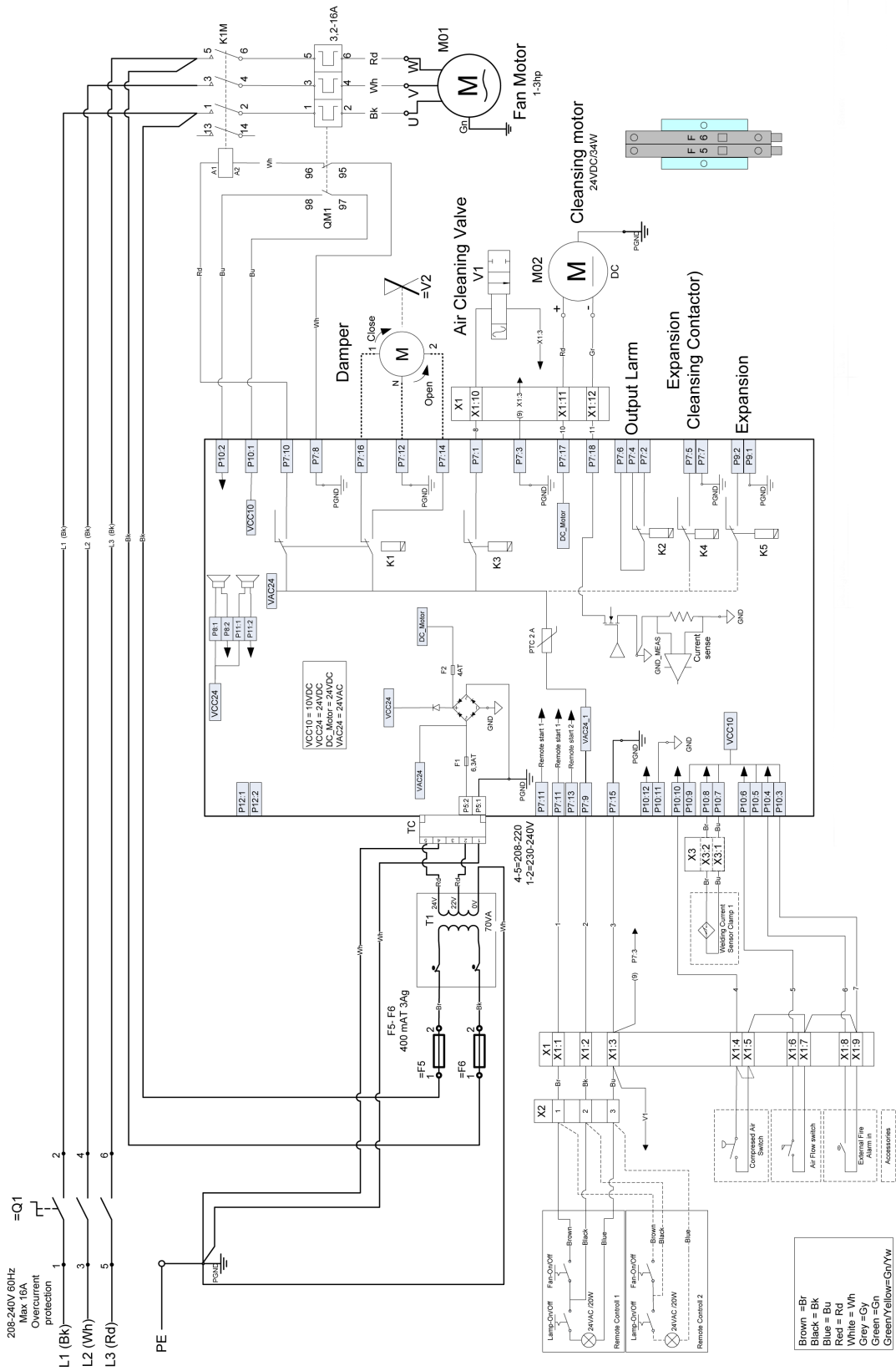


FilterBox Advanced III, 3Phase 380-420V IEC

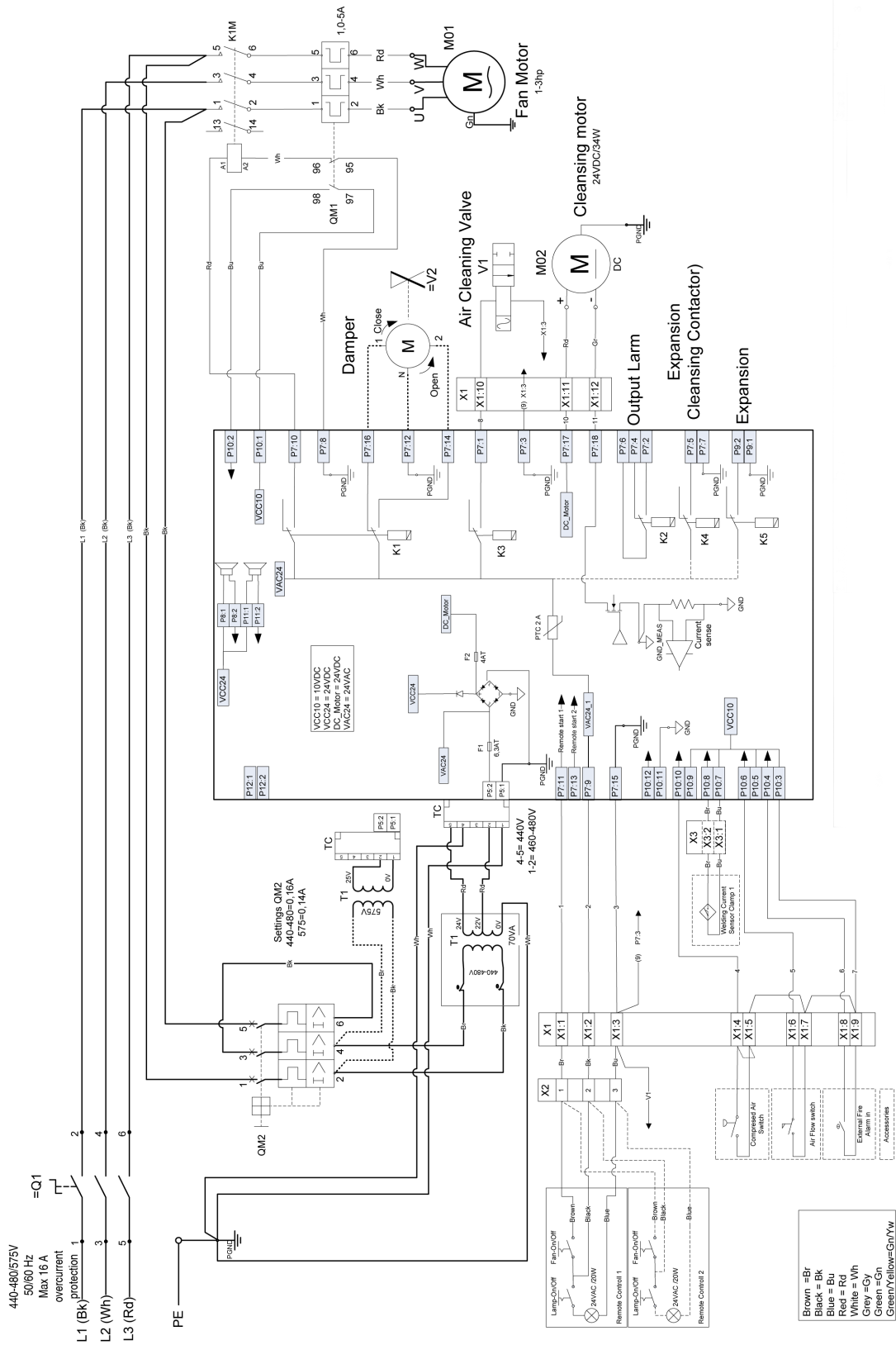
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 Black = Bk
 Blue = Bu
 Red = Rg
 White = Wh
 Grey = Gy
 Green/Yellow = Gr/Yl



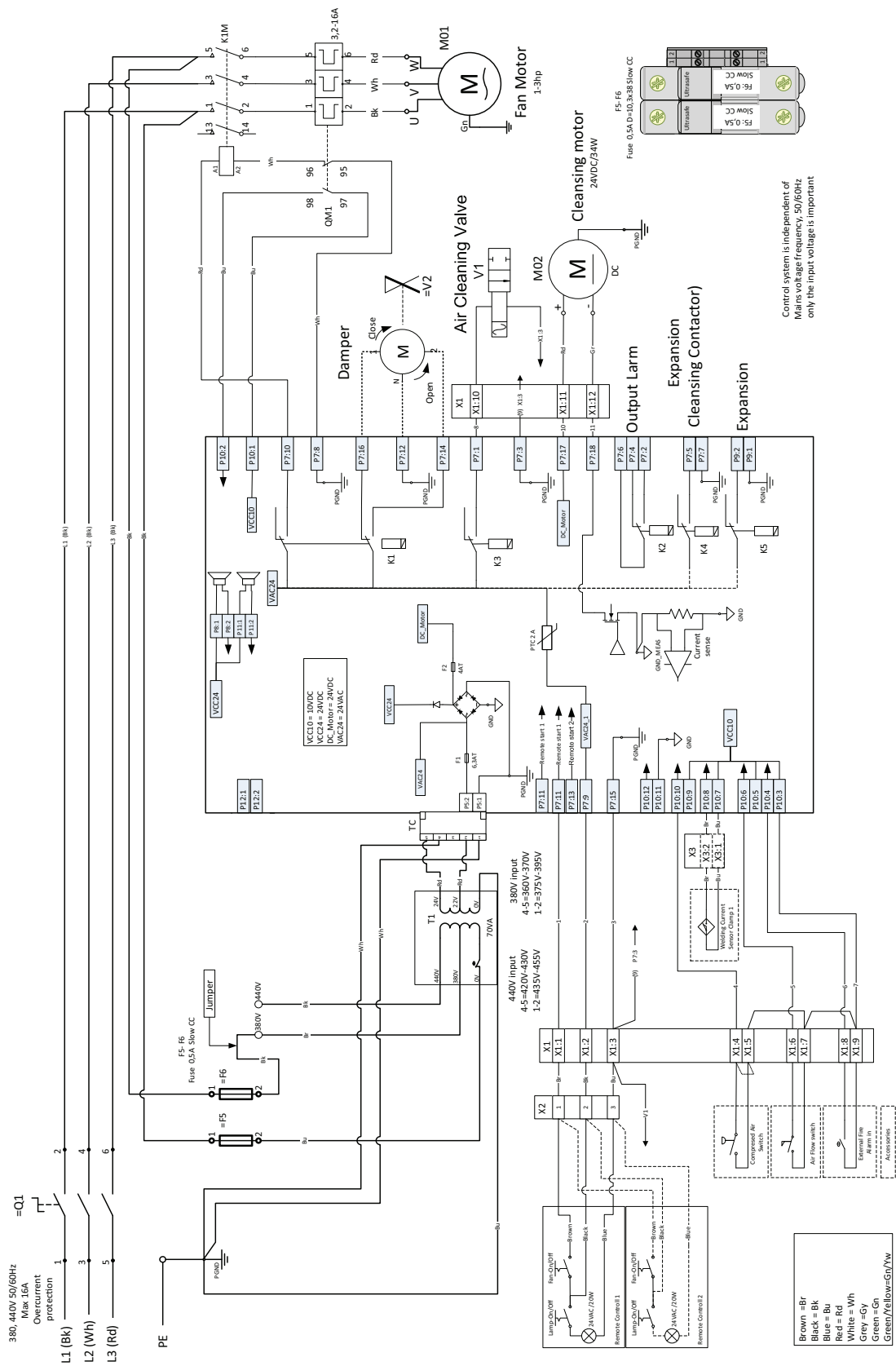
FilterBox Advanced III, 1Phase 110-120 or 220-240V UL-CSA



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

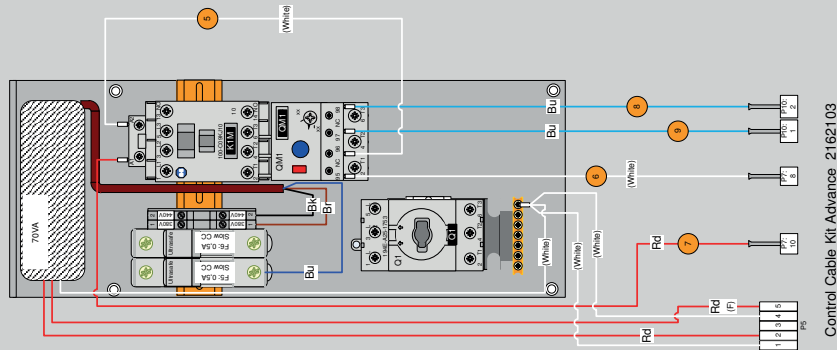


FilterBox Advanced III, 3Phase 440-480/575V UL-CSA

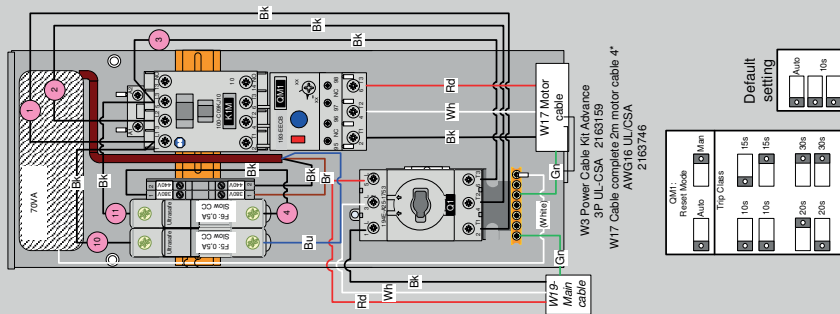


FilterBox Advanced III, 3Phase 380, 440V UL-CSA

Filterbox Advance Wiring diagram
3P 380, 440V UL-CSA 2168214



Filterbox Advance Wiring diagram
3P 380, 440V UL-CSA 2168214



OM1:

Reset Mode: Auto Man

Trip Class: 10s 10s 10s 10s

Default setting: Auto 10s

- Brown =Br
- Black = Bk
- Blue = Bu
- Red = Rd
- White = Wh
- Grey =Gy
- Green =Gn
- Green/Yellow=Gn/Yw

Label Fuse F5
2165277
Slow CC

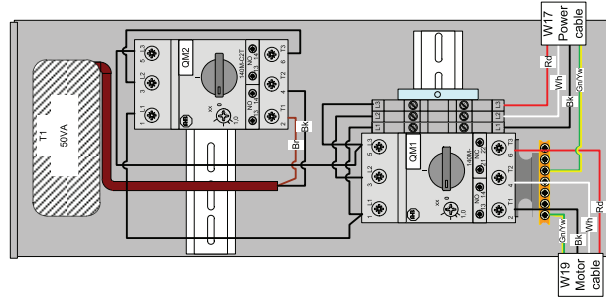
Label Fuse F6
2165278
Slow CC

Fuse 0.5A D-10.3x38 Slow CC
2167449

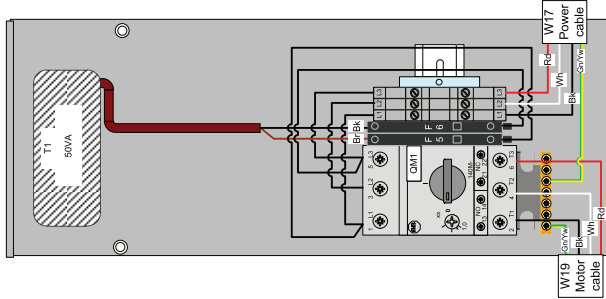
Name	Brand	Description	Data	Type	ifs nr	Supplier	Supplier nr
O1	ALLEN-BRADLEY	Main Switch	25A	194E-A25-1753	2162014	Solar	3142710
K1M	ALLEN-BRADLEY	Contactor	9 A 4 kW	100-C9KJ10	2156257	Solar	3284001
K1M	ALLEN-BRADLEY	Contactor	11kW	100-C23KJ10	2162209	Solar	3284121
K1M	ALLEN-BRADLEY	Contactor	5.5kW	100-C19KJ10	14373134	Solar	3284041
OM1	ALLEN-BRADLEY	Motor Overload Protector	3.2-16A 3P	193-EEDB	2156254	Solar	3281428
OM1	ALLEN-BRADLEY	Motor Overload Protector	1-5A 3P	193-EECB	2156253	Solar	3281427
OM1	ALLEN-BRADLEY	Motor Overload Protector	3.2-16 1P	193S-EERB	2156255	Solar	3281451
OM2	ALLEN-BRADLEY	Transformer overload protector	0.1-0.16A	140M-C2T-A16	2162284	Solar	3118140

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

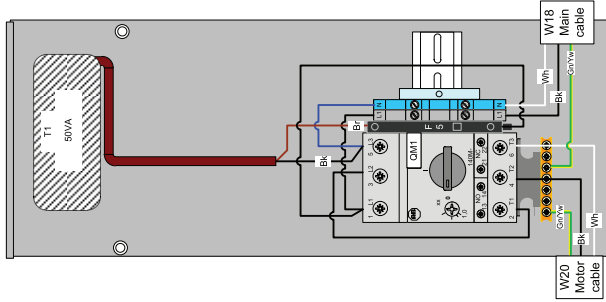
Filterbox Basic
Wiring diagram
3P 440-480V/575V UL-CSA
2162486



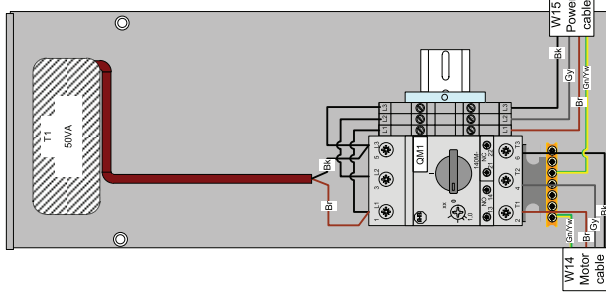
Filterbox Basic
Wiring diagram
3P 208-240V UL-CSA
2162485



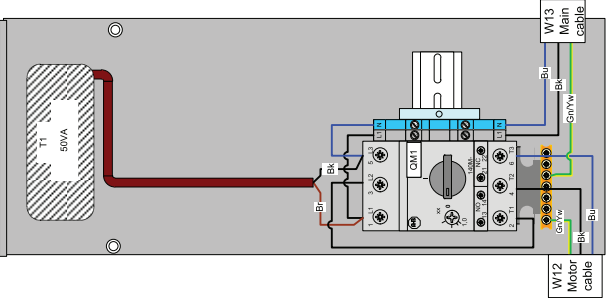
Filterbox Basic
Wiring diagram
1P 110-120/220-240V UL-CSA
2162484



Filterbox Basic
Wiring diagram
3P 200-240V IEC
2162482
3P 380-420V IEC
2162483

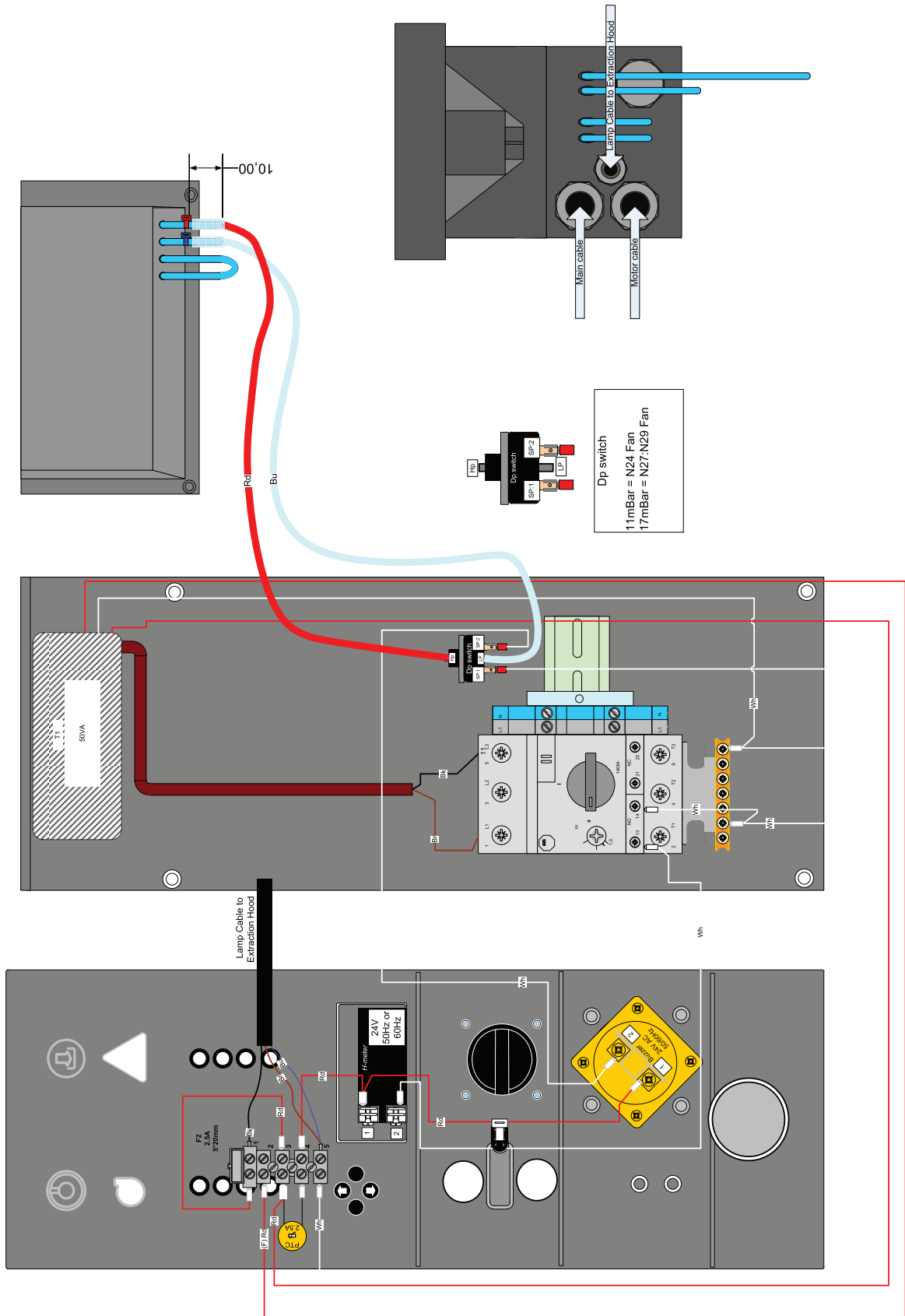


Filterbox Basic
Wiring diagram
1P 110-120/220-240V IEC
2162481

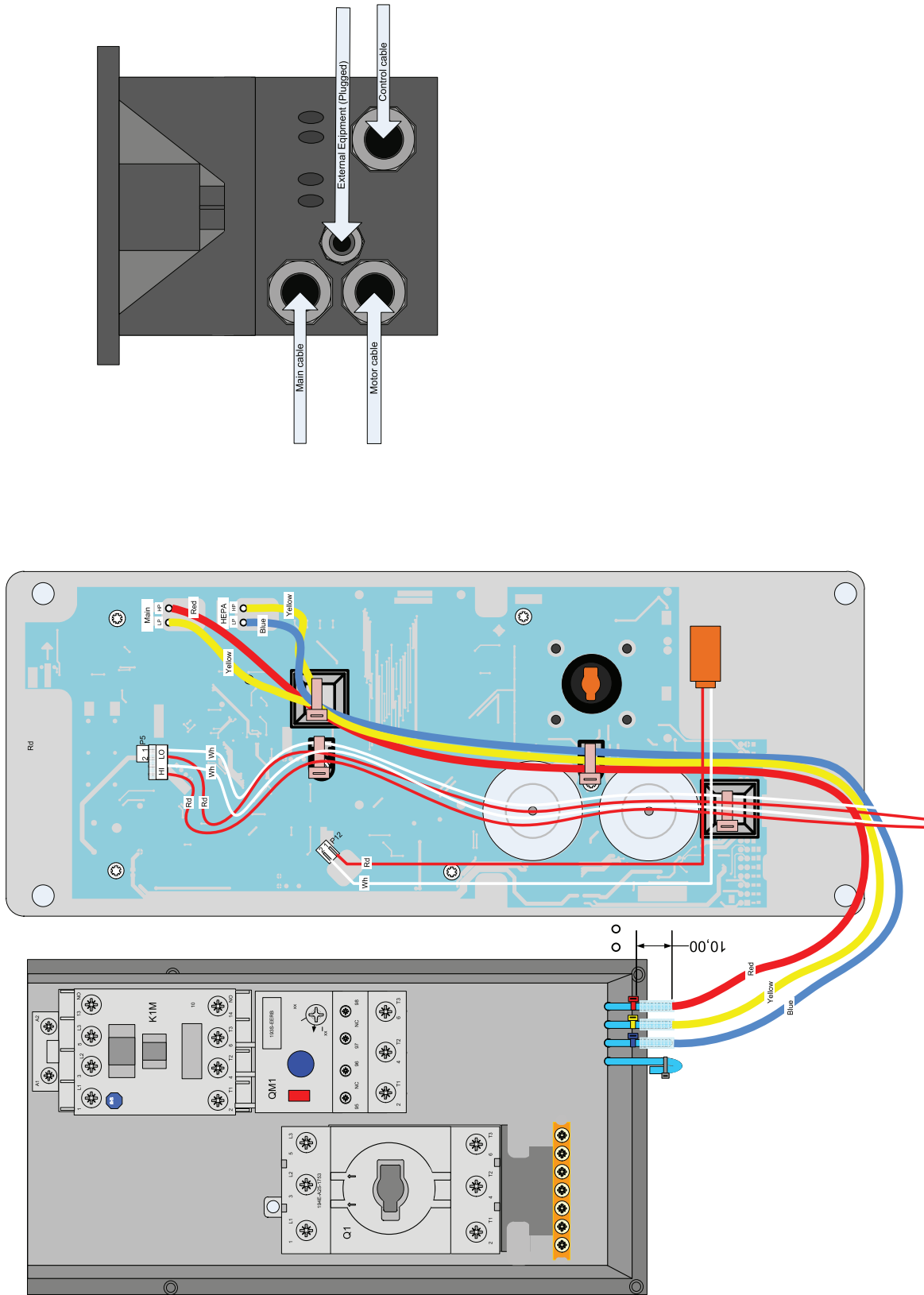


- Brown = Br
- Black = Bk
- Blue = Bu
- Red = Rd
- White = Wh
- Grey = Gy
- Green = Gn
- Green/
Yellow = Gn/Yw

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

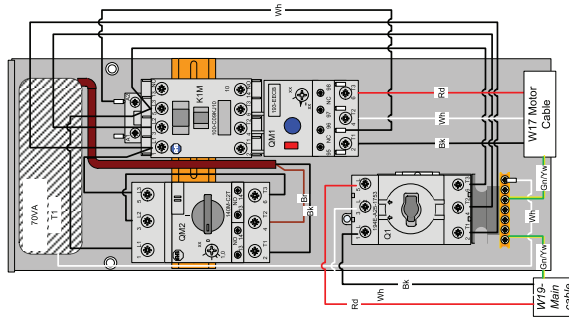


FilterBox Basic III, Layout Control Cable Basic IEC / UL-CSA

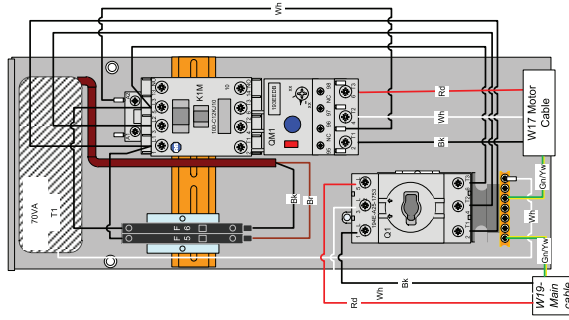


FilterBox Advanced III, Layout Dp Hose Advanced IEC / UL-CSA

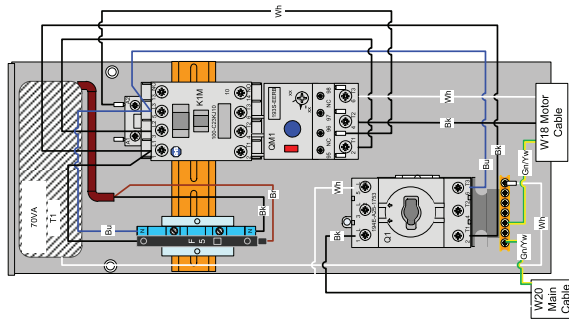
Filterbox Advance
Wiring diagram
3P 440-480V/575V UL-CSA
2162480



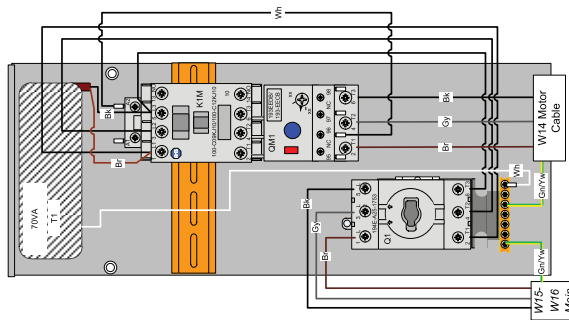
Filterbox Advance
Wiring diagram
3P 208-240V UL-CSA
2162479



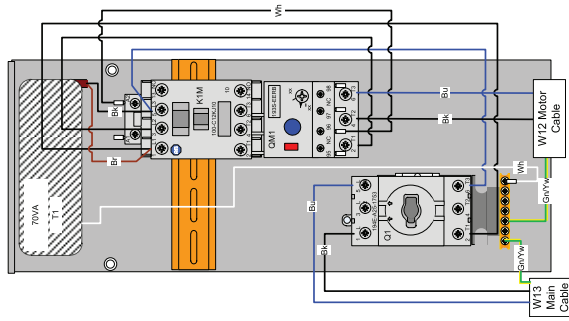
Filterbox Advance
Wiring diagram
1P 110-120/220-240V UL-CSA
2162478



Filterbox Advance
Wiring diagram
3P 380-420V IEC 2162477
3P 200-240V IEC 2162476



Filterbox Advance
Wiring diagram
1P 110-120/220-240V IEC
2162475



- Brown = Br
- Black = Bk
- Blue = Bl
- Red = Rd
- White = Wh
- Grey = Gy
- Green = Gn
- Green/Yellow = Gn/Yw

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 as in [Section 2.1 Download error log via USB](#).

2.3 Troubleshooting guide

If the information does not solve the problem, contact your nearest authorized distributor or Nederman for technical advice.


NOTE!

If necessary, download the USB error log, see [Section 2.1 Download error log via USB](#).

Error	Solution
Overload protector is activated. See also the Filter-Box User Manual.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • Check for leaks in compressed airlines. • The compressed air tube is too long.
Collector bin leaks.	<ul style="list-style-type: none"> • 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

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	<ul style="list-style-type: none"> • Check the compressed air connection. • Check that compressed air is 5-8 bar.
PTC fuse Lamp is tripped	<ul style="list-style-type: none"> • 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

Error	Solution
Fan Motor overloaded	<ul style="list-style-type: none"> • Check that the motor can rotate freely. • Check the 3-phase connection and fuses.
External Fire detected	<ul style="list-style-type: none"> • Check the external fire alarm.
V Control transformer overheated.	<ul style="list-style-type: none"> • Check the transformer voltage. • Check for a short circuit in the cable.
Overcurrent 10V DC circuits	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Check the transformer voltage. • Check for a short circuit in the cable. • Check for short circuits in digital input.

3 Electrical diagrams

See [Figure 1](#) to [Figure 18](#).



NOTE!

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

Nederman

www.nederman.com