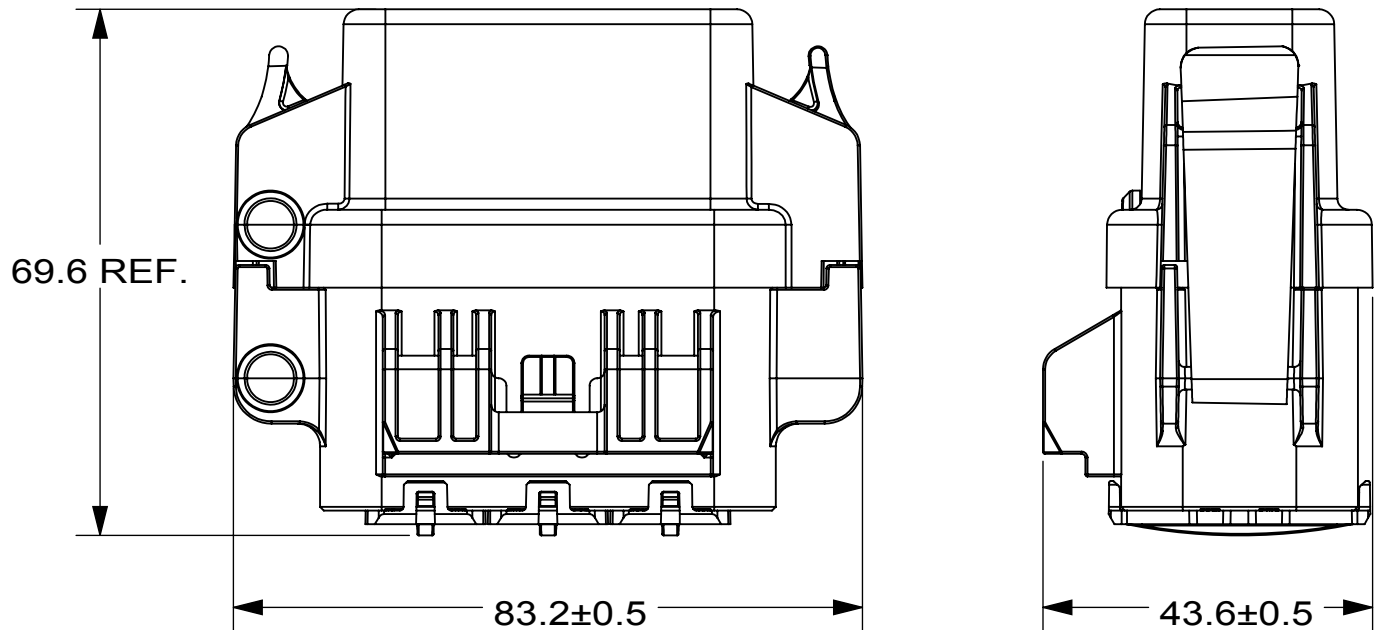
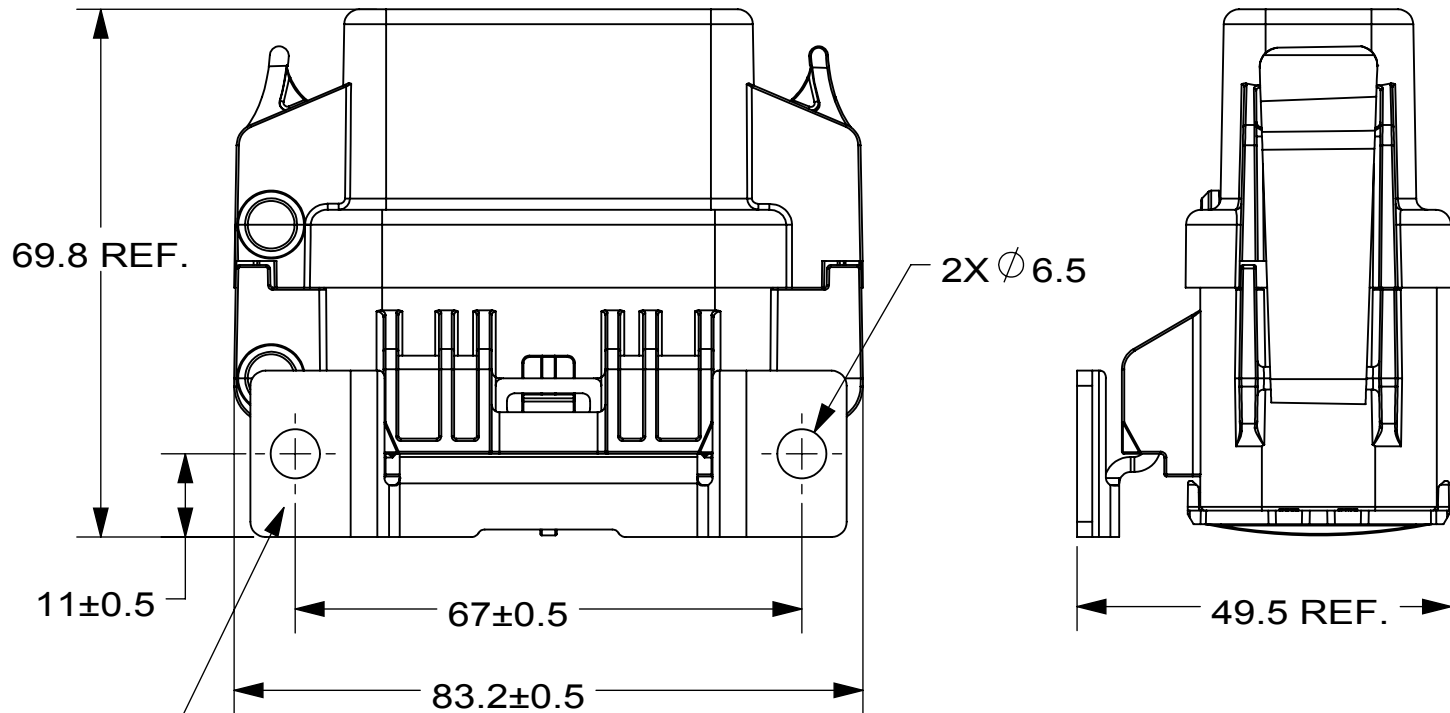


THIS DRAWING AND THE INFORMATION CONTAINED WITHIN IT ARE CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF LITTELFUSE.

- NOTES:
1. 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
  2. OPERATING TEMPERATURE RANGE: -40 °C TO +105 °C.
  3. 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.
  4. 2.8mm BLADES (RATED FOR 40A MAXIMUM). TOTAL MAXIMUM CONTINUOUS CURRENT IS 135A.
  5. TPAs AND METAL BRACKET TO BE PACKED ALONG WITH THE HOLDER SEPARATELY IN BULK.
  6. OPTIONAL TETHER (890009470) TO BE INSTALLED WITH THE PIN ON COVER AND THE PIN ON BASE.
  7. MOUNTING BRACKET (868-964) CAN BE SOLD SEPARATELY, SEE CHART 3 CONFIGURATION.
  8. STRAIGHT BRACKET (868-964) CAN BE REPLACED WITH OPTIONAL 30° ANGLE BRACKET (868-068) IF NEEDED.
  9. MOUNTING TORQUE 5.5~6.5 Nm, M6 BOLT & LOCK WASHER.
  10. IF RELAY(S) IS (ARE) APPLIED, FOAM(S) (901-327) MUST BE FIXED ON THE RELEVANT PLACE(ES) IN COVER TO RETAIN THE RELAY(S). RELAY MUST BE INSERTED AT ASSIGNED LOCATION. REFER TO VIEW WITH RELAYS AND FOAMS ON PAGE 3.
  11. INGRESS PROTECTION RATING: IP67.

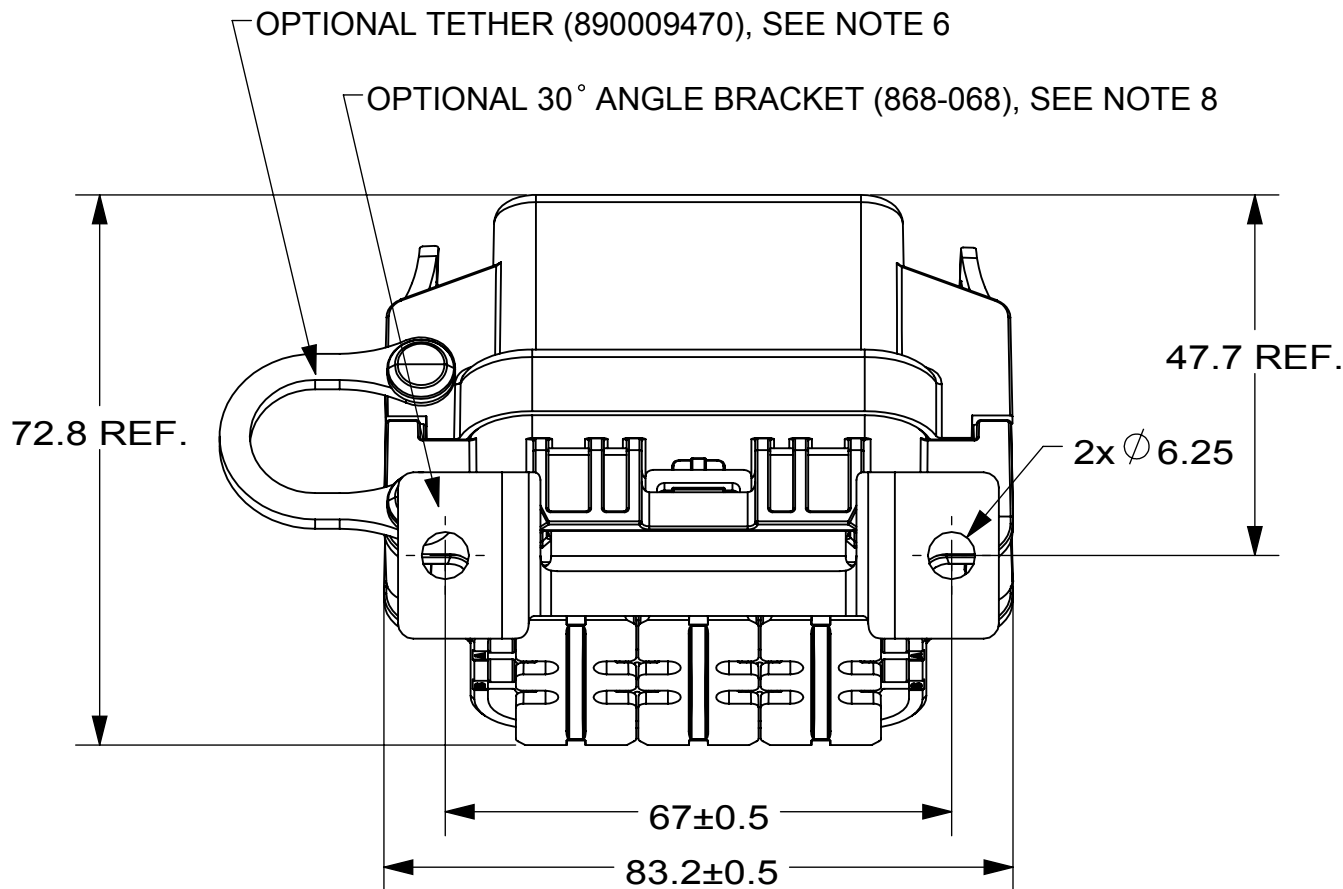


VIEW WITHOUT BRACKET

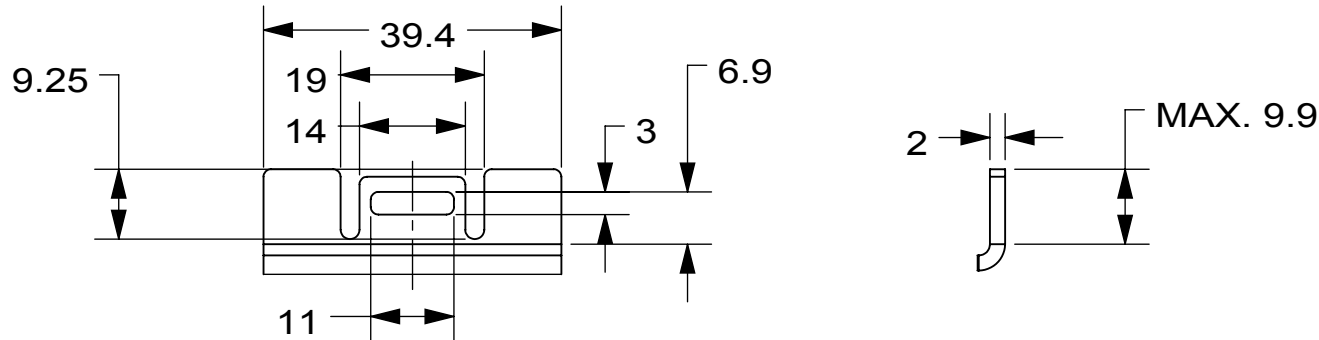
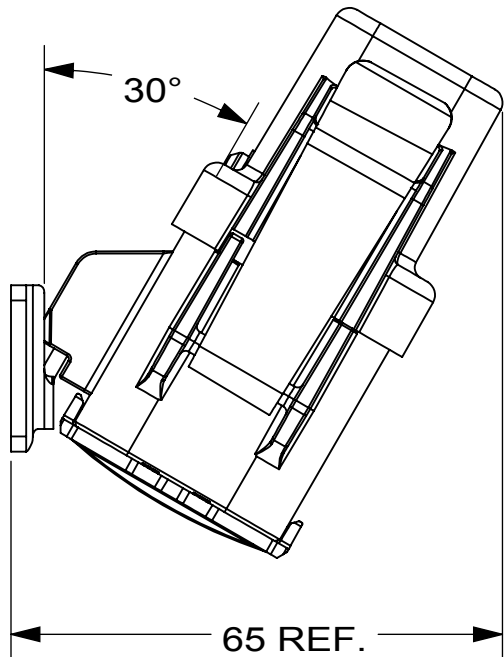


STRAIGHT BRACKET (868-964), SEE NOTE 7

VIEW WITH STRAIGHT BRACKET



VIEW WITH TETHER AND 30° ANGLE BRACKET

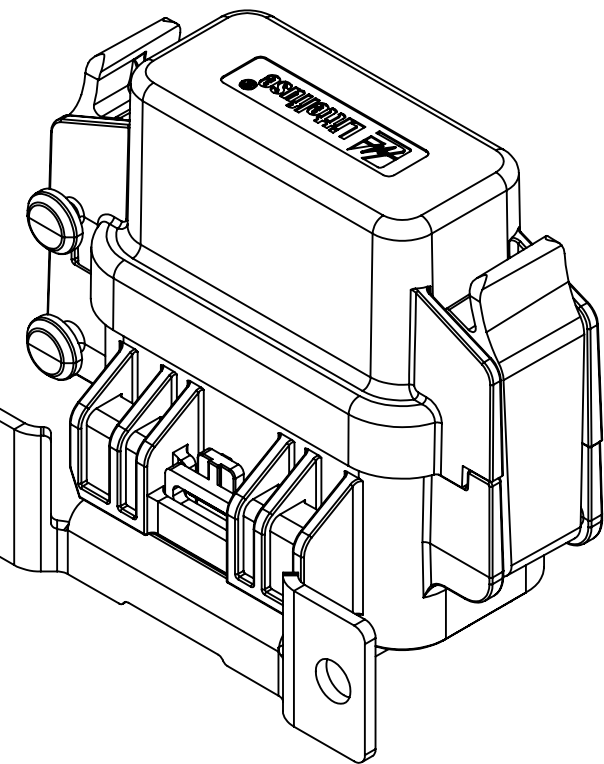


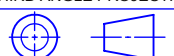
THE LATCHING GEOMETRY OF BRACKET

CHART 3: CONFIGURATION

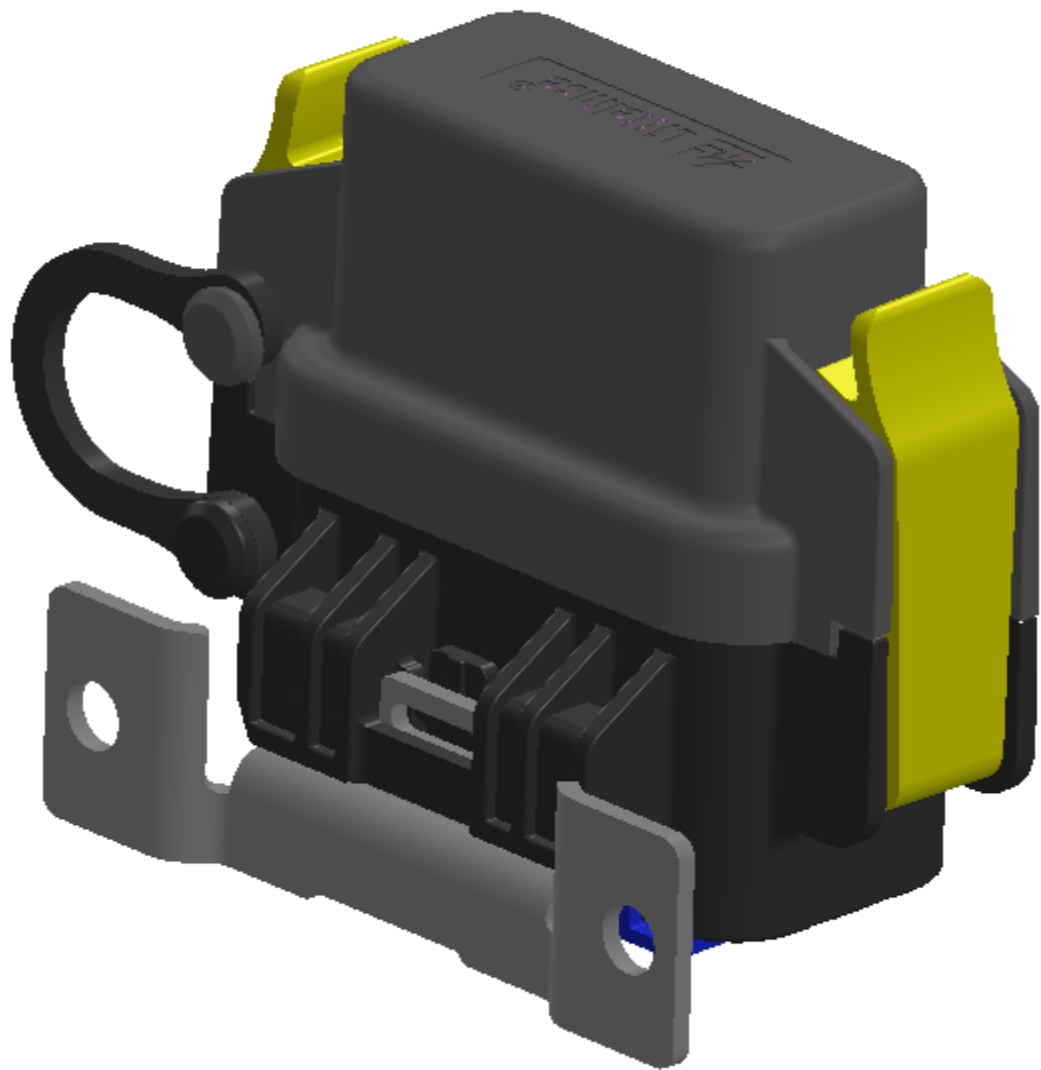
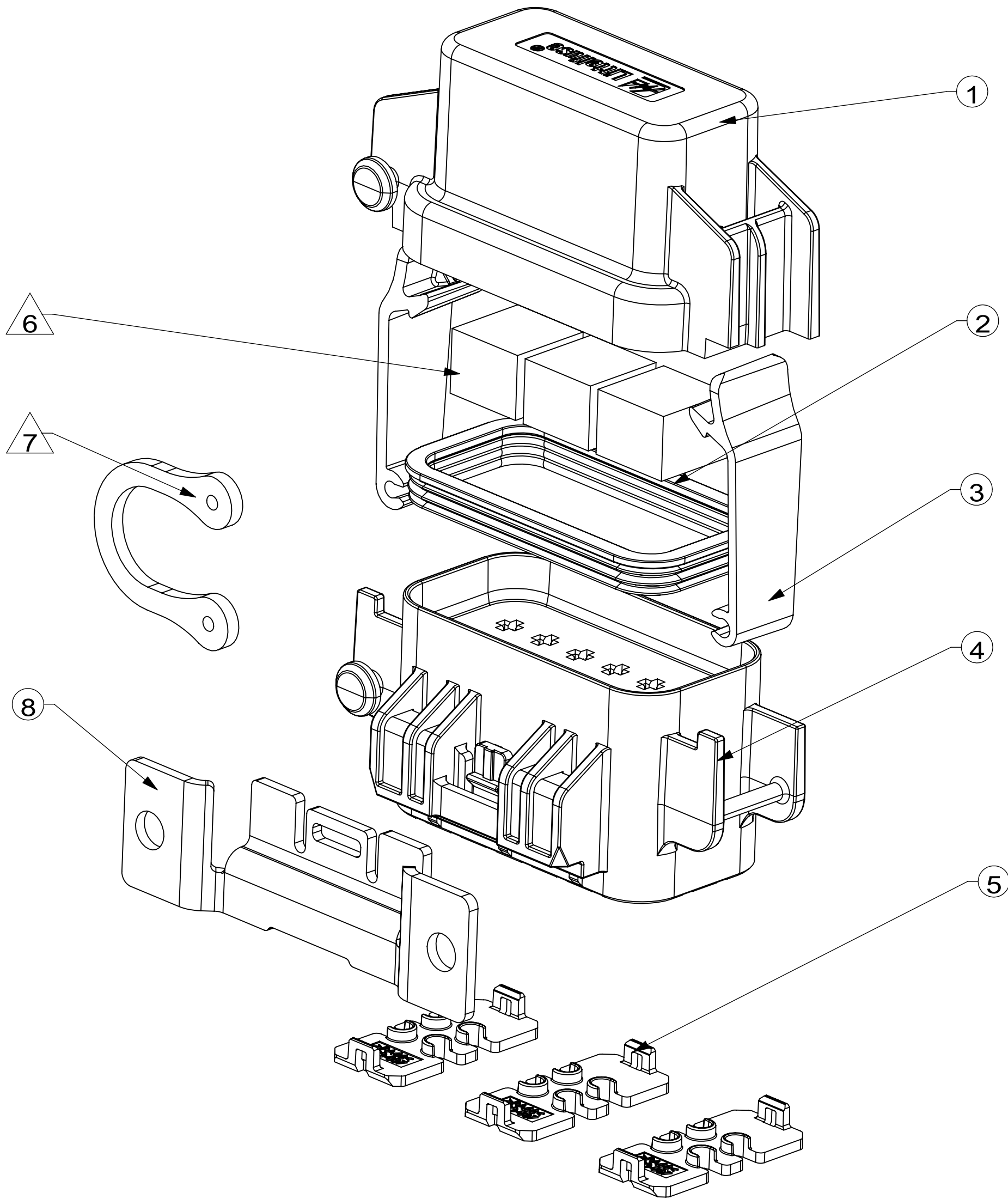
| HWB12 P/N   | COVER |       |          | STRAIGHT BRACKET (868-964) |
|-------------|-------|-------|----------|----------------------------|
|             | CLEAR | BLACK | REMARK   |                            |
| PDM33001ZXM | x     |       | UL94 V-2 |                            |
| PDM33002ZXM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

| 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 |          |



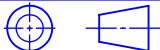
|                                                                                                               |                                                                                                                                                                       |                   |   |                                                                                                                                                                                                                                   |          |                     |           |       |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------|-----------|-------|
| DIMENSIONS ARE SHOWN IN MILLIMETERS. DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ANSI/ASME Y14.5-1994. |                                                                                                                                                                       |                   |   |                                                                                                                                                                                                                                   |          |                     |           |       |
|                          | DENOTES PRODUCTS CRITICAL CHARACTERISTICS                                                                                                                             |                   |   |                                                                                                                                                                                                                                   |          |                     |           |       |
| CPK                                                                                                           | DENOTES CPK DIMENSIONS MINIMUM CPK VALUE                                                                                                                              |                   |   |                                                                                                                                                                                                                                   |          |                     |           |       |
|                          | DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE.PROCEDURE FOR MEASUREMENTAND 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                                                                                                     | 0.5 - 3                                                                                                                                                               | UP TO 3<br>OVER 3 | 6 | UP TO 6<br>OVER 6                                                                                                                                                                                                                 | 30       | UP TO 30<br>OVER 30 | 120 - 400 | ANGLE |
| TOLERANCES                                                                                                    | ±0.1                                                                                                                                                                  | ±0.1              |   | ±0.2                                                                                                                                                                                                                              | ±0.3     | ±0.5                | ±1°       |       |
| NAME                                                                                                          |                                                                                                                                                                       | DATE              |   | <br>Excerpt Applied   Answer's Be. record<br>No.6 Xinghai Street,Suzhou Industry Park,China<br>Phone +86 512 6761 3189 Fax +86 512 6761 1489 |          |                     |           |       |
| DRAWN                                                                                                         |                                                                                                                                                                       | J. LI 10/29/2015  |   |                                                                                                                                                                                                                                   |          |                     |           |       |
| CHECKED                                                                                                       |                                                                                                                                                                       | E.JIN 03/30/2016  |   |                                                                                                                                                                                                                                   |          |                     |           |       |
|                                                                                                               |                                                                                                                                                                       |                   |   |                                                                                                                                                                                                                                   |          |                     |           |       |
|                                                                                                               |                                                                                                                                                                       |                   |   | TITLE                                                                                                                                                                                                                             |          |                     |           |       |
|                                                                                                               |                                                                                                                                                                       |                   |   |                                                                                                                                                                                                                                   |          |                     |           |       |
|                                                                                                               |                                                                                                                                                                       |                   |   |                                                                                                                                                                                                                                   |          |                     |           |       |
| THIRD ANGLE PROJECTION                                                                                        |                                                                                                                                                                       |                   |   | HARD WIRE BOX -12                                                                                                                                                                                                                 |          |                     |           |       |
|                          |                                                                                                                                                                       |                   |   |                                                                                                                                                                                                                                   |          |                     |           |       |
|                                                                                                               |                                                                                                                                                                       |                   |   |                                                                                                                                                                                                                                   |          |                     |           |       |
| DO NOT SCALE DRAWING                                                                                          |                                                                                                                                                                       |                   |   | SIZE                                                                                                                                                                                                                              | DWG. NO. | OL-PDM33000ZXM      |           | REV.  |
| SCALE 1:1                                                                                                     |                                                                                                                                                                       |                   |   | C                                                                                                                                                                                                                                 |          |                     |           | D     |
|                                                                                                               |                                                                                                                                                                       |                   |   | SHEET 1 OF 3                                                                                                                                                                                                                      |          |                     |           |       |

| REVISIONS |      |             |      |          |
|-----------|------|-------------|------|----------|
| ZONE      | REV. | DESCRIPTION | DATE | APPROVED |
|           |      | SEE PAGE 1  |      |          |
|           |      |             |      |          |

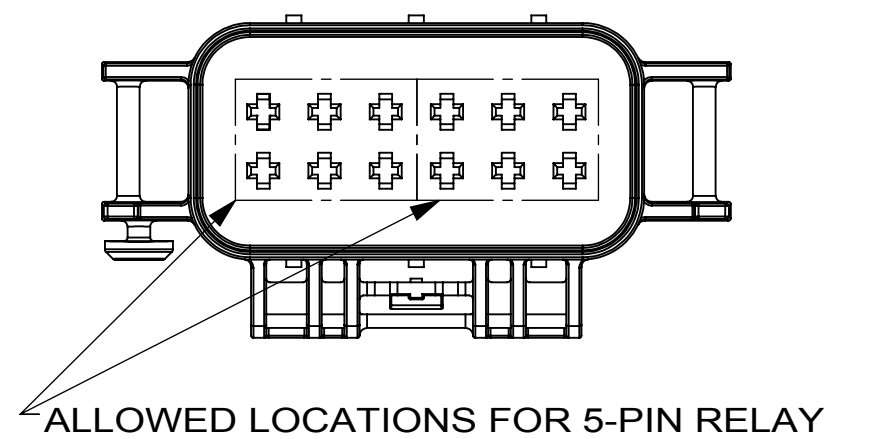
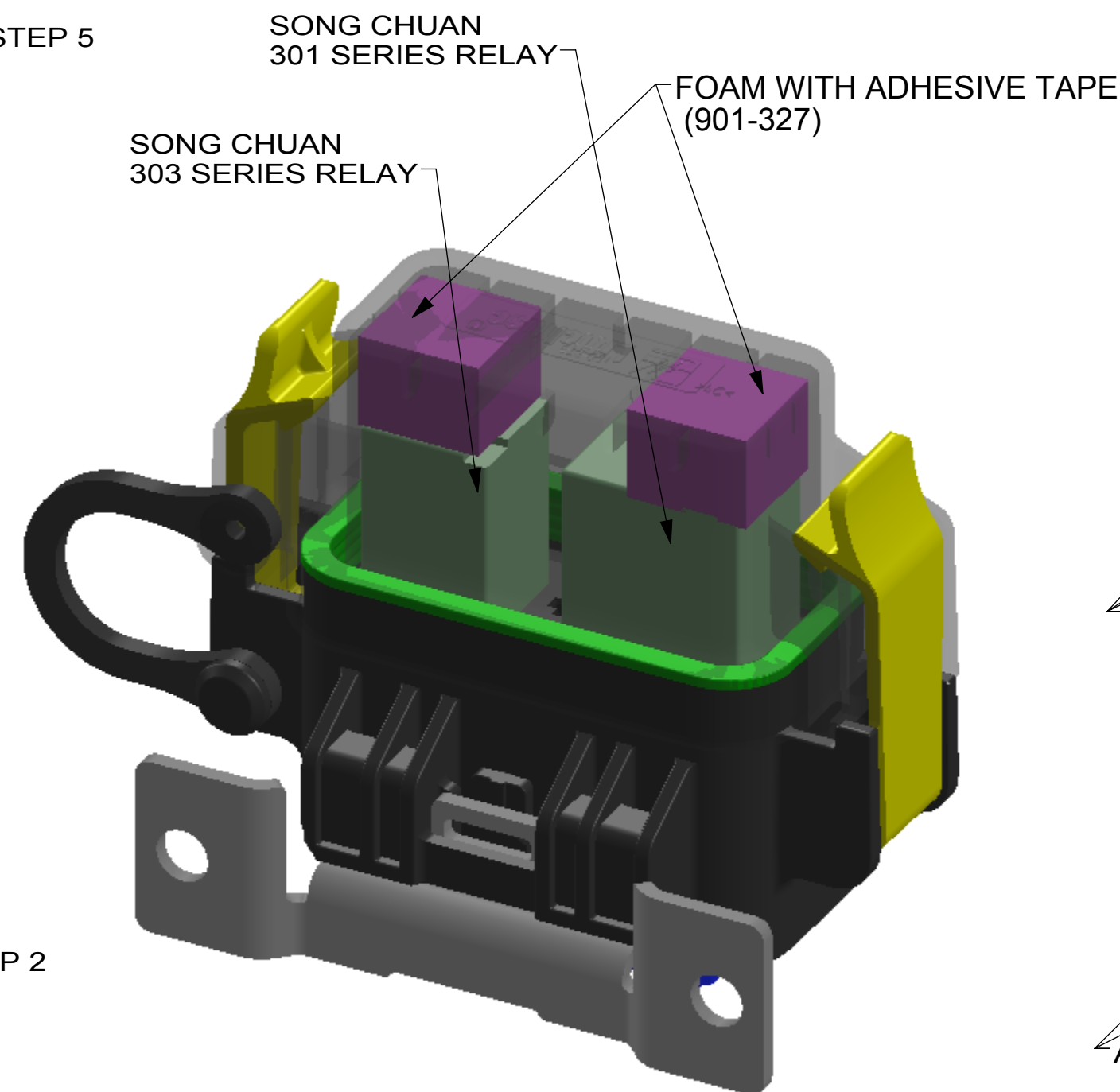


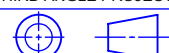
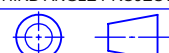
NOTE:  
PARTS MARKED △ TO BE ORDERED SEPARATELY.

| # | PART         | QT'Y | 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         |

|                                                                                                               |       |                                                                                                                                                                         |  |                                                                                                                                                                                                                                  |                                |                 |  |                  |              |                   |  |       |
|---------------------------------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------|--|------------------|--------------|-------------------|--|-------|
| DIMENSIONS ARE SHOWN IN MILLIMETERS. DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ANSI/ASME Y14.5-1994. |       |                                                                                                                                                                         |  |                                                                                                                                                                                                                                  |                                |                 |  |                  |              |                   |  |       |
|                          |       | DENOTES PRODUCTS CRITICAL CHARACTERISTICS                                                                                                                               |  |                                                                                                                                                                                                                                  |                                |                 |  |                  |              |                   |  |       |
| CPK                                                                                                           |       | DENOTES CPK DIMENSIONS MINIMUM CPK VALUE                                                                                                                                |  |                                                                                                                                                                                                                                  |                                |                 |  |                  |              |                   |  |       |
|                          |       | 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<br>0.5 - 3                                                                                                                                                        |  | OVER<br>3 - 6                                                                                                                                                                                                                    |                                | UP TO<br>6 - 30 |  | OVER<br>30 - 120 |              | OVER<br>120 - 400 |  | ANGLE |
| TOLERANCES                                                                                                    |       | ±0.1                                                                                                                                                                    |  | ±0.1                                                                                                                                                                                                                             |                                | ±0.2            |  | ±0.3             |              | ±0.5              |  | ±1°   |
| DRAWN                                                                                                         | NAME  | DATE                                                                                                                                                                    |  | <br>Excerpt applied   Answer's Be word<br>No.6 Xinghai Street, Suzhou Industry Park, China<br>Phone +86 512 6761 3189 Fax +86 512 6761 1489 |                                |                 |  |                  |              |                   |  |       |
| CHECKED                                                                                                       | J. LI | 10/29/2015                                                                                                                                                              |  |                                                                                                                                                                                                                                  |                                |                 |  |                  |              |                   |  |       |
|                                                                                                               |       |                                                                                                                                                                         |  |                                                                                                                                                                                                                                  |                                |                 |  |                  |              |                   |  |       |
|                                                                                                               |       |                                                                                                                                                                         |  |                                                                                                                                                                                                                                  |                                |                 |  |                  |              |                   |  |       |
| THIRD ANGLE PROJECTION                                                                                        |       |                                                                                                                                                                         |  | TITLE<br><br>HARD WIRE BOX -12                                                                                                                                                                                                   |                                |                 |  |                  |              |                   |  |       |
|                          |       |                                                                                                                                                                         |  |                                                                                                                                                                                                                                  |                                |                 |  |                  |              |                   |  |       |
| DO NOT SCALE DRAWING                                                                                          |       |                                                                                                                                                                         |  | SIZE<br>C                                                                                                                                                                                                                        | DWG. NO.<br><br>OL-PDM33000ZXM |                 |  |                  | REV. D       |                   |  |       |
|                                                                                                               |       |                                                                                                                                                                         |  | SCALE 1:2                                                                                                                                                                                                                        |                                |                 |  |                  | SHEET 2 OF 3 |                   |  |       |

STEP6: OPTIONAL: INSERT THE BRACKET TO THE UNIT.



|                                                                                                               |                  |                                                                                                                                                               |               |            |                |                                                                                                                                                                                                                                      |                   |          |                   |                |       |
|---------------------------------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|-------------------|----------------|-------|
| DIMENSIONS ARE SHOWN IN MILLIMETERS. DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ANSI/ASME Y14.5-1994. |                  |                                                                                                                                                               |               |            |                |                                                                                                                                                                                                                                      |                   |          |                   |                |       |
|                          |                  | DENOTES PRODUCTS CRITICAL CHARACTERISTICS                                                                                                                     |               |            |                |                                                                                                                                                                                                                                      |                   |          |                   |                |       |
| CPK                                                                                                           |                  | DENOTES CPK DIMENSIONS MINIMUM CPK VALUE                                                                                                                      |               |            |                |                                                                                                                                                                                                                                      |                   |          |                   |                |       |
|                          |                  | DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE/PROCEDURE FOR MEASUREMENT/AND TRACKING TO BE DEFINED IN LIFETIME/USE 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<br>0.5 - 3 |                                                                                                                                                               | OVER<br>3 - 6 |            | OVER<br>6 - 30 |                                                                                                                                                                                                                                      | UP TO<br>30 - 120 |          | OVER<br>120 - 400 |                | ANGLE |
| TOLERANCES                                                                                                    | ±0.1             |                                                                                                                                                               | ±0.1          |            | ±0.2           |                                                                                                                                                                                                                                      | ±0.3              |          | ±0.5              |                | ±1°   |
| DRAWN                                                                                                         |                  | NAME                                                                                                                                                          |               | DATE       |                | <br>Electronic Applications   America's Best<br>No 8 Xinghai Street Suzhou Industry Park China<br>Phone +86 512 6761 3189 Fax +86 512 6761 1489 |                   |          |                   |                |       |
| CHECKED                                                                                                       |                  | J. LI                                                                                                                                                         |               | 10/29/2015 |                |                                                                                                                                                                                                                                      |                   |          |                   |                |       |
|                                                                                                               |                  |                                                                                                                                                               |               |            |                |                                                                                                                                                                                                                                      |                   |          |                   |                |       |
|                                                                                                               |                  |                                                                                                                                                               |               |            |                |                                                                                                                                                                                                                                      |                   |          |                   |                |       |
|                                                                                                               |                  |                                                                                                                                                               |               |            |                |                                                                                                                                                                                                                                      |                   |          |                   |                |       |
| THIRD ANGLE PROJECTION                                                                                        |                  |                                                                                                                                                               |               |            |                |                                                                                                                                                 |                   |          |                   |                |       |
|                          |                  |                                                                                                                                                               |               |            |                |                                                                                                                                                                                                                                      |                   |          |                   |                |       |
| DO NOT SCALE DRAWING                                                                                          |                  |                                                                                                                                                               |               |            |                | SIZE C                                                                                                                                                                                                                               |                   | DWG. NO. |                   | OL-PDM33000ZXM |       |
|                                                                                                               |                  |                                                                                                                                                               |               |            |                | SCALE 1:1                                                                                                                                                                                                                            |                   |          |                   | SHEET 3 OF 3   |       |