



TABLE 1	
LENGTH	TOLERANCE
<2M	+5CM/-0CM
2 TO 5M	+10CM/-0CM
>5M	+15CM/-0CM

CONNECTORS AND HARDWARE	
REF DES	DESCRIPTION
P1,P2,P3,P4, P5,P6,P7,P8	HIROSE IX INDUSTRIAL CONNECTOR, FEMALE, TYPE B OR EQUIVALENT
P9	68-POSITION VHDCI CONNECTOR, MALE
1	M2.0X0.4 THUMBSCREWS, METAL, SLOTTED AND KURLED

CABLE DETAILS				
REF DES	CONSTRUCTION	CONDUCTORS	INSULATION	JACKET
2	4 SHIELDED TWISTED PAIRS, WITH OVERALL SHIELD	30 AWG TINNED STRANDED COPPER (7/0.10MM, 0.30MM OD)	0.15MM THICK SRPVC, 0.60MM OD	0.76MM THICK PVC, 5.50MM OD

METRIC

CUSTOMER DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS AND [INCHES]

NI.COM AUSTIN, TEXAS

DO NOT SCALE DRAWING THIRD ANGLE PROJECTION

TITLE SH68M-8IXBF AI DIFF

SIZE CODE IDENT NO. MM/DD/YYYY D 7U296 08/19/2021

SCALE: 1/1 SHEET 1 OF 2

2 PRODUCT AND COMPANY NAMES MENTIONED ARE TRADEMARKS OR TRADE NAMES OF THEIR RESPECTIVE COMPANIES.

1. REFER TO PRODUCT MANUAL ON NI.COM FOR MORE DETAILS.

NOTES: UNLESS OTHERWISE SPECIFIED.

WIRE LIST

LEAD	PAIR	P9 (VHDCI)	SIGNAL - VHDCI	SIGNAL - IX	COND.	COLOR	P1	P2	P3	P4	
1	0	68	AI16+	A	C0	RED	1				
		34	AI16-	B	C1	WHITE	2				
		22	AIGND	I (REF)	SHIELD_0	SHIELD/DRAIN	3				
	1	1	22	AIGND	I (REF)	SHIELD_1	SHIELD/DRAIN	3			
			33	AI17+	C	C2	BROWN	4			
		67	AI17-	D	C3	WHITE	5				
		32	AI18+	E	C4	ORANGE	6				
	2	2	66	AI18-	F	C5	WHITE	7			
			22	AIGND	J (AUX)	SHIELD_2	SHIELD/DRAIN	8			
		22	AIGND	J (AUX)	SHIELD_3	SHIELD/DRAIN	8				
3	3	65	AI19+	G	C6	YELLOW	9				
		31	AI19-	H	C7	WHITE	10				
	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
2	0	30	AI20+	A	C8	RED		1			
		64	AI20-	B	C9	WHITE		2			
		22	AIGND	I (REF)	SHIELD_4	SHIELD/DRAIN		3			
	1	1	22	AIGND	I (REF)	SHIELD_5	SHIELD/DRAIN		3		
			29	AI21+	C	C10	BROWN		4		
		63	AI21-	D	C11	WHITE		5			
		62	AI22+	E	C12	ORANGE		6			
	2	2	28	AI22-	F	C13	WHITE		7		
			22	AIGND	J (AUX)	SHIELD_6	SHIELD/DRAIN		8		
		22	AIGND	J (AUX)	SHIELD_7	SHIELD/DRAIN		8			
3	3	27	AI23+	G	C14	YELLOW		9			
		61	AI23-	H	C15	WHITE		10			
	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
3	0	26	AI32+	A	C16	RED			1		
		60	AI32-	B	C17	WHITE			2		
		22	AIGND	I (REF)	SHIELD_8	SHIELD/DRAIN			3		
	1	1	22	AIGND	I (REF)	SHIELD_9	SHIELD/DRAIN			3	
			59	AI33+	C	C18	BROWN			4	
		25	AI33-	D	C19	WHITE			5		
		24	AI34+	E	C20	ORANGE			6		
	2	2	58	AI34-	F	C21	WHITE			7	
			22	AIGND	J (AUX)	SHIELD_10	SHIELD/DRAIN			8	
		22	AIGND	J (AUX)	SHIELD_11	SHIELD/DRAIN			8		
3	3	23	AI35+	G	C22	YELLOW			9		
		57	AI35-	H	C23	WHITE			10		
	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
4	0	55	AI36+	A	C24	RED				1	
		21	AI36-	B	C25	WHITE				2	
		22	AIGND	I (REF)	SHIELD_12	SHIELD/DRAIN				3	
	1	1	22	AIGND	I (REF)	SHIELD_13	SHIELD/DRAIN				3
			20	AI37+	C	C26	BROWN				4
		54	AI37-	D	C27	WHITE				5	
		19	AI38+	E	C28	ORANGE				6	
	2	2	53	AI38-	F	C29	WHITE				7
			22	AIGND	J (AUX)	SHIELD_14	SHIELD/DRAIN				8
		22	AIGND	J (AUX)	SHIELD_15	SHIELD/DRAIN				8	
3	3	52	AI39+	G	C30	YELLOW				9	
		18	AI39-	H	C31	WHITE				10	
	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				

WIRE LIST (CONT.)

LEAD	PAIR	P9 (VHDCI)	SIGNAL - VHDCI	SIGNAL - IX	COND.	COLOR	P5	P6	P7	P8	
5	0	17	AI48+	A	C32	RED	1				
		51	AI48-	B	C33	WHITE	2				
		9	AIGND	I (REF)	Shield16	SHIELD/DRAIN	3				
	1	1	9	AIGND	I (REF)	Shield17	SHIELD/DRAIN	3			
			16	AI49+	C	C34	BROWN	4			
		50	AI49-	D	C35	WHITE	5				
		49	AI50+	E	C36	ORANGE	6				
	2	2	15	AI50-	F	C37	WHITE	7			
			9	AIGND	J (AUX)	Shield18	SHIELD/DRAIN	8			
		9	AIGND	J (AUX)	Shield19	SHIELD/DRAIN	8				
3	3	14	AI51+	G	C38	YELLOW	9				
		48	AI51-	H	C39	WHITE	10				
	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
6	0	13	AI52+	A	C40	RED		1			
		47	AI52-	B	C41	WHITE		2			
		9	AIGND	I (REF)	Shield20	SHIELD/DRAIN		3			
	1	1	9	AIGND	I (REF)	Shield21	SHIELD/DRAIN		3		
			46	AI53+	C	C42	BROWN		4		
		12	AI53-	D	C43	WHITE		5			
		11	AI54+	E	C44	ORANGE		6			
	2	2	45	AI54-	F	C45	WHITE		7		
			9	AIGND	J (AUX)	Shield22	SHIELD/DRAIN		8		
		9	AIGND	J (AUX)	Shield23	SHIELD/DRAIN		8			
3	3	10	AI55+	G	C46	YELLOW		9			
		44	AI55-	H	C47	WHITE		10			
	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
7	0	42	AI64+	A	C48	RED			1		
		8	AI64-	B	C49	WHITE			2		
		43	AIGND	I (REF)	Shield24	SHIELD/DRAIN			3		
	1	1	43	AIGND	I (REF)	Shield25	SHIELD/DRAIN			3	
			7	AI65+	C	C50	BROWN			4	
		41	AI65-	D	C51	WHITE			5		
		6	AI66+	E	C52	ORANGE			6		
	2	2	40	AI66-	F	C53	WHITE			7	
			43	AIGND	J (AUX)	Shield26	SHIELD/DRAIN			8	
		43	AIGND	J (AUX)	Shield27	SHIELD/DRAIN			8		
3	3	39	AI67+	G	C54	YELLOW			9		
		5	AI67-	H	C55	WHITE			10		
	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
8	0	4	AI68+	A	C56	RED				1	
		38	AI68-	B	C57	WHITE				2	
		43	AIGND	I (REF)	Shield28	SHIELD/DRAIN				3	
	1	1	43	AIGND	I (REF)	Shield29	SHIELD/DRAIN				3
			3	AI69+	C	C58	BROWN				4
		37	AI69-	D	C59	WHITE				5	
		36	AI70+	E	C60	ORANGE				6	
	2	2	2	AI70-	F	C61	WHITE				7
			43	AIGND	J (AUX)	Shield30	SHIELD/DRAIN				8
		43	AIGND	J (AUX)	Shield31	SHIELD/DRAIN				8	
3	3	1	AI71+	G	C62	YELLOW				9	
		35	AI71-	H	C63	WHITE				10	
	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				