



AMPHENOL PCD SHENZHEN



EXCEL|MATE MSD

Manual Service Disconnect

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Amphenol PCD Manual Service Disconnect

Excel|Mate MSD is a safe and a reliable solution for HEV servicing.

Equipped with a two-stage lever to open the HVIL circuit prior to the separation of HV contacts, it is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit. All HV conductive contact surfaces on the receptacle assembly are finger-touch safe.

Available in a scalable design with a variety of fuse ratings.



KEY FEATURES

A two-stage lever provides an HVIL time delay

2 x integrated internal HVIL

Unique cooling structure

Dual-channel design lowers temperature rise

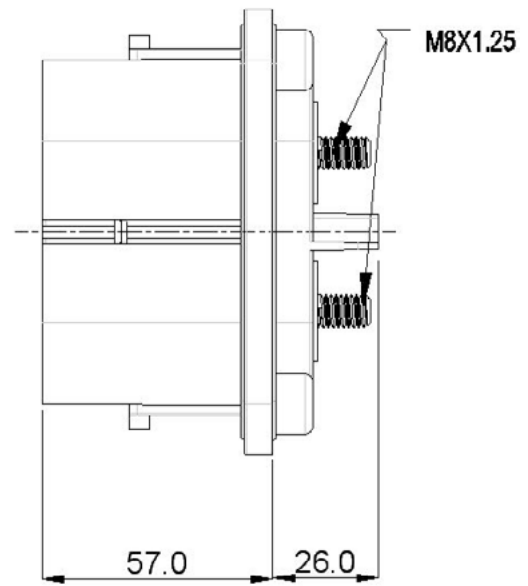
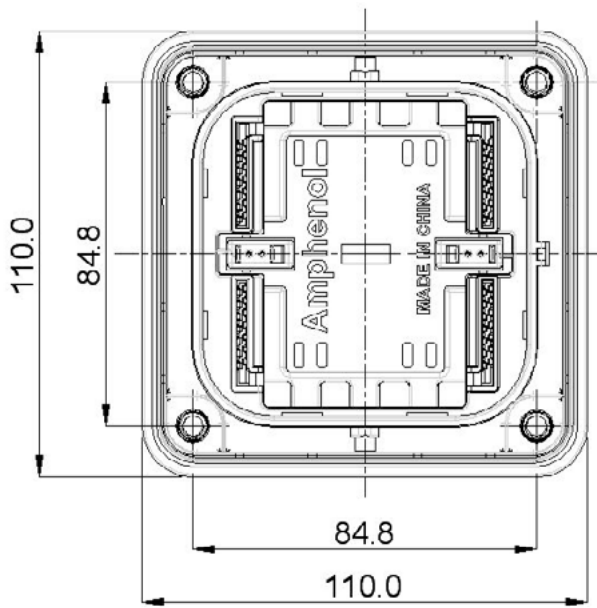
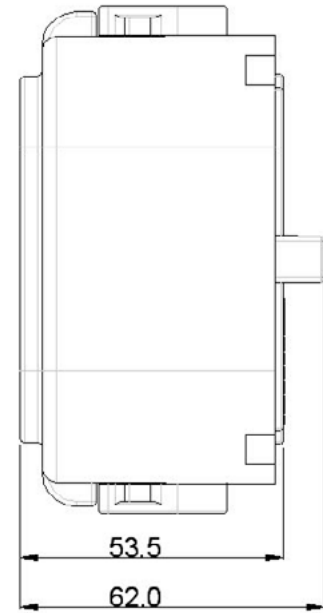
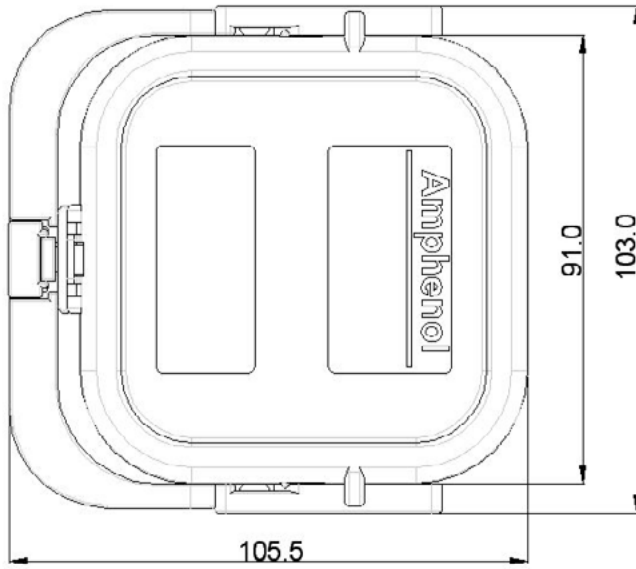
No tools required to unmate

Various fuse ratings

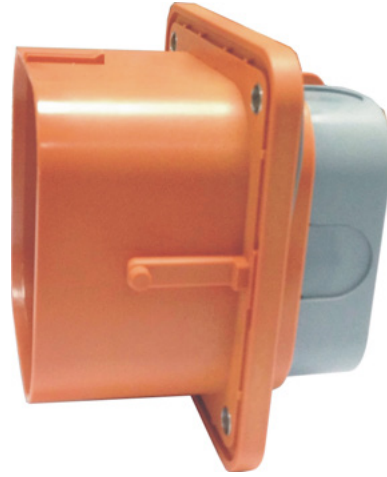
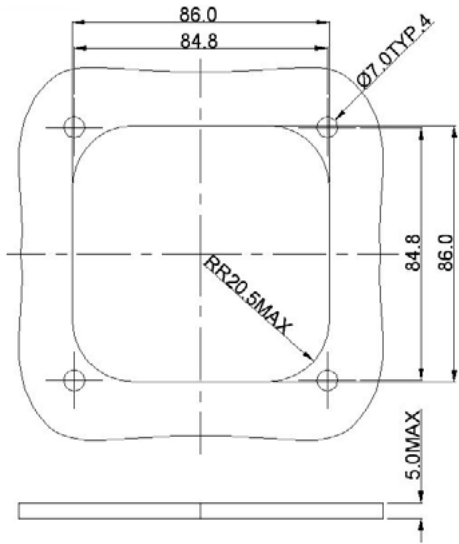
Receptacle can be front or rear mounted

| APPLICATION | |
|---|---|
| It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit. | |
| MECHANICAL | |
| Mating cycles | ≥ 50 cycles |
| ELECTRICAL | |
| Fuse specification | up to 630A |
| With fuse: | |
| Rated current | Current is approximately 1/3 the fuse rating (230A Max) |
| Rated voltage | 600V DC |
| With shunt: | |
| Rated current | 230A Max |
| Rated voltage | 1000V DC Max |
| ENVIRONMENTAL | |
| Protection degree | IP67, IP6K9K (mated) |
| Ambient temperature | -40°C to 70°C |
| Storage temperature | -40°C to 85°C |
| Operating temperature | -40°C to 125°C |
| STANDARDS | |
| USCAR-2 | |
| USCAR-37 | |
| LV-215 | |
| RoHS | |

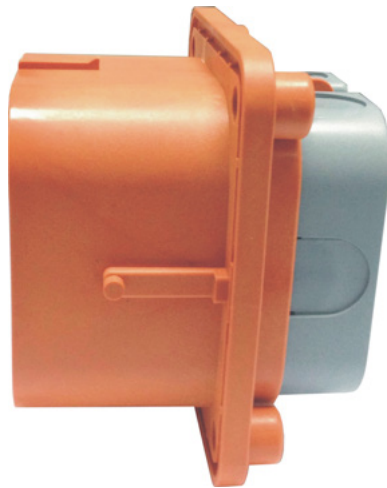
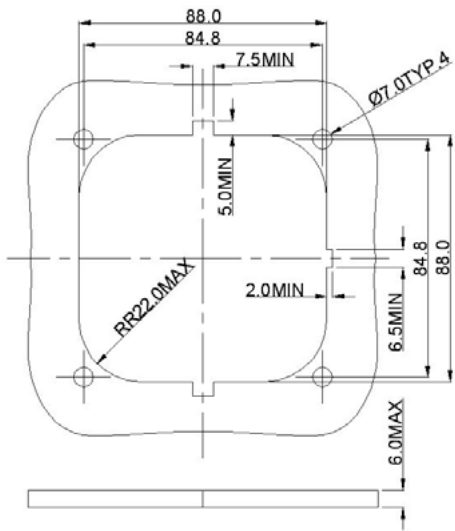
PRODUCT DIMENSIONS



FRONT MOUNTED



REAR MOUNTED



DUST CAP AVAILABLE
P/N: C270006810



HOW TO ORDER - EXCEL|MATE MSD

| | MSD | M | 350 | 2 | F |
|---|------------|----------|------------|----------|----------|
| Shell type: M : Plug F : Receptacle | | | | | |
| Fuse rating current: XXX : 200, 250, 315, 350, 400, 450, 500, 550, 630 (Unit: AMP) 000 : No fuse needed, can directly use the terminal | | | | | |
| Fuse brand (this applies to plugs) : 1 : Ferraz 2 : Bussmann | | | | | |
| Flange mounted type (this applies to sockets) : F : Front mounted R : Rear mounted | | | | | |

EXCEL|MATE MSD V - TECHNICAL CHARACTERISTICS



MSD V is an upgraded version of the standard MSD.

It provides a rated voltage of 800V and a plug with integrated fuse. The other parameters remain unchanged.

KEY FEATURES

A two-stage lever provides an HVIL time delay

2 x integrated internal HVIL

Unique cooling structure

Dual-channel design lowers temperature rise

No tools required to unmate

Various fuse ratings

Receptacle can be front or rear mounted

| APPLICATION | |
|---|---|
| It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit. | |
| MECHANICAL | |
| Mating cycles | ≥ 50 cycles |
| ELECTRICAL | |
| Fuse specification | up to 630A |
| With fuse: | |
| Rated current | Current is approximately 1/3 the fuse rating (230A Max) |
| Rated voltage | 800V DC |
| With shunt: | |
| Rated current | 230A Max |
| Rated voltage | 1000V DC Max |
| ENVIRONMENTAL | |
| Protection degree | IP67, IP6K9K (mated) |
| Ambient temperature | -40°C to 70°C |
| Storage temperature | -40°C to 85°C |
| Operating temperature | -40°C to 125°C |
| STANDARDS | |
| USCAR-2 | |
| USCAR-37 | |
| LV-215 | |
| RoHS | |

HOW TO ORDER - EXCEL|MATE MSD V

| | MSD V | M | 350 | / |
|---|-------|---|-----|---|
| Shell type: M: Plug | | | | |
| Fuse rating current: XXX: 200, 250, 315, 350, 400, 450, 500, 550, 630 (Unit: AMP) 000: No fuse needed, can directly use the terminal | | | | |
| Fuse brand (this applies to plugs): / : Bussmann (by default) For other brands, please contact us | | | | |

EXCEL|MATE MSD XL - TECHNICAL CHARACTERISTICS

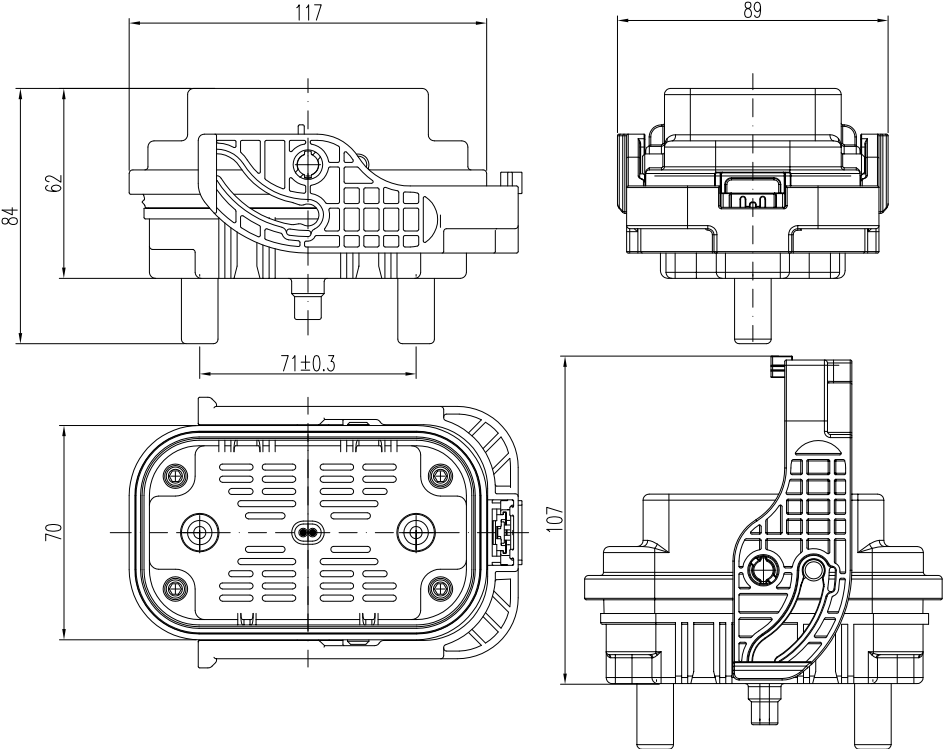


KEY FEATURES

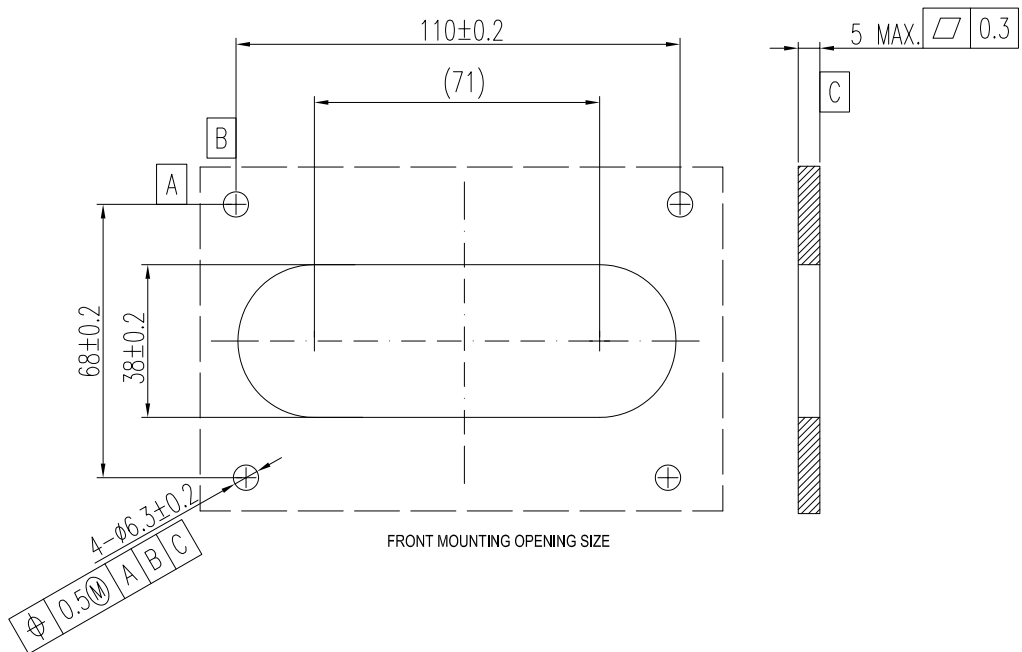
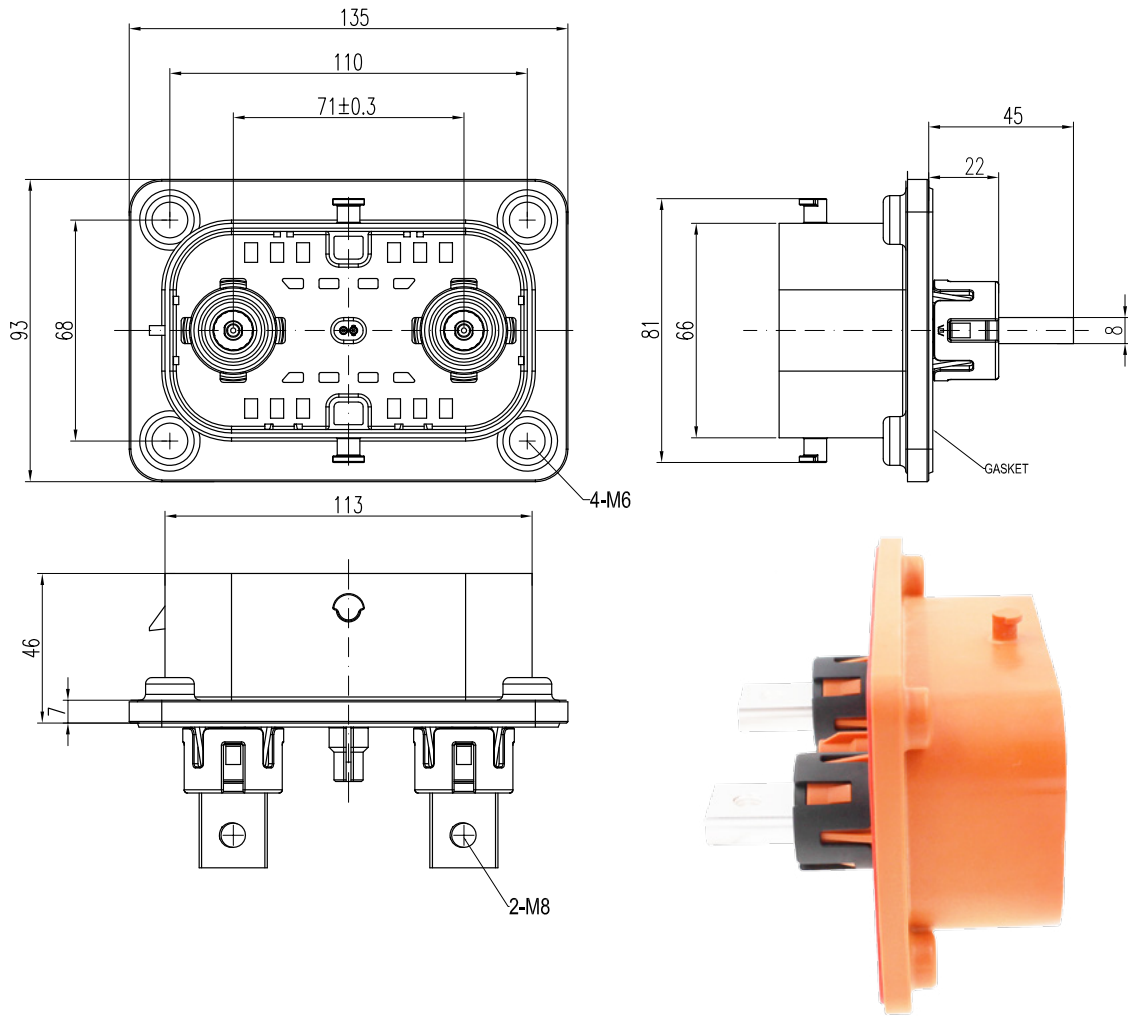
- 1 x integrated internal HVIL
- Unique cooling structure
- High current contacts with Amphenol Radsok technology
- No tools required to unmate
- Various fuse ratings
- Receptacle can be front or rear mounted

| APPLICATION | |
|---|----------------------|
| It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit. | |
| MECHANICAL | |
| Mating cycles | ≥ 500 cycles |
| ELECTRICAL | |
| Fuse specification | up to 630A |
| With fuse: | |
| Rated current | 300A Max |
| Rated voltage | 1000V DC |
| With shunt: | |
| Rated current | 300A |
| Rated voltage | 1500V DC Max |
| ENVIRONMENTAL | |
| Protection degree | IP67, IP6K9K (mated) |
| Ambient temperature | -40°C to 70°C |
| Storage temperature | -40°C to 85°C |
| Operating temperature | -40°C to 125°C |
| STANDARDS | |
| USCAR-2 | |
| USCAR-37 | |
| LV-215 | |
| RoHS | |

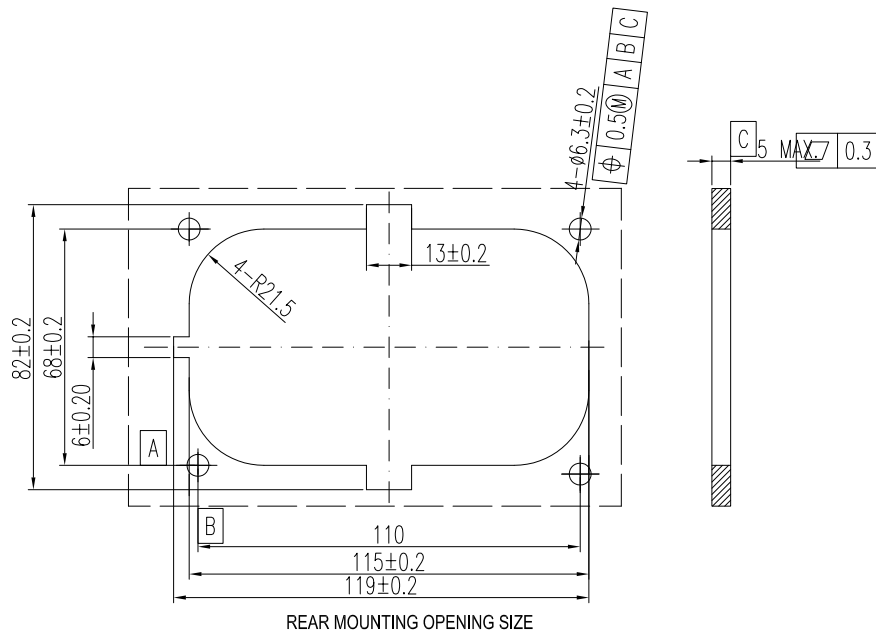
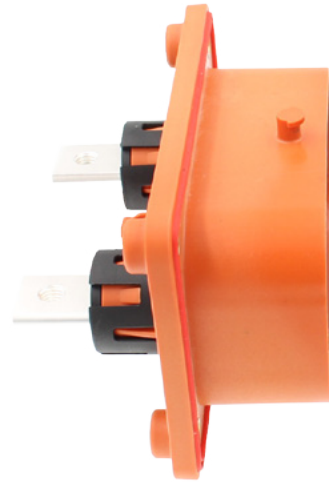
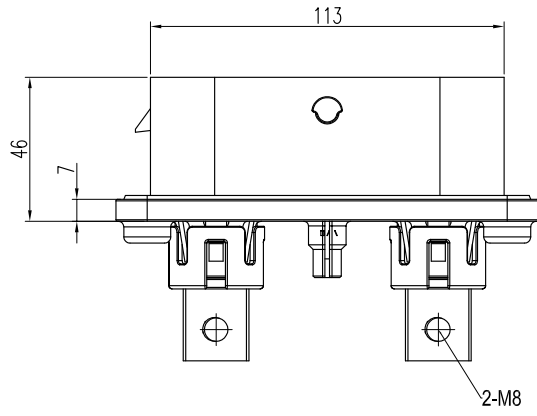
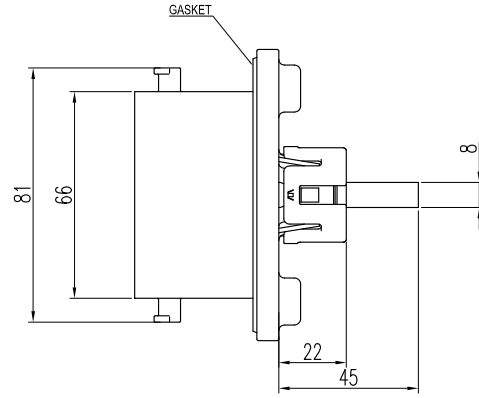
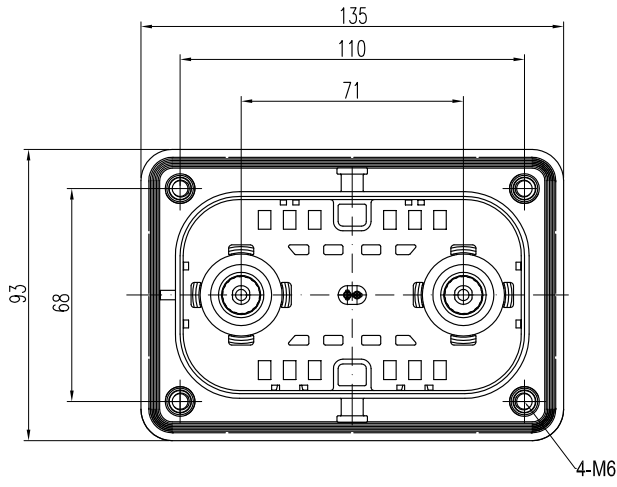
PRODUCT DIMENSIONS



FRONT MOUNTED



REAR MOUNTED



HOW TO ORDER - EXCEL|MATE MSD XL

| | | | | | |
|--|---------------|----------|------------|----------|----------|
| | MSD XL | M | 350 | / | F |
| Shell type: | | | | | |
| M: Plug | | | | | |
| F: Receptacle | | | | | |
| Fuse rating current: | | | | | |
| XXX: 160, 200, 250, 315, 350, 400, 450, 500, 550, 630 | | | | | |
| (Unit: AMP) | | | | | |
| 000: No fuse needed, can directly use the terminal | | | | | |
| Fuse brand (this applies to plugs): | | | | | |
| / : Bussmann (by default) | | | | | |
| For other brands, please contact us | | | | | |
| Flange mounted type (this applies to sockets) : | | | | | |
| F: Front mounted | | | | | |
| R: Rear mounted | | | | | |



Amphenol PCD MINI Manual Service Disconnect

Mini MSD has been developed from the standard MSD. Smaller in size and lower in cost, it offers a more compact solution.

Available in a scalable design with a variety of fuse ratings.

EXCEL|MATE MINI MSD - TECHNICAL CHARACTERISTICS



KEY FEATURES

A two-stage lever provides an HVIL time delay

1 x integrated internal HVIL

Unique cooling structure

Dual-channel design lowers temperature rise

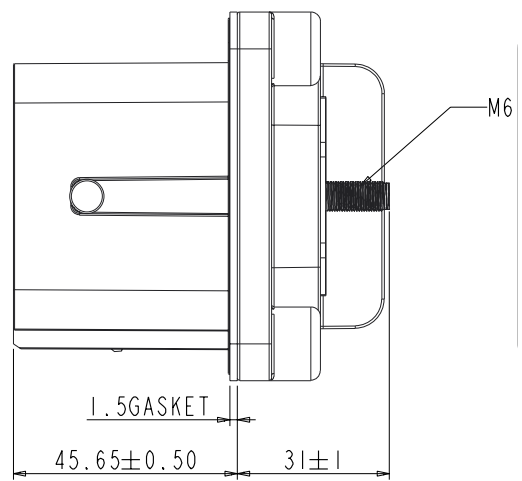
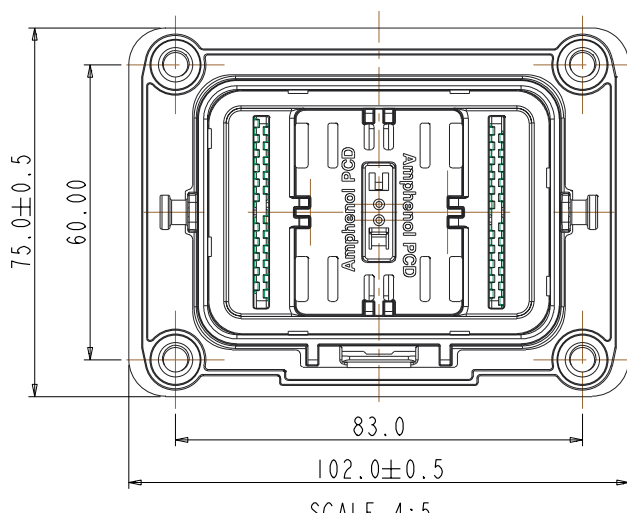
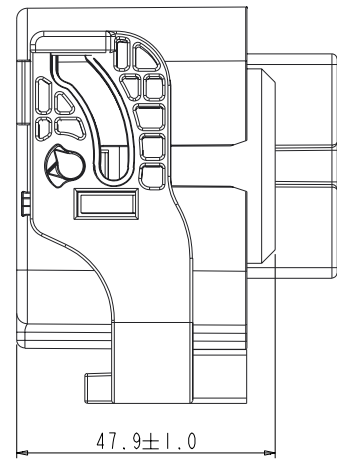
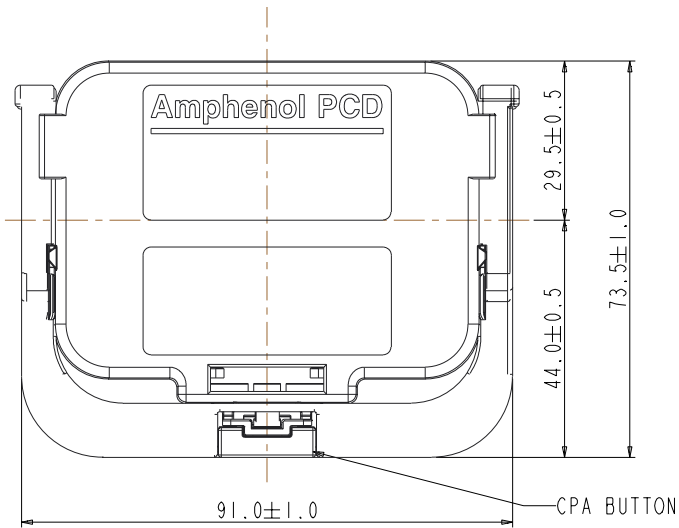
No tools required to unmate

Various fuse ratings

Receptacle can be front or rear mounted

| APPLICATION | |
|---|---|
| It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit. | |
| MECHANICAL | |
| Mating cycles | ≥ 50 cycles |
| ELECTRICAL | |
| Fuse specification | up to 400A |
| With fuse: | |
| Rated current | Current is approximately 1/3 the fuse rating (170A Max) |
| Rated voltage | 600V to 700V DC |
| With shunt: | |
| Rated current | 170A Max |
| Rated voltage | 1500V DC Max |
| ENVIRONMENTAL | |
| Protection degree | IP67, IP6K9K (mated) |
| Ambient temperature | -40°C to 70°C |
| Storage temperature | -40°C to 85°C |
| Operating temperature | -40°C to 125°C |
| STANDARDS | |
| USCAR-2 | |
| USCAR-37 | |
| LV-215 | |
| RoHS | |

PRODUCT DIMENSIONS



HOW TO ORDER - EXCEL|MATE MINI MSD

| | | | | | |
|--|----------|---|-----|---|---|
| | MINI MSD | M | 350 | / | F |
| Shell type: | | | | | |
| M: Plug | | | | | |
| F: Receptacle | | | | | |
| Fuse rating current: | | | | | |
| XXX: 080, 100, 125, 160, 200, 250, 315, 350, 400 (Unit: AMP) | | | | | |
| 000: No fuse needed, can directly use the terminal | | | | | |
| Fuse brand (this applies to plugs) : | | | | | |
| / : Bussmann (by default) | | | | | |
| 1: Other brands (TBD) | | | | | |
| Flange mounted type (this applies to sockets): | | | | | |
| F: Front mounted | | | | | |
| R: Rear mounted | | | | | |

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