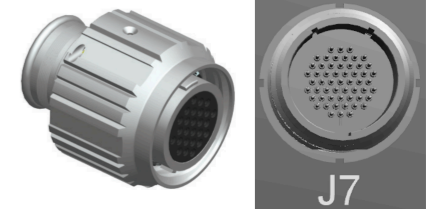


REV	CR NO	DESCRIPTION	AUTHOR
001	N/A	CREATED	Matheus Hagemann

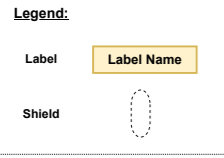
Item Number	Part Name	Sales part no.	Description	Qty	Manufacturer
1	22.1027 & 22.2380-22	22.1027 & 22.2380-22	Banana Test Connector, 4mm, Shrouded & Stackable, Plug, Cable Mount, 32 A, 1 kV, Red	3 pc.	Stäubli
2	22.1027 & 22.2380-21	22.1027 & 22.2380-21	Banana Test Connector, 4mm, Shrouded & Stackable, Plug, Cable Mount, 32 A, 1 kV, Black	3 pc.	Stäubli
(*) 3	2461CSL005-ND	2461CSL005-ND	CABLE 2CON 22AWG SLATE SHLD 100'	30 or 18 m	Alpha Wire
(*) 4	44A1121-24-2/3-9	44A1121-24-2/3-9	CABLE 2CON 24AWG WHT SHLD FEET	30 or 18 m	TE Connectivity
(*) 5	3251 BK005	3251 BK005	HOOK-UP STRND 22AWG BLACK 100'	30 or 18 m	Alpha Wire
6	2306566	2306566	SUBCON-PLUS/AX/CAN/SO145 Sub-D	6 pc.	Phoenix Contact
7	22.1027 & 22.2380-28	22.1027 & 22.2380-28	Banana Test Connector, 4mm, Shrouded & Stackable, Plug, Cable Mount, 32 A, 1 kV, Grey	6 pc.	Stäubli
8	2M805-001-16M18-55SA	2M805-001-16M18-55SA	Connector Circular MIL Spec M805 55C 55#23 SK T PLUG OM	1 pc.	Amphenol Aerospace
9	66.9155-21	66.9155-21	4MM BANANA JACK, SOCKET, CABLE MOUNT, 32A, 1KV, NICKLE PLATED, BLACK 23AH8799	1 pc.	Stäubli
(*) 10	170-12000	HEGP20-PET-BK	Polyester braided hose black, PET, nominal size 20mm	48 or 80 m	HellermannTyton
(*) 11	51608-00003-00	51608-00003-00	Tesa 51608 Duct Tape, PET Black, 0.28mm x 19mm x 15m	5 pc.	Tesa

Tolerances:
 Between connectors: +15mm
 0mm
 Other dimensions: ±10mm



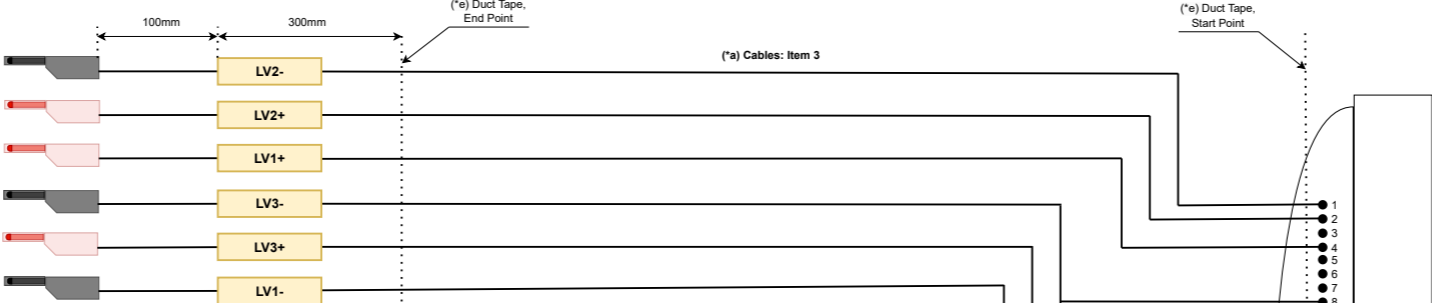
2M805-001-16M18-55SA

*a - Cables for the PINs connections: 28VDC
 *b - Cables for the PINs connections: CAN Bus
 *c - Cables for the PINs connections: ID Pin Prog
 *d - Cover each Cable individually with the item Braided Hose (170-12000). Cover shall be done on all cable's length.
 *e - Wrap each of the 3 signal groups (28V, CAN, PROG) together with the Duct Tape (51608-00003-00)



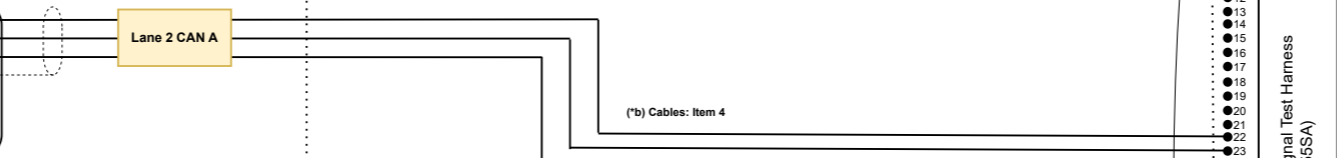
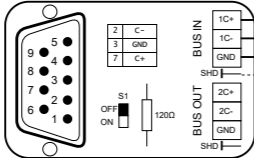
Harness Notes:
 Standard lengths of the Harness: 3m and 5m

PIN No	wire colour	(J7 Connection)	Signal & wire Name	wire Type	wire Size
A	BK	1	28VDC-RTN	SINGLE	AWG 22D
A	BK	2	28VDC-PWR	SINGLE	AWG 22D
A	BK	4	28VDC-PWR	SINGLE	AWG 22D
A	BK	8	28VDC-RTN	SINGLE	AWG 22D
A	BK	9	28VDC-PWR	SINGLE	AWG 22D
A	BK	10	28VDC-RTN	SINGLE	AWG 22D



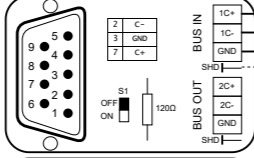
PIN No	PIN No	wire Colour	(J7 Connection)	Signal & wire Name	wire Type	wire Size
2	C-	BK	23	Lane 2 CAN A (L)	SINGLE	AWG 22D
3	GND	BK	24	Lane 2 CAN A (GND)	SINGLE	AWG 22D
7	C+	BK	22	Lane 2 CAN A (H)	SINGLE	AWG 22D

*Shielding: Fold back 10 mm of the braided shield over the outer sheath. Remove the aluminum foil. Close the housing half-shells/strain relief around the braided shield.



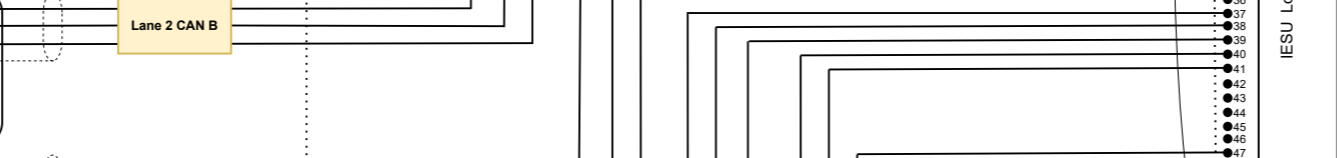
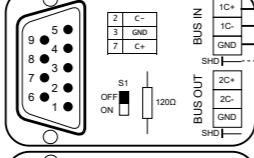
PIN No	PIN No	wire Colour	(J7 Connection)	Signal & wire Name	wire Type	wire Size
2	C-	BK	26	Lane 2 CAN A (L)	SINGLE	AWG 22D
3	GND	BK	27	Lane 2 CAN A (GND)	SINGLE	AWG 22D
7	C+	BK	25	Lane 2 CAN A (H)	SINGLE	AWG 22D

*Shielding: Fold back 10 mm of the braided shield over the outer sheath. Remove the aluminum foil. Close the housing half-shells/strain relief around the braided shield.



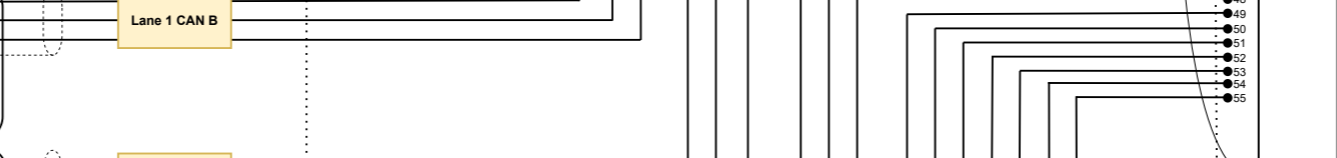
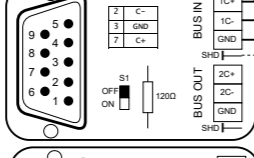
PIN No	PIN No	wire Colour	(J7 Connection)	Signal & wire Name	wire Type	wire Size
2	C-	BK	30	Lane 2 CAN A (L)	SINGLE	AWG 22D
3	GND	BK	31	Lane 2 CAN A (GND)	SINGLE	AWG 22D
7	C+	BK	29	Lane 2 CAN A (H)	SINGLE	AWG 22D

*Shielding: Fold back 10 mm of the braided shield over the outer sheath. Remove the aluminum foil. Close the housing half-shells/strain relief around the braided shield.



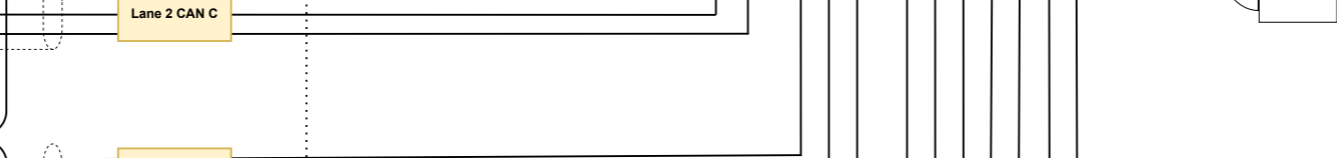
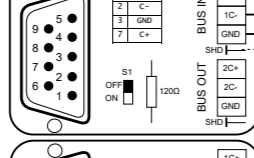
PIN No	PIN No	wire Colour	(J7 Connection)	Signal & wire Name	wire Type	wire Size
2	C-	BK	33	Lane 2 CAN A (L)	SINGLE	AWG 22D
3	GND	BK	34	Lane 2 CAN A (GND)	SINGLE	AWG 22D
7	C+	BK	32	Lane 2 CAN A (H)	SINGLE	AWG 22D

*Shielding: Fold back 10 mm of the braided shield over the outer sheath. Remove the aluminum foil. Close the housing half-shells/strain relief around the braided shield.



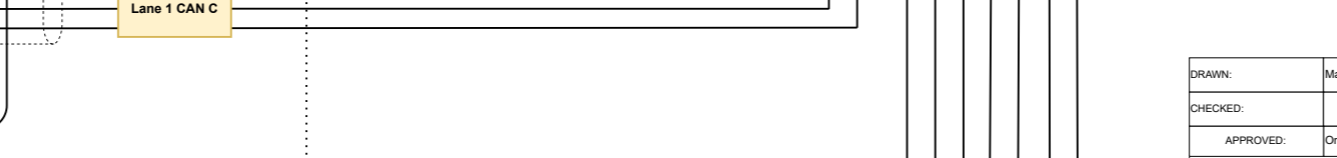
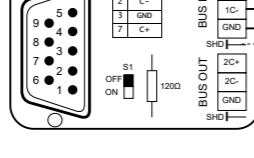
PIN No	PIN No	wire Colour	(J7 Connection)	Signal & wire Name	wire Type	wire Size
2	C-	BK	38	Lane 2 CAN A (L)	SINGLE	AWG 22D
3	GND	BK	39	Lane 2 CAN A (GND)	SINGLE	AWG 22D
7	C+	BK	37	Lane 2 CAN A (H)	SINGLE	AWG 22D

*Shielding: Fold back 10 mm of the braided shield over the outer sheath. Remove the aluminum foil. Close the housing half-shells/strain relief around the braided shield.

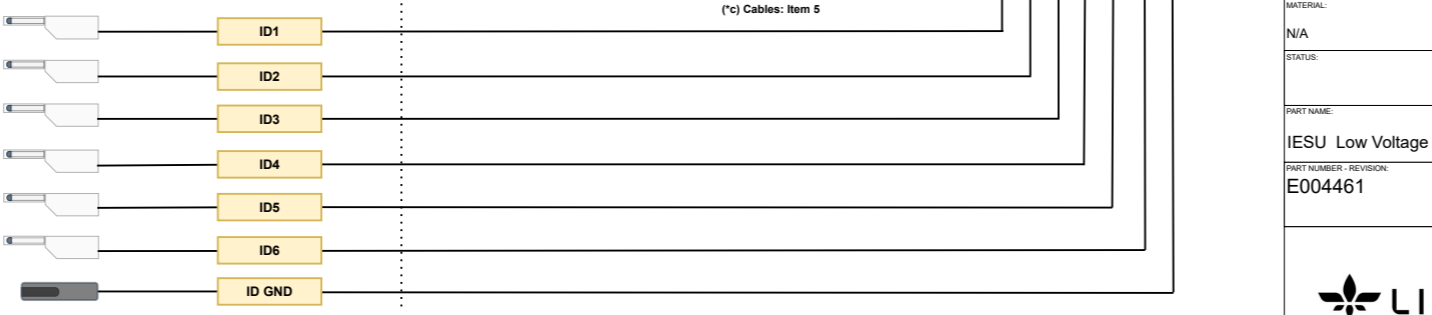


PIN No	PIN No	wire Colour	(J7 Connection)	Signal & wire Name	wire Type	wire Size
2	C-	BK	38	Lane 2 CAN A (L)	SINGLE	AWG 22D
3	GND	BK	39	Lane 2 CAN A (GND)	SINGLE	AWG 22D
7	C+	BK	37	Lane 2 CAN A (H)	SINGLE	AWG 22D

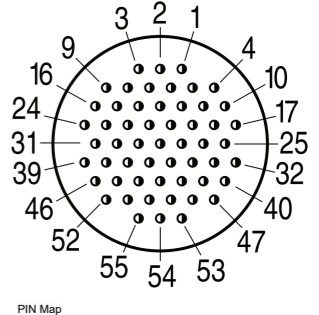
*Shielding: Fold back 10 mm of the braided shield over the outer sheath. Remove the aluminum foil. Close the housing half-shells/strain relief around the braided shield.



PIN No	wire Colour	(J7 Connection)	Signal & wire Name	wire Type	wire Size
A	BK	49	28VDC-RTN	SINGLE	AWG 22D
A	BK	50	28VDC-RTN	SINGLE	AWG 22D
A	BK	51	28VDC-RTN	SINGLE	AWG 22D
A	BK	52	28VDC-RTN	SINGLE	AWG 22D
A	BK	53	28VDC-RTN	SINGLE	AWG 22D
A	BK	54	28VDC-RTN	SINGLE	AWG 22D
A	BK	55	28VDC-RTN	SINGLE	AWG 22D



PIN No	wire Colour	Signal Type	Signal & wire Name	wire Type
1	Black	28VDC-RTN	LV2-	Cable 2x 22AWG
2	Red	28VDC-PWR	LV2+	Cable 2x 22AWG
3			SPARE	
4	Red	28VDC-PWR	LV1+	Cable 2x 22AWG
5			SPARE	
6			SPARE	
7			SPARE	
8	Black	28VDC-RTN	LV3-	Cable 2x 22AWG
9	Red	28VDC-PWR	LV3+	Cable 2x 22AWG
10	Black	28VDC-RTN	LV1-	Cable 2x 22AWG
11			SPARE	
12			SPARE	
13			SPARE	
14			SPARE	
15			SPARE	
16			SPARE	
17			SPARE	
18			SPARE	
19			SPARE	
20			SPARE	
21			SPARE	
22	Red	CAN-BUS	Lane 2 CAN A (H)	Cable 2x 24AWG + shield
23	Black	CAN-BUS	Lane 2 CAN A (L)	Cable 2x 24AWG + shield
24	Braid shield	SIG-GND	Lane 2 CAN A (GND)	Cable 2x 24AWG + shield
25	Red	CAN-BUS	Lane 1 CAN A (H)	Cable 2x 24AWG + shield
26	Black	CAN-BUS	Lane 1 CAN A (L)	Cable 2x 24AWG + shield
27	Braid shield	SIG-GND	Lane 1 CAN A (GND)	Cable 2x 24AWG + shield
28			SPARE	
29	Red	CAN-BUS	Lane 2 CAN B (H)	Cable 2x 24AWG + shield
30	Black	CAN-BUS	Lane 2 CAN B (L)	Cable 2x 24AWG + shield
31	Braid shield	SIG-GND	Lane 2 CAN B (GND)	Cable 2x 24AWG + shield
32	Red	CAN-BUS	Lane 1 CAN B (H)	Cable 2x 24AWG + shield
33	Black	CAN-BUS	Lane 1 CAN B (L)	Cable 2x 24AWG + shield
34	Braid shield	SIG-GND	Lane 1 CAN B (GND)	Cable 2x 24AWG + shield
35			SPARE	
36			SPARE	
37	Red	CAN-BUS	Lane 2 CAN C (H)	Cable 2x 24AWG + shield
38	Black	CAN-BUS	Lane 2 CAN C (L)	Cable 2x 24AWG + shield
39	Braid shield	CAN-BUS	Lane 2 CAN C (GND)	Cable 2x 24AWG + shield
40	Red	CAN-BUS	Lane 1 CAN C (H)	Cable 2x 24AWG + shield
41	Black	CAN-BUS	Lane 1 CAN C (L)	Cable 2x 24AWG + shield
42			SPARE	
43			SPARE	
44			SPARE	
45			SPARE	
46			SPARE	
47	Braid shield	SIG-GND	Lane 1 CAN C (GND)	Cable 2x 24AWG + shield
48			SPARE	
49	Black	PIN-PROG	ID1	Single wire 1x 22 AWG
50	Black	PIN-PROG	ID2	Single wire 1x 22 AWG
51	Black	PIN-PROG	ID3	Single wire 1x 22 AWG
52	Black	PIN-PROG	ID4	Single wire 1x 22 AWG
53	Black	PIN-PROG	ID5	Single wire 1x 22 AWG
54	Black	PIN-PROG	ID6	Single wire 1x 22 AWG
55	Black	PIN-PROG	ID GND	Single wire 1x 22 AWG



PIN Map

Note: Set all termination resistor terminals ON.

DRAWN:	Matheus Hagemann	DATE:	10.09.2024
CHECKED:		DATE:	
APPROVED:	On TeamCenter workflow	DATE:	
MATERIAL:	THEOR. EXACT DIMENSIONS ACC. TO CAD.		
N/A			
STATUS:	PART MARKING ACC. TO:	TOLERANCING PRINCIPLE:	
PART NAME:	STRUCTURE CATEGORY:		
IESU Low Voltage Power and Signal Test Harness			
PART NUMBER - REVISION:	VARIANT:	SHEET:	SCALE:
E004461	N/A	A3	N/A
PROJECT ANGLE:			

