

ELECTRICAL/SYSTEM

SHEET NO.	DRAWING NO.	TITLE
200	5661602	RISER; 200; ELECTRICAL NOTES AND INDEX
201	5661603	RISER; 201; DVX-2210-288X1120 POWER AND SIGNAL LAYOUT

NOTE: ALL FIBER TERMINATIONS TO BE DESIGNATED BY TEXT IN UPPER RIGHT CORNER OF DEVICES. DAKTRONICS USES ST AND LC TERMINATIONS THROUGHOUT THE SYSTEM. DESIGNATION IS FOR ALL TERMINATIONS LOCATED AT EACH DEVICE.

EXAMPLE:

ST (OR LC)

DEVICE

NOTES:

THE FOLLOWING 200 SERIES ARE NOT SCALED DRAWINGS AND SHOULD BE USED FOR POWER AND SIGNAL REQUIREMENTS ONLY.

IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT ALL ELECTRICAL WORK PERFORMED ON SITE MEETS OR EXCEEDS ALL LOCAL AND NATIONAL ELECTRICAL CODES.

ALL SIGNAL CABLE RUNS SHOULD BE LABELED WITH THEIR ORIGIN AND DESTINATION ON EACH END.

FIBER OPTIC CABLE RUNS MUST BE CONTINUOUS WITH A MINIMUM BEND RADIUS OF 15X O.D. OF THE FIBER CABLE.

IF A SHIELDED SIGNAL CABLE IS UTILIZED IN YOUR SYSTEM, ENSURE THAT THE CABLES SHIELD IS GROUNDED ON THE DISPLAY END ONLY, AND TO THE SHIELD TERMINAL AT THE SIGNAL CABLE SURGE ARRESTER CARD WHEN AVAILABLE.

ALL DISPLAYS MUST BE GROUNDED PER ALL LOCAL AND NATIONAL ELECTRICAL CODES WITH NO MORE THAN 10 OHMS GROUND RESISTANCE.

THE OVER CURRENT PROTECTION DEVICE MUST BE MATCHED TO THE FAULT CURRENT THAT IS AVAILABLE IN THE POWER DELIVERY CIRCUIT. TO DETERMINE THE AVAILABLE FAULT CURRENT OF A SITE, AN ONSITE FAULT CURRENT SURVEY MAY NEED TO BE PERFORMED BY QUALIFIED PERSONNEL. IF THE AVAILABLE FAULT CURRENT IN THE ELECTRICAL SYSTEM EXCEEDS 6,000 AMPS, A DAKTRONICS REPRESENTATIVE SHOULD BE CONTACTED.

DUE TO THE INRUSH CURRENT (MOMENTARY SURGE) CREATED BY THE DISPLAY EQUIPMENT ON STARTUP, THE OVER CURRENT PROTECTION DEVICE(S) MAY HAVE TO BE OVERSIZED.

DAKTRONICS UTILIZES BOTH STANDARD AND SUPPLEMENTARY CIRCUIT BREAKERS IN THE DISPLAY ASSEMBLY PROCESS. IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT ALL PRIMARY FEEDER CIRCUIT BREAKERS TO EACH DISPLAY/DISPLAY SECTION ARE UL 489 LISTED.

DAKTRONICS IS NOT RESPONSIBLE FOR THE QUALITY OF THE POWER DELIVERY SYSTEM TO THE DISPLAY SYSTEM.

BECAUSE EACH INSTALLATION IS UNIQUE, DAKTRONICS OFFERS THESE INSTRUCTIONS AS GUIDELINES ONLY. DAKTRONICS, INC. ASSUMES NO LIABILITY IF INSTALLATION STEPS HAVE BEEN OMITTED OR OTHER NECESSARY PROCEDURES ARE NOT INCLUDED IN THIS SYSTEM RISER DIAGRAM.

POWER AND SIGNAL REQUIREMENTS ARE SPECIFIED TO THE EQUIPMENT AND SETUP SHOWN. ANY CHANGES MADE TO EQUIPMENT OR THEIR SETUP SHOULD BE DISCUSSED WITH DAKTRONICS DESIGN PERSONNEL AND WILL REQUIRE AN UPDATED RISER DIAGRAM DRAWING.

THE CONTRACTUAL AGREEMENT WILL DETERMINE THE PARTY OR PARTIES RESPONSIBLE FOR ITEMS LISTED AS FIELD INSTALLED. THIS DRAWING IS NOT INTENDED TO DETERMINE RESPONSIBILITIES AND SHOULD BE USED FOR REFERENCES ONLY.

ACTUAL PLACEMENT OF ELECTRICAL COMPONENTS, SUCH AS PANEL BOARDS, A/C'S, AND SPLICE PANELS, MAY VARY. LOCATION OF SUCH EQUIPMENT TO BE FIELD VERIFIED.

----- EXTERNALLY MOUNTED HARDWARE
----- INTERNALLY MOUNTED HARDWARE

NOTE:

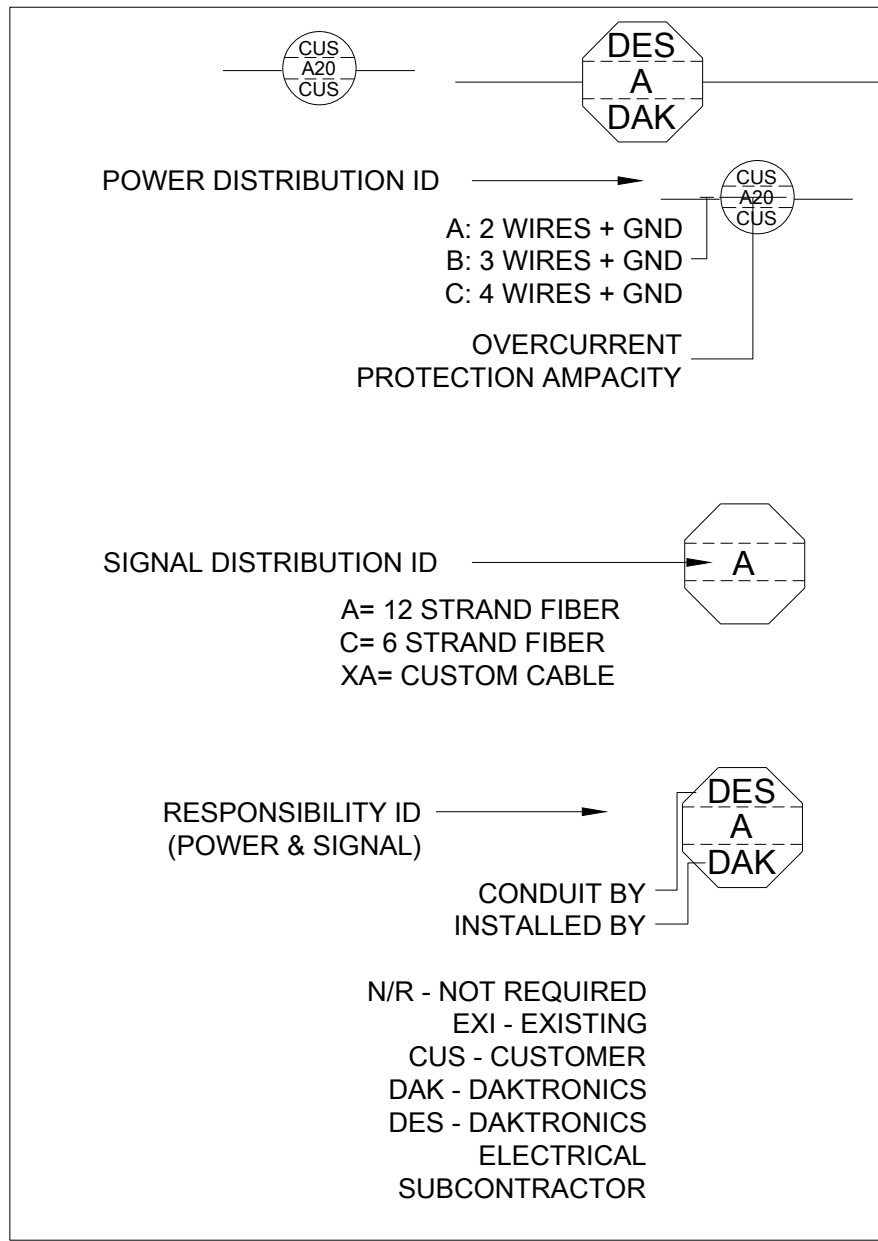
POWER FEEDERS SHOWN ARE CONSIDERED MINIMUM. ON INTERNATIONAL PROJECTS, INSTALLER TO COMPLY WITH ALL LOCAL AND NATIONAL ELECTRICAL CODES. INSTALLER TO SPECIFY ACTUAL FEEDER SIZES USED.

SIGNAL DISTRIBUTION SYSTEM LEGEND

ID TAG	CABLE TYPE	SIZE (O.D.)	DAKTRONICS PART NUMBER	CONDUIT PROVIDED & INSTALLED BY	CABLE		
					PROVIDED BY	INSTALLED BY	TERMINATED BY
A	12 STRAND, MM 50µm DX FIBER	0.23"	W-1490	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
B	NOT USED	-	-	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
C	6 STRAND, MM 50µm DX FIBER	0.20"	W-1489	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
D	6 STRAND, SM DX FIBER	0.25"	W-2515	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
E	4 STRAND, MM 50µm DX FIBER	0.18"	W-2121	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
F	4 STRAND, MM 50µm BX FIBER	0.31"	W-1494	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
G	2 STRAND, MM 50µm DX FIBER	0.17"	W-2120	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
H	6 STRAND, MM 62.5µm DX FIBER	0.22"	W-1456	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
J	6 PAIR, 22 AWG W/SHIELD	0.362"	W-1245	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
K	6 PAIR, 22 AWG PLENUM	0.30"	W-2035	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
L	2 PAIR, 22 AWG W/SHIELD	0.168"	W-1234	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
M	2 PAIR, 22 AWG PLENUM	0.14"	W-2034	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
N	AUDIO; 2 PAIR, 22 AWG	0.22"	W-1614	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
P	AUDIO; 1 PAIR, 22 AWG	0.17"	W-1615	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
R	2 PAIR, 18 AWG W/SHIELD	0.38"	W-1852	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
S	4 PAIR, 24 AWG CAT5E	0.21"	W-1384	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
T	4 PAIR, 24 AWG CAT5	0.26"	W-1467	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
U	1 PAIR 22 AWG W/SHIELD	0.138"	W-1077	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
V	1 PAIR, 12 AWG SPEAKER WIRE	0.279"	W-1561	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
W	1 PAIR, 16 AWG SPEAKER PLENUM	0.176"	W-2383	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG
XA	TWISTED PAIR CAT5E/CAT6 CABLE	0.21"	W OR PR	SEE TAG	DAKTRONICS	SEE TAG	SEE TAG

POWER DISTRIBUTION SYSTEM LEGEND

FEEDER TABLE - 2 CONDUCTORS+GND (SEE SPECIFICATIONS FOR INSULATION TYPE)			FEEDER TABLE - 3 CONDUCTORS+GND (SEE SPECIFICATIONS FOR INSULATION TYPE)			FEEDER TABLE - 4 CONDUCTORS+GND (SEE SPECIFICATIONS FOR INSULATION TYPE)		
OVER CURRENT PROTECTION AMPACITY	FDR REF	2 WIRES	OVER CURRENT PROTECTION AMPACITY	FDR REF	3 WIRES	OVER CURRENT PROTECTION AMPACITY	FDR REF	4 WIRES
10	A10		10	B10		10	C10	
15	A15		15	B15		15	C15	
20	A20		20	B20		20	C20	
25	A25		25	B25		25	C25	
30	A30		30	B30		30	C30	
35	A35		35	B35		35	C35	
40	A40		40	B40		40	C40	
45	A45		45	B45		45	C45	
50	A50		50	B50		50	C50	
60	A60		60	B60		60	C60	
70	A70		70	B70		70	C70	
80	A80		80	B80		80	C80	
90	A90		90	B90		90	C90	
100	A100		100	B100		100	C100	
110	A110		110	B110		110	C110	
125	A125		125	B125		125	C125	
150	A150		150	B150		150	C150	
175	A175		175	B175		175	C175	
200	A200		200	B200		200	C200	
			225	B225		225	C225	
			250	B250		250	C250	
			300	B300		300	C300	
			350	B350		350	C350	
			400	B400		400	C400	
						450	C450	
						500	C500	
						600	C600	
						800	C800	
						1000	C1000	
						1200	C1200	
						1600	C1600	
						2000	C2000	
						2500	C2500	
						3000	C3000	
						4000	C4000	



DVX-2210-10MN-8000-WJ-HC-288X1120@1

ONE DISPLAY SECTION
3 MODS HIGH X 4 MODS WIDE
MAX POWER PER SECTION: ~779W

ONE DISPLAY SECTION
3 MODS HIGH X 3 MODS WIDE
MAX POWER PER SECTION: ~586W

96X96

FRONT VIEW

POWER AND SIGNAL DISTRIBUTION SYSTEM LEGEND

REFERENCE DRAWING 5661602, SHEET 20

COMPONENT IDENTIFICATION LEGEND

ID TAG	COMPONENT DESCRIPTION	MANUFACTURER'S PART NUMBER	COMPONENT PROVIDED BY	COMPONENT INSTALLED BY
MD	MAIN DISTRIBUTION PANEL		CUSTOMER	CUSTOMER
P IN	QUICK POWER CONNECT		DAKTRONICS	CUSTOMER
SIG	QUICK SIGNAL CONNECT		DAKTRONICS	CUSTOMER

Manchester, UK

SUBMITTAL APPROVAL

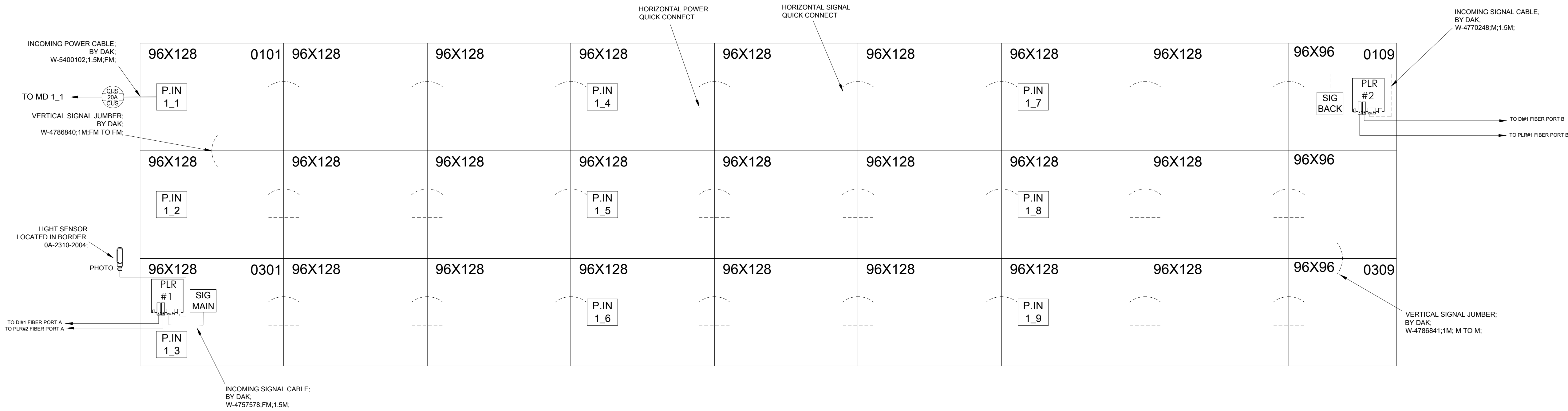
☐ APPROVED ☐ APPROVED AS NOTED ☐ APPROVED AS NOTED & RESUBMIT

COMPAN*

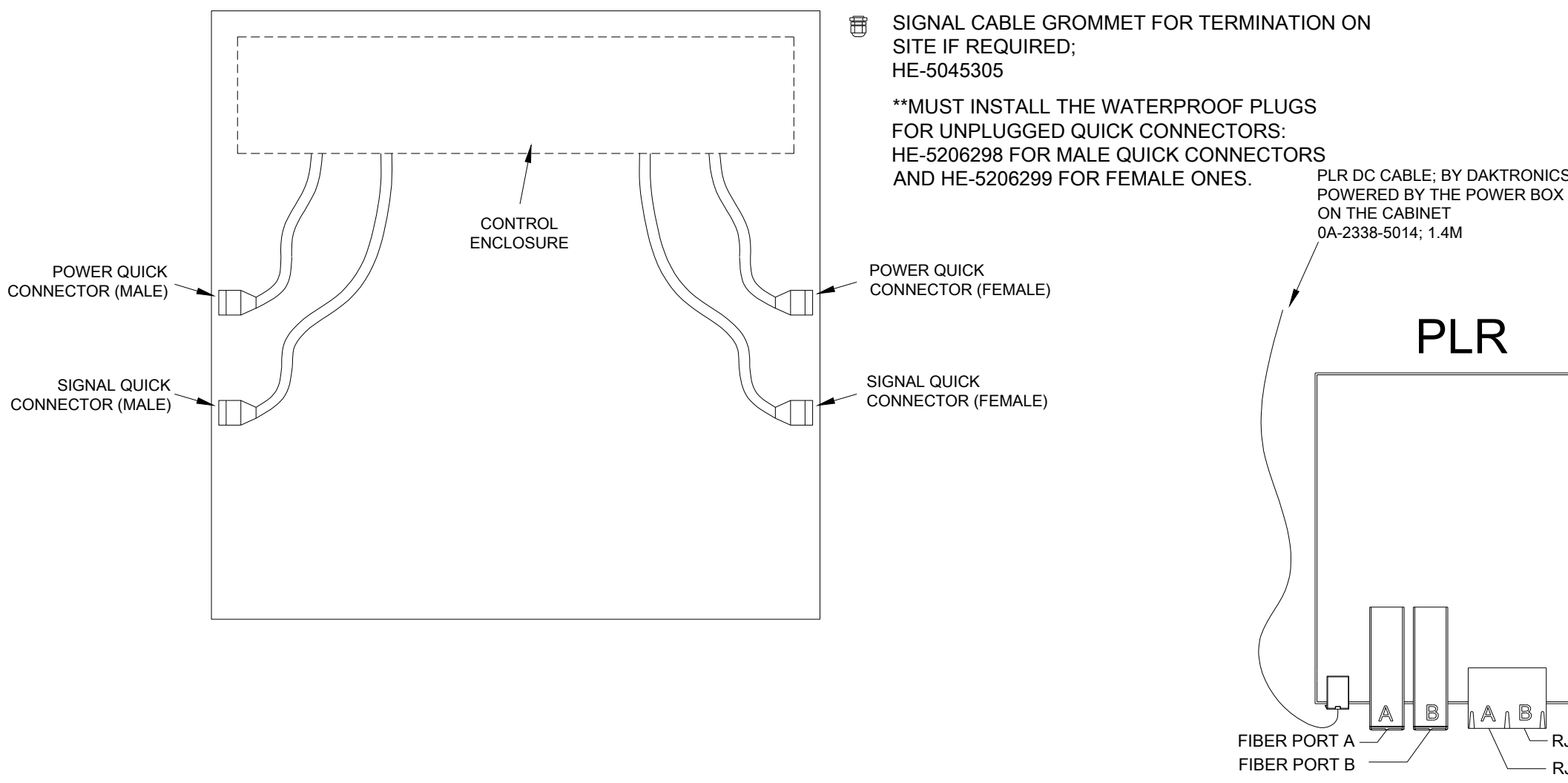
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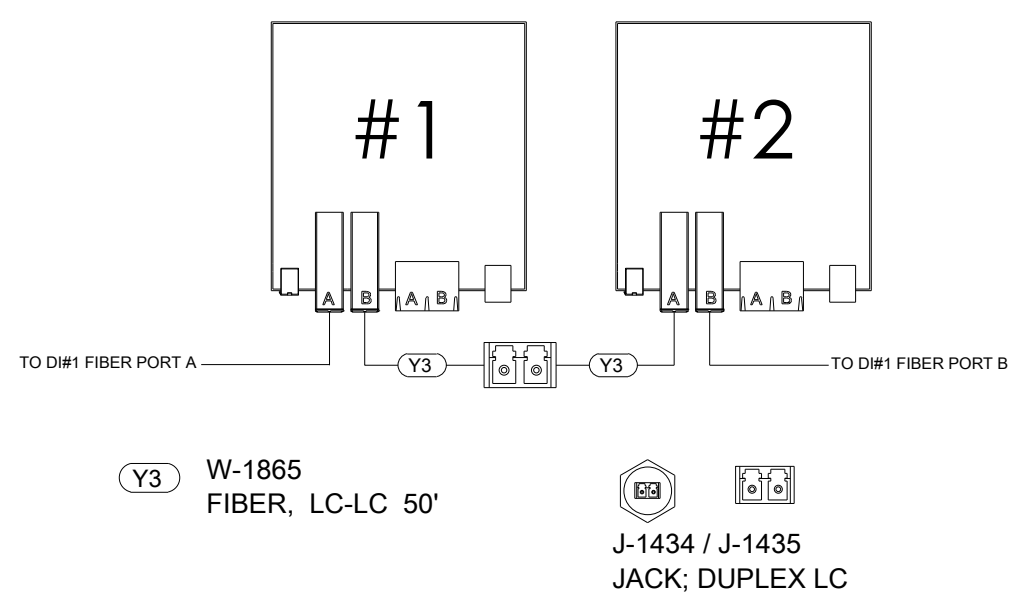
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FRONT VIEW



FIBER INTERCONNECT DETAIL



DI #1

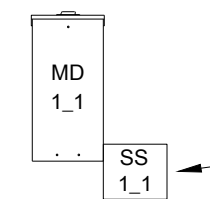
Pin	Label	Notes
1	USB 3.0 1	
2	USB 3.0 2	
3	USB 3.0 3	
4	DP DAK RX	
5	SDI PORT E	
6	SDI PORT F	
7	LAN 1	
8	LAN 2	
9	USB 2.0 1	
10	MON DP1	
11	USB 2.0 2	
12	COM 1	
13	COM 2	
14	USB 2.0 2	
15	DP DAK TX	
16	DP DAK TX	
17	PORT A MM	
18	PORT A TX	→ PLUR#1 FIBER PORT A
19	PORT A RX	
20	PORT C MM	
21	PORT C TX	
22	PORT C RX	
23	PORT D MM	
24	PORT D TX	
25	PORT D RX	
26	PORT D TX	→ PLUR#2 FIBER PORT B

0A-1848-0031

D CURVE CIRCUIT BREAKER REQUIRED

PANEL: MD1.1		SERVICE: 450Y/230_V		3 PH		4#GND_W			
CIRCUIT	AMP LOAD			BKRR CIRCT NO.	V			AMP LOAD	
	A	B	C	P	AMP	A	B	C	CIRCUIT
P.IN 1.1	10.2			1	20	1	2	20	P.IN 1
P.IN 1.2	10.2			1	20	3	4	20	P.IN 1
P.IN 1.3		10.2		1	20	5	6	20	P.IN 1
P.IN 1.4	10.2			1	20	7	8		P.IN 1
P.IN 1.5	10.2			1	20	9	10		P.IN 1
P.IN 1.6		10.2		1	20	11	12		P.IN 1
TOTAL LOAD: A: 29.7_B: 29.7_C: 29.7				TOTAL (KVA): 20.5				SURGESUP	

*DAKTRONICS LED DISPLAYS ARE
CONSIDERED NON-CONTINUOUS LOADS



SURGE SUPPRESSOR SUPPLIED BY DAKTRONICS. MOUNTED ON SIDE OF THE PANELBOARD. TYPICALLY FED WITH 30A-3PHASE BREAKER.

****NOTE***

POWER DISTRIBUTION SHOWN IS A BRANCH
CIRCUIT SYSTEM. OPTIMAL WIRING METHOD
IS AT THE DISCRETION OF THE INSTALLER
AND MUST COMPLY WITH ALL LOCAL AND
NATIONAL ELECTRIC CODES.

LAYOUT OF THE PANELBOARD WILL BE
DETERMINED BY ACTUAL WIRING METHODS
USED