



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

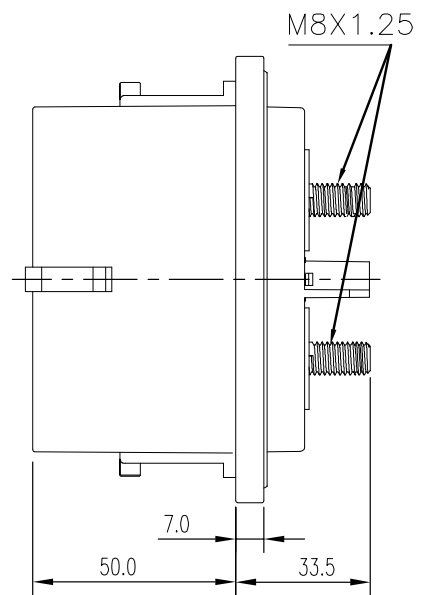
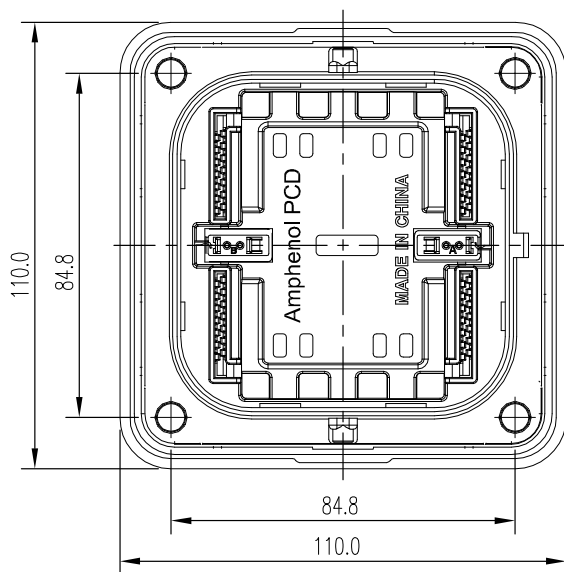
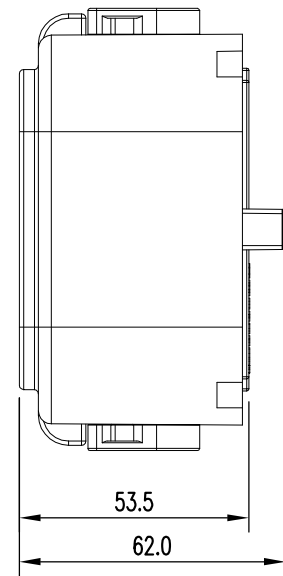
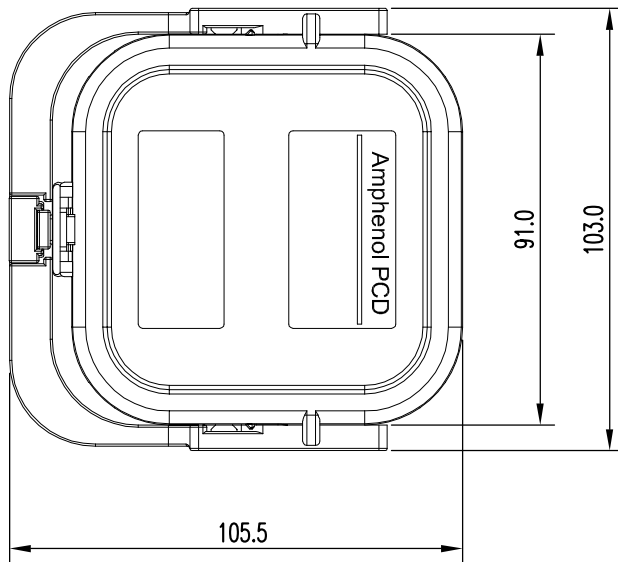
No tools required to unmate

Various fuse ratings

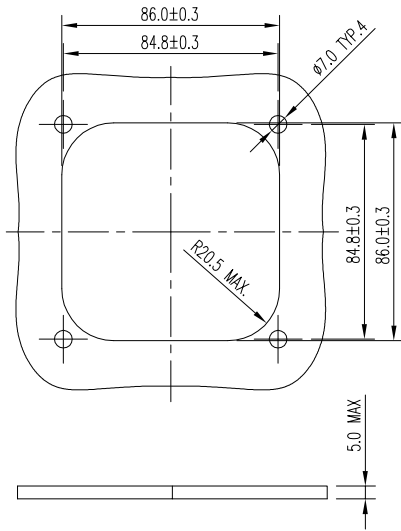
Receptacle can be front or rear mounted

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	

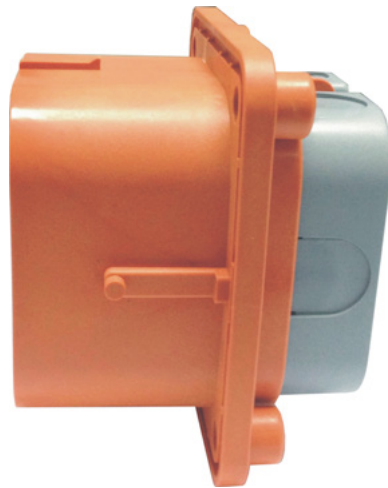
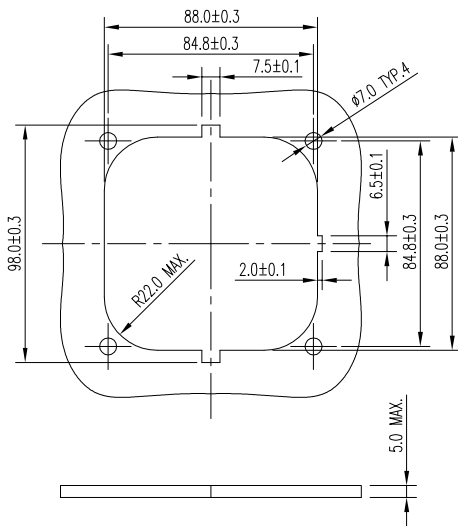
## PRODUCT DIMENSIONS



## FRONT MOUNTED



## REAR MOUNTED



DUST CAP AVAILABLE  
P/N: C270006810



## HOW TO ORDER - EXCEL|MATE MSD

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

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

## EXCEL|MATE MSD XL - TECHNICAL CHARACTERISTICS



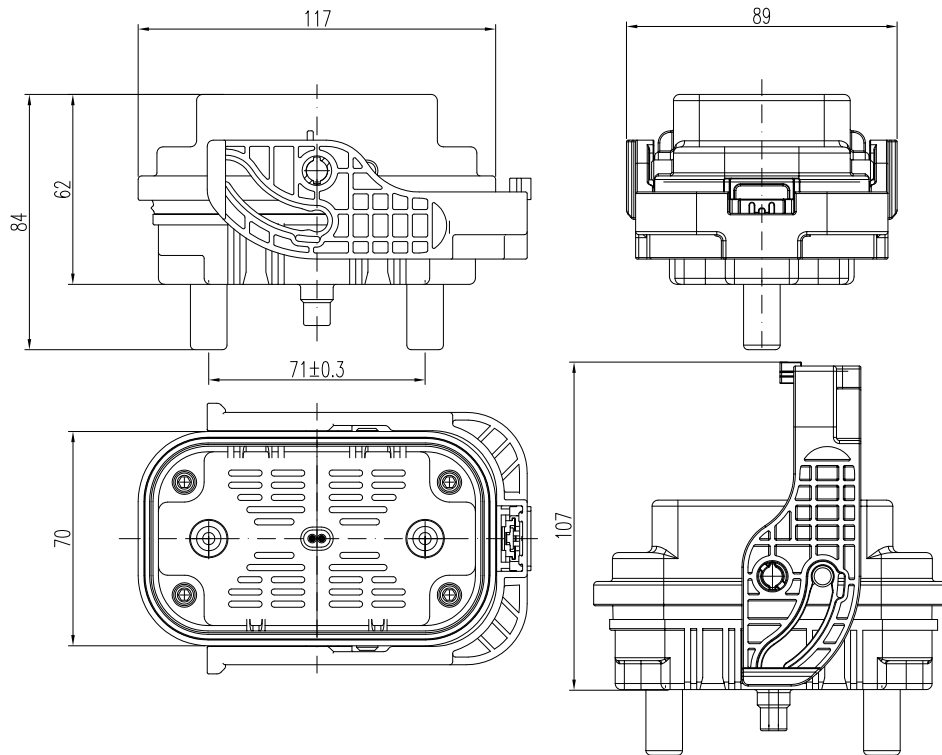
### KEY FEATURES

- 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

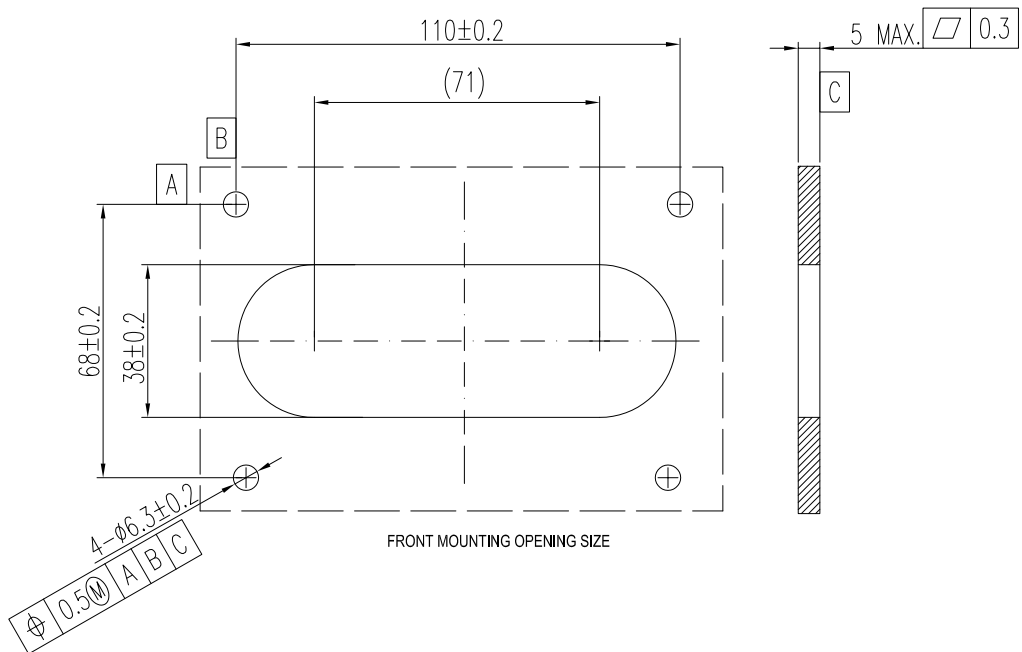
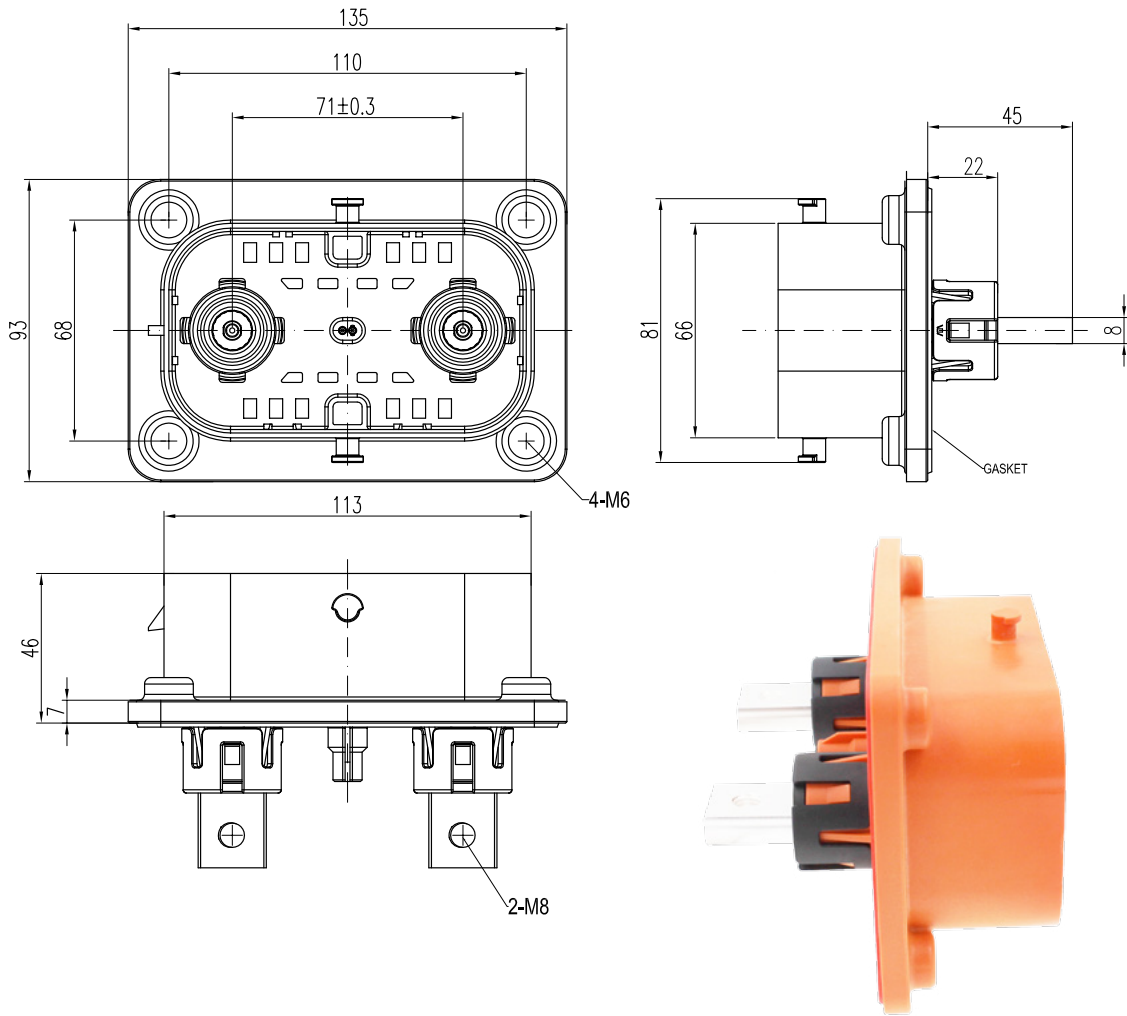
APPLICATION	
It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit.	
MECHANICAL	
Mating cycles	≥ 500 cycles
ELECTRICAL	
Fuse specification	up to 630A
With fuse:	
Rated current	300A Max
Rated voltage	1000V DC
With shunt:	
Rated current	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

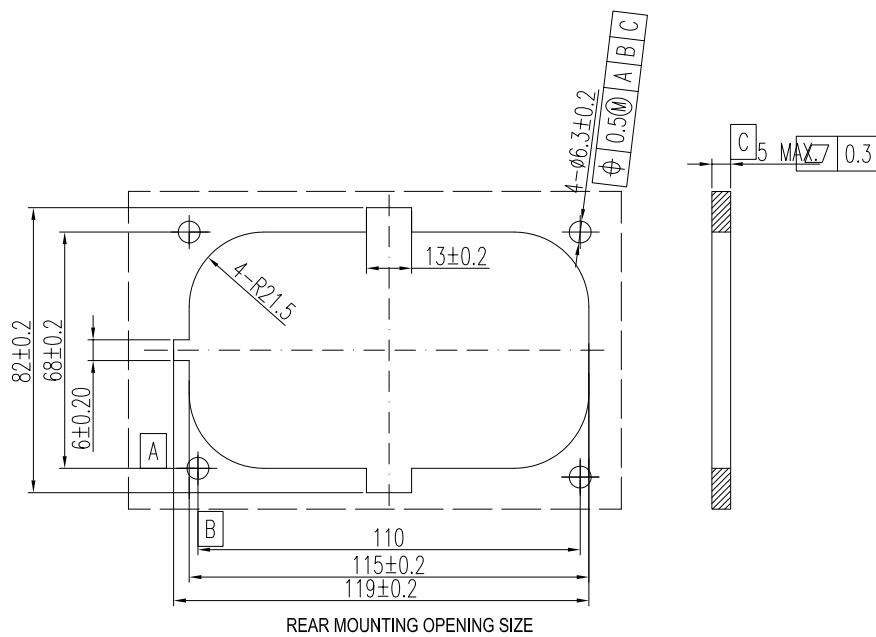
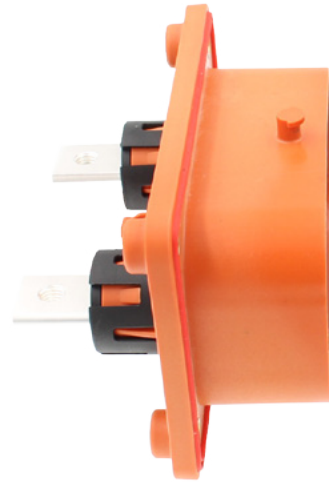
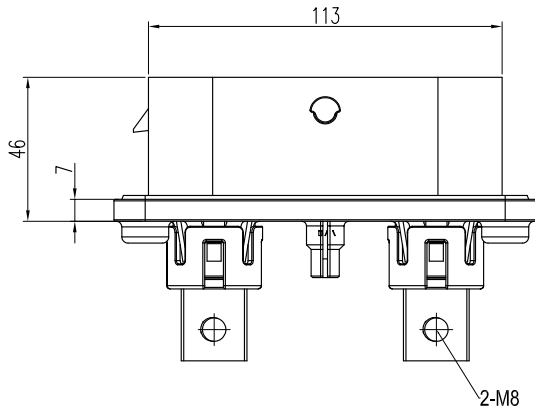
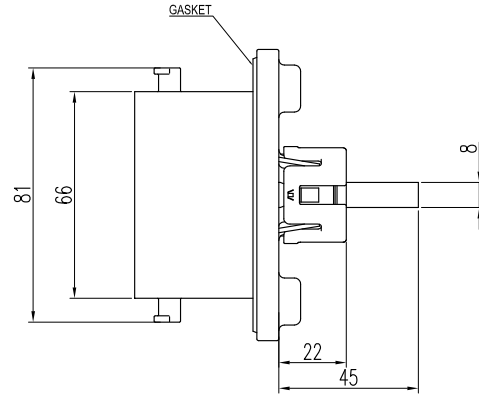
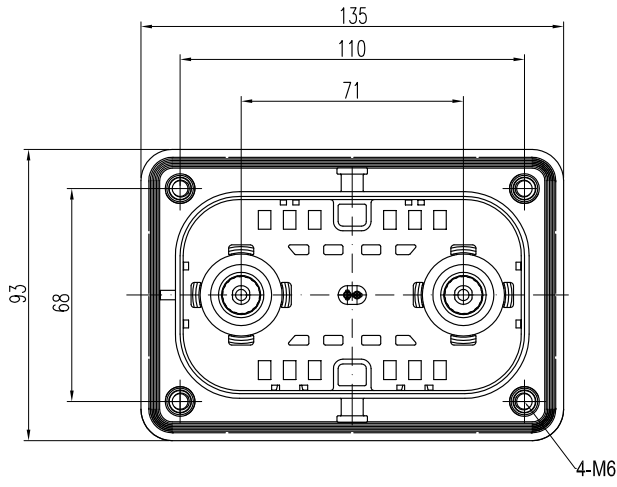
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FRONT MOUNTED



REAR MOUNTED



## HOW TO ORDER - EXCEL|MATE MSD XL

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

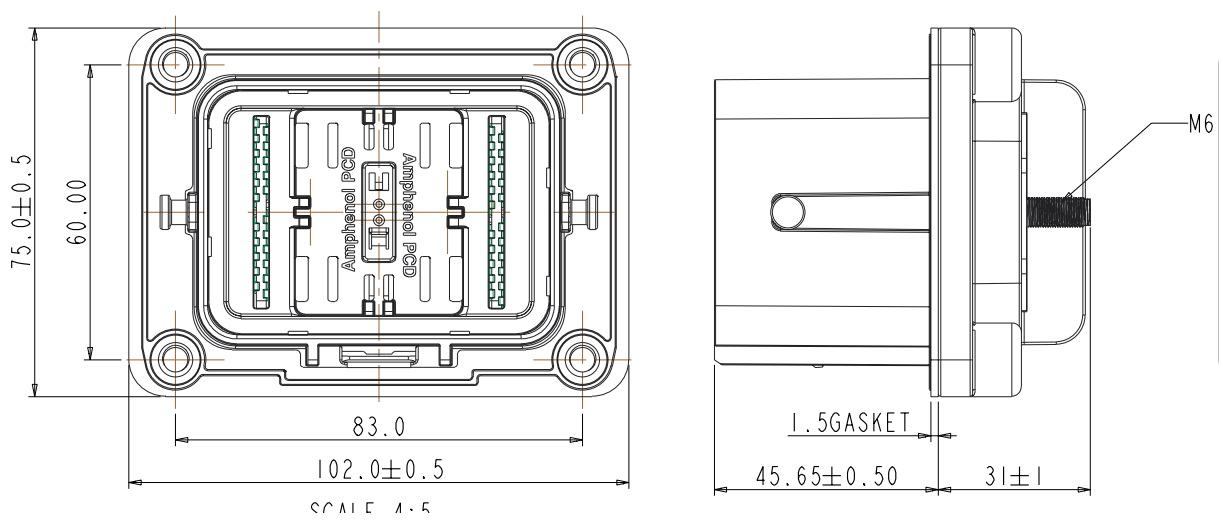
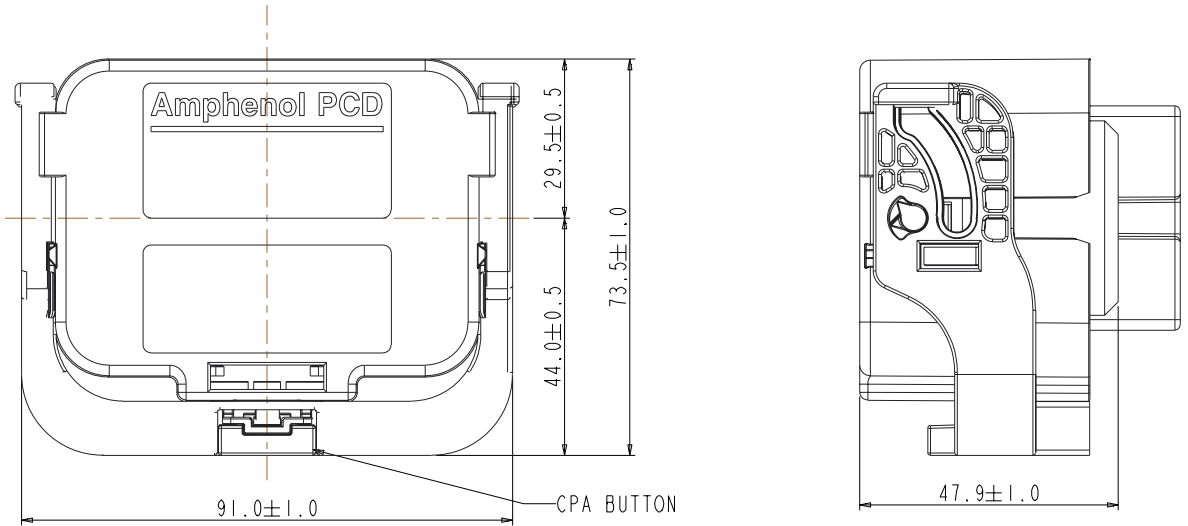
Various fuse ratings

Receptacle can be front or rear mounted

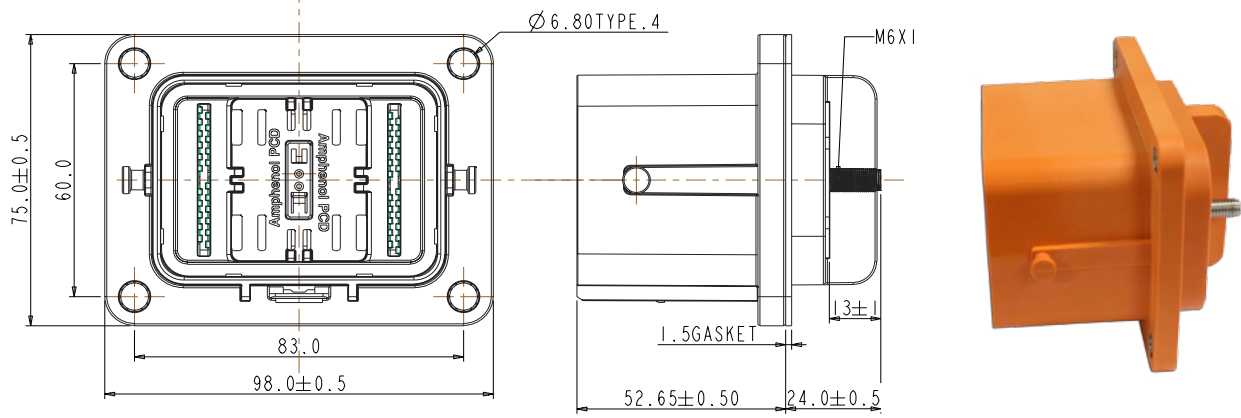
APPLICATION	
It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit.	
MECHANICAL	
Mating cycles	≥ 50 cycles
ELECTRICAL	
Fuse specification	up to 400A
With fuse:	
Rated current	Current is approximately 1/3 the fuse rating (170A Max)
Rated 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	



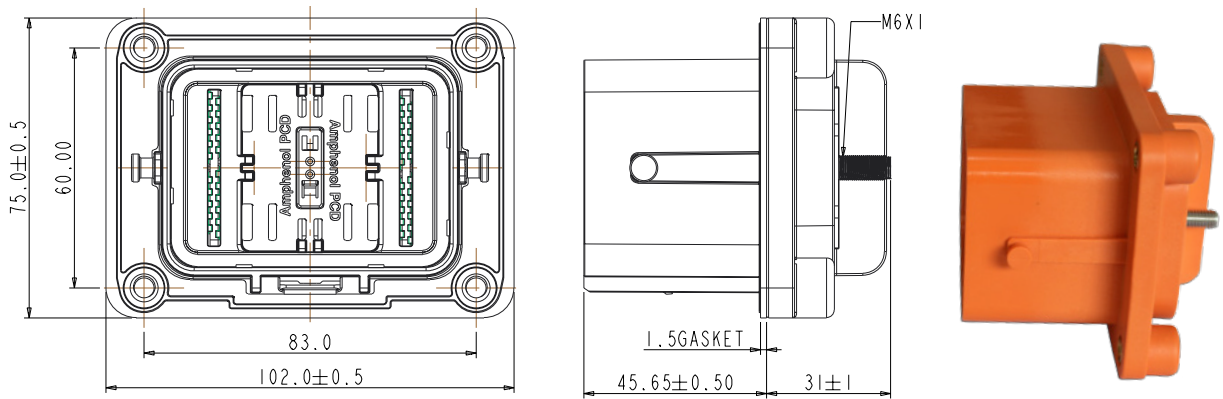
# PRODUCT DIMENSIONS



## FRONT MOUNTED



## REAR MOUNTED



DUST CAP AVAILABLE:  
P/N: C270006809



## HOW TO ORDER - EXCEL|MATE MINI MSD

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

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