

- NOTES:
- MATERIAL:
HOUSING: PA66 GF30, BLACK, UL 94 V-0
COVER: PC, COLOR SEE CHART 3 CONFIGURATION
SEAL: SILICON RUBBER, GREEN
TPA: PA66, BLUE, UL94 V-0
 - OPERATING TEMPERATURE RANGE: -40 °C TO +105 °C.
 - MATES WITH TE AMP MCP 2.8 FEMALE TERMINAL, FLR CABLE FOLLOW ISO 6722 CLASS C AND DIN 72511, DETAIL SEE CHART 1 FOR ALLOWED TYPES.
 - 2.8mm BLADES (RATED FOR 40A MAXIMUM), TOTAL MAXIMUM CONTINUOUS CURRENT IS 135A.
 - TPAs AND METAL BRACKET TO BE PACKED ALONG WITH THE HOLDER SEPARATELY IN BULK.
 - OPTIONAL TETHER (890009470) TO BE INSTALLED WITH THE PIN ON COVER AND THE PIN ON BASE.
 - MOUNTING BRACKET (868-964) CAN BE SOLD SEPARATELY, SEE CHART 3 CONFIGURATION.
 - STRAIGHT BRACKET (868-964) CAN BE REPLACED WITH OPTIONAL 30° ANGLE BRACKET (868-068) IF NEEDED.
 - MOUNTING TORQUE 5.5~6.5 Nm, M6 BOLT & LOCK WASHER.
 - IF RELAY(S) IS (ARE) APPLIED, FOAM(S) (901-327) MUST BE FIXED ON THE RELEVANT PLACE(S) IN COVER TO RETAIN THE RELAY(S). RELAY MUST BE INSERTED AT ASSIGNED LOCATION. REFER TO VIEW WITH RELAYS AND FOAMS ON PAGE 3.
 - INGRESS PROTECTION RATING: IP67.

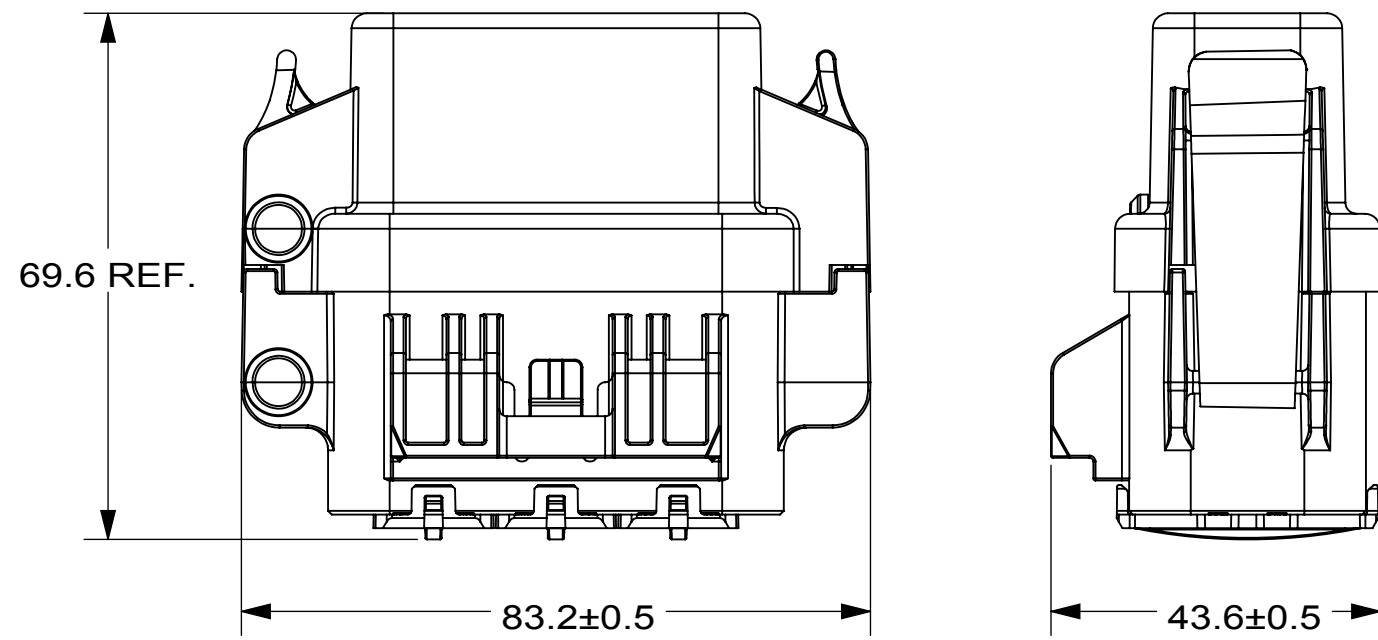
CHART 1: TE AMP MCP 2.8 CONTACT SYSTEM

Wire Size range(mm2)	FLR Insulation Diameter(mm)	Terminal P/N		Single Wire seal	Sealing Plug
		Strip Form	Loose-piece		
0.36-0.5	1.2-1.4	968882	968896	828904-1	828922-1
0.5-1.0	1.4-2.1	968855	968875	828904-2	
1.0-2.5	2.2-3.0	968857	968876	828905-1	

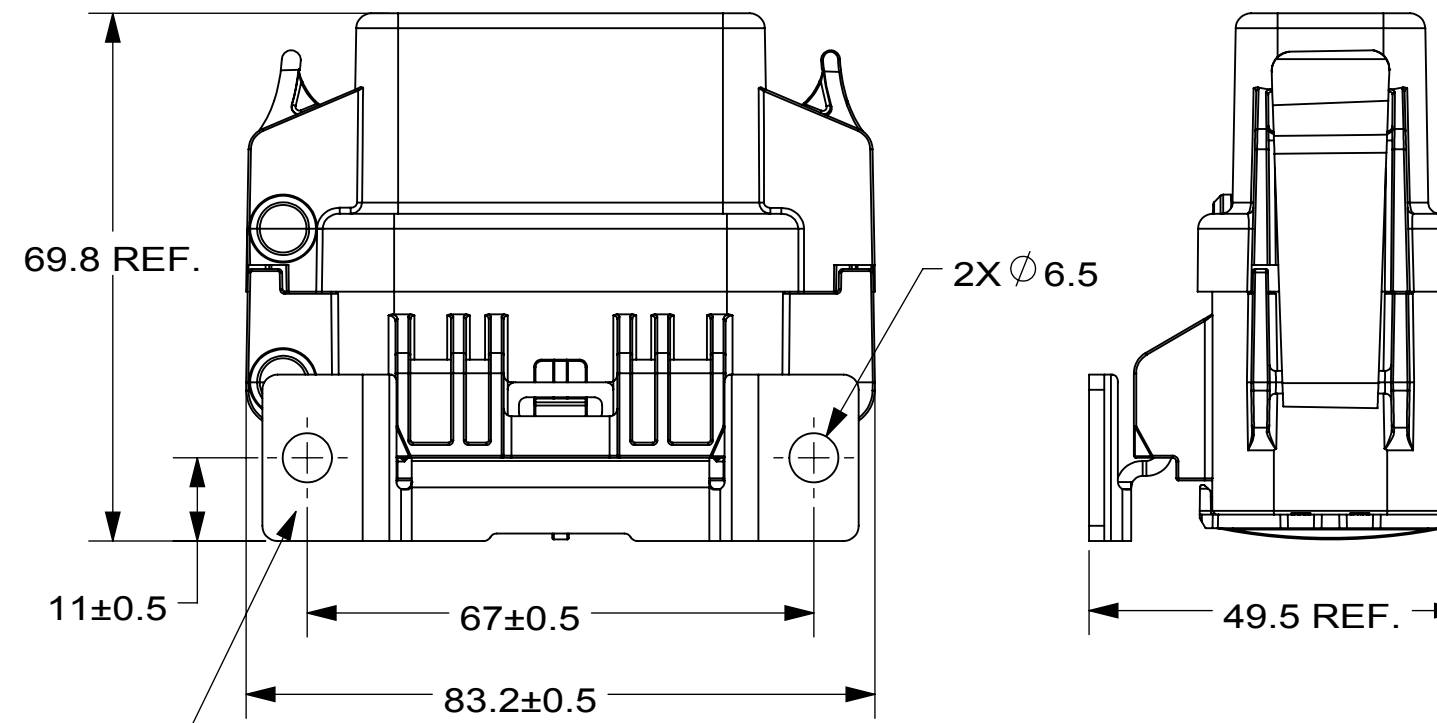
CHART 2: HWB12 ACCESSORY

PART	TETHER	OPTIONAL		NECESSARY IF RELAY APPLIED
		STRAIGHT BRACKET	30° ANGLE BRACKET	FOAM
P/N	890009470	868-964	868-068	901-327
REMARK	SEE NOTE 6	EITHER, SEE CHART 3 CONFIGURATION		ONLY FOR RELAY, SEE NOTE 10 AND VIEW WITH RELAYS AND FOAMS ON PAGE 3

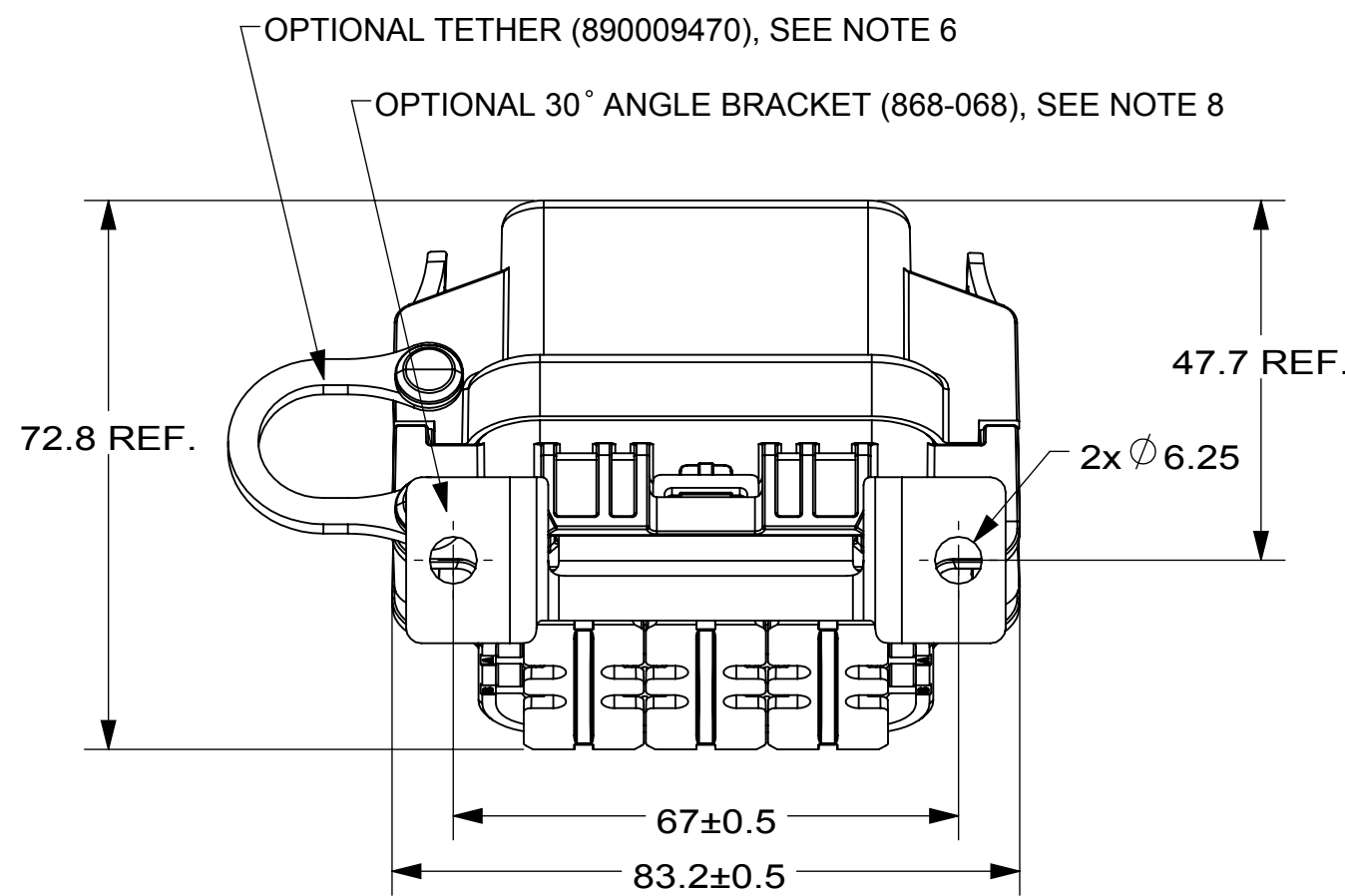
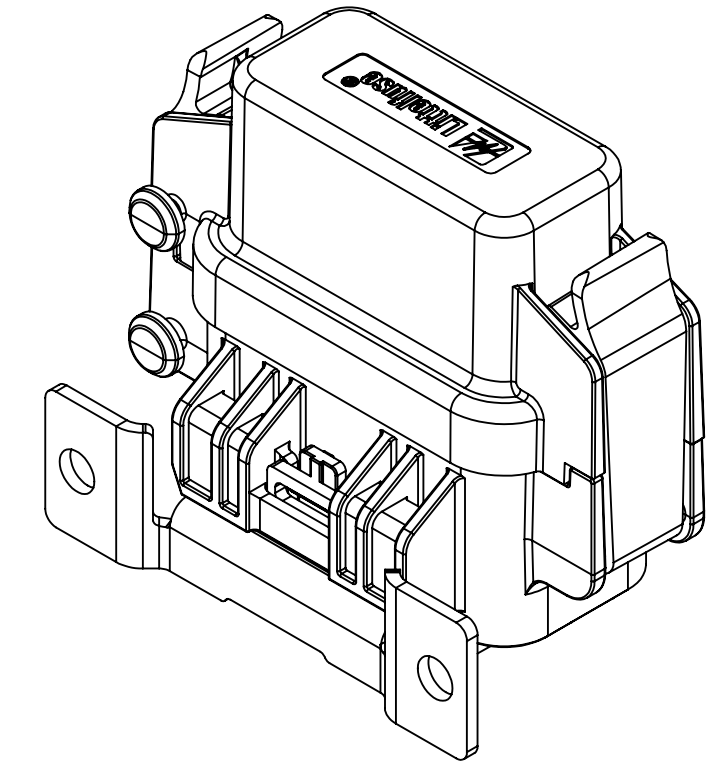
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	EC #515015 INITIAL RELEASE	11/30/2015	
	B	EC #515383 ADD NEW P/N WITH MOUNTING BRACKET	01/06/2016	
	C	EC #515712 ADD PAGE 2, PAGE 3	03/30/2016	
D1,E3,E4	D	EC #516067 CORRECT THE MISSED SKETCH OF LATCHES IN VIEW WITH STRAIGHT BRACKET	06/28/2016	



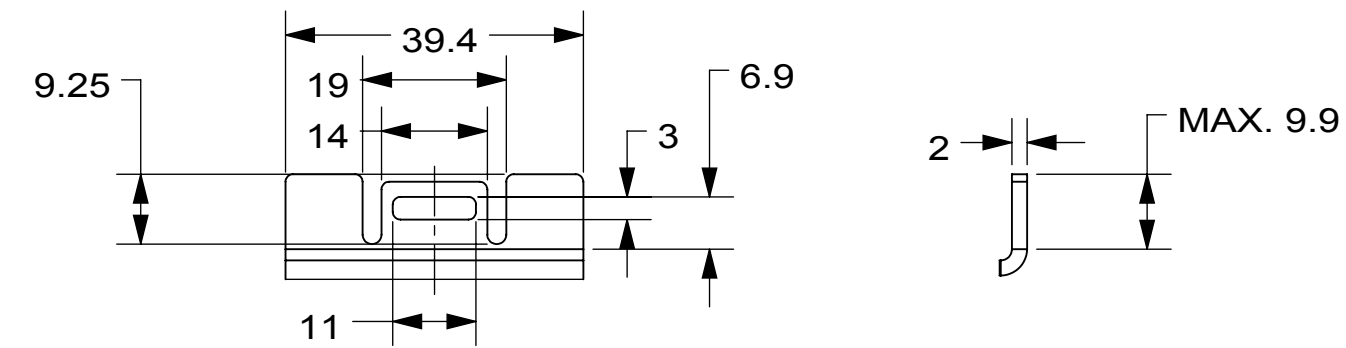
VIEW WITHOUT BRACKET



VIEW WITH STRAIGHT BRACKET



VIEW WITH TETHER AND 30° ANGLE BRACKET



THE LATCHING GEOMETRY OF BRACKET

CHART 3: CONFIGURATION

HWB12 P/N	COVER			STRAIGHT BRACKET (868-964)
	CLEAR	BLACK	REMARK	
PDM33001ZXM	x		UL94 V-2	
PDM33002ZXM		x	UL94 V-0	
PDM33003ZXM	x		UL94 V-2	x
PDM33004ZXM		x	UL94 V-0	x

DIMENSIONS ARE SHOWN IN MILLIMETERS. DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ANSIS/ASME Y14.5-1994.

- DENOTES PRODUCTS CRITICAL CHARACTERISTICS
- CPK DENOTES CPK DIMENSIONS MINIMUM CPK VALUE
- ST DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS
- CP DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE

TOLERANCES UNLESS OTHERWISE SPECIFIED (REF. ISO2768-M)

DIMENSION	UP TO 0.5 - 3	OVER 3 - 6	OVER 6 - 30	OVER 30 - 120	OVER 120 - 400	ANGLE
TOLERANCES	±0.1	±0.1	±0.2	±0.3	±0.5	±1°

NAME	DATE
J. LI	10/29/2015
E. JIN	03/30/2016

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TITLE
 HARD WIRE BOX -12

THIRD ANGLE PROJECTION

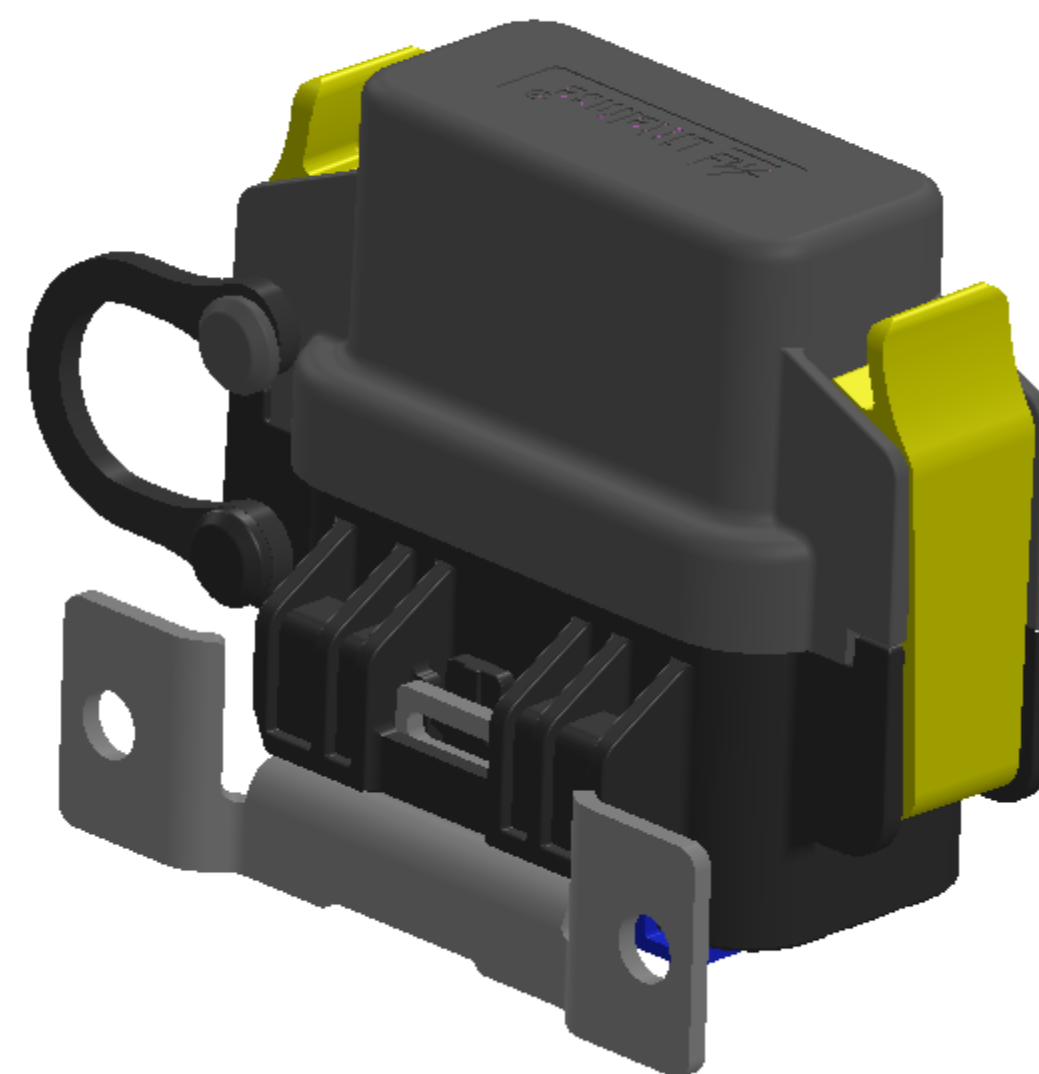
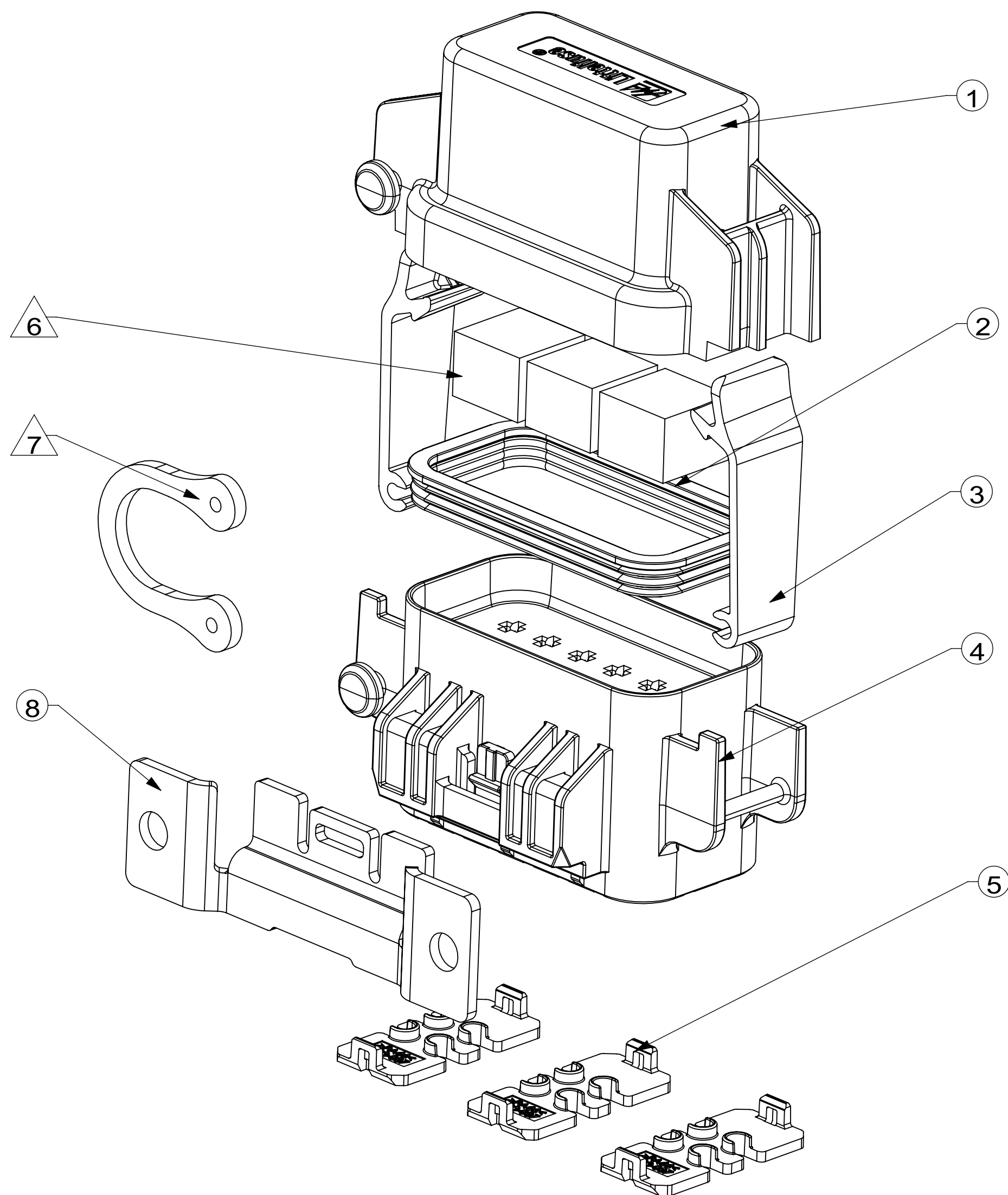
DO NOT SCALE DRAWING

SCALE 1:1

SHEET 1 OF 3

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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
SEE PAGE 1				



NOTE:
PARTS MARKED Δ TO BE ORDERED SEPARATELY.

#	PART	QTY	REMARK
1	COVER	1	TWO COLOR: CLEAR AND BALCK
2	SEAL	1	
3	YELLOW LATCH	2	
4	BASE	1	
5	TPA	3	
6	FOAM	0~3	APPLY 1 EA FOAM FOR EACH RELAY
7	TETHER	1	OPTIONAL, P/N: 890009470
8	BRACKET	1	OPTIONAL, P/N: 868-964

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CP	DENOTES CP DIMENSIONS. -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE						
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TOLERANCES	± 0.1	± 0.1	± 0.2	± 0.3	± 0.5	$\pm 1^\circ$	
DRAWN	NAME J. LI	DATE 10/29/2015	 Excelsite Applied Answere's Best word No.6 Xinghai Street, Suzhou Industry Park, China Phone +86 512 6761 3189 Fax +86 512 6761 1489				
CHECKED							
THIRD ANGLE PROJECTION			TITLE				
			HARD WIRE BOX -12				
DO NOT SCALE DRAWING			SCALE 1:2	SIZE C	DWG. NO. OL-PDM33000ZXM	REV. D	SHEET 2 OF 3

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
		SEE PAGE 1		

ASSEMBLY STEPS (FOR CUSTOMER ASSEMBLY USE ONLY)

STEP1: OPEN THE YELLOW LATCHES BY HAND, AND REMOVE THE COVER.

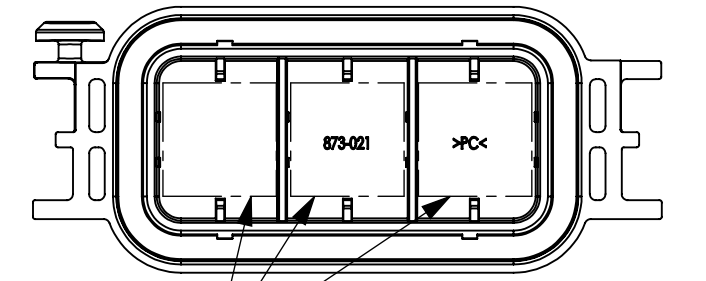
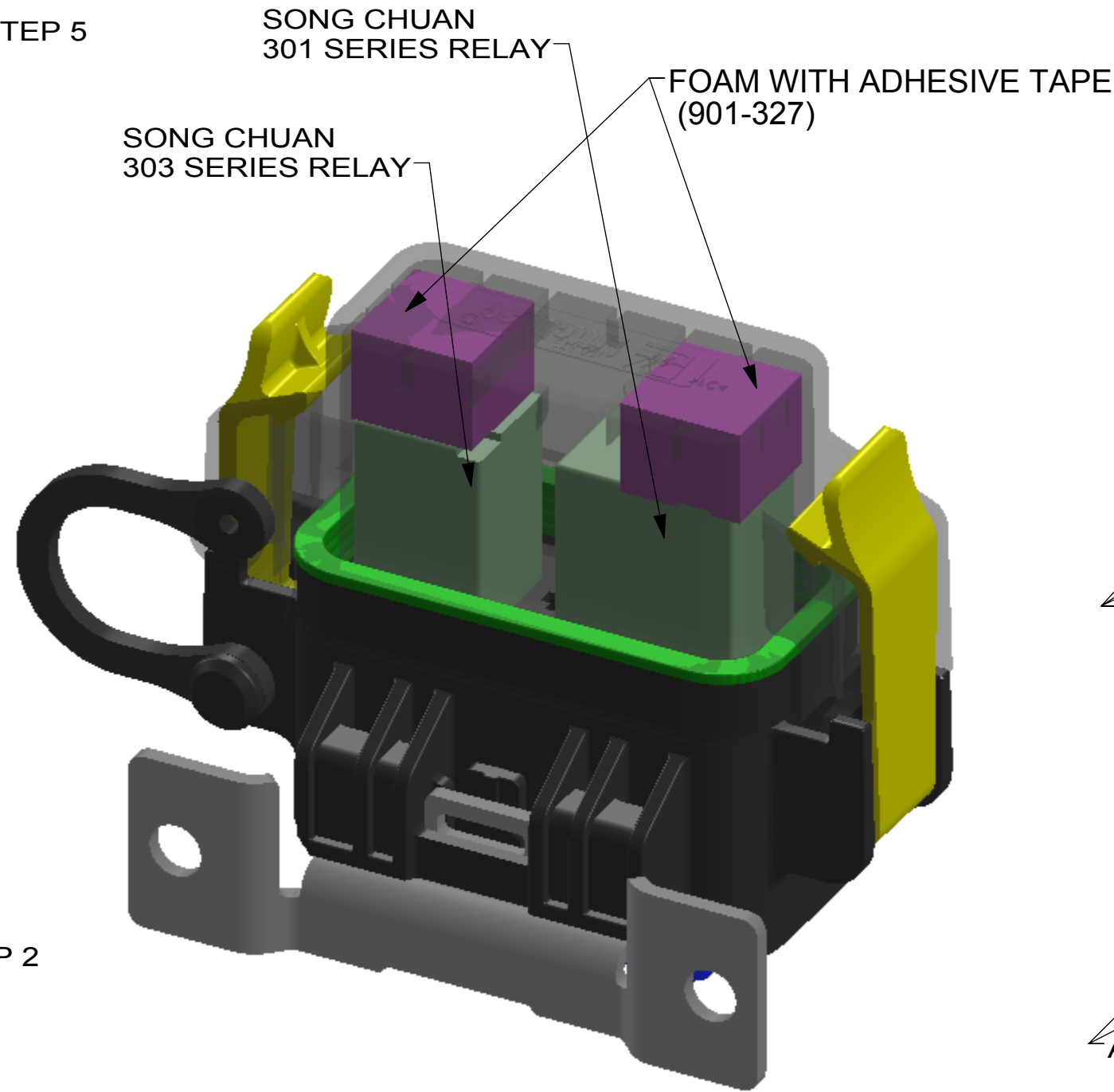
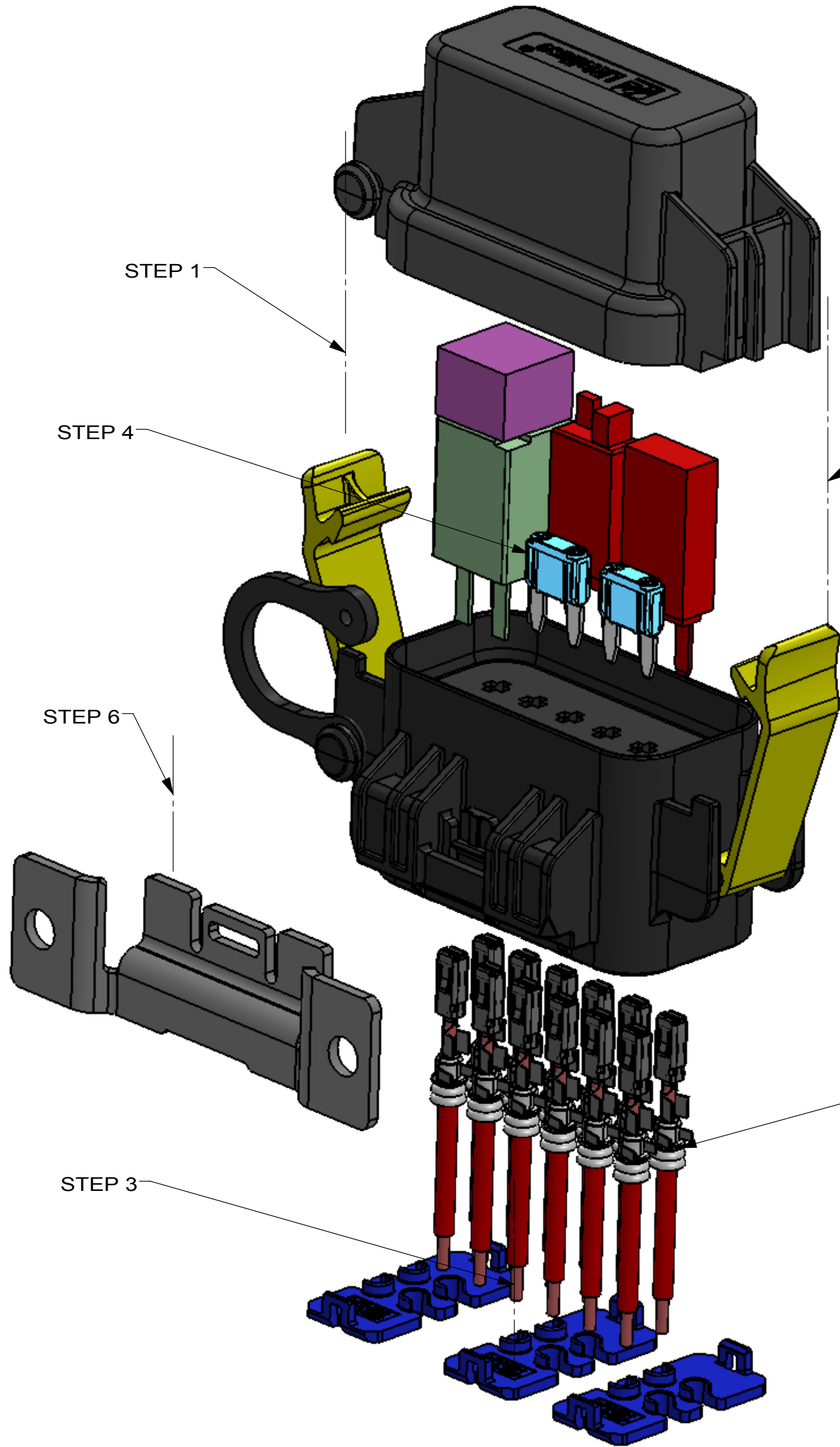
STEP2: PUT CABLE THROUGH THE CABLE SEAL AND STRIP THE CABLE, CRIMP THE CABLE AND CABLE SEAL WITH TE 2.8mm TERMINAL.

STEP3: INSERT THE CABLE WITH TERMINAL TO THE CABLE CAVITIES OF BASE UNTIL HEAR A CLICK SOUND, AND THEN SNAP THE TPAS TO THE BASE.

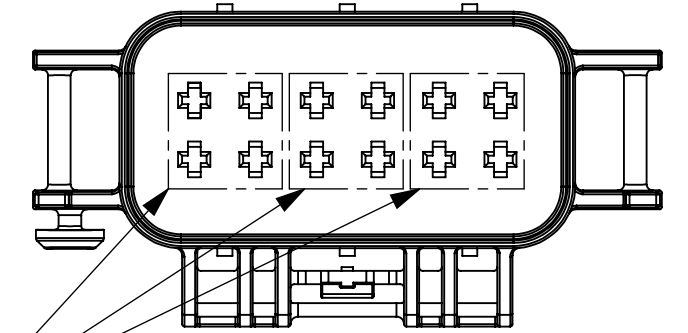
STEP4: INSERT 6 MINI FUSES OR COMBINATION OF MINI FUSE, MCASE FUSE (NEED ADAPTER), MINI CIRCUIT BREAKER AND RELAY.
PASTE A FOAM (901-327) ON THE RELEVANT PLACE IN COVER FOR EACH RELAY (IF APPLIED).

STEP5: ASSEMBLE THE COVER (SEAL SEATED BY LATCHES) WITH BASE AND SNAP THE YELLOW LATCHES.

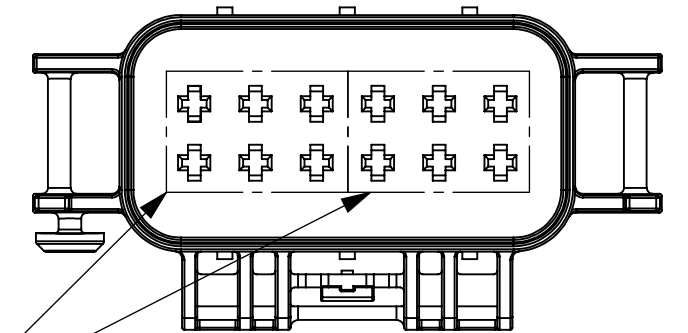
STEP6: OPTIONAL: INSERT THE BRACKET TO THE UNIT.



FOAM AREAS IN COVER



ALLOWED LOCATIONS FOR 4-PIN RELAY



ALLOWED LOCATIONS FOR 5-PIN RELAY

VIEW WITH RELAYS AND FOAMS

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TOLERANCES	±0.1	±0.1	±0.2	±0.3	±0.5	±1°	
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SHEET 3 OF 3							