

MBARI DBW-6 - Electric Winch System

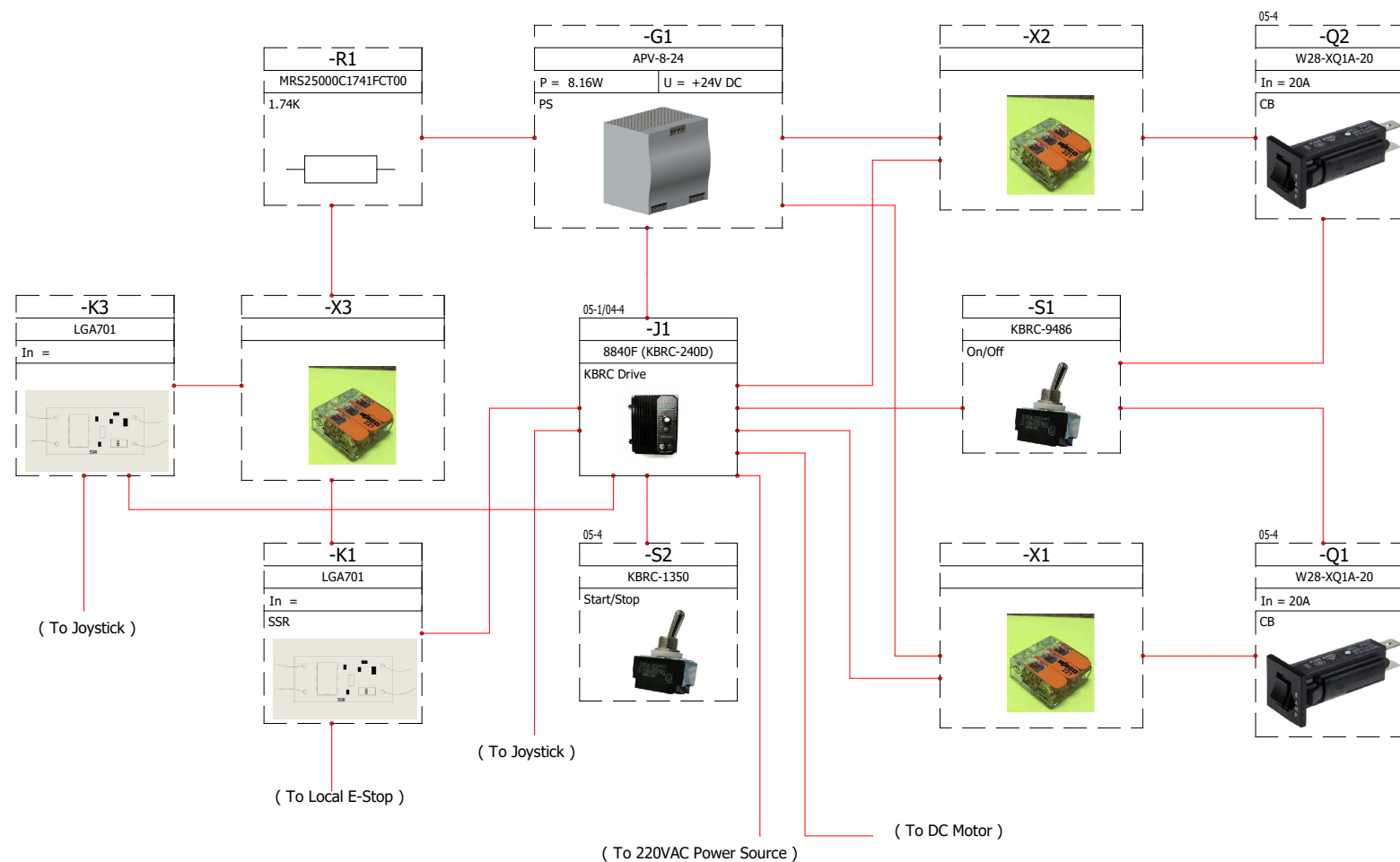
Document book

0	1/4/2024	PROD-ENG	
REV.	DATE	NAME	CHANGES
MBARI Building A			AGO Environmental Electronics Ltd.
7700 Sandholdt Rd			#10-626 Esquimalt Rd, Victoria, BC
Moss Landing, CA, USA			Canada, V9A 3L4
95039-9644			REVISION
			0
			SCHEME
			01

1-Document book

Drawing	Function	Location	Revision	Date	Created by	Description	Folder designation
01	=F1	+L1	0	1/4/2024	PROD-ENG	Cover page	
02	=F1	+L1	0	1/4/2024	PROD-ENG	Drawing list	
03	=F1	+L1	0	1/4/2024	PROD-ENG	Wiring line diagram 1/2	
04	=F1	+L1	0	1/10/2024	PROD-ENG	Wiring line diagram 2/2	
05	=F1	+L1	0	1/4/2024	PROD-ENG	Main Circuit	
06	=F1	+L4	0	3/1/2024	PROD-ENG	Local E-Stop	
07	=F1	+L2	0	1/4/2024	PROD-ENG	Remote Joystick	
08	=F1	+L3	0	1/4/2024	PROD-ENG	DC Motor	
09	=F1	+L1	0	2/23/2024	PROD-ENG	Bill Of Materials grouped by manufacturer	
10	=F1	+L1	0	2/23/2024	PROD-ENG	Bill Of Materials grouped by manufacturer	
11	=F1	+L1	0	2/23/2024	PROD-ENG	List of the cables	
12	=F1	+L1	0	2/23/2024	PROD-ENG	List of the cables	
13	=F1	+L1	0	2/23/2024	PROD-ENG	List of the cables	
14	=F1	+L1	0	3/12/2024	PROD-ENG	List of the cables	

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					REV.	DATE	NAME	CHANGES	
CONTRACT: PO 2311038	LOCATION: +L1	Main electrical closet			User data 1			User data 2	



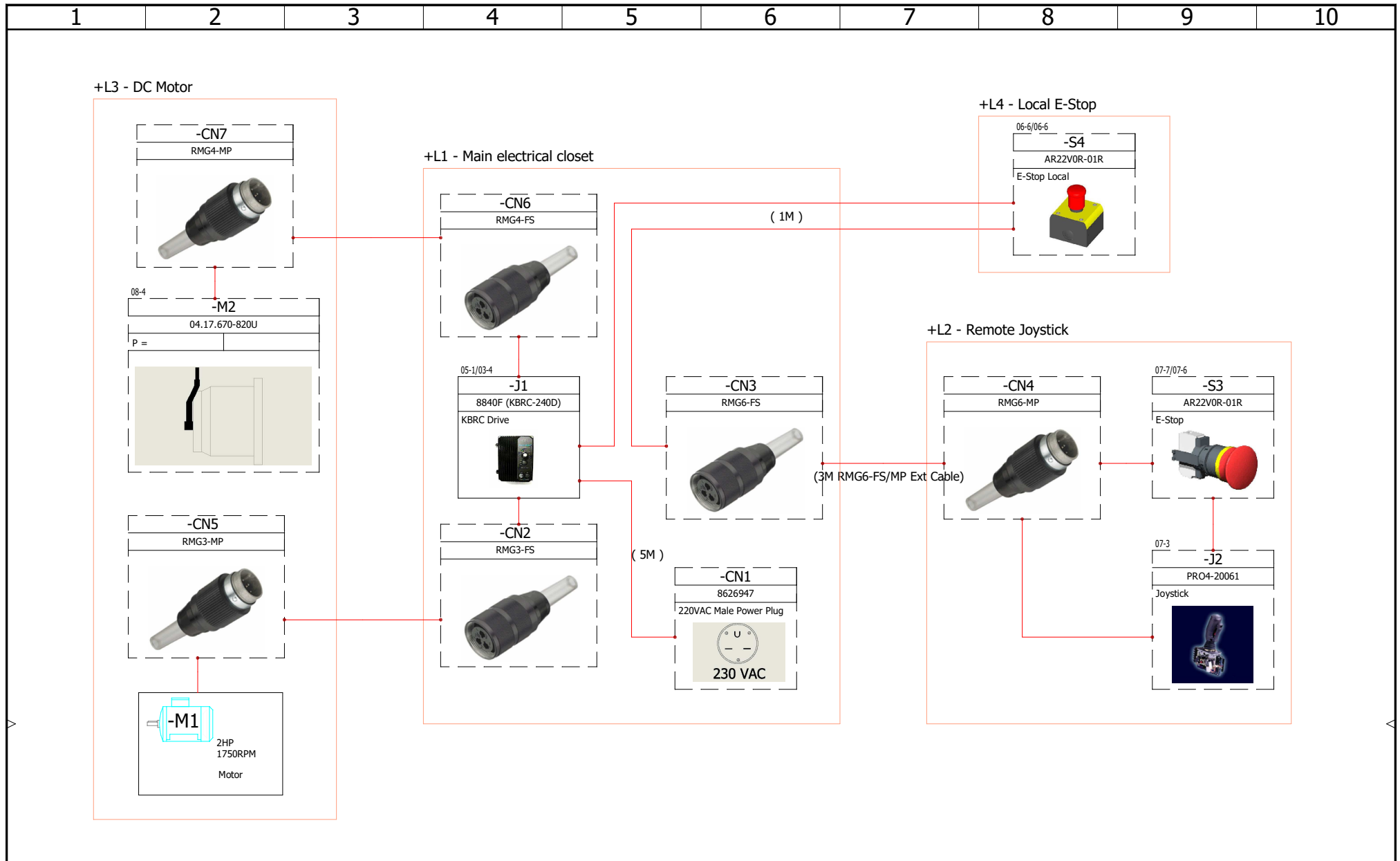
KBRC 240D:1PH 220VAC 2HP 1800Rpm 180VDC

Document book
Wiring line diagram 1/2

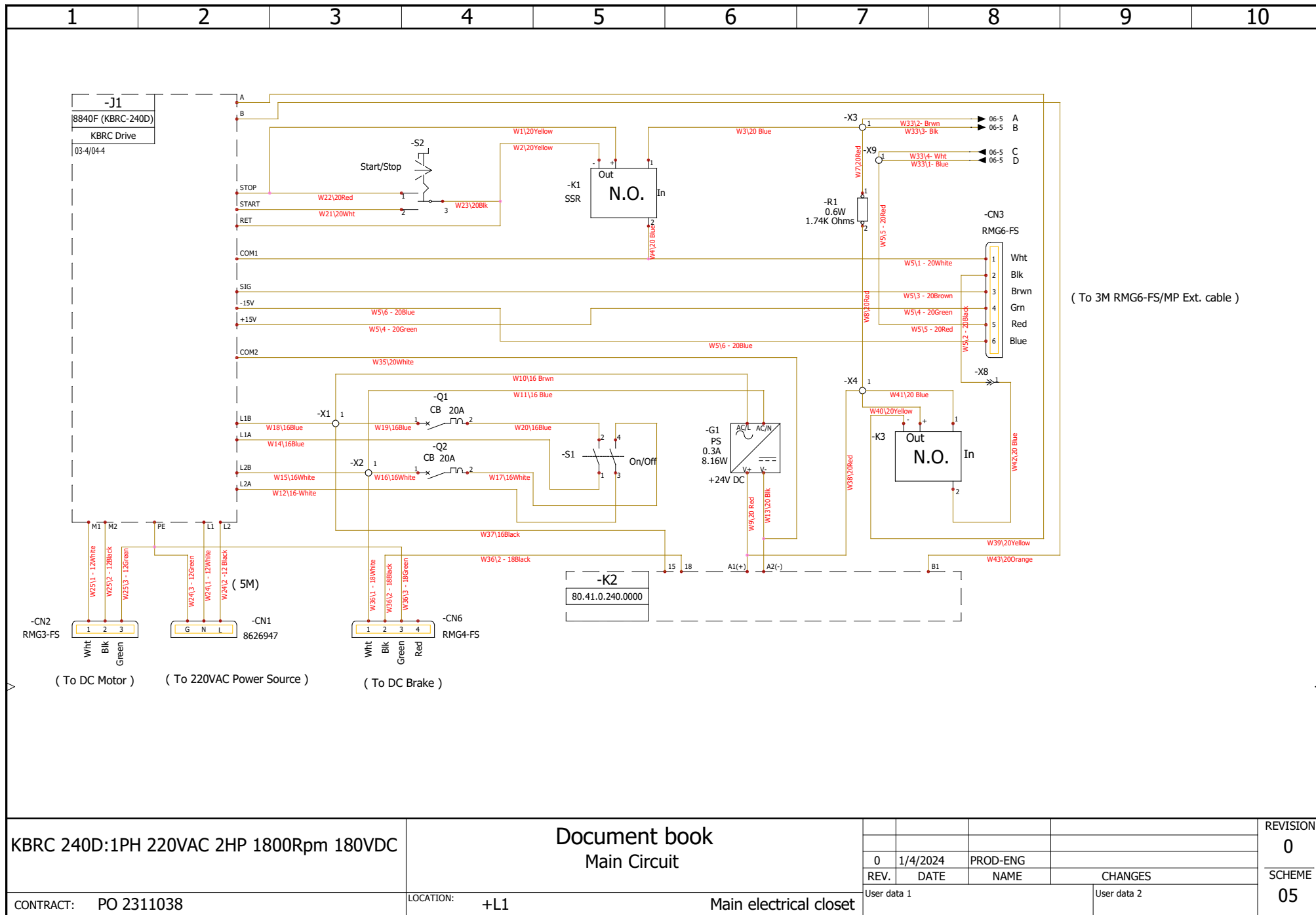
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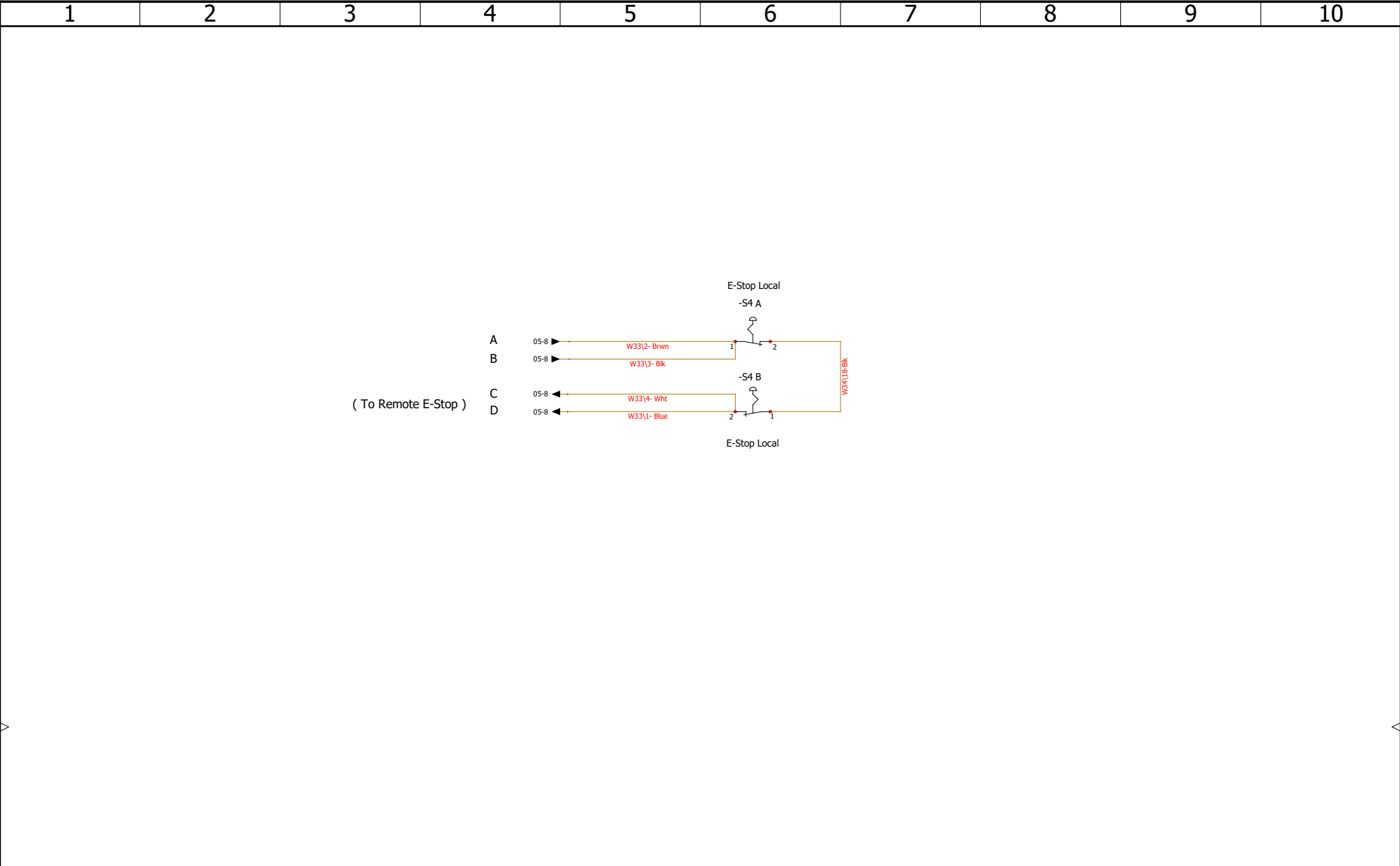
Main electrical closet

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User data 1			User data 2	03

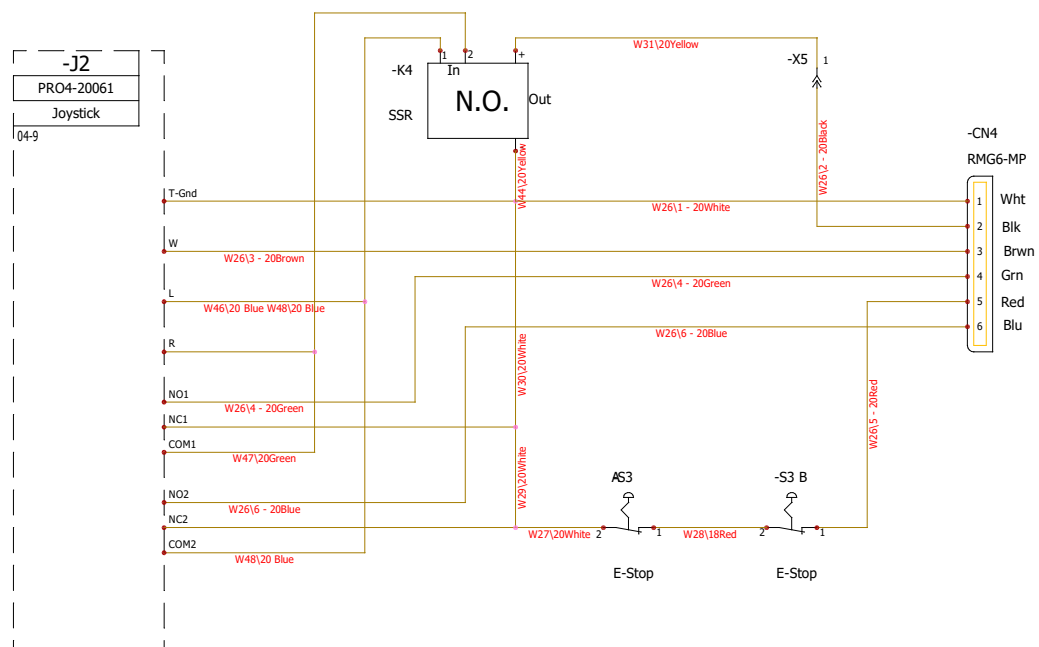


KBRC 240D:1PH 220VAC 2HP 1800Rpm 180VDC CONTRACT: PO 2311038	Document book Wiring line diagram 2/2 LOCATION: +L1 Main electrical closet	<table border="1"> <tr> <td>REV.</td> <td>DATE</td> <td>NAME</td> <td>CHANGES</td> </tr> <tr> <td>0</td> <td>1/10/2024</td> <td>PROD-ENG</td> <td></td> </tr> <tr> <td colspan="3">User data 1</td> <td>User data 2</td> </tr> </table>	REV.	DATE	NAME	CHANGES	0	1/10/2024	PROD-ENG		User data 1			User data 2	REVISION 0 SCHEME 04
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KBRC 240D:1PH 220VAC 2HP 1800Rpm 180VDC	Document book Local E-Stop								REVISION
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CONTRACT: PO 2311038	LOCATION: +L4	Local E-Stop			User data 1			User data 2	06



KBRC 240D:1PH 220VAC 2HP 1800Rpm 180VDC

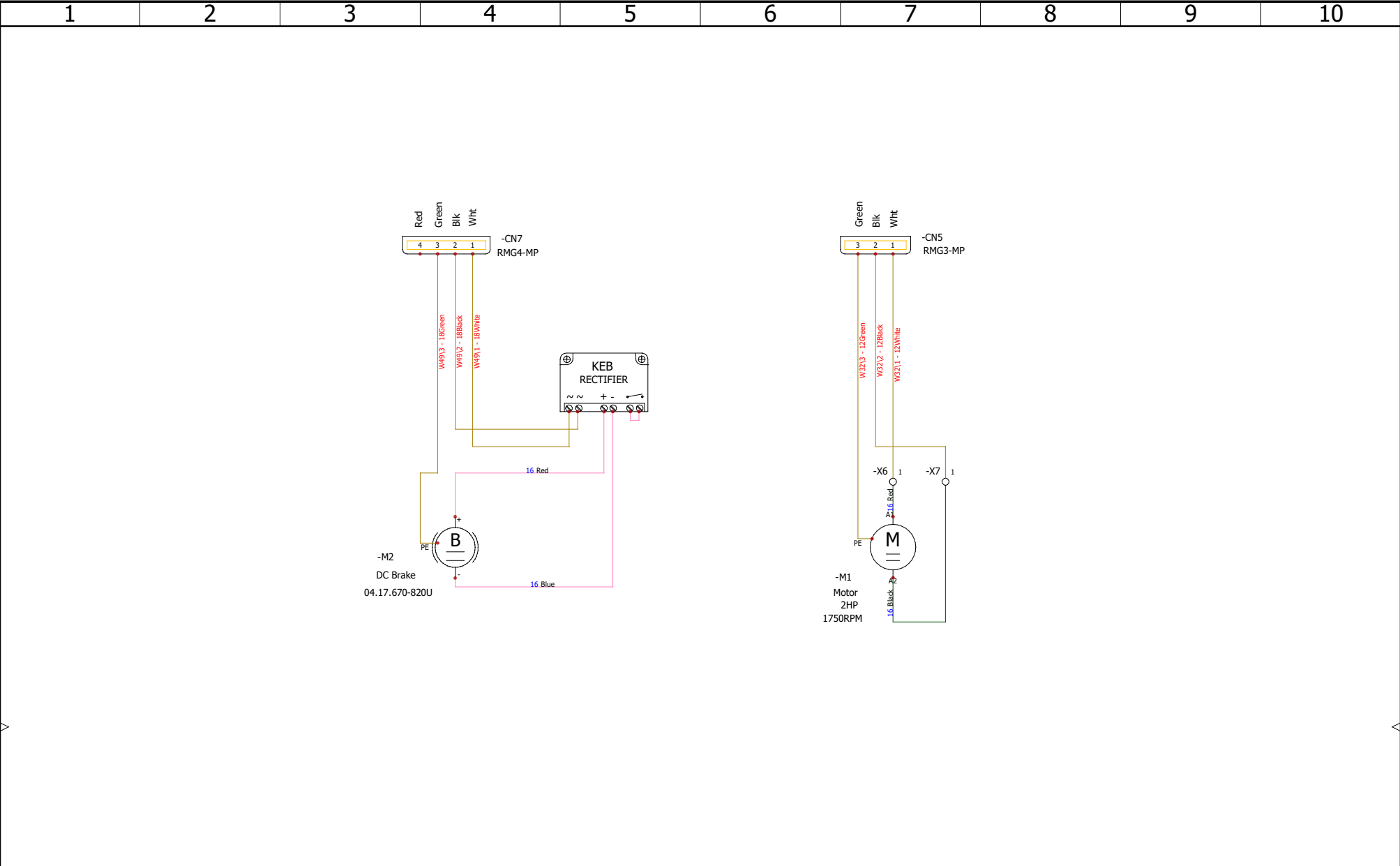
Document book
Remote Joystick

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LOCATION:	+L2
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Remote Joystick

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KBRC 240D:1PH 220VAC 2HP 1800Rpm 180VDC	Document book DC Motor								REVISION
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CONTRACT: PO 2311038	LOCATION: +L3	DC Motor			User data 1			User data 2	08

3H

Reference	Mark	Description	Quantity
RMG3-FS	-CN2	3 socket rubber connector with 20" pigtail	1
RMG4-FS	-CN6	4 socket rubber connector with 20" pigtail	1
RMG6-FS	-CN3	6 socket rubber connector with 20" pigtail	1
RMG6-MP	-CN4	6 pin rubber connector with 20" pigtail	1
RMG3-MP	-CN5	3 pin rubber connector with 20" pigtail	1
RMG4-MP	-CN7	4 pin rubber connector with 20" pigtail	1

Digi-Key

Reference	Mark	Description	Quantity
MRS25000C1741FCT00	-R1	1.74K Ohm, 0.6W 1% Axial Resistor	1

Finder

Reference	Mark	Description	Quantity
80.41.0.240.0000	-K2	Timer Relay SPDT 16A 24-240VAC/DC	1

Fuji Electric

Reference	Mark	Description	Quantity
AR22V0R-01R	-S3 , -S4	E-Stop Push button, 22mm, twist to release, round plastic with white arrow, red	2

IXYS

Reference	Mark	Description	Quantity
LGA701	-K1 , -K3 , -K4	Solid State Relay Module, 24VAC/VDC	3

J.R. Merritt Controls

Reference	Mark	Description	Quantity
PRO4-20061	-J2	Joystick, Spring Return	1

KB Electronics

Reference	Mark	Description	Quantity
8840F (KBRC-240D)	-J1	115-230VAC 0.25-2HP DC Motor Controller (Black Case)	1
KBRC-1350	-S2	KBRC Start/Stop Switch	1
KBRC-9486	-S1	KBRC ON/OFF Switch	1

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Document book

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LOCATION:

+L1

Main electrical closet

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09

KEB

Reference	Mark	Description	Quantity
02.91.010-CE07	-J3	Rectifier	1

KEB America

Reference	Mark	Description	Quantity
04.17.670-820U	-M2	Double C-Face Spring- Set Brakes 120/230/460VAC 12ft.lb	1

Mean Well

Reference	Mark	Description	Quantity
APV-8-24	-G1	Switching Power Supply CV AC/DC 24V 340mA	1

POWER FIST

Reference	Mark	Description	Quantity
8626947	-CN1	Plug Male 250V 15A	1

TE Connectivity

Reference	Mark	Description	Quantity
W28-XQ1A-20	-Q1 , -Q2	Circuit Breaker: 20A, 1P	2

Techtop

Reference	Mark	Description	Quantity
123ZYT DC 81	-M1	Techtop DC81 2HP 1750RPM 180VDC	1

Wago

Reference	Mark	Description	Quantity
221-413	-X1-1 , -X2-1	3-Wire Connectors	2

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3H-RMG4

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W36	RMG-4 18AWG	+L1<>+L1	Main electrical closet	Main electrical closet	0	RMG4
W49	RMG-4 18AWG	+L3<>+L3	DC Motor	DC Motor	0	RMG4

3H-RMG6

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W5	RMG-6 20AWG	+L1<>+L1	Main electrical closet	Main electrical closet	0	RMG6
W26	RMG-6 20AWG	+L2<>+L2	Remote Joystick	Remote Joystick	0	RMG6

Alpha Wire-461816

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W34	Black hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	461816

AWM-E-479307- Blk

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W13	Power Supply DC Out Cable Blk	+L1<>+L1	Main electrical closet	Main electrical closet	0	E-479307- Blk

AWM-E-479307- Blue

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W11	Power Supply AC/N Cable Blue	+L1<>+L1	Main electrical closet	Main electrical closet	0	E-479307- Blue

AWM-E-479307- Brown

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W10	Power Supply AC/L Cable Brown	+L1<>+L1	Main electrical closet	Main electrical closet	0	E-479307- Brown

AWM-E-479307- Red

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W9	Power Supply DC Out Cable red	+L1<>+L1	Main electrical closet	Main electrical closet	0	E-479307- Red

AWM-E52828

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W33	Incremental Encoder Cable 6C 24 AWG	+L1<>+L4	Main electrical closet	Local E-Stop	0	E52828

AWM-E77981-20Blk

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W23	Black hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	E77981-20Blk

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CONTRACT: PO 2311038	LOCATION: +L1	Main electrical closet			User data 1			User data 2	11

AWM-E77981-20Red

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W22	Red hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	E77981-20Red

AWM-E77981-20Wht

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W21	White hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	E77981-20Wht

AWM-LL43774-16B

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W14	Blue hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	LL43774-16B

AWM-LL43774-16W

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W12	White hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	LL43774-16W

Carol-SJOW12-03-LL

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W24	12AWG 3C SJOW Cable	+L1<>+L1	Main electrical closet	Main electrical closet	0	SJOW12-03-LL

PICO-8016-0C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W37	Black hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8016-0C

PICO-8016-1C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W18	Blue hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8016-1C
W19	Blue hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8016-1C
W20	Blue hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8016-1C

PICO-8016-6C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W15	White hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8016-6C
W16	White hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8016-6C
W17	White hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8016-6C

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Document book

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LOCATION: +L1 Main electrical closet

PICO-8118-5-C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W28	Red hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8118-5-C

PICO-8820-1C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W3	Blue hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-1C
W4	Blue hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-1C
W41	Blue hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-1C
W42	Blue hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-1C
W45	Blue hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8820-1C
W46	Blue hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8820-1C
W48	Blue hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8820-1C

PICO-8820-3C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W47	Green hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8820-3C

PICO-8820-4C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W43	Orange hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-4C

PICO-8820-5C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W7	Red hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-5C
W8	Red hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-5C
W38	Red hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-5C

PICO-8820-6C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W6	White hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-6C
W27	White hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8820-6C
W29	White hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8820-6C
W30	White hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8820-6C
W35	White hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-6C

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LOCATION: +L1 Main electrical closet

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PICO-8820-7C

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W1	Yellow hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-7C
W2	Yellow hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-7C
W31	Yellow hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8820-7C
W39	Yellow hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-7C
W40	Yellow hook up wire	+L1<>+L1	Main electrical closet	Main electrical closet	0	8820-7C
W44	Yellow hook up wire	+L2<>+L2	Remote Joystick	Remote Joystick	0	8820-7C

Royal-RMG3

Mark	Description	Path	Origin	Destination	Length (m)	Reference
W25	RMG-3 12AWG	+L1<>+L1	Main electrical closet	Main electrical closet	0	RMG3
W32	RMG-3 12AWG	+L3<>+L3	DC Motor	DC Motor	0	RMG3

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User data 1			User data 2	14

CONTRACT: PO 2311038

LOCATION: +L1 Main electrical closet