



Cable Dimensions

TABLE													
T1 Connects to	T1 Stud Size	A1: Bend Added to T1	T2 Connects to	T2 Stud Size	A2: Bend Added to T2	2x 18S- 0x 18S+	1x 18S- 1x 18S+	0x 18S- 2x 18S+	L: Lenth to Cut Cable	S: Length to Cut Conduit	Cable Name	Note	Series Cells
BAY 2-	M6	60	BAY 3+ (CABLE B)	ANDERSON(RED)	-	X			472	450	A		48S
BAY 3+	M6	0	BAY 2- (CABLE A)	ANDERSON(RED)	-	X			290	262	B		48S
BAY 2-	M6	60	BAY 3+ (CABLE D)	ANDERSON(BLU)	-			X	290	268	C		48S
BAY 3+	M6	60	BAY 2- (CABLE C)	ANDERSON(BLU)	-			X	370	348	D		48S
BAY 3-	M6	60	HVDC- (CABLE F)	ANDERSON(BLK)	-		X	X	290	268	E		48S
HVDC-	M5	0	BAY 3- (CABLE E)	ANDERSON(BLK)	-		X	X	265	190	F		48S
BAY 2+	M6	60	FUSE	M8	0			X	550	550	G	SLEEVE BEFORE CRIMP	48S
BAY 2-	M6	60	BAY 3+	M6	60		X		212	212	H	SLEEVE BEFORE CRIMP	48S
BAY 2+	M6	45	FUSE	M8	0	X	X		295	250	J	SLEEVE BEFORE CRIMP	48S
BAY 3-	M6	60	HVDC-	M5	0	X			570	535	K	SLEEVE BEFORE CRIMP	48S
BAY 1-	M6	0	SWITCH	M8	75	X	X	X	335	335	L		48S
BAY 1+	M6	30	RELAY	M5	0	X	X	X	305	-	M	NO CONDUIT	48S

Total Cable Length:
2x 18S- & 0x 18S+ = ABJKLM: 2267 mm
1x 18S- & 1x 18S+ = EFHJLM: 1702 mm (ideal configuration)
0x 18S- & 2x 18S+ = CDEFGLM: 2405 mm (worst configuration: longer & QTY2 Anderson pairs)

Terminals

TABLE				
Stud Size	Manufacturer	Part Number	Digikey PN	QTY per Car
M5 (ideal)	TE AMP	130552	A112030-ND	2
M5 (alt)	Molex	0191930245	23-0191930245-ND	2
M5 (alt)	TE AMP	52197	A27067-ND	2
M6 (ideal)	TE AMP	321598	A27073-ND	6
M6 (alt)	Molex	0191930248	WM19129-ND	6
M8	Phoenix	3240096	277-11168-ND	2

Note:
Cable is 4 AWG, while Terminal is 6 AWG. All strands still fit.
Wire: Southwire Royal Excelene #4
Must be flexible! (Above contains QTY385 30 gauge strands)

Example:
To make Cable 'A':
Cut a 472 mm long piece of cable

Install 1st Terminal:
-Add a 60 degree bend to T1
-Strip 12 mm insulation
-Crimp T1 (M6 ring terminal)

Install 2nd Terminal*:
-No bend added (Anderson connector)
-Strip 12 mm insulation
-Crimp T2 (PP75 Anderson terminal)

Install Conduit and Label*:
-Cut a 450 mm long piece of conduit.
-Slide conduit over wire
-Install RED Anderson PP75 housing
-Label side T1 'BAY 2-'
-Label side T2 'TO BAY3+'
-Add orange tape to indicate high voltage

*These steps are swapped for cables GHJK, because both cable terminals are too large to slide thru conduit.

DRAWN John Sullivan	10/7/2021	TITLE LiBCM Cable Lengths		
CHECKED				
QA				
MFG				
APPROVED		SIZE D	DWG NO LiBCM Cable Lengths	REV B
SCALE 3:1		SHEET 1 OF 1		