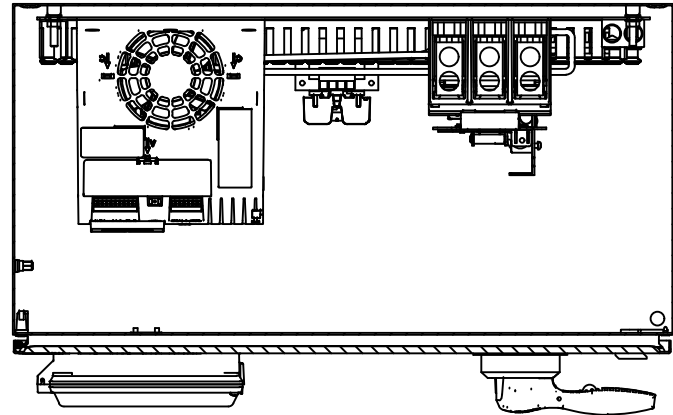


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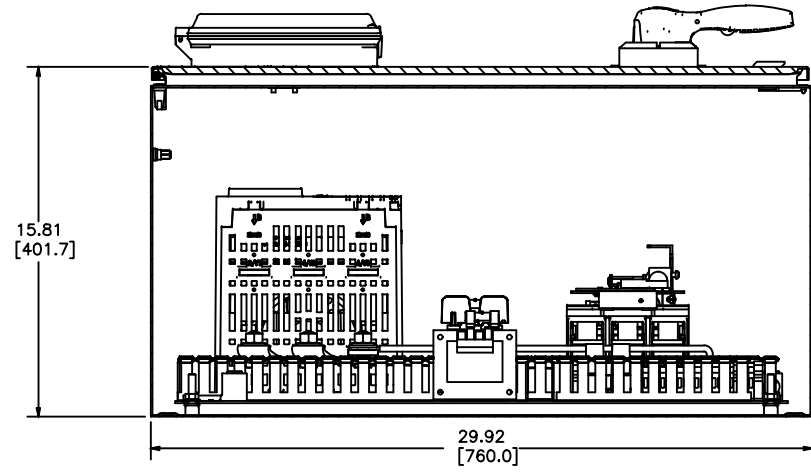
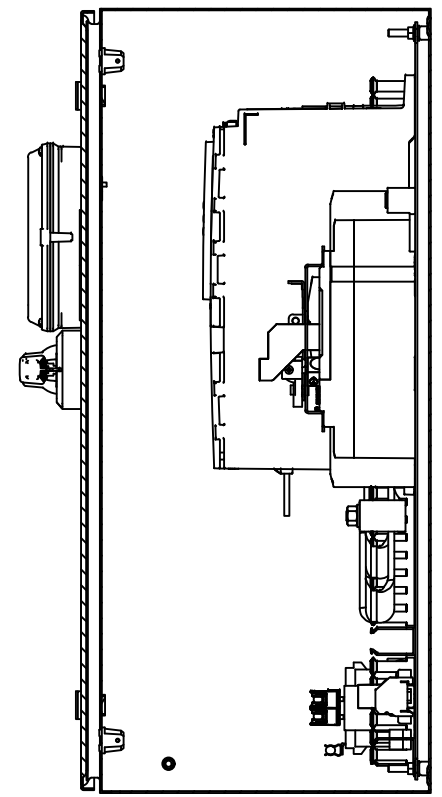
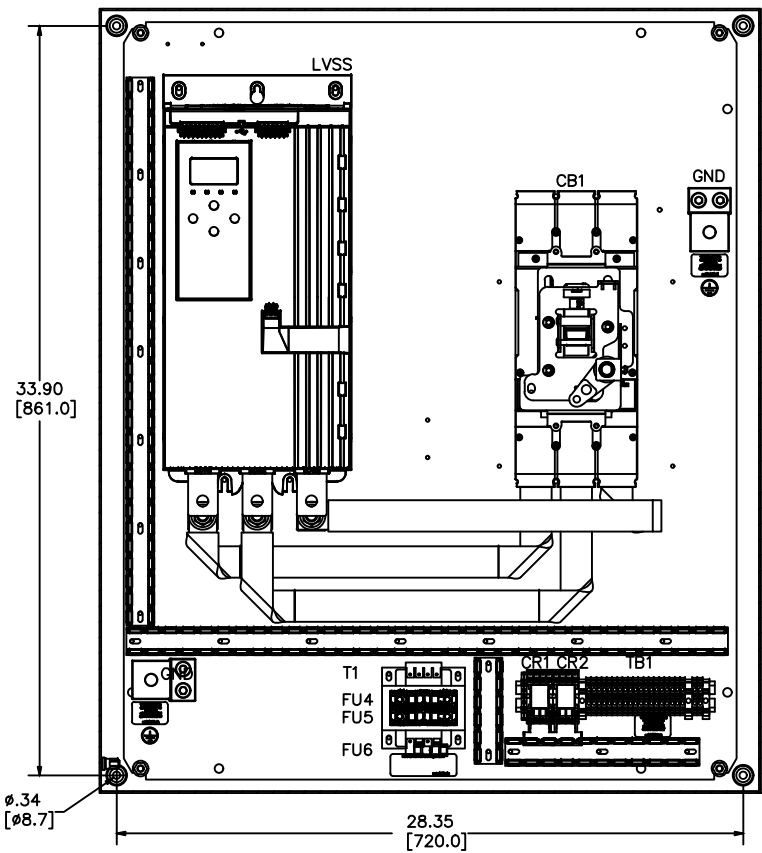
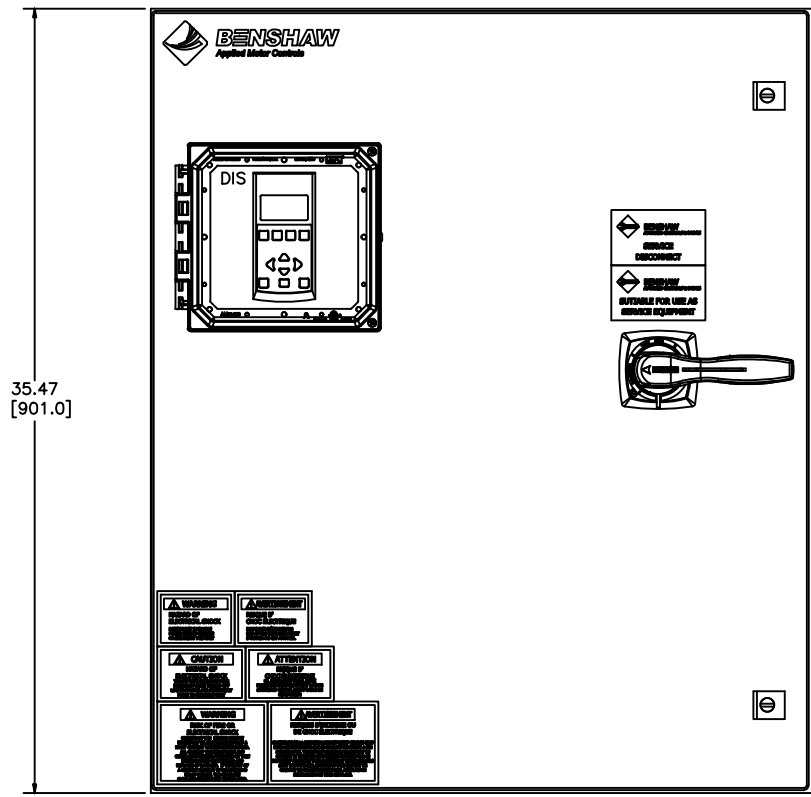
MX4PB-HD-150-2-4-HB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N



**LABEL LEGEND**

- CB1: CIRCUIT BREAKER
- GND: GROUND LUG
- LVSS: EMX4I SOFT START (W/INTEGRAL BYPASS)
- TB1: TERMINAL BLOCKS
- CR1-2: CONTROL RELAYS
- T1: CONTROL POWER TRANSFORMER
- FU4-FU5: PRIMARY FUSES (T1)
- FU6: SECONDARY FUSE (T1)
- DIS: EMX4I LCD DISPLAY/KEYPAD



**NOTES:**

- 1 MINIMUM WIRE BENDING SPACE SHALL BE 8.00" FROM TOP OF CIRCUIT BREAKER POWER CONNECTION TO TOP OF ENCLOSURE.
- 2 ENSURE THAT ALL RIBBON CABLES ARE ROUTED AWAY FROM POWER CONDUCTORS.
- 3 MINIMUM WIRE BENDING SPACE SHALL BE 8.00" FROM BOTTOM OF POWERSTACK POWER CONNECTION TO BOTTOM OF ENCLOSURE.

OPTIONS AND CODE NUMBERS			
OPTION	DISPLAY	HEATER	CONTROL
CODE NO.	YES		

1	APPROD: BDA 2/8/24 CHG BY: RWS 2/8/24 CHANGE CHANGED BRAND OF TERMINAL BLOCKS	THIRD ANGLE PROJECTION	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES INTERPRET DRAWING PER ASME Y14.5M-1994 TOLERANCES: .XX ± .03 .XXX ± .015 ANGLES ± 1°
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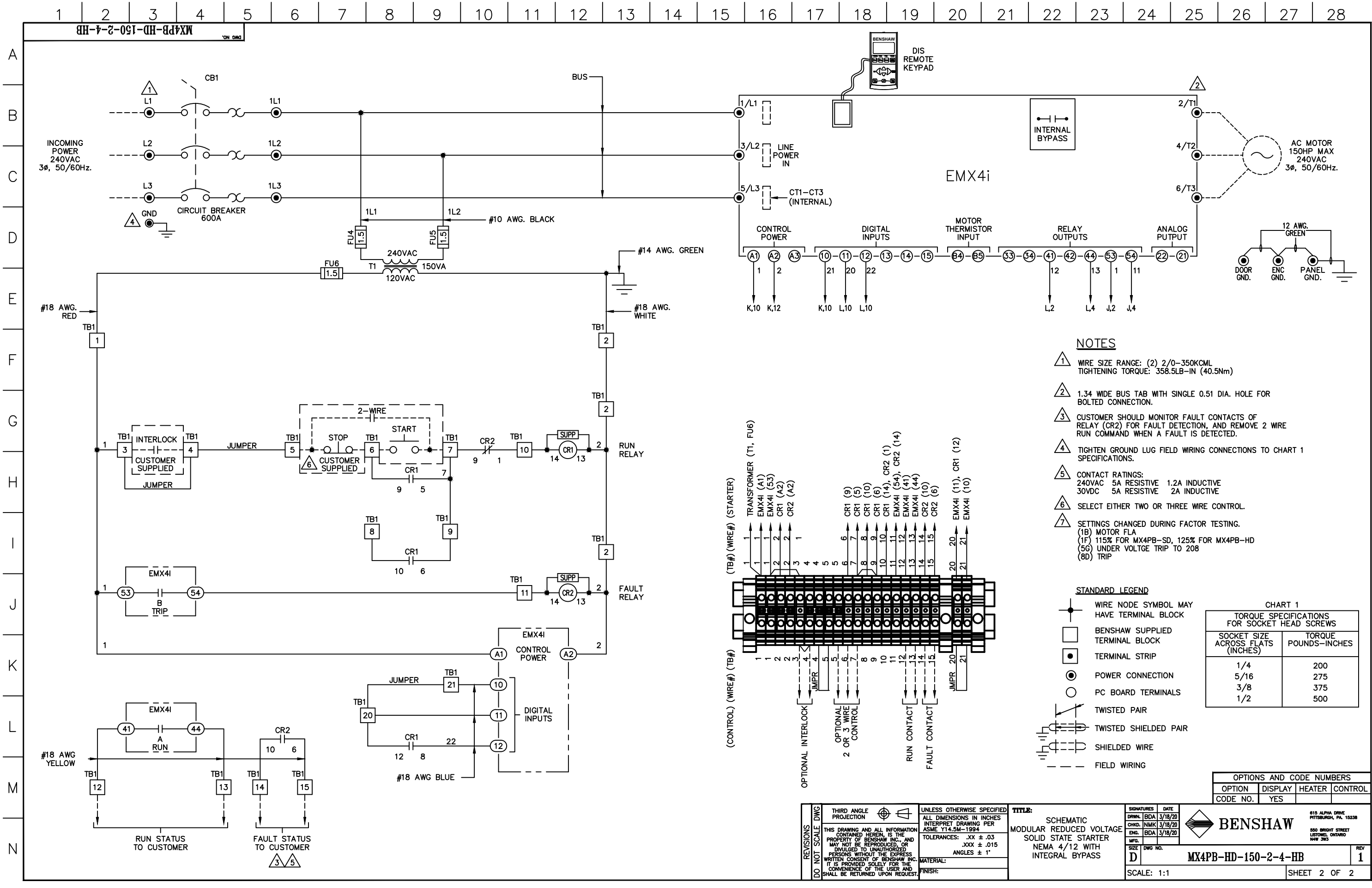
**TITLE:**  
ENCLOSURE LAYOUT  
MODULAR REDUCED VOLTAGE  
SOLID STATE STARTER  
NEMA 4/12 WITH  
INTEGRAL BYPASS

SIGNATURES	DATE
DRWN: BDA	3/18/20
CHRD: NMK	3/18/20
ENG: BDA	3/18/20
MFG:	
SIZE	DWG NO.

**BENSHAW**  
615 ALPHA DRIVE  
PITTSBURGH, PA. 15238  
550 BRIGHT STREET  
LISTON, ONTARIO  
N4W 3W5

**MX4PB-HD-150-2-4-HB**

SCALE: 1:4 SHEET 1 OF 2



**NOTES**

- ① WIRE SIZE RANGE: (2) 2/0-350KCMIL  
TIGHTENING TORQUE: 358.5LB-IN (40.5Nm)
- ② 1.34 WIDE BUS TAB WITH SINGLE 0.51 DIA. HOLE FOR BOLTED CONNECTION.
- ③ CUSTOMER SHOULD MONITOR FAULT CONTACTS OF RELAY (CR2) FOR FAULT DETECTION, AND REMOVE 2 WIRE RUN COMMAND WHEN A FAULT IS DETECTED.
- ④ TIGHTEN GROUND LUG FIELD WIRING CONNECTIONS TO CHART 1 SPECIFICATIONS.
- ⑤ CONTACT RATINGS:  
240VAC 5A RESISTIVE 1.2A INDUCTIVE  
30VDC 5A RESISTIVE 2A INDUCTIVE
- ⑥ SELECT EITHER TWO OR THREE WIRE CONTROL.
- ⑦ SETTINGS CHANGED DURING FACTOR TESTING.  
(1B) MOTOR FLA  
(1F) 115% FOR MX4PB-SD, 125% FOR MX4PB-HB  
(5G) UNDER VOLTAGE TRIP TO 208  
(8D) TRIP

**STANDARD LEGEND**

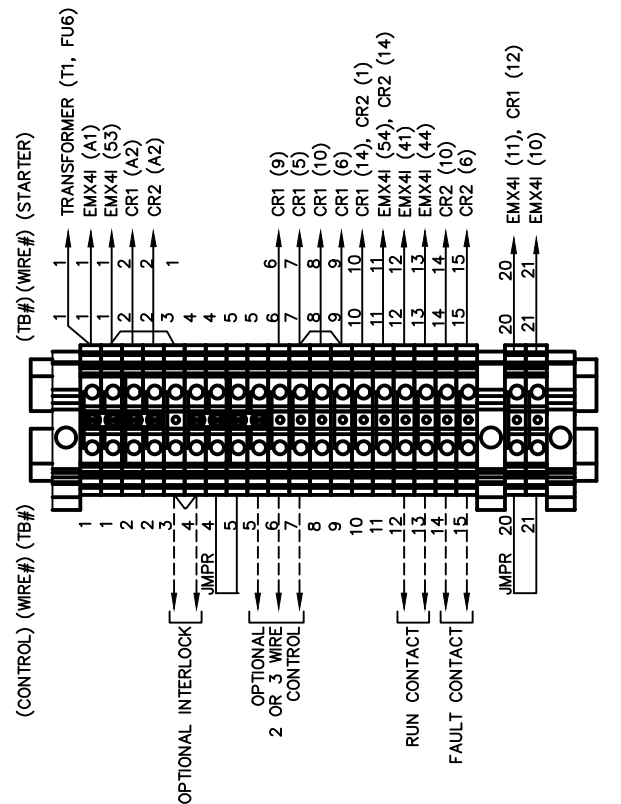
- WIRE NODE SYMBOL MAY HAVE TERMINAL BLOCK
- BENSCHAW SUPPLIED TERMINAL BLOCK
- TERMINAL STRIP
- ⊙ POWER CONNECTION
- PC BOARD TERMINALS
- TWISTED PAIR
- TWISTED SHIELDED PAIR
- SHIELDED WIRE
- - - FIELD WIRING

**CHART 1**  
TORQUE SPECIFICATIONS FOR SOCKET HEAD SCREWS

SOCKET SIZE ACROSS FLATS (INCHES)	TORQUE POUNDS-INCHES
1/4	200
5/16	275
3/8	375
1/2	500

**OPTIONS AND CODE NUMBERS**

OPTION	DISPLAY	HEATER	CONTROL
CODE NO.	YES		



**REVISIONS**  
DO NOT SCALE DWG

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED  
ALL DIMENSIONS IN INCHES  
INTERPRET DRAWING PER  
ASME Y14.5M-1994  
TOLERANCES: .XX ± .03  
.XXX ± .015  
ANGLES ± 1°

**TITLE:**  
SCHEMATIC  
MODULAR REDUCED VOLTAGE  
SOLID STATE STARTER  
NEMA 4/12 WITH  
INTEGRAL BYPASS

**SIGNATURES**  
DRWN: BDA 3/18/20  
CHD: NMK 3/18/20  
ENG: BDA 3/18/20  
MFG:  
SIZE: D  
SCALE: 1:1

**DATE**  
3/18/20

**REV**  
1

**MATERIAL:**

**FINISH:**

**BENSCHAW**  
615 ALPHA DRIVE  
PITTSBURGH, PA. 15238  
550 BRIGHT STREET  
LISTON, ONTARIO  
M4W 3W5

**MX4PB-HD-150-2-4-HB**

**SHEET 2 OF 2**