UL508A BOTTOM MOUNT VFD BYPASS PANELS

The c3controls' ECP-BP series offers a configurable and UL 508A-listed solution for VFD bypass applications. This series provides a two or three contactor bypass design that seamlessly integrates with various VFD brands for increased flexibility. Available in Type 1 and Type 4 carbon steel enclosures, these panels fit directly below your VFD of choice and are conveniently shaped as tall slim panels to minimize their footprint. c3controls' VFD Bypass Panels come with all the features and benefits of our Series 300 Contactors, Series TB IEC Terminal Blocks, and Series 22mm IEC Pilot Devices. Our Series ECP-BP panels are factory wired with a control transformer saving you time and reducing installation costs.

Section 36

PROVEN

Conformity to Standards:

CONTACTORS
UL 508, 60947-4-1A
CSA C22.2 No. 14
IEC 60947-1, 60947-4-1

PILOT DEVICES
UL 508
CSA C22.2 No. 14
IEC 60947-1, 60947-5-1

ENCLOSURES
UL 50
CSA C22.2 No. 94
IEC 60529

Certifications:

UL File #: E236197 (Guide NLDX, NLDX7), E68568 (Guide NKCR, NKCR7)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

UL File #: E68568 (Guide NKCR, NKCR7)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

UL Listed
CSA Certified

Visit c3controls.com to download product certifications.

UL508A BOTTOM MOUNT VFD BYPASS PANELS NEW

All our products are fully certified, rated, and backed by our limited lifetime warranty to meet the needs of the machine builder, and our bypass panels are no exception. Check out the incredible features in the chart below!

DELIVERING SUPERIOR PRODUCT QUALITY AND MANUFACTURING EXCELLENCE	
✓ **Proven**	Our Series ECP-BP Bottom Mount VFD Bypass Panels are UL508A Listed and CE marked meeting global standards requirements.
✓ **Enclosure Flexibility**	Our ECP-BP Bottom Mount VFD Bypass Panels are available in two versions of Carbon Steel (Type 1 or Type 3R, 4 & 12).
✓ **Reliable**	For enhanced safety and operational reliability, mechanically interlocked contactors ensure a seamless transition between VFD and bypass modes for motor operation.
✓ **Simple Solution**	c3controls' Electrical Engineers have designed these bottom mount VFD Bypass Panels specifically for any fan, pump, conveyor, or air handling VFD applications.
✓ **Limited Lifetime Warranty***	Every product is backed by our limited lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ **Quick Shipment**	We assemble, test and ship fully assembled and wired panels within 15 days,—and confirm every order ensuring accuracy. NOTE: Series ECP-BP VFD Bypass Panels ship via LTL Freight Collect and do not qualify for standard ground shipping or free shipping.
✓ **Advantage Pricing**	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.

*See c3controls Terms & Conditions

Without Local Bypass Control

With Local Bypass

UNIQUE PRODUCT LINE FEATURES

FACTORY ASSEMBLED AND WIRED

Factory-assembled and wired bypass panels offer the convenience of a single catalog number, resulting in a more efficient bill of materials.

PRE-CONFIGURED

The contactor, disconnect, and transformer selections have been pre-configured based on your fuse size, streamlining the process of ordering and configuring fully assembled panels.

HIGH FAULT SCCR

Configuration options for high fault short circuit current rating of up to 100kA providing safety and reliability in high fault applications.

PRE-WIRED CONTROL CIRCUITS

The bypass panel control circuits come pre-wired with a control transformer that supplies 24VAC power, facilitating straightforward field installation. Additionally, all terminal blocks and wires are clearly labeled for ease of use.

SMALL FOOTPRINT

These slender panels are designed to fit directly beneath your chosen VFD and have been thoughtfully shaped to minimize their footprint.

IT'S EASY TO BUILD YOUR OWN VFD BYPASS PANEL

Simply pick the code number from each of the sections below and combine them to build your part number.

UL508A Bottom Mount VFD Bypass Panels

ECP - ____ - ____ - ____ ____ - ____ - ____
I II III IV V VI VII

Example: To build one of our most popular VFD Bypass Panels, the part number would be ECP + II + III + IV + V + VI + VII or ECP-BP2-460V3P-F030-M1-01

I. PRODUCT SERIES

CODE	DESCRIPTION	LIST
ECP	Series ECP, Engineered Control Panel	$ 1,000.00

II. FUNCTION

CODE	DESCRIPTION	LIST
BP2	2 Contactor Bypass, VFD Output & Bypass Output	$ 511.00
BP3	3 Contactor Bypass, VFD Output & Bypass Output with Isolation Contactor	$ 689.00

III. INPUT VOLTAGE

CODE	DESCRIPTION	LIST
208V3P	3 Phase, 208V	$ 230.00
230V3P	3 Phase, 230V	$ 230.00
460V3P	3 Phase, 460V	$ 230.00

IV. DISCONNECT SWITCH OPTIONS

CODE	DESCRIPTION
D	UL98 Non-Fused, 20kA
F	UL98 Fused with Class J Fuses, 100kA

V. DISCONNECT / FUSE / CONTACTOR SIZE

CODE	DISCONNECT/ FUSE SIZE (A)	PANEL SCCR	CONTACTOR SIZE	LIST
	FOR UL98 NON-FUSED DISCONNECT SWITCHES (CODE D)			
030	30A Disconnect	20kA	40A	$ 310.00
	FOR UL98 FUSED DISCONNECT SWITCHES (CODE F)			
006	6A Class J Time Delay Fuse	100kA	25A	$ 840.00
010	10A Class J Time Delay Fuse	100kA	25A	$ 840.00
015	15A Class J Time Delay Fuse	100kA	25A	$ 840.00
020	20A Class J Time Delay Fuse	100kA	25A	$ 840.00
025	25A Class J Time Delay Fuse	100kA	25A	$ 840.00
030	30A Class J Time Delay Fuse	100kA	25A	$ 840.00
035	35A Class J Time Delay Fuse	100kA	40A	$ 1,090.00
040	40A Class J Time Delay Fuse	100kA	40A	$ 1,090.00

VI. ENCLOSURE RATING AND MATERIAL

CODE	ENVIRONMENTAL RATING	MATERIAL	DIMENSIONS BASED ON IV & V SELECTIONS	LIST
M1	Type 1	Carbon Steel	Frame 2 - Dimensions 9" x 30" x 8" (W x H x D)	$ 560.00
M4	Type 3R, 4 & 12	Carbon Steel	Frame 2 - Dimensions 9" x 30" x 8" (W x H x D)	$ 924.00

VII. PILOT DEVICES

CODE	DESCRIPTION	LIST
00	Without Local Bypass Control	$ 50.00
01	With Local Bypass Control	$ 200.00

DISCOUNT SCHEDULE H

Bottom Mount VFD Bypass Panels

c3controls Series ECP-BP Bottom Mount VFD Bypass Panels are assembled from our Series 300 Contactors, Series TB IEC Terminal Blocks, and Series 22mm IEC Pilot Devices. Our Series ECP-BP panels are factory wired with a control transformer saving you time and reducing installation costs.

Product features include:

- VFD Bypass Panels offer the convenience of a single catalog number.
- Provides the same great features and benefits as our Series 300 Contactors, Series TB IEC Terminal Blocks, and Series 22mm IEC Pilot Devices.
- Carbon Steel enclosure comes in two versions; Type 1 or Type 3R, 4 & 12.
- Black/Red operating handle can be padlocked in the OFF position for extra safety and security needed during maintenance activities.
- Conveniently placed input and output terminal blocks provide easy access and quick installation.
- Compact panel size resulting in space savings and lower installed costs.

LTL Freight Collect Required
Ships separately from standard products unless otherwise requested.

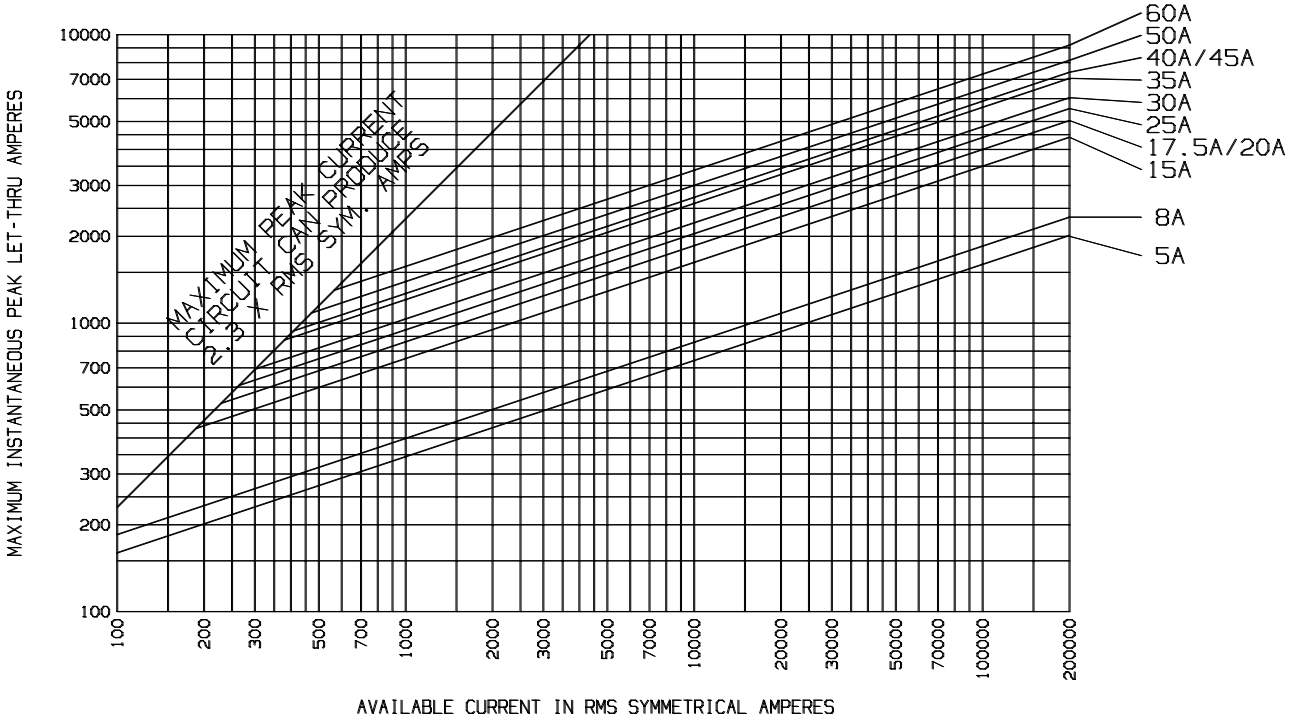
Some of Our Popular Configurations:

VFD BYPASS PANEL SERIES		
CODE	**DESCRIPTION**	**LIST**
ECP-BP2-460V3P-F030-M1-01	2-Contactor Bypass, 460VAC 3-Phase Input, Fused Disconnect, 30A Class J Time Delay Fuses, Type 1 Carbon Steel Enclosure With Local Bypass	$ 3,341.00
ECP-BP3-460V3P-F020-M4-01	3-Contactor Bypass, 460VAC 3-Phase Input, Fused Disconnect, 20A Class J Time Delay Fuses, Type 4 Carbon Steel Enclosure With Local Bypass	$ 3,883.00
ECP-BP2-208V3P-N030-M1-00	2-Contactor Bypass, 208VAC 3-Phase Input, Non-Fused Disconnect, Type 1 Carbon Steel Enclosure Without Local Bypass Control	$ 2,611.00

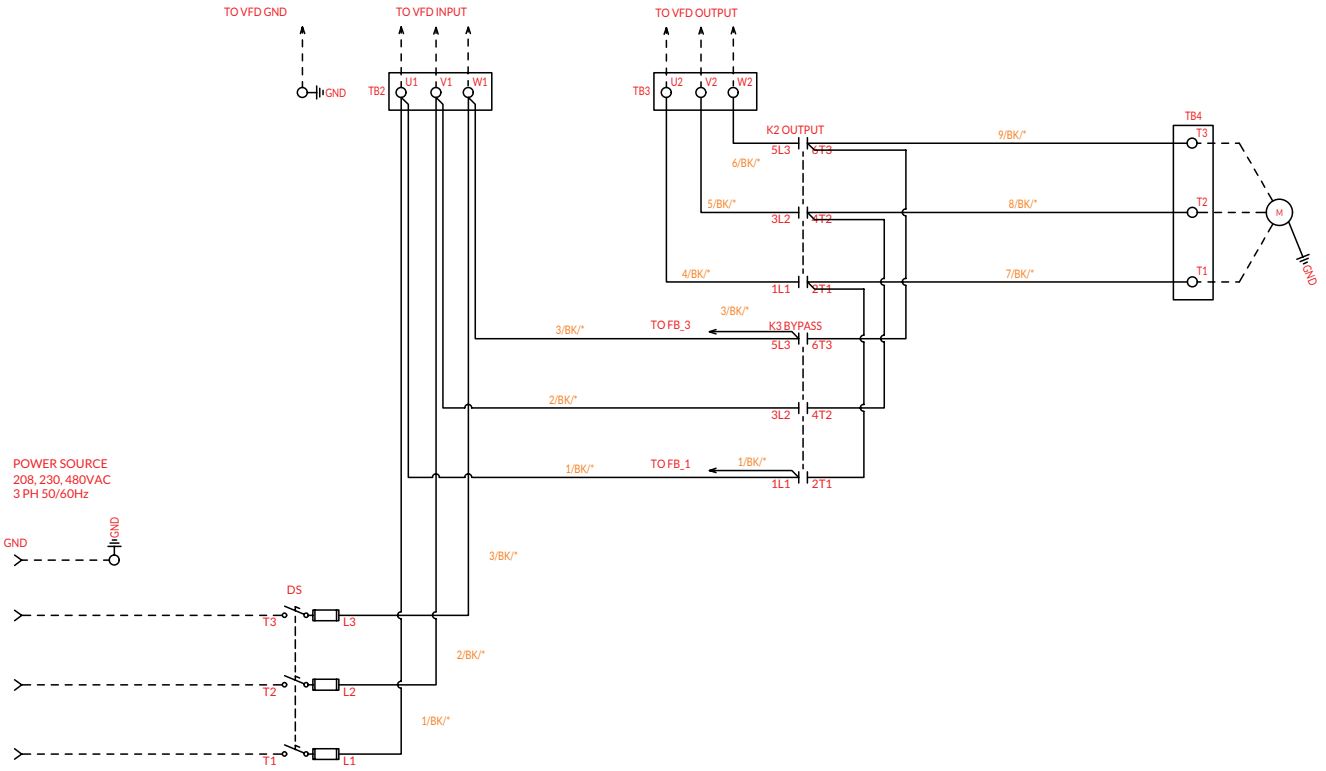
Specifications:

SERIES ECP-BP VFD BYPASS PANEL SPECIFICATIONS										
		DISCONNECT & POWER SIZE								
		D030	F006	F010	F015	F020	F025	F030	F035	F040
	UNITS									
ELECTRICAL GENERAL										
Max. Rated Operating Voltage, Ue	VAC	460								
Short Circuit Current Rating	kA	20	100							
Disconnect Rating	A	30 Non-Fused	30 Fused						60 Fused	
Class J Time Delay Fuse Size	A	—	6	10	15	20	25	30	35	40
Fuse Let-Through Characteristics		See diagram below for Maximum Instantaneous Peak Let-Through Curves								
Transformer Size	VA	150								
Transformer Primary Voltage(s)	VAC	208/230/460								
Transformer Secondary Voltage(s)	VAC	24								
Contactor Frame Size		S40	S25					S40		
COIL CHARACTERISTICS		For detailed contactor specifications by contactor frame size rating code, refer to Sec. 4 Page 14 of the catalog.								
Rated Insulation Voltage, Ui	V	1,000								
Operating Limits		80 ~ 110% of Rated Coil Voltage								
ENVIRONMENTAL										
Altitude	m / ft.	3,000 / 9,792								
Ambient Operating Temperature	°C / °F	-20 to 55 / -4 to 131								
Ambient Storage Temperature	°C / °F	-50 to 80 / -58 to 176								
Enclosure: Carbon Steel (M1)		Type 1								
Enclosure: Carbon Steel (M4)		Type 3R, 4 & 12								
For additional technical information including terminal torque requirements and wire information reference the corresponding schematics and installation instructions at c3controls.com.										

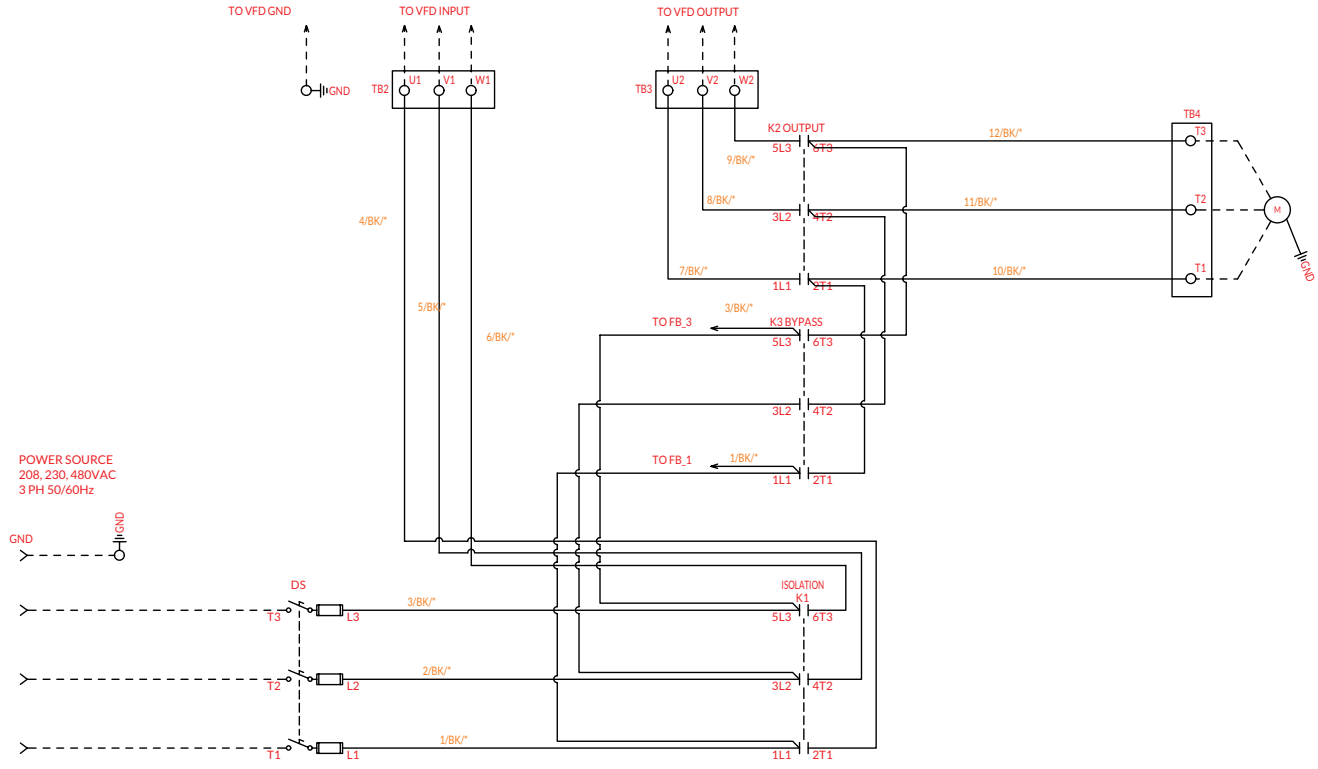
Maximum Instantaneous Peak Let-Through Curve - Class J Time Delay Fuses:



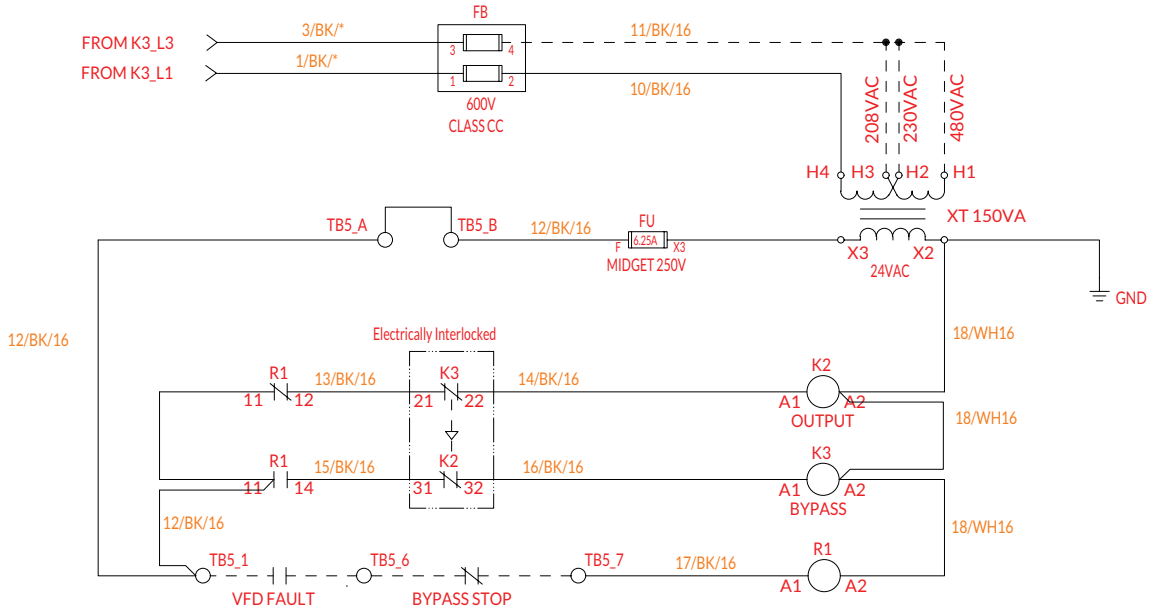
2-Contactor Bypass Power Circuit



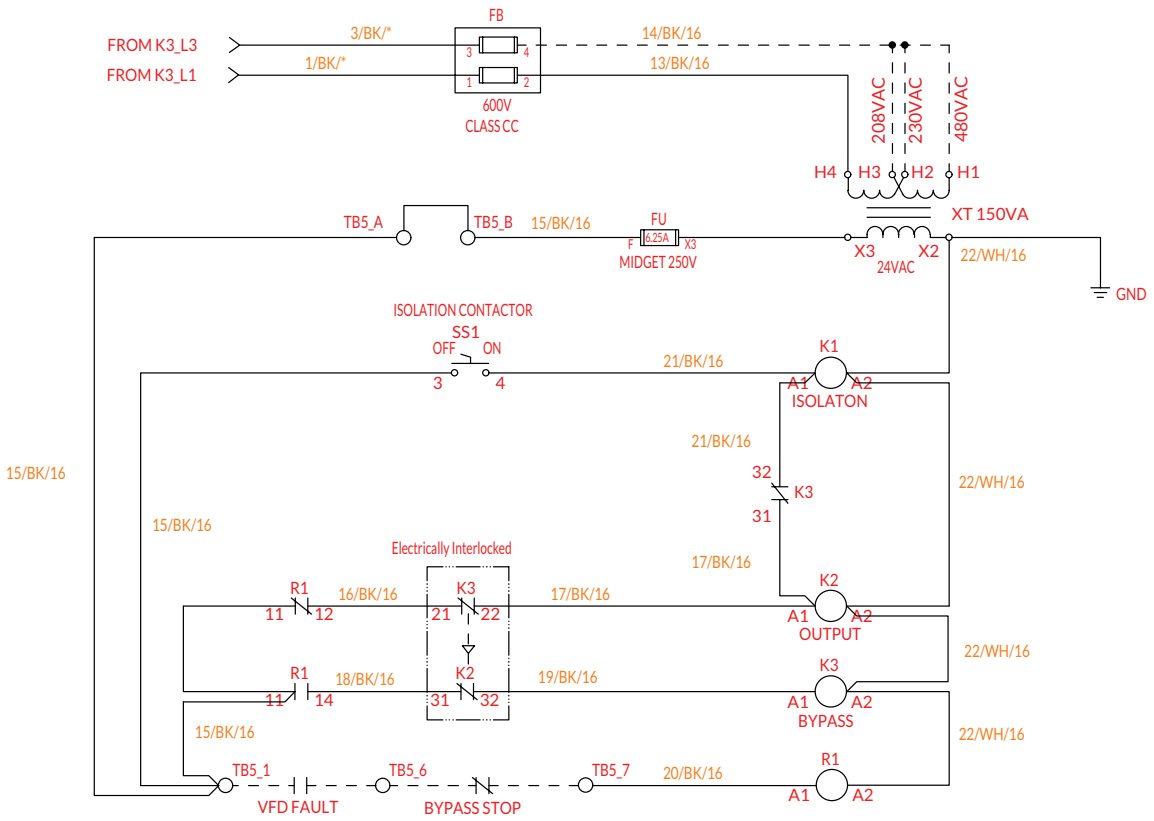
3-Contactor Bypass Power Circuit



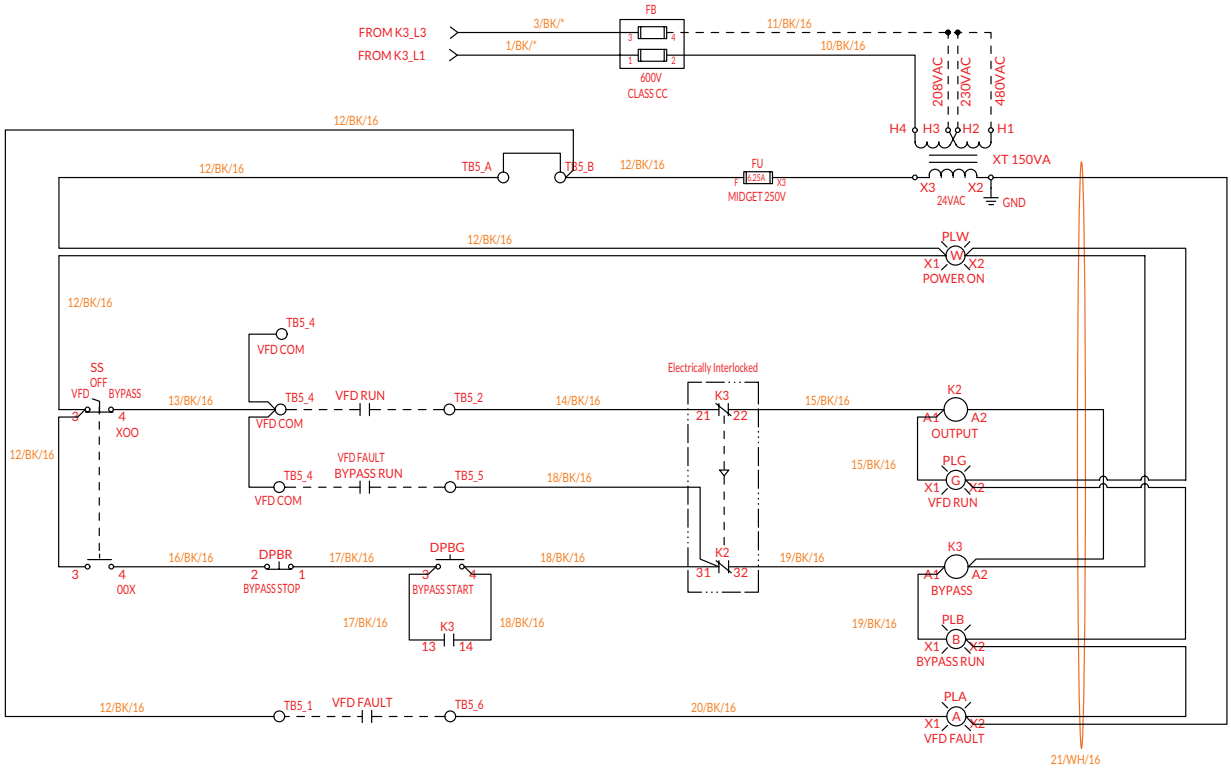
2 Contactor Bypass Control Circuit without Local Bypass Control



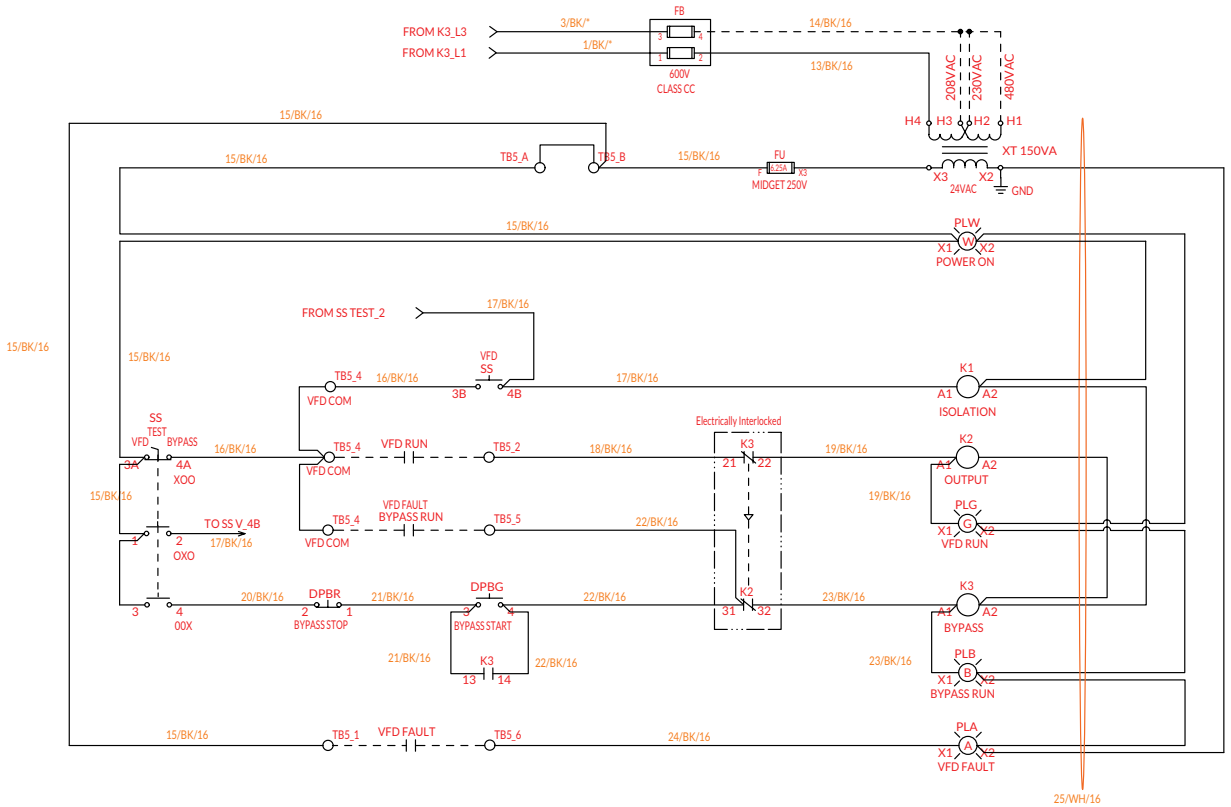
3 Contactor Bypass Control Circuit without Local Bypass Control

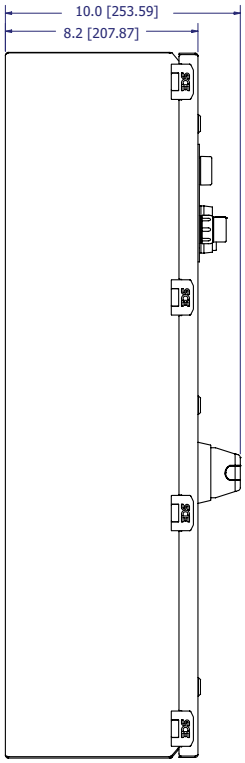


2 Contactor Bypass Control Circuit with Local Bypass Control

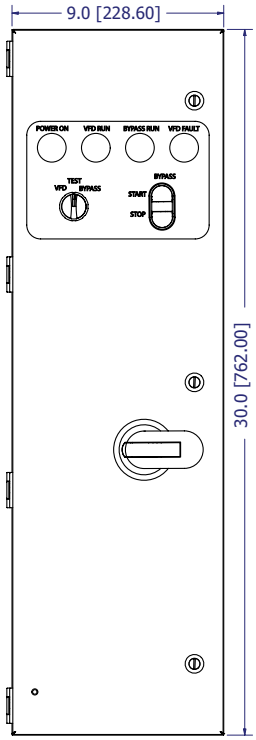


3 Contactor Bypass Control Circuit with Local Bypass Control

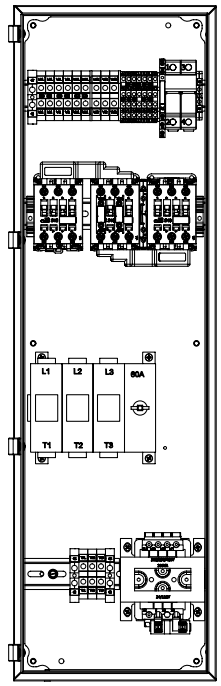




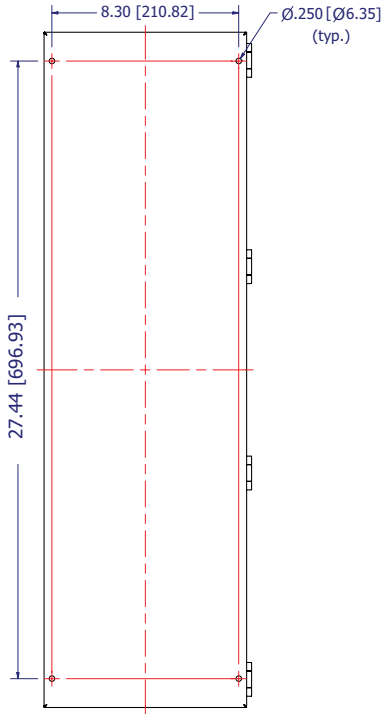
LEFT SIDE VIEW
SCALE 3/8



FRONT VIEW
SCALE 3/8



FRONT VIEW (COVER OFF)
SCALE 3/8



BACK VIEW
SCALE 3/8