Yale®

SUPPLEMENT FOR SCHEDULE # YSWRHPL-0722

YK Open Loop VFD (OLV) Hoist & Trolley Controls for Monorail Trolley

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www.cmco.com

Supplement to Schedule # YSWRHPL-0722

Prices effective February 1, 2023
Prices subject to change without notice.

All prices are F.O.B. origin.

MODELS

Finish Code	Description
OLVYK05020AF0	Yale, 5 Ton, 20’ Lift, Complete Control, EZ-Connect, Drives Shafts for 3.5” to 19.7” Flange Width
OLVYK05020BF0	Yale, 5 Ton, 20’ Lift, Crane Control, EZ-Connect, Drives Shafts for 3.5” to 19.7” Flange Width
OLVYK05033AF0	Yale, 5 Ton, 33’ Lift, Complete Control, EZ-Connect, Drives Shafts for 3.5” to 19.7” Flange Width
OLVYK05033BF0	Yale, 5 Ton, 33’ Lift, Crane Control, EZ-Connect, Drives Shafts for 3.5” to 19.7” Flange Width
OLVYK10020AF0	Yale, 10 Ton, 20’ Lift, Complete Control, EZ-Connect, Drives Shafts for 3.5” to 19.7” Flange Width
OLVYK10020BF0	Yale, 10 Ton, 20’ Lift, Crane Control, EZ-Connect, Drives Shafts for 3.5” to 19.7" Flange Width
OLVYK10033AF0	Yale, 10 Ton, 33' Lift, Complete Control, EZ-Connect, Drives Shafts for 3.5" to 19.7" Flange Width
OLVYK10033BF0	Yale, 10 Ton, 33' Lift, Crane Control, EZ-Connect, Drives Shafts for 3.5" to 19.7" Flange Width

STANDARD CONFIGURATIONS

Capacities and Configurations	5 and 10-ton, low-headroom monorail trolley in 20 or 33-foot lifts, 4-part single reeved
Speeds	20 FPM (hoist lifting speed) and 80 FPM traverse (trolley speed)
Flange Widths	Hoists are supplied with trolley drive shafts to adjust the ange width between 3.5 and 19.7 inches and shipped at 8-inch ange width
Voltages	460V only, 115V control, 120 Hz
Motor	IP55 motor for open loop VFD control
Controls	VFD hoist and trolley utilize two Magnetek IMPULSE®•G+ Mini drives set to 2-step in nitely variable
Certifications and Approvals	NEMA 4/12 enclosure, UL508 panel
Safety	Included encoder for direction and overspeed detection, 6-position electronic limit switch with upper block operated paddle limit switch, panel is installed by Columbus McKinnon prior to shipment
Tow Arm	Tow arm is included as standard on these hoist con gurations
Exceptions	Some ange width settings may require removal or addition of a counterweight to properly balance the hoist. Extra plates are not supplied.

5-TON CAPACITY HOISTS

Hoist Model Number	OLVYK05020AF0	OLVYK05020BF0	OLVYK05033AF0	OLVYK05033BF0
Unit Net Weight	827 LBS	827 LBS	937 LBS	937 LBS
Brand	Yale	Yale	Yale	Yale
Rated Lift Capacity	**5 U.S. tons**	**5 U.S. tons**	**5 U.S. tons**	**5 U.S. tons**
Hoist Suspension Type	Underhung Motorized Trolley	Underhung Motorized Trolley	Underhung Motorized Trolley	Underhung Motorized Trolley
Hoist Duty Classi cation	HMI Class H4	HMI Class H4	HMI Class H4	HMI Class H4
Operating Environment	Normal	Normal	Normal	Normal
Ambient Temperature	-4°F to 104°F / -20°C to 40°C	-4°F to 104°F / -20°C to 40°C	-4°F to 104°F / -20°C to 40°C	-4°F to 104°F / -20°C to 40°C
Installation Location	Indoor	Indoor	Indoor	Indoor
Max. Lift Dist.	**20 ft (6.1 m)**	**20 ft (6.1 m)**	**33 ft (10.1 m)**	**33 ft (10.1 m)**
Reeving Style	4-Part Single Reeved	4-Part Single Reeved	4-Part Single Reeved	4-Part Single Reeved
Operating Voltage	460V / 3 ph / 60 Hz	460V / 3 ph / 60 Hz	460V / 3 ph / 60 Hz	460V / 3 ph / 60 Hz
Control Voltage	120 VAC	120 VAC	120 VAC	120 VAC
Hoist Control Type	VFD Open Loop Vector	VFD Open Loop Vector	VFD Open Loop Vector	VFD Open Loop Vector
Hoist VFD Type	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable
Maximum Lifting Speed	20 ft/min (6.1 m/min)	20 ft/min (6.1 m/min)	20 ft/min (6.1 m/min)	20 ft/min (6.1 m/min)
Secondary Lift Speed	2 ft/min (0.610 m/min)	2 ft/min (0.610 m/min)	2 ft/min (0.610 m/min)	2 ft/min (0.610 m/min)
Hoist Motor HP	7.2	7.2	7.2	7.2
Trolley Control Type	Variable Speed Drive	Variable Speed Drive	Variable Speed Drive	Variable Speed Drive
Trolley VFD Type	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable
Trolley Traverse Speed (60Hz)	80 ft/min (24.38 m/min)	80 ft/min (24.38 m/min)	80 ft/min (24.38 m/min)	80 ft/min (24.38 m/min)
Secondary Traverse Speed(60Hz)	8 ft/min (2.44 m/min)	8 ft/min (2.44 m/min)	8 ft/min (2.44 m/min)	8 ft/min (2.44 m/min)
Trolley Motor HP (each)	1.2	1.2	1.2	1.2
Trolley Motor Qty	1	1	1	1
Trolley Wheel Tread Diameter	3.94 in (10.01 cm)	3.94 in (10.01 cm)	3.94 in (10.01 cm)	3.94 in (10.01 cm)
Trolley Wheel Tread Style	Spherical Ball	Spherical Ball	Spherical Ball	Spherical Ball
Trolley Flange Width Min. (in)	3.5	3.5	3.5	3.5
Trolley Flange Width Max. (in)	19.7	19.7	19.7	19.7

5-TON CAPACITY HOISTS

Hoist Model Number	OLVYK05020AF0	OLVYK05020BF0	OLVYK05033AF0	OLVYK05033BF0
Max Flange Thickness (in)	1	1	1	1
Block Operated Limit Switch	Included (Paddle Type)	Included (Paddle Type)	Included (Paddle Type)	Included (Paddle Type)
Hoist Limit Switch Style	6 Position Elect. Programmable	6 Position Elect. Programmable	6 Position Elect. Programmable	6 Position Elect. Programmable
Hoist Overload Limit Switch	Included	Included	Included	Included
Load Display	Not Included	Not Included	Not Included	Not Included
Lower Hook Type	Latch Type	Latch Type	Latch Type	Latch Type
Lower Hook Material	Steel	Steel	Steel	Steel
Rope/Chain Diameter	0.354 in (9.0 mm)	0.354 in (9.0 mm)	0.354 in (9.0 mm)	0.354 in (9.0 mm)
Hoist Sheave Material	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron
Trolley Bumpers	Included	Included	Included	Included
Trolley Traverse Brake	Included (IP55 Rated)	Included (IP55 Rated)	Included (IP55 Rated)	Included (IP55 Rated)
Pendant Mounting Details	No Pendant Supplied	No Pendant Supplied	No Pendant Supplied	No Pendant Supplied
Certi cations and Labelings	UL508A Control Panel	UL508A Control Panel	UL508A Control Panel	UL508A Control Panel
Hoist Control Package	**Complete Monorail Control**	**OEM Crane Manufacturer Control**	**Complete Monorail Control**	**OEM Crane Manufacturer Control**
Control Enclosure Location	Mounted on Hoist	Mounted on Hoist	Mounted on Hoist	Mounted on Hoist
Hoist Control Enclosure Rating	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12
Motor Fusing	Trolley Motor Fuses	Trolley Motor Fuses	Trolley Motor Fuses	Trolley Motor Fuses
Hoist Thermal Protection	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored
Trolley Thermal Protection	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored
Panel & Motor Protection	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12
EZ-Connect Electrical Package	Plug and Play Connector	Plug and Play Connector	Plug and Play Connector	Plug and Play Connector
Hoist Paint Finish	2C-Poly 3.2 mil, epox PC 2.4 mil	2C-Poly 3.2 mil, epox PC 2.4 mil	2C-Poly 3.2 mil, epox PC 2.4 mil	2C-Poly 3.2 mil, epox PC 2.4 mil
Hoist Paint Color	Yale Yellow, Black Trolley	Yale Yellow, Black Trolley	Yale Yellow, Black Trolley	Yale Yellow, Black Trolley
Hoist Wiring Diagram	45746201	45746205	45746201	45746205
Trolley Wiring Diagram	45747001	45747001	45747001	45747001
EZ-Connect Wiring Diagram	44818328	44818328	44818328	44818328
Hoist Clearance Drawing	OLVSK050_F0	OLVSK050_F0	OLVSK050_F0	OLVSK050_F0

10-TON CAPACITY HOISTS

Hoist Model Number	OLVYK10020AF0	OLVYK10020BF0	OLVYK10033AF0	OLVYK10033BF0
Unit Net Weight	1495 LBS	1495 LBS	1636 LBS	1636 LBS
Brand	Yale	Yale	Yale	Yale
Rated Lift Capacity	**10 U.S. tons**	**10 U.S. tons**	**10 U.S. tons**	**10 U.S. tons**
Hoist Suspension Type	Underhung Motorized Trolley	Underhung Motorized Trolley	Underhung Motorized Trolley	Underhung Motorized Trolley
Hoist Duty Classi cation	HMI Class H4	HMI Class H4	HMI Class H4	HMI Class H4
Operating Environment	Normal	Normal	Normal	Normal
Ambient Temperature	-4°F to 104°F / -20°C to 40°C	-4°F to 104°F / -20°C to 40°C	-4°F to 104°F / -20°C to 40°C	-4°F to 104°F / -20°C to 40°C
Installation Location	Indoor	Indoor	Indoor	Indoor
Max. Lift Dist.	**20 ft (6.1 m)**	**20 ft (6.1 m)**	**33 ft (10.1 m)**	**33 ft (10.1 m)**
Reeving Style	4-Part Single Reeved	4-Part Single Reeved	4-Part Single Reeved	4-Part Single Reeved
Operating Voltage	460V / 3 ph / 60 Hz	460V / 3 ph / 60 Hz	460V / 3 ph / 60 Hz	460V / 3 ph / 60 Hz
Control Voltage	120 VAC	120 VAC	120 VAC	120 VAC
Hoist Control Type	VFD Open Loop Vector	VFD Open Loop Vector	VFD Open Loop Vector	VFD Open Loop Vector
Hoist VFD Type	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable
Maximum Lifting Speed	20 ft/min (6.1 m/min)	20 ft/min (6.1 m/min)	20 ft/min (6.1 m/min)	20 ft/min (6.1 m/min)
Secondary Lift Speed	2 ft/min (0.610 m/min)	2 ft/min (0.610 m/min)	2 ft/min (0.610 m/min)	2 ft/min (0.610 m/min)
Hoist Motor HP	14.8	14.8	14.8	14.8
Trolley Control Type	Variable Speed Drive	Variable Speed Drive	Variable Speed Drive	Variable Speed Drive
Trolley VFD Type	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable	VFD 2-step In nitely Variable
Trolley Traverse Speed (60Hz)	80 ft/min (24.38 m/min)	80 ft/min (24.38 m/min)	80 ft/min (24.38 m/min)	80 ft/min (24.38 m/min)
Secondary Traverse Speed(60Hz)	8 ft/min (2.44 m/min)	8 ft/min (2.44 m/min)	8 ft/min (2.44 m/min)	8 ft/min (2.44 m/min)
Trolley Motor HP (each)	1.2	1.2	1.2	1.2
Trolley Motor Qty	1	1	1	1
Trolley Wheel Tread Diameter	5.51 in (14.00 cm)	5.51 in (14.00 cm)	5.51 in (14.00 cm)	5.51 in (14.00 cm)
Trolley Wheel Tread Style	Spherical Ball	Spherical Ball	Spherical Ball	Spherical Ball
Trolley Flange Width Min. (in)	4.7	4.7	4.7	4.7
Trolley Flange Width Max. (in)	19.7	19.7	19.7	19.7
Max Flange Thickness (in)	1.39	1.39	1.39	1.39

10-TON CAPACITY HOISTS

Hoist Model Number	OLVYK10020AF0	OLVYK10020BF0	OLVYK10033AF0	OLVYK10033BF0
Block Operated Limit Switch	Included (Paddle Type)	Included (Paddle Type)	Included (Paddle Type)	Included (Paddle Type)
Hoist Limit Switch Style	6 Position Elect. Programmable	6 Position Elect. Programmable	6 Position Elect. Programmable	6 Position Elect. Programmable
Hoist Overload Limit Switch	Included	Included	Included	Included
Load Display	Not Included	Not Included	Not Included	Not Included
Lower Hook Type	Latch Type	Latch Type	Latch Type	Latch Type
Lower Hook Material	Steel	Steel	Steel	Steel
Rope/Chain Diameter	0.492 in (12.5 mm)	0.492 in (12.5 mm)	0.492 in (12.5 mm)	0.492 in (12.5 mm)
Hoist Sheave Material	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron
Trolley Bumpers	Included	Included	Included	Included
Trolley Traverse Brake	Included (IP55 Rated)	Included (IP55 Rated)	Included (IP55 Rated)	Included (IP55 Rated)
Pendant Mounting Details	No Pendant Supplied	No Pendant Supplied	No Pendant Supplied	No Pendant Supplied
Certi cations and Labelings	UL508A Control Panel	UL508A Control Panel	UL508A Control Panel	UL508A Control Panel
Hoist Control Package	**Complete Monorail Control**	**OEM Crane Manufacturer Control**	**Complete Monorail Control**	**OEM Crane Manufacturer Control**
Control Enclosure Location	Mounted on Hoist	Mounted on Hoist	Mounted on Hoist	Mounted on Hoist
Hoist Control Enclosure Rating	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12
Motor Fusing	Trolley Motor Fuses	Trolley Motor Fuses	Trolley Motor Fuses	Trolley Motor Fuses
Hoist Thermal Protection	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored
Trolley Thermal Protection	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored	PTC Thermistor SLE Monitored
Panel & Motor Protection	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12	IP55 - Similar to NEMA 4/12
EZ-Connect Electrical Package	Plug and Play Connector	Plug and Play Connector	Plug and Play Connector	Plug and Play Connector
Hoist Paint Finish	2C-Poly 3.2 mil, epox PC 2.4 mil	2C-Poly 3.2 mil, epox PC 2.4 mil	2C-Poly 3.2 mil, epox PC 2.4 mil	2C-Poly 3.2 mil, epox PC 2.4 mil
Hoist Paint Color	Yale Yellow, Black Trolley	Yale Yellow, Black Trolley	Yale Yellow, Black Trolley	Yale Yellow, Black Trolley
Hoist Wiring Diagram	45746202	45746206	45746202	45746206
Trolley Wiring Diagram	45747001	45747001	45747001	45747001
EZ-Connect Wiring Diagram	44818328	44818328	44818328	44818328
Hoist Clearance Drawing	OLVSK100_F0	OLVSK100_F0	OLVSK100_F0	OLVSK100_F0

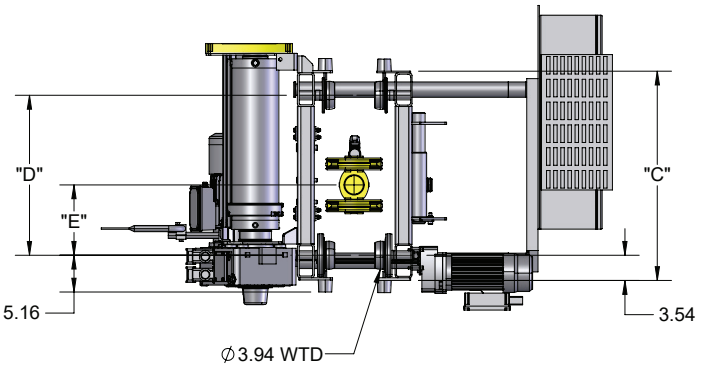
Columbus McKinnon Corporation
Amherst, NY USA

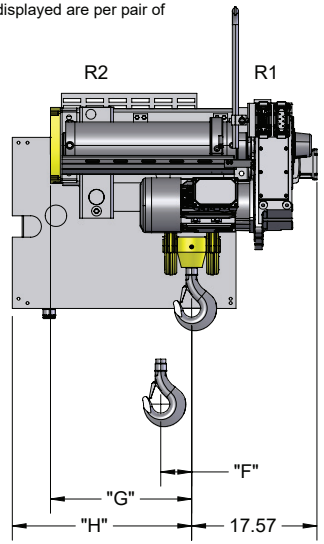
Lift	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
20 Ft	See Table	See Table	29.37	22.44	9.88	4.33	19.81	25.16
33 Ft	See Table	See Table	46.89	39.96	15.78	7.21	31.42	19.89

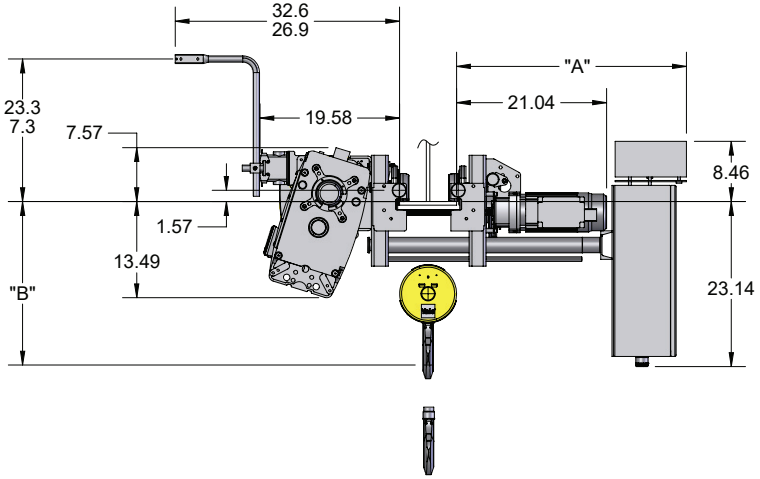
Flange Width	"A"	"B"
3.5	36.74	22.24
6.7	33.54	22.97
11.8	28.44	23.43
15.7	24.54	28.15
19.7	22.54	36.42

Lift	Est. Weight	R1 Max Wheel Load	R2 Max Wheel Load
20 Ft	827 lbs	6093 lbs	6663 lbs
33 Ft	937 lbs	6613 lbs	6128 lbs

NOTE: Wheel loads displayed are per pair of wheels







FINISH CODE	DESCRIPTION
OLVSK05020AF0	20 FT LIFT, COMPLETE HOIST CONTROL
OLVSK05020BF0	20 FT LIFT, CRANE BUILDER CONTROL
OLVSK05033AF0	33 FT LIFT, COMPLETE HOIST CONTROL
OLVSK05033BF0	33 FT LIFT, CRANE BUILDER CONTROL

ECN	Rev.	Description of change	Date	By
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Standard Dimensional Tolerances Unless Otherwise Specified

	0° to 60°	Over 60°
.X	± .020	± .025
.XX	± .010	± .015
.XXX	± .005	± .010
Ang	± 0°30'	± 0°30'

Dimensional Units INCH

Third Angle Projection

Material:
Standard:
Material No:

Modeled:
Drawn:
Approved:
Design Authority:
Original project:
Original scale: 1:24

COLUMBUS McKINNON CORPORATION

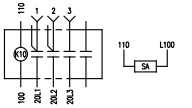
Columbus McKinnon Corporation
Hoist & Rigging - Americas
Amherst, NY USA

Description:
OLVSK050_F0
YK, 5 TON, 20 & 33 FT LIFT, 3.5"-19.75" FLANGE

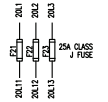
Format B | Number: | Sheet 1/1

WIRE #	AWG*		DEVICE CONNECTED
1	12–BLK	X20	K10, F101
2	12–BLK	X20	K10, F102
3	12–BLK	X20	K10
11	14–BLK		K7A, G21
12	14–BLK		K7A, G21
13	14–BLU		K7A, G21
14	14–BLU		K7A, G21
17	14–RED		U20, K7A
27	14–BLU	X20	G21, Y21
28	14–BLU	X20	G21, Y21
20L1	12–BLK		K10, F21, F24, F26
20L2	12–BLK		K10, F22, F25, F27
20L3	12–BLK		K10, F23, F28
20L11	12–BLK		F21, U20
20L12	12–BLK		F22, U20
20L13	12–BLK		F23, U20
20L21	12–BLK	X20	U20, M21
20L22	12–BLK	X20	U20, M21
20L23	12–BLK	X20	U20, M21
L31	14–BLK		F24, K7A
L32	14–BLK		F25, K7A
100	16–WHT	X20	T100, PE, K20, K7A, K9, A275 DC1, KS1, KS2, KS3, KS4
101	16–RED	X20	F103,
110	16–RED	X20	A110, K20, K7A, U20, S228
116	16–RED	X20	S228, K9
125	16–BLU	X20	B202, DC1
210	16–RED	X20	A275, U20
211	16–RED	X20	A110
212	16–RED	X20	A110, A275
215	16–RED	X20	A110, A275
217	16–BLU	X20	S260, U20
223	16–RED	X20	A275, KS1
224	16–RED	X20	A275, KS2
225	16–RED	X20	A275, KS3
226	16–BLU		KS1, K9
227	16–BLU		KS2, U20
228	16–BLU		KS3, U20
229	16–BLU		K9, U20
230	16–BLU	X20	DC1, KS1, KS2, KS3, S260, U20, B202
240	16–BLU	X20	B202–A, D1
241	16–BLU	X20	D1, U20
242	16–BLU	X20	B202–B, D2
243	16–BLU	X20	D2, U20
250	16–RED	X20	K9, S260, U20
251	16–RED	X20	K9, S260, U20
291	16–RED	X20	B291
292	16–RED	X20	B291, A275
122		X20	SPARE–OPT.
142		X20	SPARE–OPT.
R20.1	12–BLK	X20	U20
R20.2	12–BLK	X20	U20

TIGHTENING TORQUE 20 LB.–IN.

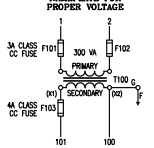


TIGHTENING TORQUE 25 LB.–IN.



TIGHTENING TORQUE 20 LB.–IN.

TIGHTENING TORQUE 20 LB.–IN.
CONNECT PER NAMEPLATE FOR PROPER VOLTAGE



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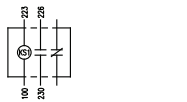

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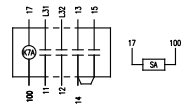

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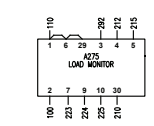
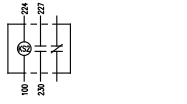
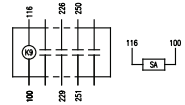


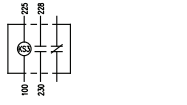
TIGHTENING TORQUE 7 LB.–IN.



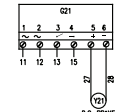
TIGHTENING TORQUE 7 LB.–IN.

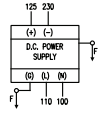


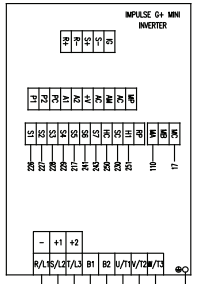
TIGHTENING TORQUE 7 LB.–IN.



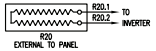
TIGHTENING TORQUE 4.5 LB.–IN.

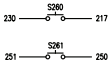


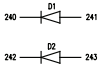




MA–MB–MC TERMINALS TIGHTENING TORQUE 4.4–5.3 LB.–IN.
CONTROL TERMINALS TIGHTENING TORQUE 1.9–2.2 LB.–IN.
POWER TERMINALS TIGHTENING TORQUE 10.6–13.3 LB.–IN.
GND TERMINALS TIGHTENING TORQUE 17.7–22.1 LB.–IN.







B202 - ENCODER LEADS
230 - (WHT) - 0VDC
125 - (BRN) - +5 TO +30 VDC
240 - (GRN) - A+
(YEL) - A- (NOT USED)
242 - (GRY) - B+
(PNK) - B- (NOT USED)
(BLU) - Z+ (NOT USED)
(RED) - Z- (NOT USED)

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

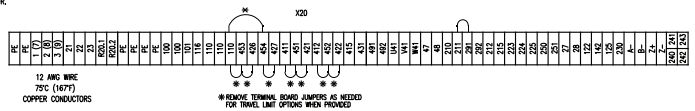
LABEL TERMINAL BLOCKS WITH ALPHANUMERIC CODE AS SHOWN ON WIRING DIAGRAM USING PERMANENT MARKER.

SYMBOL DESIGNATIONS

A110 – PUSHBUTTON PENDANT
A275 – LOAD MONITOR
F21–F23 – HOIST CIRCUIT FUSING
F24–F25 – BRAKE CIRCUIT FUSING
T100 – CONTROL TRANSFORMER
F101–102 – T100 PRIMARY FUSING
F103 – T100 SECONDARY FUSE.
B202 – LIMIT POSITION ENCODER
DC1 – 24VDC SUPPLY
D1 – B202 INTERFACE DIODE
D2 – B202 INTERFACE DIODE
G21 – HOIST BRAKE RECTIFIER
K10 – MAIN CONTACTOR
K7A – BRAKE RELAY
K79 – S228 RELAY
KS1 – A257–U20 SWITCHING RELAY
KS2 – A257–U20 SWITCHING RELAY
KS3 – A257–U20 SWITCHING RELAY
KS4 – A257–U20 SWITCHING RELAY
U20 – HOIST INVERTER
R20 – HOIST BRAKING RESISTOR
S260 – OPERATING LIMITS OVERRIDE
S261 – S228 FAULT OVERRIDE
B275 – LOAD SENSOR
M21 – HOIST MOTOR
Y21 – HOIST MOTOR BRAKE
B291 – HOIST MOTOR THERMAL PROTECTION
X20 – TERMINAL BLOCKS
PE – FRAME GROUND

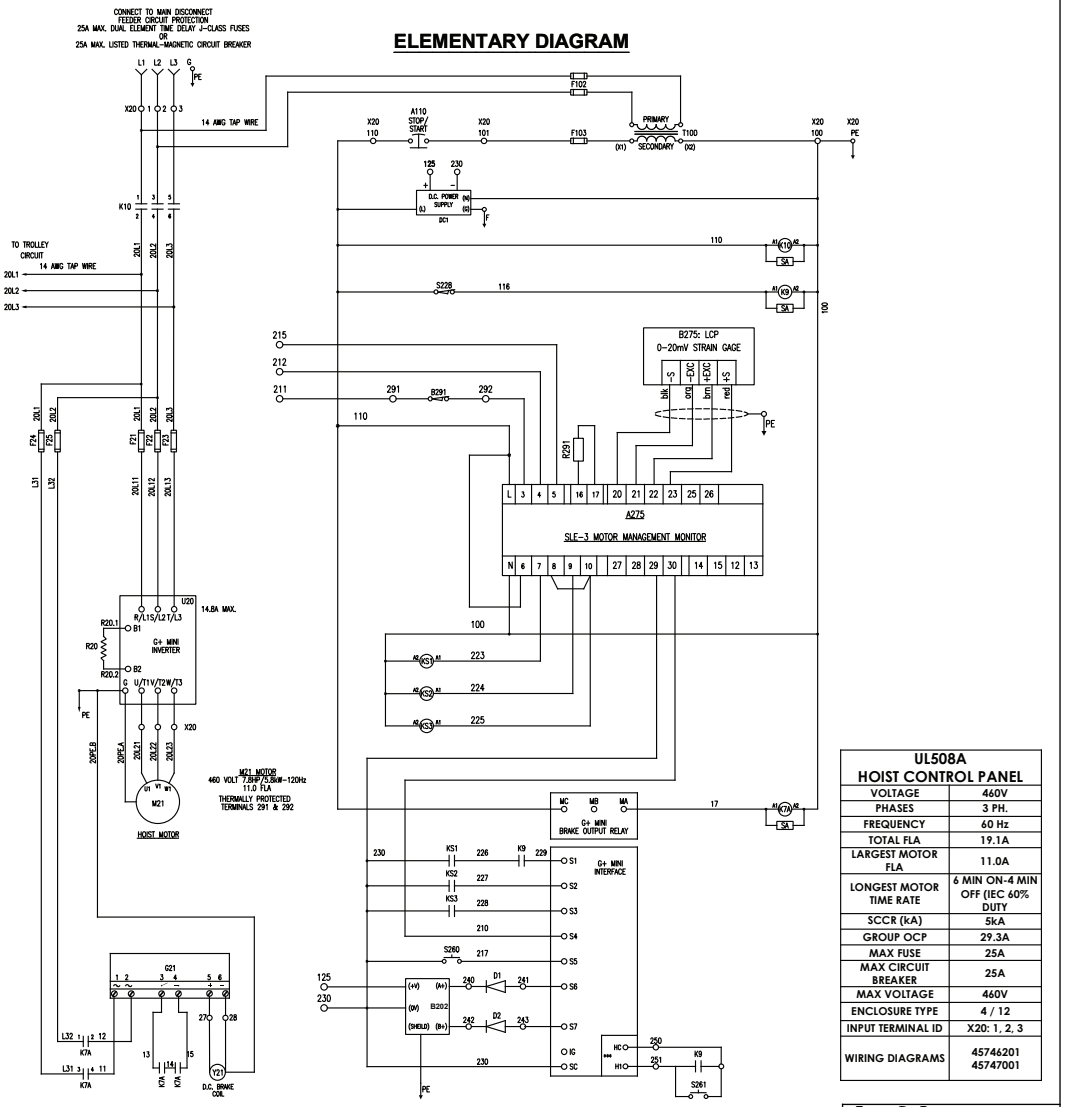
⚠WARNING:
THIS EQUIPMENT MUST BE EFFECTIVELY GROUNDED ACCORDING TO APPLICABLE CODES.

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



FIRST USED ON: PROJECT ONE

ELEMENTARY DIAGRAM



UL508A HOIST CONTROL PANEL	
VOLTAGE	460V
PHASES	3 PH.
FREQUENCY	60 Hz
TOTAL FLA	19.1A
LARGEST MOTOR FLA	11.0A
LONGEST MOTOR TIME RATE	6 MIN ON–4 MIN OFF (IEC 60% DUTY
SCCR (kA)	5kA
GROUP OCP	29.3A
MAX FUSE	25A
MAX CIRCUIT BREAKER	25A
MAX VOLTAGE	460V
ENCLOSURE TYPE	4 / 12
INPUT TERMINAL ID	X20: 1, 2, 3
WIRING DIAGRAMS	45746201 45747001

ECN	Rev.	Description of change	Date	By	Original Scale:	NONE
153104	AG	REVISED DC1 TERMINAL LABEL	9/27/2022	RTB	Drawn:	5/19/2021 RTB
153104	AF	ADDED K9 CONTACT TO S1	8/26/2022	RTB	Approved:	- -
153104	AE	REV B202 & S228 CONN	8/26/2022	RTB	Design Authority:	Wadesboro

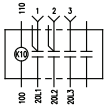
Columbus McKinnon Corporation
Hoist & Rigging - Americas
Amherst, NY USA

Description:
WIRING DIAGRAM - YK/SK HOIST
G+M OLV CONTROL
TYPE B: BLS, PTO
A20 PANEL

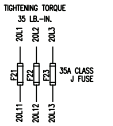
Format: D
Number: 45746201
Sheet: 1/1

WIRE #	AWG*		DEVICE CONNECTED
1	8-BLK	X20	K10, F101
2	8-BLK	X20	K10, F102
3	8-BLK	X20	K10
11	14-BLK		K7A, G21
12	14-BLK		K7A, G21
13	14-BLU		K7A, G21
14	14-BLU		K7A, G21
17	16-RED		U20, K7A
27	14-BLU	X20	G21, Y21
28	14-BLU	X20	G21, Y21
20L1	8-BLK		K10, F21, F24, F26
20L2	8-BLK		K10, F22, F25, F27
20L3	8-BLK		K10, F23, F28
20L11	8-BLK		F21, U20
20L12	8-BLK		F22, U20
20L13	8-BLK		F23, U20
20L21	8-BLK	X20	U20, M21
20L22	8-BLK	X20	U20, M21
20L23	8-BLK	X20	U20, M21
L31	14-BLK		F24, K7A
L32	14-BLK		F25, K7A
100	16-WHT	X20	T100, PE, K10, K7A, K9, A275
			DC1, KS1, KS2, KS3, KS4
101	16-RED	X20	F103,
110	16-RED	X20	A110, K7A, U20, S228
			A275, DC1
116	16-RED	X20	S228, K9
125	16-BLU	X20	B202, DC1
210	16-RED	X20	A275, U20
211	16-RED	X20	A110,
212	16-RED	X20	A110, A275
215	16-RED	X20	A110, A275
217	16-BLU	X20	S260, U20
223	16-RED	X20	A275, KS1
224	16-RED	X20	A275, KS2
225	16-RED	X20	A275, KS3
226	16-BLU		KS1, K9
227	16-BLU		KS2, U20
228	16-BLU		KS3, U20
229	16-BLU		K9, U20
230	16-BLU	X20	DC1, KS1, KS2, KS3, S260, U20, B202
240	16-BLU	X20	B202-A, D1
241	16-BLU	X20	D1, U20
242	16-BLU	X20	B202-B, D2
243	16-BLU	X20	D2, U20
250	16-RED	X20	K9, S260, U20
251	16-RED	X20	K9, S260, U20
291	16-RED	X20	B291
292	16-RED	X20	B291, A275
122		X20	SPARE-OPT.
142		X20	SPARE-OPT.
R20.1	8-BLK	X20	U20
R20.2	8-BLK	X20	U20

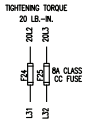
TIGHTENING TORQUE 20 LB.-IN.



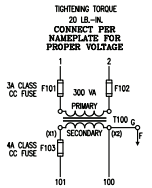
TIGHTENING TORQUE 35 LB.-IN.



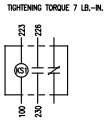
TIGHTENING TORQUE 20 LB.-IN.



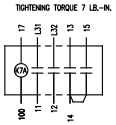
TIGHTENING TORQUE 20 LB.-IN. CONNECT PER NAMEPLATE FOR PROPER VOLTAGE

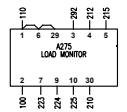


TIGHTENING TORQUE 7 LB.-IN.

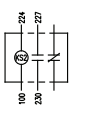


TIGHTENING TORQUE 7 LB.-IN.

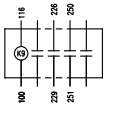




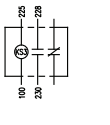
TIGHTENING TORQUE 7 LB.-IN.



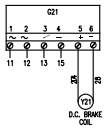
TIGHTENING TORQUE 7 LB.-IN.

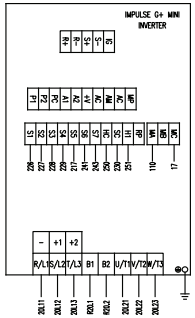


TIGHTENING TORQUE 7 LB.-IN.

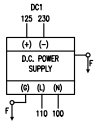


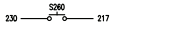
TIGHTENING TORQUE 4.5 LB.-IN.

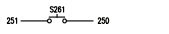


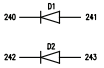


MA-MB-MC TERMINALS TIGHTENING TORQUE 4.4-5.3 LB.-IN.
CONTROL TERMINALS TIGHTENING TORQUE 1.9-2.2 LB.-IN.
POWER TERMINALS TIGHTENING TORQUE 17.7-22.1 LB.-IN.
GND TERMINALS TIGHTENING TORQUE 35.4-53.1 LB.-IN.









UL508A NOTES:

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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

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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 DIGRAM USING PERMANENT MARKER.

SYMBOL DESIGNATIONS

A110 – PUSHBUTTON PENDANT
A275 – LOAD MONITOR
F21–F23 – HOIST CIRCUIT FUSING
F24–F25 – BRAKE CIRCUIT FUSING
T100 – CONTROL TRANSFORMER
F101–102 – T100 PRIMARY FUSING
F103 – T100 SECONDARY FUSE
B202 – LIMIT POSITION ENCODER
DC1 – 24VDC SUPPLY
D1 – B202 INTERFACE DIODE
D2 – B202 INTERFACE DIODE
G21 – HOIST BRAKE RECTIFIER
K10 – MAIN CONTACTOR
K7A – BRAKE RELAY
K9 – S228 RELAY
KS1 – A257-U20 SWITCHING RELAY
KS2 – A257-U20 SWITCHING RELAY
KS3 – A257-U20 SWITCHING RELAY
KS4 – A257-U20 SWITCHING RELAY
U20 – HOIST INVERTER
R20 – HOIST BRAKING RESISTOR
S260 – OPERATING LIMITS OVERRIDE
S261 – S228 FAULT OVERRIDE
B275 – LOAD SENSOR
M21 – HOIST MOTOR
Y21 – HOIST MOTOR BRAKE
B291 – HOIST MOTOR THERMAL PROTECTION
X20 – TERMINAL BLOCKS
PE – FRAME GROUND

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230 - (WHT) - 0VDC
125 - (BRN) - +5 TO +30 VDC
240 - (GRN) - A+
(YEL) - A- (NOT USED)
242 - (GRY) - B+
(PNK) - B- (NOT USED)
(BLU) - Z+ (NOT USED)
(RED) - Z- (NOT USED)

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

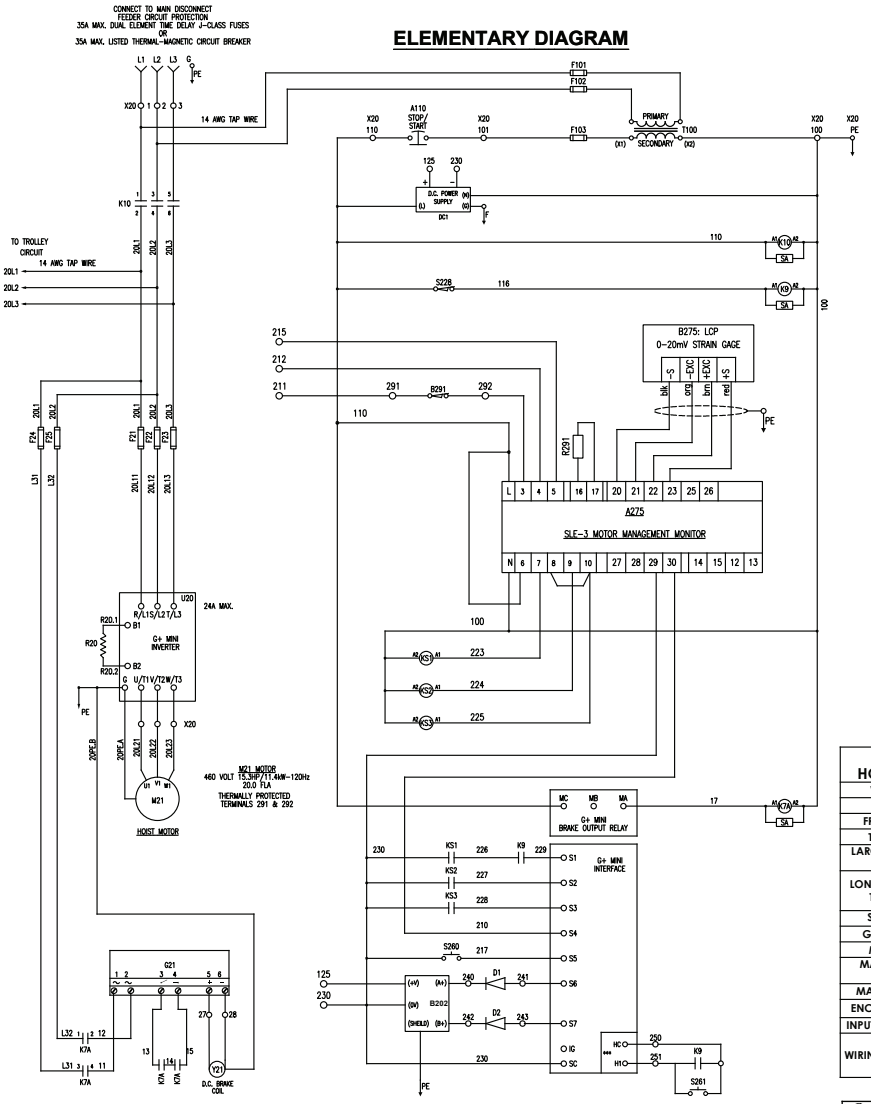
AVERTISSEMENT:
CET EQUIPMENT DOIT ETRE MIS A'LA TERRE EN ACCORDANCE AVEC LES NORMES EN VIGUEUR.

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

* REMOVE TERMINAL BOARD JUMPERS AS NEEDED FOR TRAVEL LIMIT OPTIONS WHEN PROVIDED

FIRST USED ON: PROJECT ONE

ELEMENTARY DIAGRAM



UL508A HOIST CONTROL PANEL	
VOLTAGE	460V
PHASES	3 PH.
FREQUENCY	60 Hz
TOTAL FLA	28.3A
LARGEST MOTOR FLA	20.0A
LONGEST MOTOR TIME RATE	6 MIN ON-4 MIN OFF (IEC 60% DUTY
SCCR (kA)	5kA
GROUP OCP	39.3A
MAX FUSE	35A
MAX CIRCUIT BREAKER	35A
MAX VOLTAGE	460V
ENCLOSURE TYPE	4 / 12
INPUT TERMINAL ID	X20: 1, 2, 3
WIRING DIAGRAMS	45746202 45747001

ECN	Rev.	Description of change	Date	By	Original Scale:	NONE
153104	AF	REVISED DC1 TERMINAL LABEL	8/27/2022	RTB	Drawn:	8/14/2021 RTB
153104	AE	ADDED K9 CONTACT TO S1	8/26/2022	RTB	Approved:	-
153104	AD	REV B202 & S228 CONN	8/26/2022	RTB	Design Authority:	Wadesboro

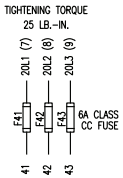
Columbus McKinnon Corporation
Hoist & Rigging - Americas
Amherst, NY USA

Description:
WIRING DIAGRAM - YK/SK HOIST
G+M OLV CONTROL
TYPE A: BLS, PTO
A20 PANEL

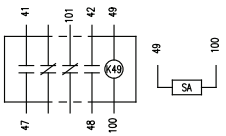
Format: D
Number: 45746202
Sheet: 1/1

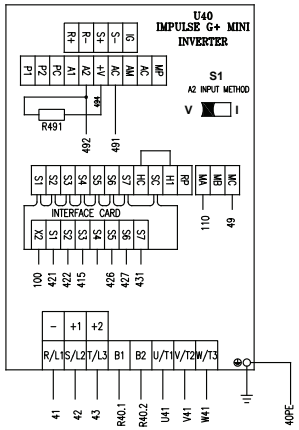
WIRE #	AWG*	DEVICE CONNECTED	
20L1/7	14–BLK		F41
20L2/8	14–BLK		F42
20L3/9	14–BLK		F43
41	14–BLK	X20	F41, K49, U40
42	14–BLK	X20	F42, K49, U40
43	14–BLK	X20	U40
49	16–RED		U40, K49, SA
100	16–WHT		K49, SA, U40
110	16–RED	X20	U40, S420
411	18–RED	X20	S420
421	18–RED	X20	S420, U40
412	18–RED	X20	S420
415	18–RED	X20	U40
422	18–RED	X20	S420, U40
426	18–RED	X20	U40
427	16–RED	X20	U40
431	16–RED	X20	U40
491	14–BLU	X20	U40
492	14–BLU	X20	U40
494			U40
R40.1	14–BLK		U40
R40.2	14–BLK		U40
47	14–BLK	X20	K49, G41
48	14–BLK	X20	K49, G41
U41		X20	M41, U40
V41		X20	M41, U40
W41		X20	M41, U40

TIGHTENING TORQUE
25 LB.–IN.

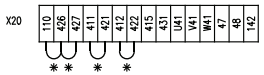


TIGHTENING TORQUE 7 LB.–IN.





POWER TERMINALS TIGHTENING TORQUE 10.6–13.3 LB.–IN.
INTERFACE CARD TERMINAL TIGHTENING TORQUE 1.1–2.2 LB.–IN.



* REMOVE TERMINAL BOARD JUMPER
WHEN TRAVEL LIMIT S420 IS PROVIDED

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 DIGRAM USING PERMANENT MARKER.

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

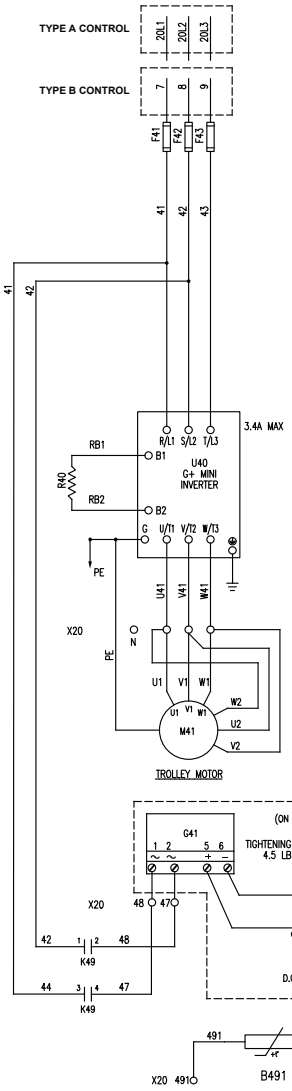
⚠AVERTISSEMENT:
CET EQUIPMENT DOIT ETRE MIS A'LA TERRE EN ACCORDANCE AVEC LES NORMES EN VIGUEUR.

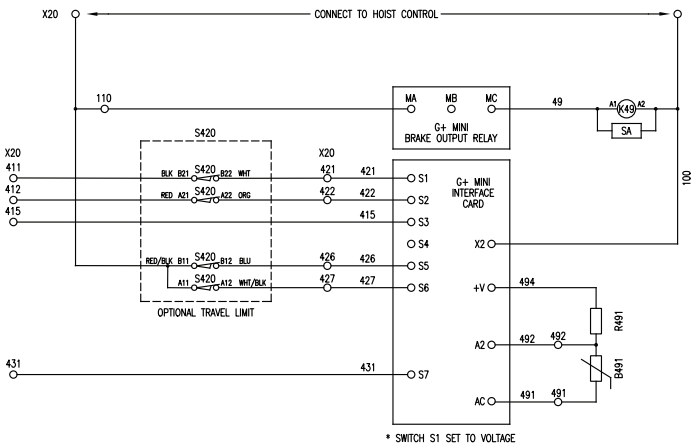
SYMBOL DESIGNATIONS

U40 – INVERTER
R40 – DYNAMIC BRAKING RESISTOR
K49 – BRAKE RELAY
G41 – BRAKE RECTIFIER
R491 – PTC BRANCH RESISTOR
B491 – PTC THERMISTOR
S420– TRAVEL LIMITS
SA – SURGE ABSORBER
X20 – TERMINAL BLOCKS

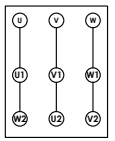
FIRST USED ON: PROJECT ONE

ELEMENTARY DIAGRAM





MOTOR CONNECTION:
CONNECT MOTOR FOR DELTA WINDING



ECN	Rev.	Description of change	Date	By	Original Scale:	NONE
153104	AB	ADDED WIRE 431	5/26/2022	RTB	Drawn:	9/14/2021 RTB
153104	AA	INITIAL RELEASE	9/14/2021	RTB	Approved:	09/14/2021 -
-	-	-	-	-	Design Authority:	Wadesboro

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

Description:
WIRING DIAGRAM - YK/SK HOIST
TROLLEY WITH BRAKE
G+MINI VFD
A20 PANEL- UL508A

Format: D
Number: **45747001**
Sheet: 1/1

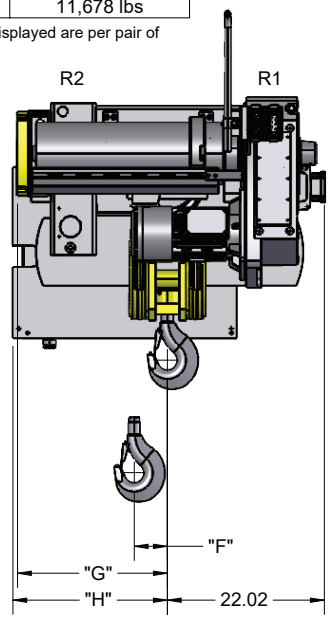
Columbus McKinnon Corporation
Amherst, NY USA

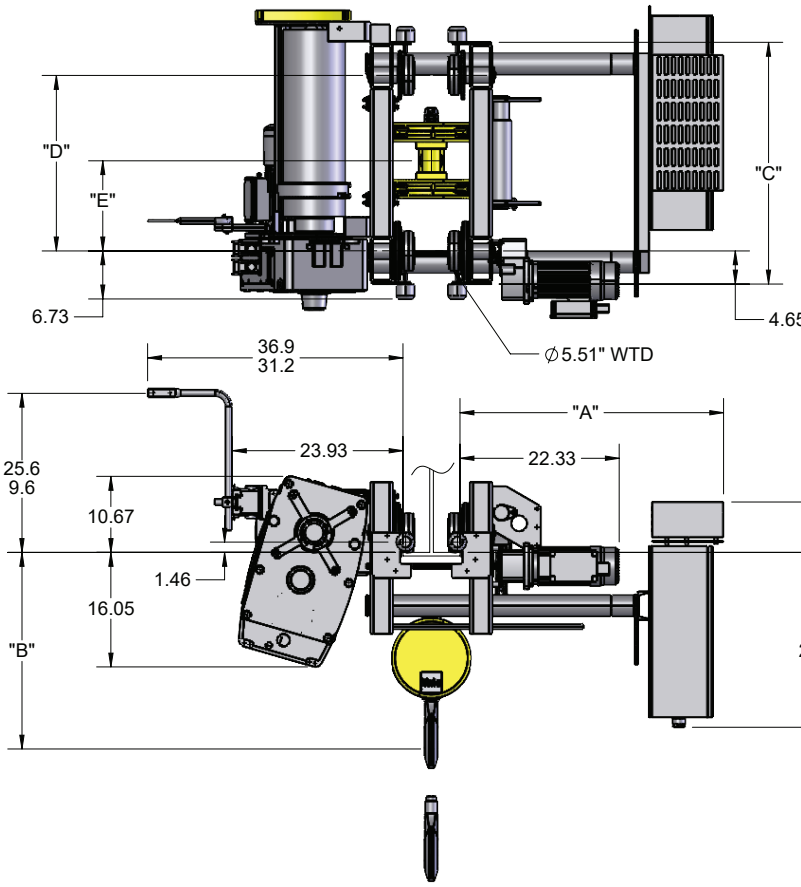
Lift	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
20 Ft	See Table	See Table	33.90	24.61	12.64	4.65	21.02	21.67
33 Ft	See Table	See Table	46.30	37.01	12.64	7.76	33.43	21.67

Flange Width	"A"	"B"
4.7	40.28	28.38
6.7	38.28	27.58
11.8	33.18	27.36
15.7	29.28	30.91
19.7	27.28	36.61

Lift	Est. Weight	R1 Max Wheel Load	R2 Max Wheel Load
20 Ft	1494 lbs	10,624 lbs	14,649 lbs
33 Ft	1635 lbs	14,151 lbs	11,678 lbs

NOTE: Wheel loads displayed are per pair of wheels





FINISH CODE	DESCRIPTION
OLVSK10020AF0	20 FT LIFT, COMPLETE HOIST CONTROL
OLVSK10020BF0	20 FT LIFT, CRANE BUILDER CONTROL
OLVSK10033AF0	33 FT LIFT, COMPLETE HOIST CONTROL
OLVSK10033BF0	33 FT LIFT, CRANE BUILDER CONTROL

ECN	Rev.	Description of change	Date	By
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Standard Dimensional Tolerances Unless Otherwise Specified		
	0° to 60°	Over 60°
.X	± .020	± .025
.XX	± .010	± .015
.XXX	± .005	± .010
Ang	± 0°30'	± 0°30'

Dimensional Units INCH

Third Angle Projection

COLUMBUS McKINNON CORPORATION

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

Material:
Standard:
Material No:

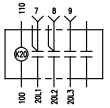
Modeled:
Drawn:
Approved:
Design Authority:
Original project:
Original scale: 1:24

Description:
OLVSK100_F0
YK, 10 TON, 20 & 33 FT LIFT, 4.7"-19.75" FLANGE

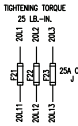
Format: B
Number:
Sheet: 1/1

WIRE #	AWG*		DEVICE CONNECTED
7	12-BLK	X20	K20
8	12-BLK	X20	K20
9	12-BLK	X20	K20
11	14-BLK		K7A, G21
12	14-BLK		K7A, G21
13	14-BLU		K7A, G21
14	14-BLU		K7A, G21
17	16-RED		U20, K7A
27	14-BLU	X20	G21, Y21
28	14-BLU	X20	G21, Y21
20L1	12-BLK		K20, F21, F24, F26
20L2	12-BLK		K20, F22, F25, F27
20L3	12-BLK		K20, F23, F28
20L11	12-BLK		F21, U20
20L12	12-BLK		F22, U20
20L13	12-BLK		F23, U20
20L21	12-BLK	X20	U20, M21
20L22	12-BLK	X20	U20, M21
20L23	12-BLK	X20	U20, M21
L31	14-BLK		F24, K7A
L32	14-BLK		F25, K7A
100	16-WHT	X20	PE, K20, K7A, K9, A275 DC1, KS1, KS2, KS3, KS4
101	16-RED	X20	
110	16-RED	X20	A110, K20, K7A, U20, S228 A275, DC1
116	16-RED	X20	S228, K9
125	16-BLU	X20	B202, DC1
210	16-RED	X20	A275, U20
211	16-RED	X20	A110,
212	16-RED	X20	A110, A275
215	16-RED	X20	A110, A275
217	16-BLU	X20	S260, U20
223	16-RED	X20	A275, KS1
224	16-RED	X20	A275, KS2
225	16-RED	X20	A275, KS3
226	16-BLU		KS1, K9
227	16-BLU		KS2, U20
228	16-BLU		KS3, U20
229	16-BLU		K9, U20
230	16-BLU	X20	DC1, KS1, KS2, KS3, S260, U20, B202
240	16-BLU	X20	B202-A, D1
241	16-BLU	X20	D1, U20
242	16-BLU	X20	B202-B, D2
243	16-BLU	X20	D2, U20
250	16-RED	X20	K9, S260, U20
251	16-RED	X20	K9, S260, U20
291	16-RED	X20	B291
292	16-RED	X20	B291, A275
122		X20	SPARE-OPT.
142		X20	SPARE-OPT.
R20.1	12-BLK	X20	U20
R20.2	12-BLK	X20	U20

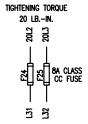
TIGHTENING TORQUE 20 LB.-IN.



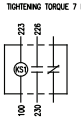
TIGHTENING TORQUE 25 LB.-IN.



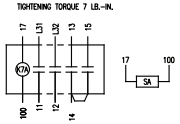
TIGHTENING TORQUE 20 LB.-IN.

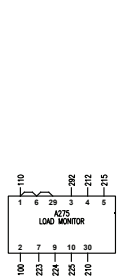


TIGHTENING TORQUE 7 LB.-IN.

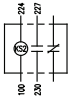


TIGHTENING TORQUE 7 LB.-IN.

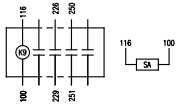




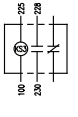
TIGHTENING TORQUE 7 LB.-IN.



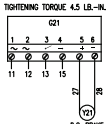
TIGHTENING TORQUE 7 LB.-IN.

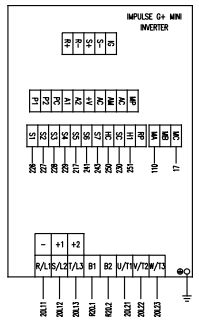


TIGHTENING TORQUE 7 LB.-IN.

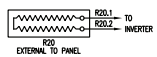


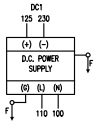
TIGHTENING TORQUE 4.5 LB.-IN.

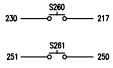


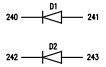


MA-MB-MC TERMINALS TIGHTENING TORQUE 4.4-5.3 LB.-IN.
CONTROL TERMINALS TIGHTENING TORQUE 1.9-2.2 LB.-IN.
POWER TERMINALS TIGHTENING TORQUE 10.6-13.3 LB.-IN.
GND TERMINALS TIGHTENING TORQUE 17.7-22.1 LB.-IN.









SLE3- S3 SETTINGS

B202 - ENCODER LEADS
230 - (WHT) - 0VDC
125 - (BRN) - +5 TO +30 VDC
240 - (GRN) - A+
(YEL) - A- (NOT USED)
242 - (GRY) - B+
(PNK) - B- (NOT USED)
(BLU) - Z+ (NOT USED)
(RED) - Z- (NOT USED)

ULSOBA 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

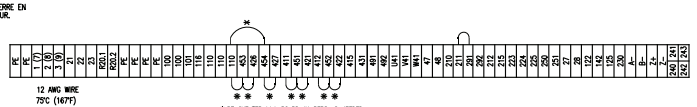
LABEL TERMINAL BLOCKS WITH ALPHANUMERIC CODE AS SHOWN ON WIRING DIGRAM USING PERMANENT MARKER.

SYMBOL DESIGNATIONS

A110 – PUSHBUTTON PENDANT
A275 – LOAD MONITOR
F21–F23 – HOIST CIRCUIT FUSING
F24–F25 – BRAKE CIRCUIT FUSING
T100 – CONTROL TRANSFORMER
F101–102 – T100 PRIMARY FUSING
F103 – T100 SECONDARY FUSE
B202 – LIMIT POSITION ENCODER
DC1 – 24VDC SUPPLY
D1 – B202 INTERFACE DIODE
D2 – B202 INTERFACE DIODE
G21 – HOIST BRAKE RECTIFIER
K10 – MAIN CONTACTOR
K7A – BRAKE RELAY
K9 – S228 RELAY
KS1 – A257-U20 SWITCHING RELAY
KS2 – A257-U20 SWITCHING RELAY
KS3 – A257-U20 SWITCHING RELAY
KS4 – A257-U20 SWITCHING RELAY
U20 – HOIST INVERTER
R20 – HOIST BRAKING RESISTOR
S260 – OPERATING LIMITS OVERRIDE
S261 – S228 FAULT OVERRIDE
B275 – LOAD SENSOR
M21 – HOIST MOTOR
Y21 – HOIST MOTOR BRAKE
B291 – HOIST MOTOR THERMAL PROTECTION
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.

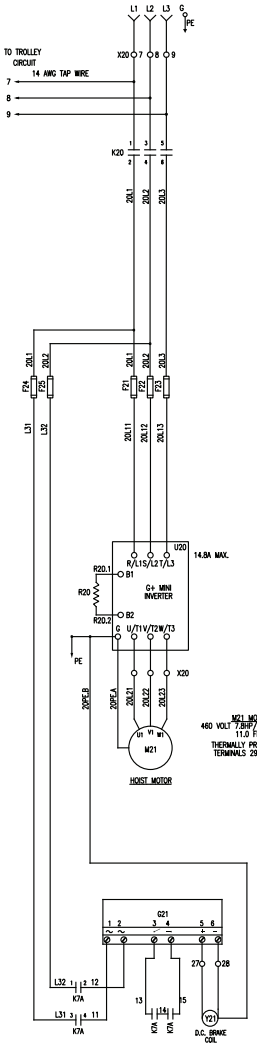


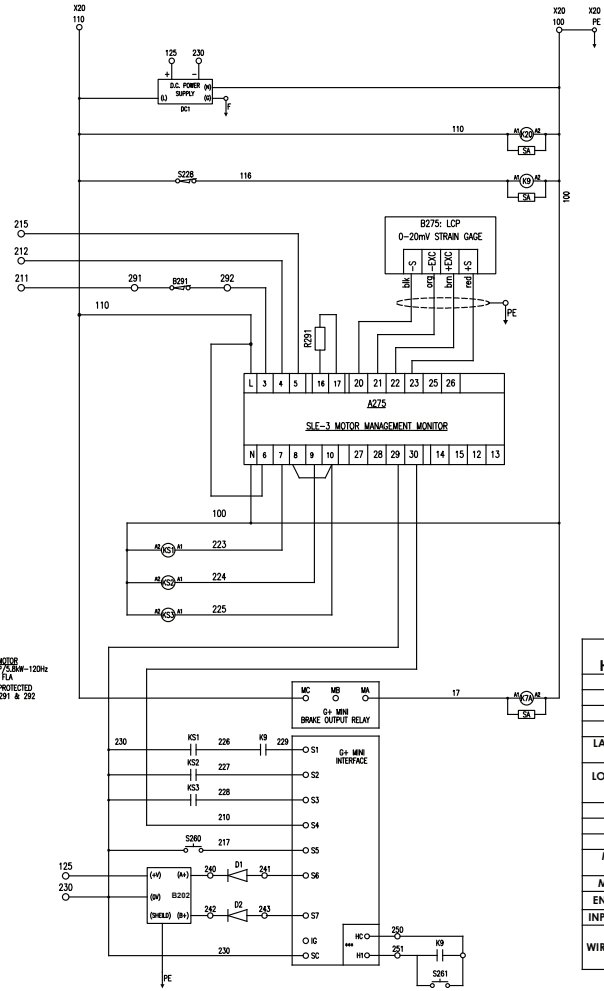
12 AWG WIRE
75°C (167°F)
COPPER CONDUCTORS

FIRST USED ON: PROJECT ONE

CONNECT TO MAIN DISCONNECT
FEEDER CIRCUIT PROTECTION
25A MAX. DUAL ELEMENT TIME DELAY J-CLASS FUSES
OR
25A MAX. LISTED THERMAL-MAGNETIC CIRCUIT BREAKER

ELEMENTARY DIAGRAM





UL508A HOIST CONTROL PANEL	
VOLTAGE	460V
PHASES	3 PH.
FREQUENCY	60 Hz
TOTAL FLA	18.4A
LARGEST MOTOR FLA	11.0A
LONGEST MOTOR TIME RATE	6 MIN ON-4 MIN OFF (IEC 60% DUTY
SCCR (kA)	5kA
GROUP OCP	28.6A
MAX FUSE	25A
MAX CIRCUIT BREAKER	25A
MAX VOLTAGE	460V
ENCLOSURE TYPE	4 / 12
INPUT TERMINAL ID	X20: 7, 8, 9
WIRING DIAGRAMS	45746205 45747001

ECN	Rev.	Description of change	Date	By	Original Scale:	NONE
153104	AF	REVISED DC1 TERMINAL LABEL	8/27/2022	RTB	Drawn:	5/19/2021 RTB
153104	AE	ADDED K9 CONTACT TO S1	8/26/2022	RTB	Approved:	-
153104	AD	REV B202 & S228 CONN	8/26/2022	RTB	Design Authority:	Wadesboro

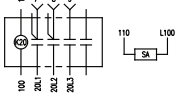
Columbus McKinnon Corporation
Hoist & Rigging - Americas
Amherst, NY USA

Description:
WIRING DIAGRAM - YK/SK HOIST
G+M OLV CONTROL
TYPE B: BLS, PTO
A20 PANEL

Format: D
Number: 45746205
Sheet: 1/1

WIRE #	AWG*		DEVICE CONNECTED
7	8-BLK	X20	K20
8	8-BLK	X20	K20
9	8-BLK	X20	K20
11	14-BLK		K7A, G21
12	14-BLK		K7A, G21
13	14-BLU		K7A, G21
14	14-BLU		K7A, G21
17	16-RED		U20, K7A
27	14-BLU	X20	G21, Y21
28	14-BLU	X20	G21, Y21
20L1	8-BLK		K20, F21, F24, F26
20L2	8-BLK		K20, F22, F25, F27
20L3	8-BLK		K20, F23, F28
20L11	8-BLK		F21, U20
20L12	8-BLK		F22, U20
20L13	8-BLK		F23, U20
20L21	8-BLK	X20	U20, M21
20L22	8-BLK	X20	U20, M21
20L23	8-BLK	X20	U20, M21
L31	14-BLK		F24, K7A
L32	14-BLK		F25, K7A
100	16-WHT	X20	PE, K20, K7A, K9, A275
101	16-RED	X20	DC1, KS1, KS2, KS3, KS4
110	16-RED	X20	A110, K7A, U20, K20, S228
116	16-RED	X20	A275, DC1
125	16-BLU	X20	S228, K9
			B202, DC1
210	16-RED	X20	A275, U20
211	16-RED	X20	A110
212	16-RED	X20	A110, A275
215	16-RED	X20	A110, A275
217	16-BLU	X20	S260, U20
223	16-RED	X20	A275, KS1
224	16-RED	X20	A275, KS2
225	16-RED	X20	A275, KS3
226	16-BLU		KS1, K9
227	16-BLU		KS2, U20
228	16-BLU		KS3, U20
229	16-BLU		K9, U20
230	16-BLU	X20	DC1, KS1, KS2, KS3, S260, U20, B202
240	16-BLU	X20	B202-A, D1
241	16-BLU	X20	D1, U20
242	16-BLU	X20	B202-B, D2
243	16-BLU	X20	D2, U20
250	16-RED	X20	K9, S260, U20
251	16-RED	X20	K9, S260, U20
291	16-RED	X20	B291
292	16-RED	X20	B291, A275
299	16-BLU	X20	B202, U20
122		X20	SPARE-OPT.
142		X20	SPARE-OPT.
R20.1	8-BLK	X20	U20
R20.2	8-BLK	X20	U20

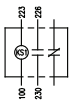
TIGHTENING TORQUE 20 LB.-IN.



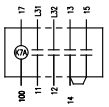
TIGHTENING TORQUE 25 LB.-IN.

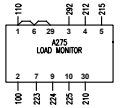
TIGHTENING TORQUE 20 LB.-IN.

TIGHTENING TORQUE 7 LB.-IN.



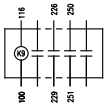
TIGHTENING TORQUE 7 LB.-IN.



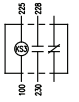


TIGHTENING TORQUE 7 LB.-IN.

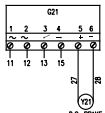
TIGHTENING TORQUE 7 LB.-IN.

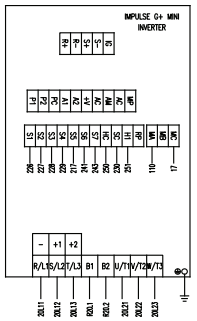


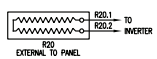
TIGHTENING TORQUE 7 LB.-IN.

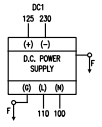


TIGHTENING TORQUE 4.5 LB.-IN.









SLE3- S3 SETTINGS

SYMBOL DESIGNATIONS

A110 – PUSHBUTTON PENDANT
A275 – LOAD MONITOR
F21–F23 – HOIST CIRCUIT FUSING
F24–F25 – BRAKE CIRCUIT FUSING
T100 – CONTROL TRANSFORMER
F101–102 – T100 PRIMARY FUSING
F103 – T100 SECONDARY FUSE
B202 – LIMIT POSITION ENCODER
DC1 – 24VDC SUPPLY
D1 – B202 INTERFACE DIODE
D2 – B202 INTERFACE DIODE
G21 – HOIST BRAKE RECTIFIER
K1Q – MAIN CONTACTOR
K7A – BRAKE RELAY
K9 – S228 RELAY
KS1 – A257-U20 SWITCHING RELAY
KS2 – A257-U20 SWITCHING RELAY
KS3 – A257-U20 SWITCHING RELAY
KS4 – A257-U20 SWITCHING RELAY
U20 – HOIST INVERTER
R20 – HOIST BRAKING RESISTOR
S260 – OPERATING LIMITS OVERRIDE
S261 – S228 FAULT OVERRIDE
B275 – LOAD SENSOR
M21 – HOIST MOTOR
Y21 – HOIST MOTOR BRAKE
B291 – HOIST MOTOR THERMAL PROTECTION
X20 – TERMINAL BLOCKS
PE – FRAME GROUND
F

B202 - ENCODER LEADS
230 - (WHT) - 0VDC
125 - (BRN) - +5 TO +30 VDC
240 - (GRN) - A+
(YEL) - A- (NOT USED)
242 - (GRY) - B+
(PNK) - B- (NOT USED)
(BLU) - Z+ (NOT USED)
(RED) - Z- (NOT USED)

ULSOBA 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 LABELLED 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.

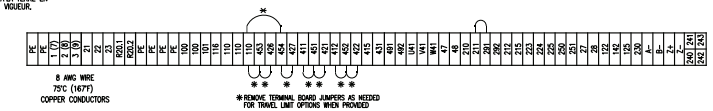
LABEL FUSE BASES WITH FUSE USE SYMBOL AND SIZE IN AMPERES USING A PRINTED LABEL.

ADJACENT TO TRANSFORMER LABEL FUSE SYMBOL AND AMPACITY

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

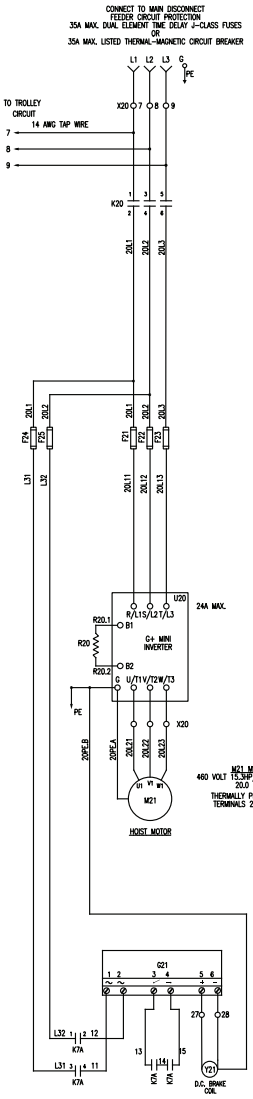
WARNING:
THIS EQUIPMENT MUST BE EFFECTIVELY GROUNDED ACCORDING TO APPLICABLE CODES.

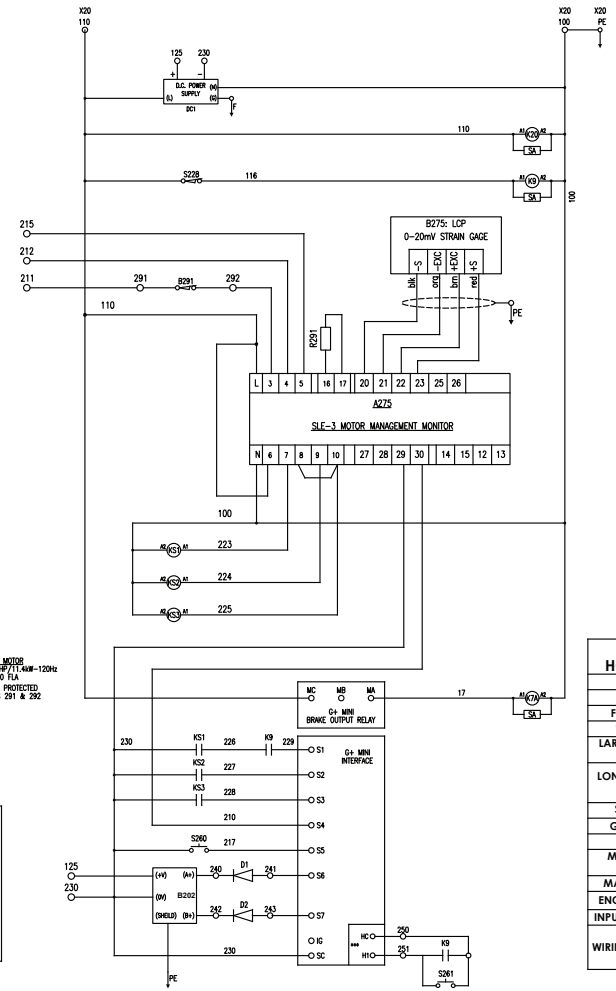
AVERTISSEMENT:
CET EQUIPMENT DOIT ETRE MIS A'LA TERRE EN ACCORDANCE AVEC LES NORMES EN VIGUEUR.



FIRST USED ON: PROJECT ONE

ELEMENTARY DIAGRAM





UL508A HOIST CONTROL PANEL

VOLTAGE	460V
PHASES	3 PH.
FREQUENCY	60 Hz
TOTAL FLA	27.7A
LARGEST MOTOR FLA	20.0A
LONGEST MOTOR TIME RATE	6 MIN ON-4 MIN OFF (IEC 60% DUTY
SCCR (kA)	5kA
GROUP OCP	38.7A
MAX FUSE	35A
MAX CIRCUIT BREAKER	35A
MAX VOLTAGE	460V
ENCLOSURE TYPE	4 / 12
INPUT TERMINAL ID	X20: 7, 8, 9
WIRING DIAGRAMS	45746206 45747001

ECN	Rev.	Description of change	Date	By	Original Scale:	NONE
153104	AG	REVISED DC1 TERMINAL LABEL	9/27/2022	RTB	Drawn:	5/19/2021 RTB
153104	AF	ADDED K9 CONTACT TO S1	8/26/2022	RTB	Approved:	-
153104	AE	REV B202 & S228 CONN	8/26/2022	RTB	Design Authority:	Wadesboro

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

Description:
WIRING DIAGRAM - YK/SK HOIST
G+M OLV CONTROL
TYPE B: BLS, PTO
A20 PANEL

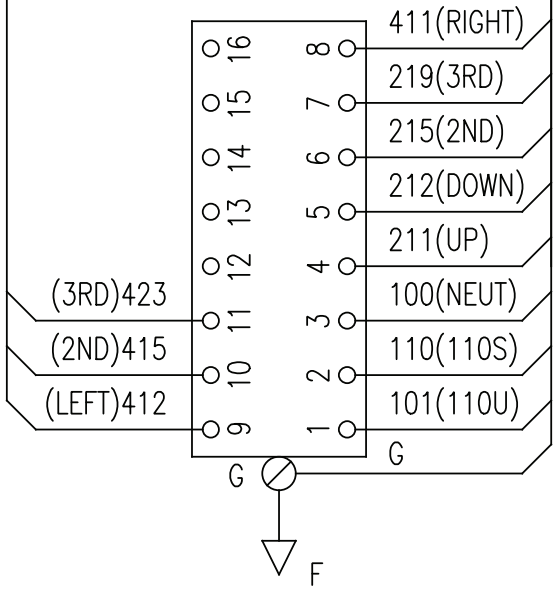
Format: D | Number: 45746206 | Sheet: 1/1

PLACE LABEL ON SIDE OF CONNECTOR HOUSING

3

TO X16/X20 TERMINAL STRIP

C3
FEMALE

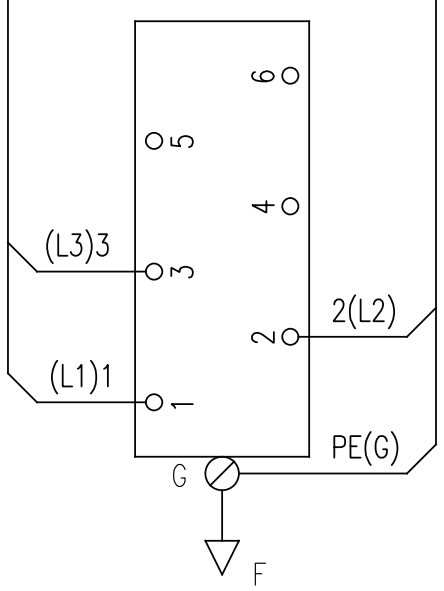


PLACE LABEL ON SIDE OF CONNECTOR HOUSING

1

TO X16/X20 TRMNL STRIP

C1
MALE



110U: UNSWITCHED CONTROL POWER
110S: SWITCHED CONTROL POWER
NEUT: CONTROL POWER NEUTRAL

153232	AA	INITIAL RELEASE	10/31/2022	JKPWD	Drawn:	10/28/2022	JKPWD
-	-	-		-	Approved:		-
-	-	-		-	Design Authority:	Wadesboro	
ECN	Rev.	Description of change	Date	By	Original Scale:	-	

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

Description:

WIRING DIAGRAM
YK/SK PLUG-N-PLAY
SUPPLEMENT DIAGRAM
HOIST MAIN FUSE 35A OR LESS

Format: B
Number: 44818328
Sheet: 1/1

Yale®

CMCO INTELLIGENT MOTION

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