

GENERAL NOTES:
(UNLESS OTHERWISE SPECIFIED)

1. WORKMANSHIP QUALITY AS PER IPC-A-620, CLASS-3.

2. MINIMUM CRIMP PULLOUT FORCE AS PER MIL-T-7928 OR EQUIVALENT (SAE-AS-7928).

3. ALL CRIMPS AND CONNECTORS MUST MEET MANUFACTURER SPECIFICATIONS.

4. ALL CONNECTORS ARE SHOWN AS VIEWED FROM THE CABLE ENTRY SIDE (NOT TO SCALE). REFER TO DRAWING FOR CONNECTOR CAVITY NUMBERS. CAVITY NUMBERS ARE AS SHOWN.

5. HARNESS COMPONENTS SHALL NOT CHANGE UNLESS ALTERNATE COMPONENT APPROVAL IS ISSUED FROM BRAMMO ENGINEERING.

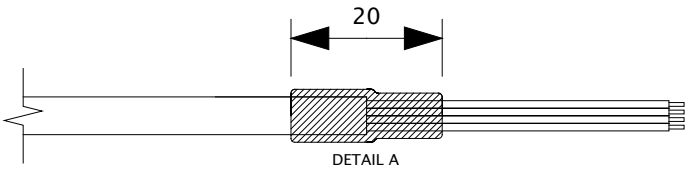
6. HARNESS DIMENSIONAL TOLERANCING SHALL BE NON-CUMULATIVE.

7. ALL WIRE LENGTHS SHALL BE AS LISTED ON THE WIRELIST TABLE. THE LISTED WIRE CUT LENGTH INCLUDES CUMULATIVE NODE TO NODE LENGTHS, ADD-ON AND DRESS ROUTES LENGTHS FOR CONNECTORS, ADD-ON LENGTHS PER JUNCTION AND ADD-ON LENGTHS FOR SPLICES. DEVIATION FROM THE WIRELIST TABLE WIRE CUT LENGTH IS NOT ALLOWED.

8. TESTING TO COMPLY WITH IPC-A-620A, CLASS 2 (CONTINUITY AND SHORTS).

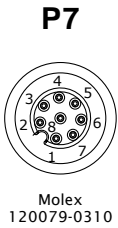
9. FINISHED CABLE ASSEMBLIES SHALL BE SUFFICIENTLY PACKAGED TO PREVENT ANY DAMAGE DURING SHIPPING.

REVISION NOTE TABLE		
REVISION	DESCRIPTION	DATE
A.00	ECO 1164 - PRODUCTION RELEASE	1/18/2013

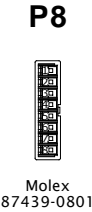
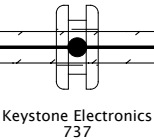


MOLEX PIGTAIL CABLE PREP

DO NOT CHANGE THE CABLE INSULATION STRIP LENGTH AS RECEIVED FROM MOLEX (38.1MM OF EXPOSED WIRE PER MOLEX DATASHEET). ADJUST THE WIRE INSULATION STRIP LENGTH AS DETAILED ON THE WIRE LIST. REMOVE THE SHIELD DRAIN WIRE (UN-INSULATED WIRE THAT IS TIED TO THE SHIELD AND P7/PIN1). ADD 20MM PIECE OF HEATSHRINK CENTERED OVER END OF OUTER CABLE INSULATION (SEE DETAIL A).





P7						
Cav	Wire	Color	Spec	Terminal P/N	End 2 Name	End 2 Zone
1	-	-	-	-	-	-
2	RS-485_D+_1	BK	24AWG 7/32	-	P8	3-F
3	RS-485_D-_1	WH	24AWG 7/32	-	P8	3-F
4	RS485_UNUSED_1	RD	24AWG 7/32	-	P8	3-F
5	RS485_INTERLOCK_1	DG	24AWG 7/32	-	P8	3-F
6	RS485_INTERLOCK_2	BN	24AWG 7/32	-	P8	3-F
7	RS485_+12V_1	DB	24AWG 7/32	-	P8	3-F
8	RS485_GND_1	OG	24AWG 7/32	-	P8	3-F



P8						
Cav	Wire	Color	Spec	Terminal P/N	End 2 Name	End 2 Zone
1	-	-	-	-	-	-
2	RS-485_D+_1	WH	24AWG 7/32	87421-0000	P7	3-A
3	RS-485_D+_1	BK	24AWG 7/32	87421-0000	P7	3-A
4	RS485_UNUSED_1	RD	24AWG 7/32	87421-0000	P7	3-A
5	RS485_INTERLOCK_1	DG	24AWG 7/32	87421-0000	P7	3-A
6	RS485_INTERLOCK_2	BN	24AWG 7/32	87421-0000	P7	3-A
7	RS485_+12V_1	DB	24AWG 7/32	87421-0000	P7	3-A
8	RS485_GND_1	OG	24AWG 7/32	87421-0000	P7	3-A

Bill Of Materials						
Index	BRAMMO P/N	Description	Qty	Unit of Measure	Supplier Name	Supplier Part Number
1	20772003	CABLE FRA-PIGTAIL 8POS ULTRA-LOCK	1	Each	Molex	120079-0310
2	72519533	CONN PLUG F 8POS PICO-SPOX	1	Each	Molex	87439-0801
3	14478040	GROMMET RUBBER .187"DIA .437"L	1	Each	Keystone Electronics	737
4	52466815	HEATSHRINK ADHSV 6.35MM BK	20.0	Per Length	3M	EPS-200 1/4"BL
5	35873415	TERM F 24-30AWG TIN PICO-SPOX	7	Each	Molex	87421-0000

Wire List												
Wire	Multicore	Color	Wire Spec	Wire Cut Length	From Zone	From	Cavity	Strip Length	To Zone	To	Cavity	Strip Length
RS-485_D+_1	M12 CABLE	BK	24AWG 7/32	1002	3-A	P7	2	0	3-F	P8	3	2
RS-485_D-_1	M12 CABLE	WH	24AWG 7/32	1002	3-A	P7	3	0	3-F	P8	2	2
RS485_+12V_1	M12 CABLE	DB	24AWG 7/32	1002	3-A	P7	7	0	3-F	P8	7	2
RS485_CABLE_SHIELD_1	M12 CABLE	-	BRAID	1002				0				0
RS485_GND_1	M12 CABLE	OG	24AWG 7/32	1002	3-A	P7	8	0	3-F	P8	8	2
RS485_INTERLOCK_1	M12 CABLE	DG	24AWG 7/32	1002	3-A	P7	5	0	3-F	P8	5	2
RS485_INTERLOCK_2	M12 CABLE	BN	24AWG 7/32	1002	3-A	P7	6	0	3-F	P8	6	2
RS485_UNUSED_1	M12 CABLE	RD	24AWG 7/32	1002	3-A	P7	4	0	3-F	P8	4	2

GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE NOT TO SCALE	DRAWN BY DW	DATE 1/18/2013	BRAMMO, Inc. 550 Clover Lane, Ashland, OR 97520, USA Phone: 541.482.9555 Fax: 541.552.0414		 BRAMMO	
0 DECIMAL PLACES ±12.70MM	DESIGN UNITS	MM	CHECKED BY JK	DATE 1/18/2013	DESCRIPTION CABLE M12-PICOSPOX 1M			
1 DECIMAL PLACES ±6.35MM	MATERIAL SEE BOM		APPROVED BY RG	DATE 1/18/2013	DOCUMENT NO. 75165465	REV. A.00	PROJECT SERVICE CABLES	
2 DECIMAL PLACES ±2.54MM								
ANGULAR ± 1°								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE B	THE INFORMATION CONTAINED HEREON SHALL BE CONSIDERED THE SOLE PROPERTY OF BRAMMO, INC. AND THE RECIPIENT THEREOF AGREES NOT TO DISCLOSE SAID INFORMATION TO PARTIES OUTSIDE THE RECIPIENT'S ORGANIZATION, AND NOT TO USE OR TO DUPLICATE SAID INFORMATION FOR ANY PURPOSE EXCEPT AS SPECIFIED BY BRAMMO, INC. THIS DOCUMENT IS BY BRAMMO, INC. THIS DOCUMENT IS LOANED IN CONFIDENCE, SUBJECT TO RETURN UPON DEMAND.				SHEET NO. 1 of 1