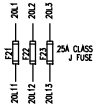
WIRE #	AWG*	DEVICE CONNECTED	
7	10-BLK	X20.1-7	K20
8	10-BLK	X20.1-8	K20
9	10-BLK	X20.1-9	K20
11	14-BLK		K7B, G21
12	14-BLK		K7B, G21
13	14-BLU		K7B, G21
14	14-BLU		K7B, G21
18	16-RED		U20, K226, K7A
27	14-BLU	X20.4-27	G21, Y21
28	14-BLU	X20.4-28	G21, Y21
45	16-RED		K226, K26
20L1	10-BLK		K20, F21, F24, F26
20L2	10-BLK		K20, F22, F25, F27
20L3	10-BLK		K20, F23, F28
20L11	10-BLK		F21, U20
20L12	10-BLK		F22, U20
20L13	10-BLK		F23, U20
20L21	10-BLK	X20.2-21	U20, W21
20L22	10-BLK	X20.2-22	U20, W21
20L23	10-BLK	X20.3-23	U20, W21
	14-BLK		F24, K7B
L32	14-BLK		F25, K7B
1LU25	14-BLK	X20.4-24	M26, K26
1LV25	14-BLK	X20.4-25	M26, K26
1LW25	14-BLK	X20.4-26	M26, K26
1LU26	14-BLK		F26, K26
1LV26	14-BLK		F27, K26
1LW26	14-BLK		F28, K26
L100	16-WHT	X20.4-100	PE, K20, K226, K26, K7A, K7B, X16
L101	16-RED	X20.3-101	F103, X16
L110	16-RED	X20.3-110	K226, X16
L117	16-RED	X20.3-117	K10, SA, X16
L210	16-RED	X20.3-210	U20, X16
L223	16-RED	X20.3-223	U20, X16
L224	16-RED	X20.3-224	U20, X16
L225	16-RED	X20.3-225	U20, X16
L219	16-RED	X20.3-226	U20, X16
L236	16-RED	X20.3-236	U20, X16
L237	16-RED	X20.3-237	U20, X16
L238	16-RED	X20.4-238	U20, X16
L239	16-RED	X20.4-239	U20, X16
L291	14-BLU	X20.4-291	U20, B291
L292	14-BLU	X20.4-292	U20, B291
L293			U20, B291
R20.1	10-BLK	X20.2-R20.1	U20, B291
R20.2	10-BLK	X20.2-R20.2	U20, B291

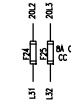
TIGHTENING TORQUE 20 LB.-IN.

10 AWG WIRE
75°C (167°F)
COPPER CONDUCTORS

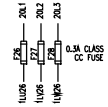
TIGHTENING TORQUE 25 LB.-IN.



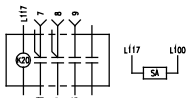
TIGHTENING TORQUE 20 LB.-IN.



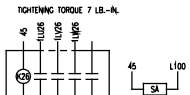
TIGHTENING TORQUE 20 LB.-IN.



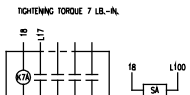
TIGHTENING TORQUE 15 LB.-IN.



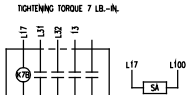
TIGHTENING TORQUE 7 LB.-IN.

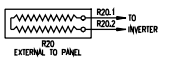


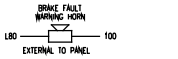
TIGHTENING TORQUE 7 LB.-IN.



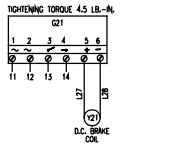
TIGHTENING TORQUE 7 LB.-IN.

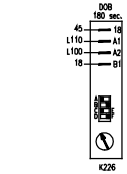


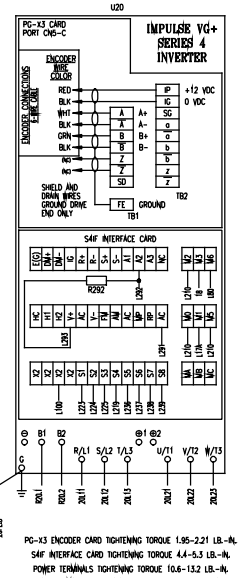




TIGHTENING TORQUE 4.5 LB.-IN.







PG-X3 ENCODER CARD TIGHTENING TORQUE 1.95-2.21 LB.-IN.
S4F INTERFACE CARD TIGHTENING TORQUE 4.4-5.3 LB.-IN.
POWER TERMINALS TIGHTENING TORQUE 10.6-13.2 LB.-IN.
GND TERMINALS TIGHTENING TORQUE 17.7-22.1 LB.-IN.

S220 - GEARED LIMIT SWITCH		
ELEMENT	FUNCTION	CONTACTS
S1	EMERGENCY HOIST UPPER LIMIT	11-12
S2	EMERGENCY HOIST LOWER LIMIT	21-22
S3	OPERATING UPPER LIMIT	31-32
S4	UPPER SLOW DOWN LIMIT	41-42
S5	OPERATING LOWER LIMIT	51-52
S6	LOWER SLOW DOWN LIMIT	61-62

UL508A NOTES:

* WIRE AWG IN THIS COLUMN APPLIES TO WIRING INTERNAL TO HOIST CONTROL PANEL. FIELD WIRING REQUIREMENTS ARE SHOWN BELOW APPROPRIATE TERMINAL BOARD.

TO MAINTAIN ENCLOSURE TYPE 4, TYPE 12 RATING OF THE ENCLOSURE, USE CORD-GRIPS AND SEALING FITTINGS WITH A TYPE 4 AND TYPE 12 RATING

ALL PANEL COMPONENTS MUST BE LABELED TO MATCH SCHEMATIC WIRING DIAGRAM DESIGNATIONS

USE COPPER CONDUCTORS ONLY FOR ALL FIELD TERMINALS

SINGLE TERMINAL GROUND LUG PROVIDED FOR SUPPLY GROUNDING CONDUCTOR ONLY. DO NOT USE FOR PANEL WIRING.

LABEL FUSE BASES WITH FUSE USE SYMBOL AND SIZE IN AMPERES USING A PRINTED LABEL.

ADJACENT TO TRANSFORMER LABEL FUSE SYMBOL AND AMPACITY

LABEL TERMINAL BLOCKS WITH ALPHANUMERIC CODE AS SHOWN ON WIRING DIAGRAM USING PERMANENT MARKER.

SYMBOL DESIGNATIONS

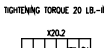
A110 - PUSHBUTTON PENDANT
A270 - SLE3 MOTOR MONITOR
F21-F23 - HOIST CIRCUIT FUSING
F24-F25 - BRAKE CIRCUIT FUSING
F26-F28 - BLOWER FAN CIRCUIT FUSING
T100 - CONTROL TRANSFORMER
F101-102 - T100 PRIMARY FUSING
F103 - T100 SECONDARY FUSE
G21 - HOIST BRAKE RECTIFIER
K10 - MAIN CONTACTOR
K26 - BLOWER MOTOR CONTACTOR
K226 - BLOWER MOTOR DOB TIMER
K7A - BRAKE RELAY
K7B - BRAKE RELAY
U20 - HOIST INVERTER
R20 - HOIST BRAKING RESISTOR
S220 - GEARED LIMIT SWITCH
S260 - OPERATING UPPER LIMIT BYPASS
S261 - EMERGENCY UPPER LIMIT RESET
S262 - OPERATING LOWER LIMIT BYPASS
S263 - EMERGENCY LOWER LIMIT RESET
S228 - UPPER BLOCK LIMIT SWITCH
B275 - LOAD SENSOR
W21 - HOIST MOTOR
Y21 - HOIST MOTOR BRAKE
R292 - HOIST PTC BRANCH RESISTOR
B291 - HOIST MOTOR PTC THERMISTOR
X20 - TERMINAL BLOCKS
PE - FRAME GROUND

WARNING:
THIS EQUIPMENT MUST BE EFFECTIVELY GROUNDED ACCORDING TO APPLICABLE CODES.

AVERTISSEMENT:
CET EQUIPMENT DOIT ETRE MIS A'LA TERRE EN ACCORDANCE AVEC LES NORMES EN VIGUEUR.

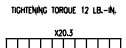
FIRST USED ON: PROJECT ONE

TIGHTENING TORQUE 20 LB.-IN.

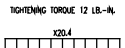


10 AWG WIRE
75°C (167°F)
COPPER CONDUCTORS

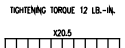
TIGHTENING TORQUE 12 LB.-IN.



TIGHTENING TORQUE 12 LB.-IN.

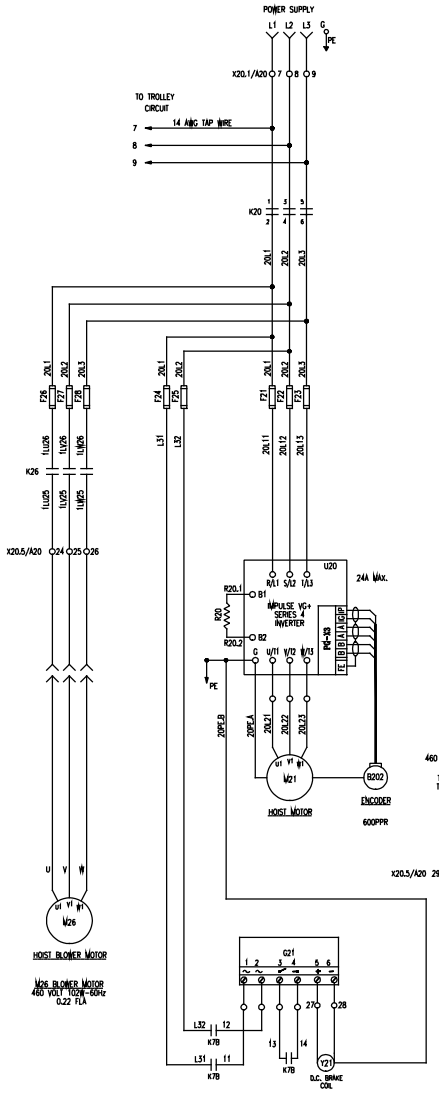


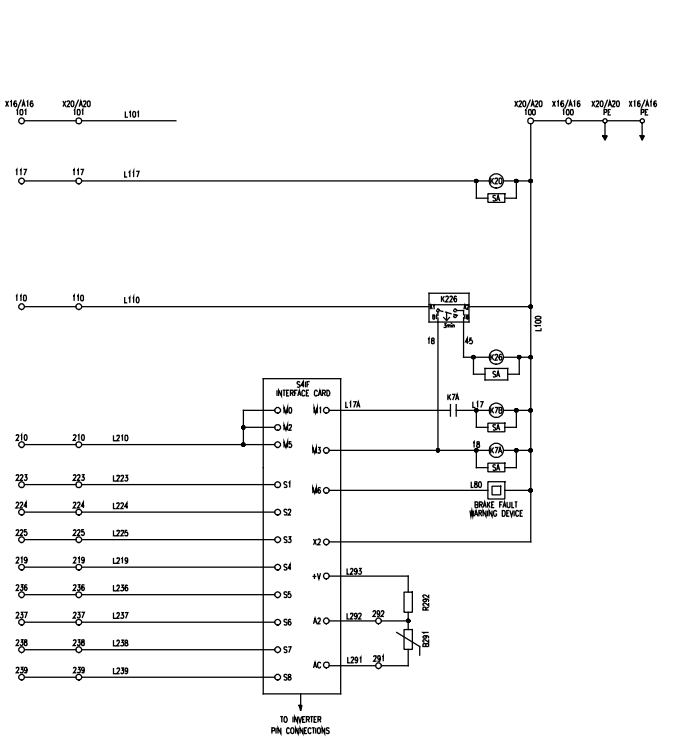
TIGHTENING TORQUE 12 LB.-IN.



CONNECT TO BRIDGE CONTROL MAINLINE CONTACTOR AND FEEDER CIRCUIT PROTECTION
40A MAX. DUAL ELEMENT TIME DELAY J-CLASS FUSES
OR
40A MAX. LISTED THERMAL-MAGNETIC CIRCUIT BREAKER

ELEMENTARY DIAGRAM





UL508A HOIST CONTROL PANEL	
VOLTAGE	460V
PHASES	3 PH.
FREQUENCY	60 Hz
TOTAL FLA	30A
LARGEST MOTOR FLA	22A
LONGEST MOTOR TIME RATE	6 MIN ON-4 MIN OFF (IEC 60% DUTY
SCCR (kA)	5kA
GROUP OCP	41A
MAX FUSE	40A
MAX CIRCUIT BREAKER	40A
MAX VOLTAGE	460V
ENCLOSURE TYPE	4 / 12
INPUT TERMINAL ID	X20.1: 7, 8, 9
WIRING DIAGRAMS	45656103 45656108 45656202

ECN	Rev.	Description of change	Date	By	Original Scale:	NONE
152416	AC	FIXED MTR FAN,BRK HORN WIRE LBLS	4/26/2019	RPW	Drawn:	12/13/2018 RTB
152105	AB	REVISED FEEDER OCP SIZE	1/11/2019	RTB	Approved:	
152105	AA	INITIAL RELEASE	12/17/2018	RTB	Design Authority:	Wadesboro

Columbus McKinnon Corporation
Hoist & Rigging - Americas
Amherst, NY USA

Description:
WIRING DIAGRAM - YK/SK HOIST
VG+S4 FLUX VECTOR CONTROL
TYPE B: BLS, GLS, PTC, SLE3
A20 PANEL - UL508A

Format: D | Number: 45656108 | Sheet: 2/2