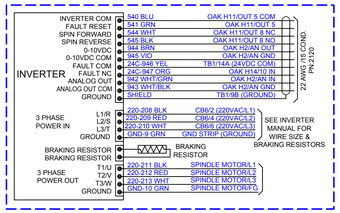
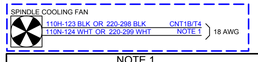
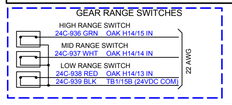


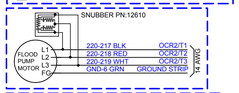


NOTE 1

110VAC SPINDLE COOLING FAN
110H-122 BLK connects from CNT1B/L4 to TB1/3A. Wire 110H-123 BLK connects to CNT1B/T4.
Wire 110N-124 WHT connects to TB1/7A.

220VAC SPINDLE COOLING FAN
220-297 BLK connects from CB7/2 to CNT1B/L4. Wire 220-298 BLK connects to CNT1B/T4. Wire 220-299 WHT connects to CB8/4.



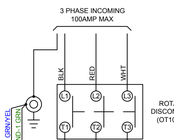


NOTE 2

110VAC LUBE PUMP
Wire 110H-126 BLK connects from TB1/2B to OAK H11/OUT 2 COM.
Wire 110H-127 BLK connects to OAK H11/OUT 2.
Wire 110N-128 WHT connects to TB1/5B. Wire GND-4 GRN connects to GND STRIP.

220VAC LUBE PUMP
220-226 BLK connects from CB7/2 to OAK H11/OUT 2 COM.
Wire 220-227 BLK connects to OAK H11/OUT 2.
Wire 220-228 WHT connects to CB7/4.
Wire GND-4 GRN connects to GND STRIP.

PART	(MFG PN:)	LOCATION
CB1	(NB1-D10-1P)	C3
CB2	(NB1-D6-1P)	C3
CB3	(SEE NOTE 4)	C3
CB4	CB7 (NB1-D10-2P)	D3
CB5	(SEE NOTE 4)	D3
CB6	(NB1-D10-3P)	D3
CB8	(SEE NOTE 4)	D3
CNT1A,CNT1B	(LC1DT40B7)	B2,B3
CNT2	(LC1K0610B7)	B3
DISCONNECT	(OT100F3)	B1
DOOR FAN		H4
E-STOP CONNECTOR		B5
E-STOP CON. PENDANT		E6
E-STOP SWITCH		B5
E-STOP SWITCH CONSOLE		B6
FLOOD PUMP MOTOR		A3
GROUND LUG		B1
GROUND STRIP		B4
GEAR RANGE SWITCHES		A2
INVERTER		A1
OPERATOR CONTROL PANEL		E6
LIMIT SWITCHES		A4
LIMIT SWITCH OPTIONS		G6
LUBE PUMP		A3
MIST		A3
MPG CABLE		E6,F6
NOTE 1		A2
NOTE 2		A3
NOTE 3		B2
NOTE 4		C1
NUC	(PN:8520)	B6
OAK	(PN:13135)	E2-F4
OCR2	(LR2K0310)	B3
PC	(PN: 11084)	B6,C6
PLCADD1616	(PN: 11025)	H1,H2
PROBE CABLE	(PN:11211)	F6
PS1	(RO-650)	E4
PS2	(S-150-24)	E5
PS3	(RT-50B)	E4
SERVO DRIVES		F4-G5
SNUBBER FOR CNT1	(LAD4RCE)	B2
SNUBBER FOR CNT2	(LAAKE1B)	B3
SPINDLE COOLING FAN		A2
SPINDLE MOTOR		A1
T1	(4953)	C1-D2
TB1		D2,D3
WORK LIGHT		A2
X-AXIS BRAKE CONNECTOR		E5

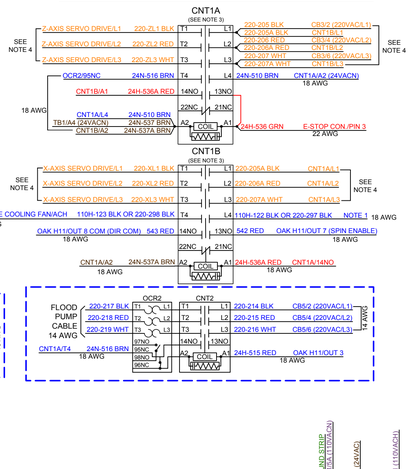


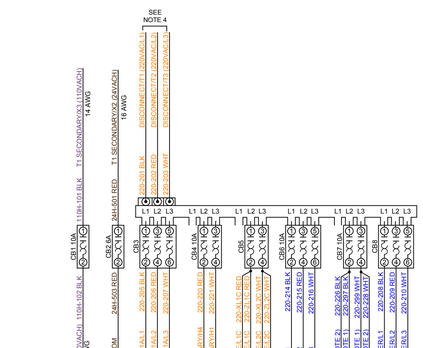
NOTE 4

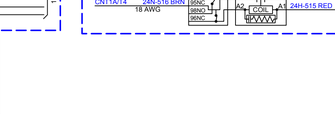
WIRES AND CIRCUIT BREAKERS MUST BE RATED FOR THE CURRENT RATING OF THE DEVICES USED. REFER TO OWNERS MANUAL FOR SPECIFIED WIRE GAUGE AND CURRENT CAPACITY.

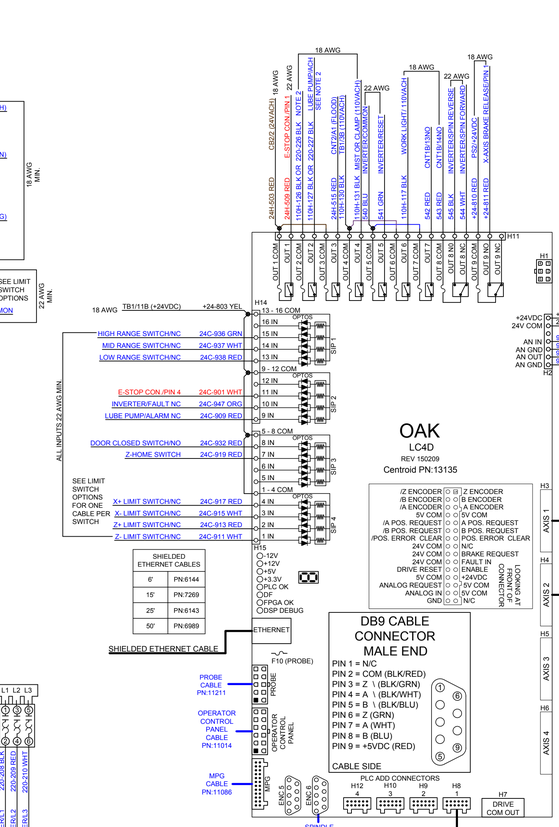
NOTE 3

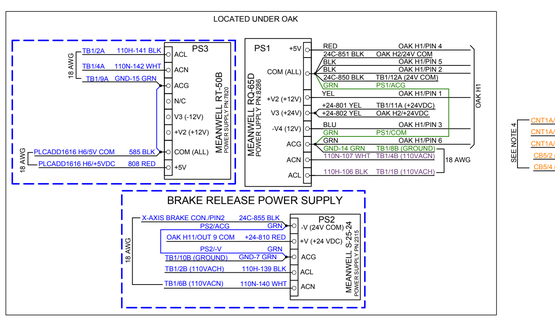
ALL CONTACTOR COILS REQUIRE A SNUBBER, EITHER CONTACTOR MANUFACTURERS RECOMMENDED SNAP ON SNUBBER OR CENTROID PN:1819 EXTERNAL QUENCHARC SNUBBER.

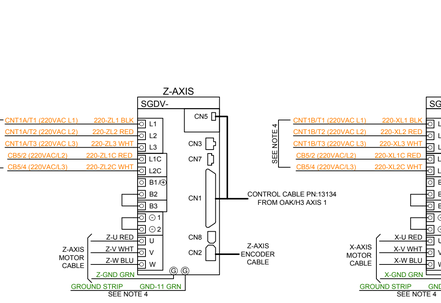


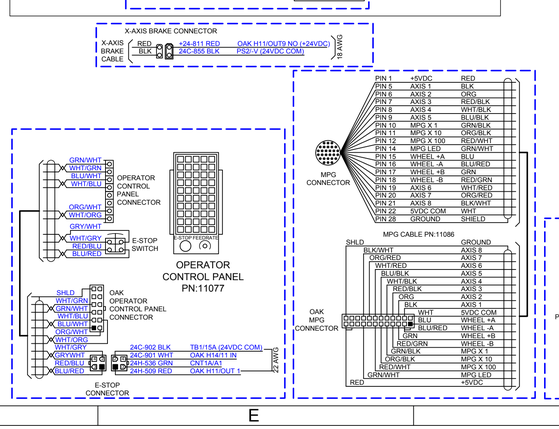












SUGGESTED WIRE CURRENT CAPACITY

STRANDED MTW OR EQUIVALENT

18 AWG - UP TO	6A
16 AWG - UP TO	8A
14 AWG - UP TO	15A
12 AWG - UP TO	20A
10 AWG - UP TO	30A
8 AWG - UP TO	40A
6 AWG - UP TO	60A

LIMIT SWITCH OPTIONS

ONE CABLE PER SWITCH		ONE CABLE PER AXIS	
X- LIMIT	RED	X- LIMIT	WHITE
X- COMMON	BLACK	X- COMMON	BLACK
X+ LIMIT	RED	X+ LIMIT	RED
X+ COMMON	BLACK	X+ COMMON	GREEN
Z- LIMIT	RED	Z- LIMIT	WHITE
Z- COMMON	BLACK	Z- COMMON	BLACK
Z+ LIMIT	RED	Z+ LIMIT	RED
Z+ COMMON	BLACK	Z+ COMMON	GREEN

All limit switch cables minimum 22AWG shielded. All shields grounded

E-STOP CONNECTIONS ARE SHOWN IN RED
OPTIONAL CONNECTIONS ARE SHOWN IN BLUE
GROUND CONNECTIONS ARE SHOWN IN GREEN
110VAC CONNECTIONS ARE SHOWN IN VIOLET
3 PHASE CONNECTIONS ARE SHOWN IN ORANGE
24VAC CONNECTIONS ARE SHOWN IN BROWN

REV	DATE	DESCRIPTION	BY
1	8-23-2016	INITIAL RELEASE	CEM
2	8-24-2016	Corrected orientation and connections of E-stop contactors and added probe cable.	CEM
3	9-23-2016	Corrected transformer primary connections and PS2 depiction.	CEM

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Title
Lathe, 220VAC, OAK, Yaskawa Drives, Generic Inverter (VFD), Optional PLCADD1616

Size	D	Number	Rev 3
Date	160823	Drawn by	CEM
Filename	S14778.DWG	Sheet	1 of 1