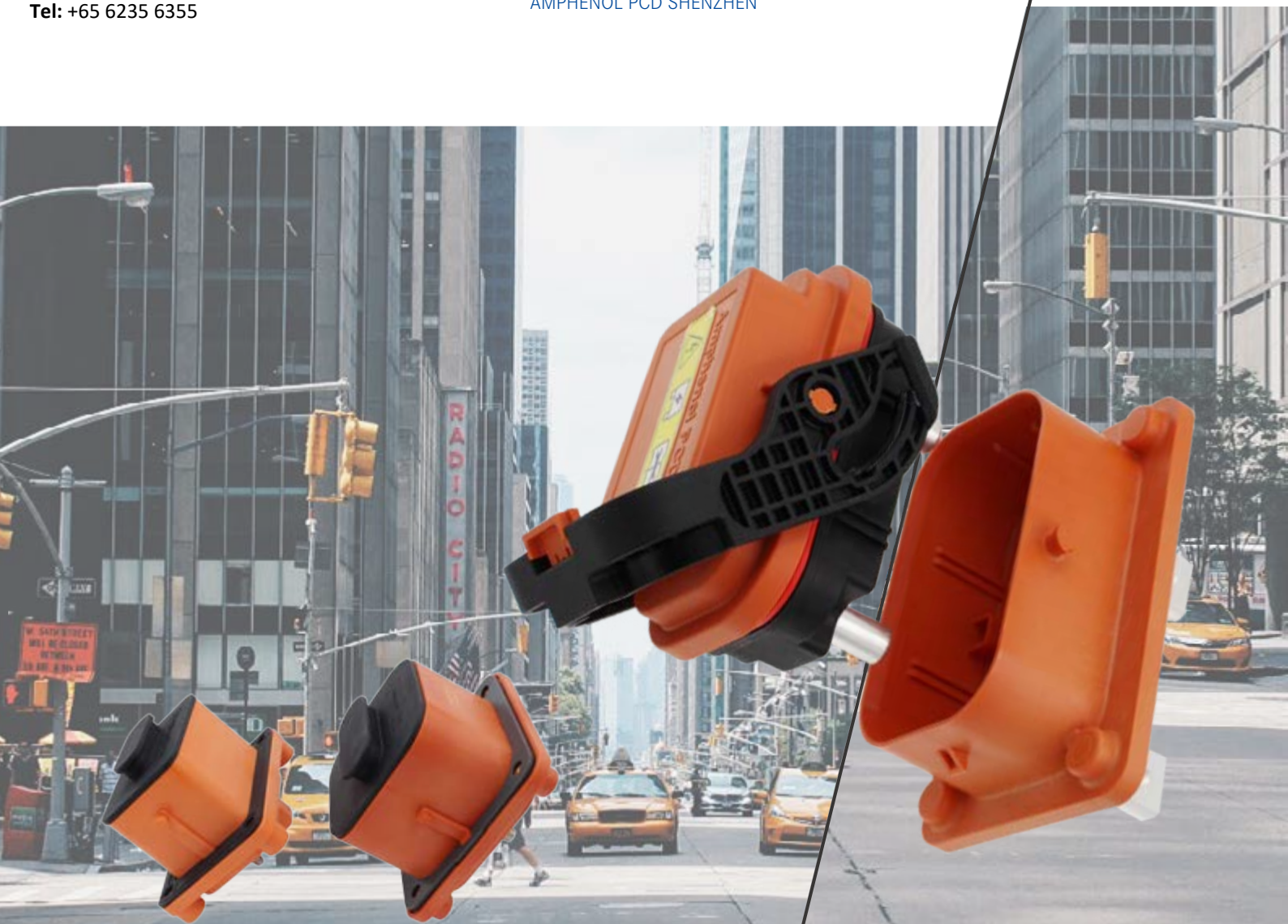




EXCEL | MATE MSD

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.

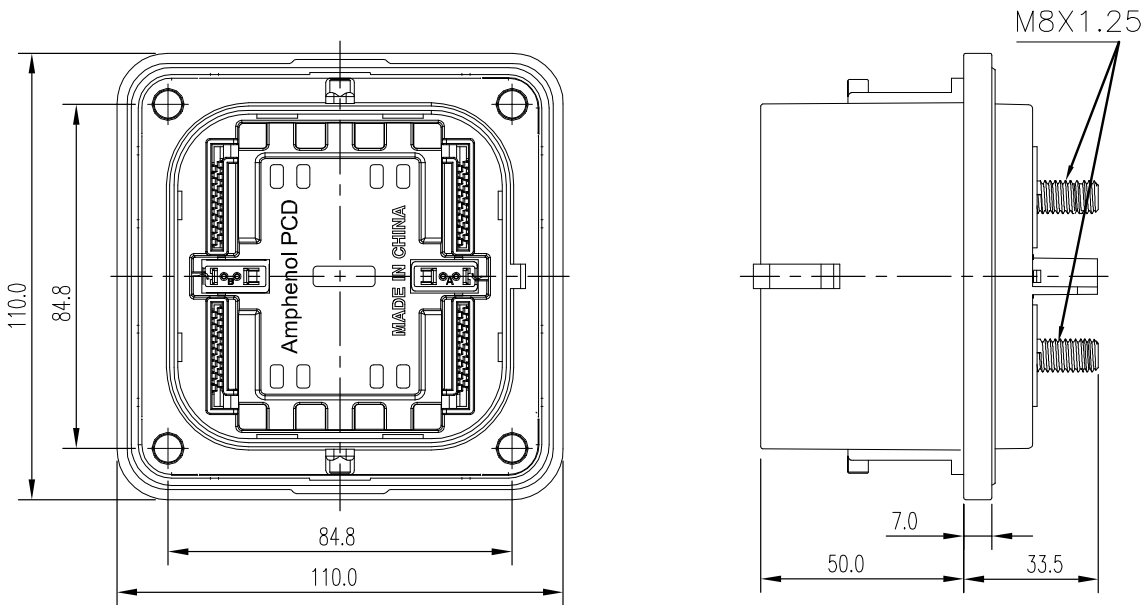
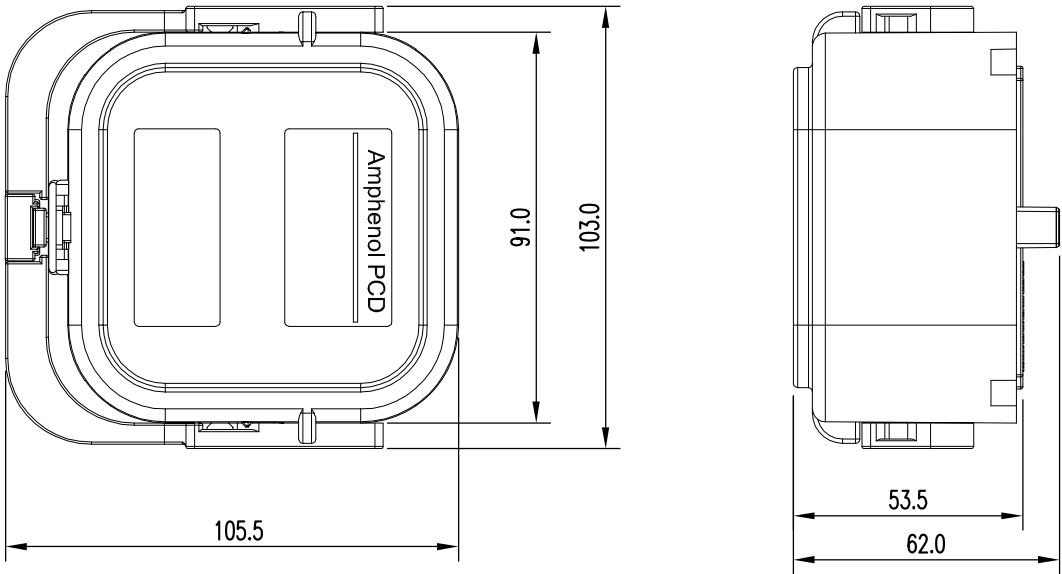


KEY FEATURES

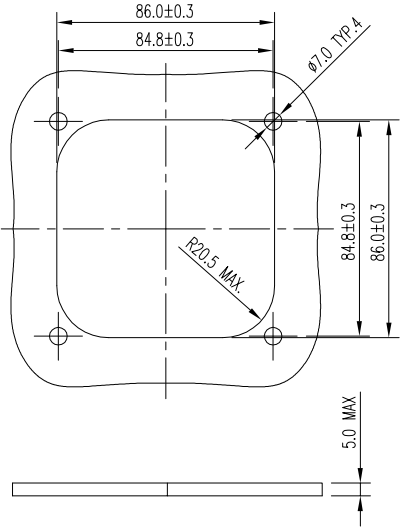
- A two-stage lever provides an HVIL time delay
- 2 x integrated internal HVIL
- Unique cooling structure
- Dual-channel design lowers temperature rise
- No tools required to unmate
- Various fuse ratings
- Receptacle can be front or rear mounted

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
Rated voltage	500V DC to 600V DC
With shunt:	
Rated current	260A Max @ Ambient 70°C
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
Flammability	UL94V0
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	

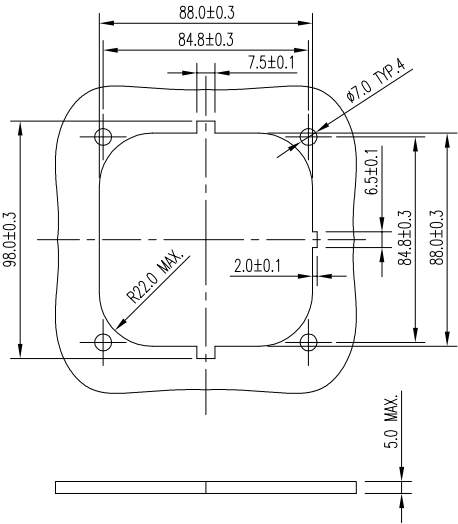
PRODUCT DIMENSIONS



FRONT MOUNTED



REAR MOUNTED



DUST CAP AVAILABLE
P/N: C270006810



Plug

	MSD	M	200	1
Shell type: M: Plug				
Fuse rating current: 200: 200A 250: 250A 315: 315A 350: 350A 400: 400A 450: 450A 500: 500A 550: 550A 630: 630A 000: No fuse needed, can directly use the terminal				
Fuse brand: 1: Ferraz 2: Bussmann				

Receptacle

	MSD	F	000	F
Shell type: F: Receptacle				
Fuse rating current: 000: No fuse needed, can directly use the terminal				
Flange mounted type: 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
Rated voltage	800V DC
With shunt:	
Rated current	260A Max @ Ambient 70°C
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
Flammability	UL94V0
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	

Plug

	MSD V	M	200
Shell type: M: Plug			
Fuse rating current: 200: 200A 250: 250A 315: 315A 350: 350A 400: 400A 450: 450A 500: 500A 550: 550A 630: 630A 000: No fuse needed, can directly use the terminal			
Fuse brand: Bussmann (by default), other brands, please contact us.			

Receptacle

	MSD V	1	F	000	F
Contact: 1: Improved contact conductivity					
Shell type: F: Receptacle					
Fuse rating current: 000: No fuse needed, can directly use the terminal					
Flange mounted type: F: Front mounted R: Rear mounted					

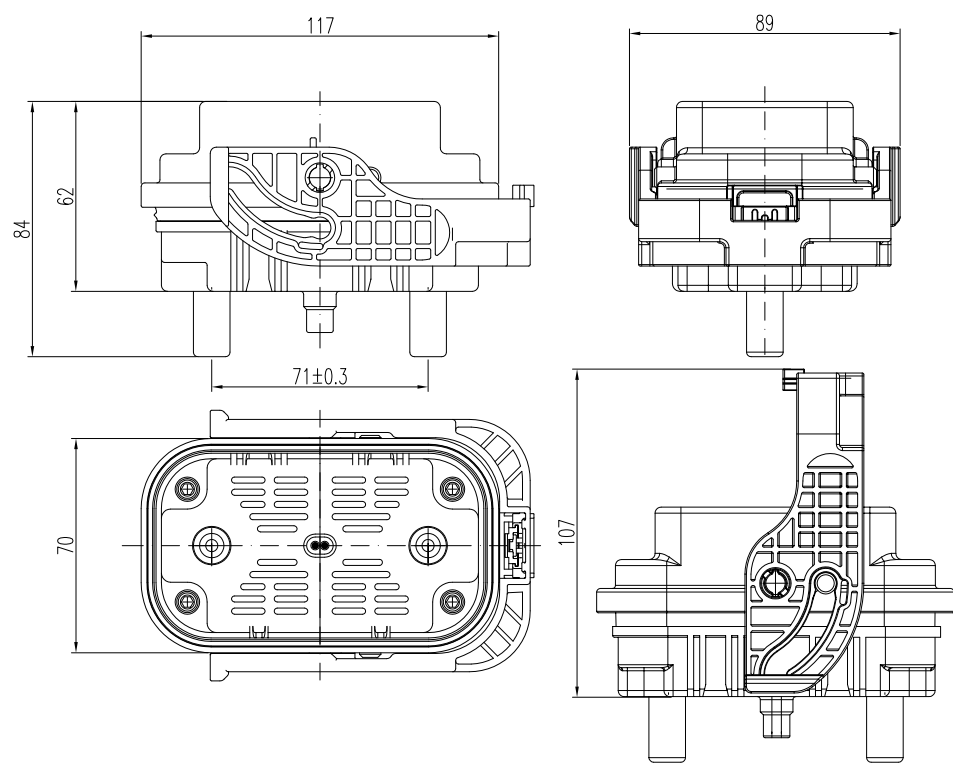


KEY FEATURES

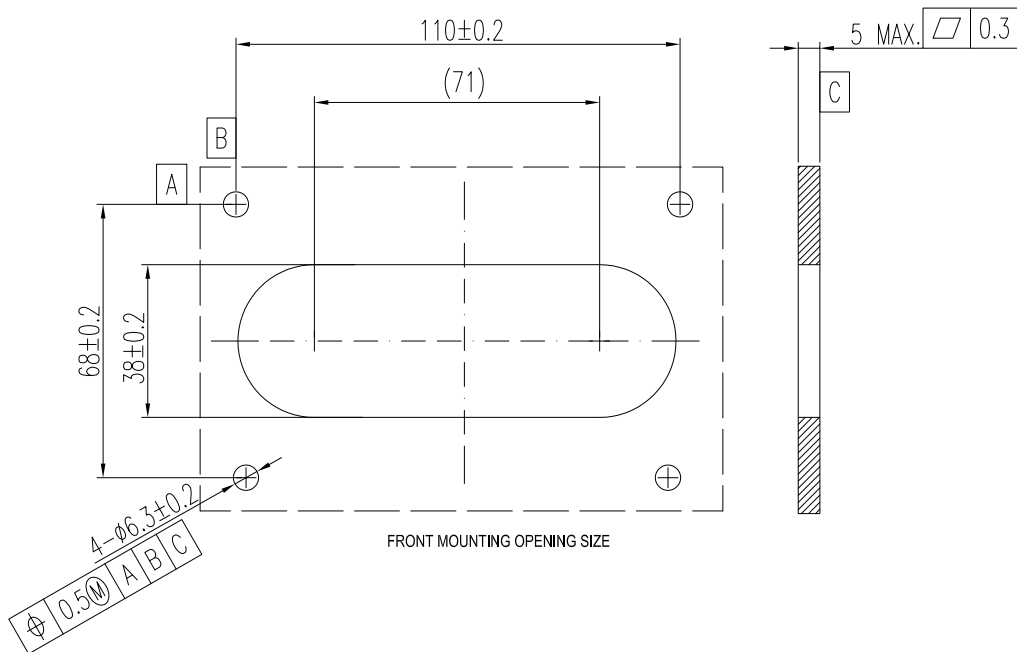
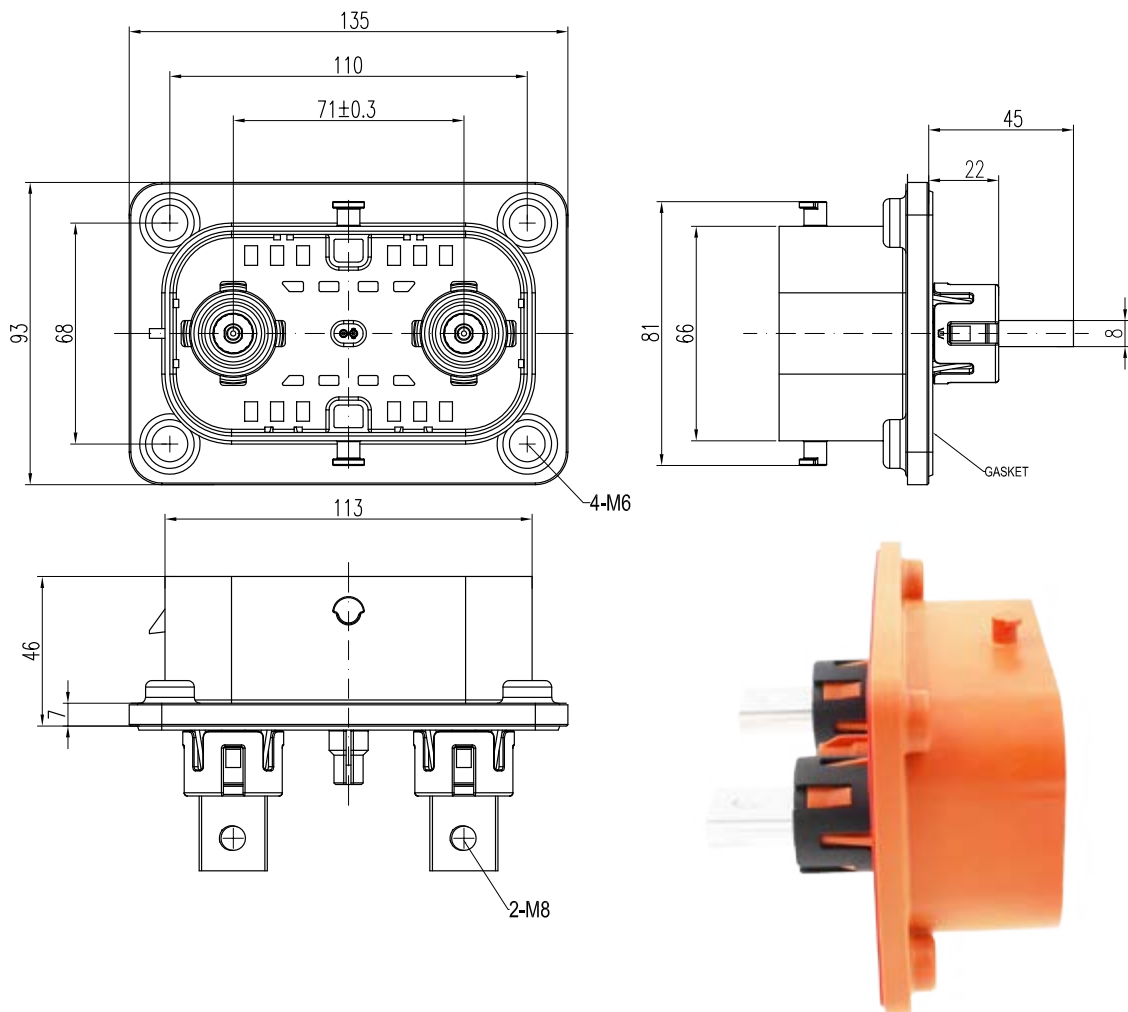
- 1 x integrated internal HVIL
- Unique cooling structure
- High current contacts with Amphenol Radsok technology
- No tools required to unmate
- Various fuse ratings
- Receptacle can be front or rear mounted

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
Flammability	UL94V0
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	

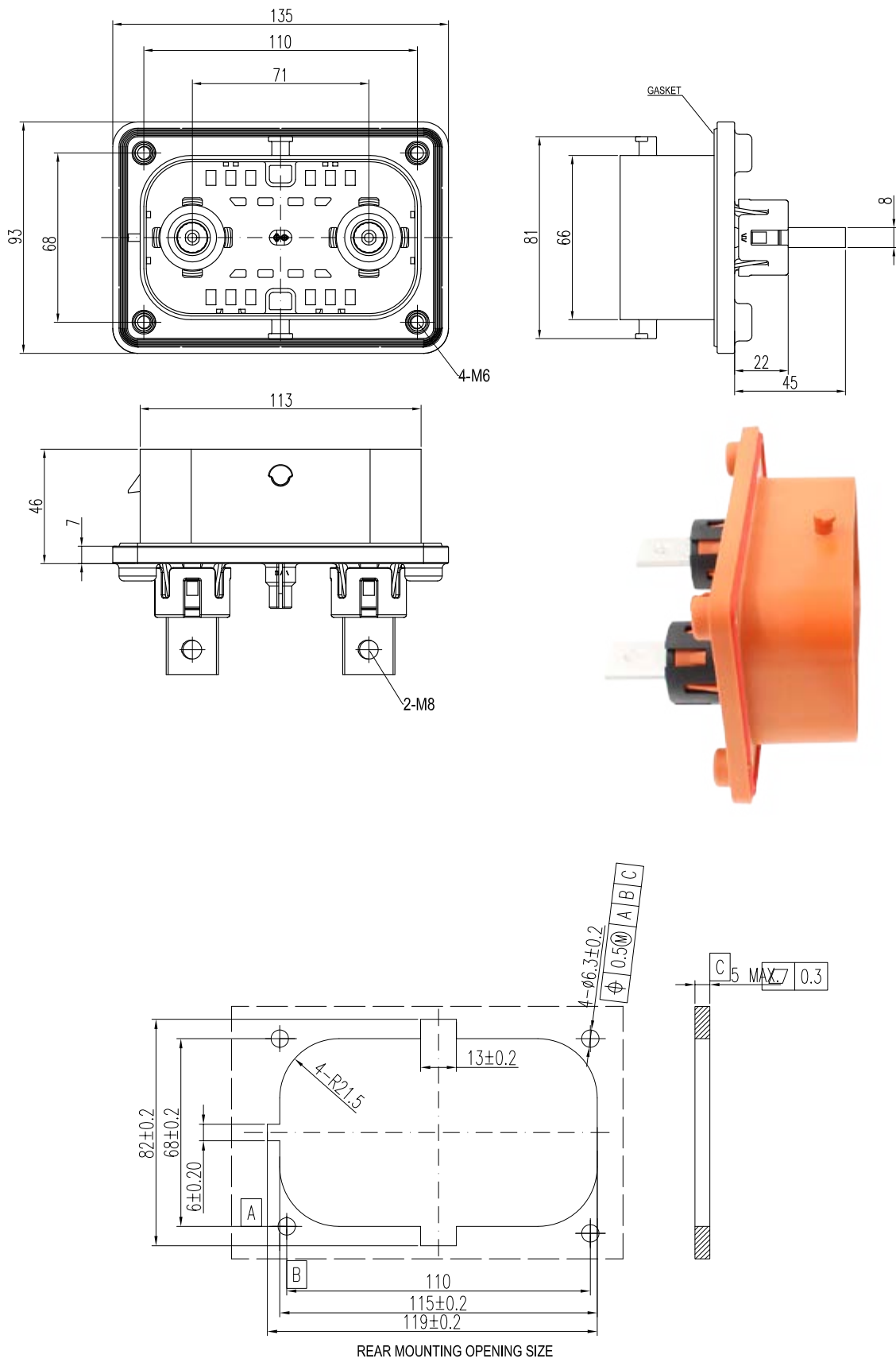
PRODUCT DIMENSIONS



FRONT MOUNTED



REAR MOUNTED



Plug

	MSD XL	M	200
Shell type: M: Plug			
Fuse rating current: 200: 200A 250: 250A 315: 315A 350: 350A 400: 400A 450: 450A 500: 500A 550: 550A 630: 630A 000: No fuse needed, can directly use the terminal			
Fuse brand : Bussmann (by default), other brands, please contact us.			

Receptacle

	MSD XL	F	000	F
Shell type: F: Receptacle				
Fuse rating current: 000: No fuse needed, can directly use the terminal				
Flange mounted type: 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

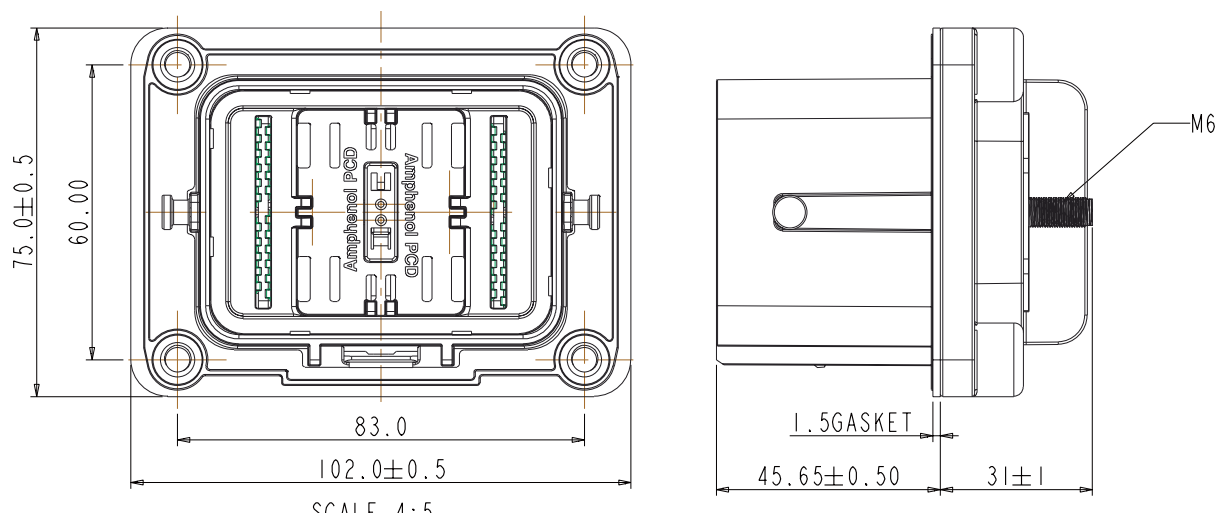
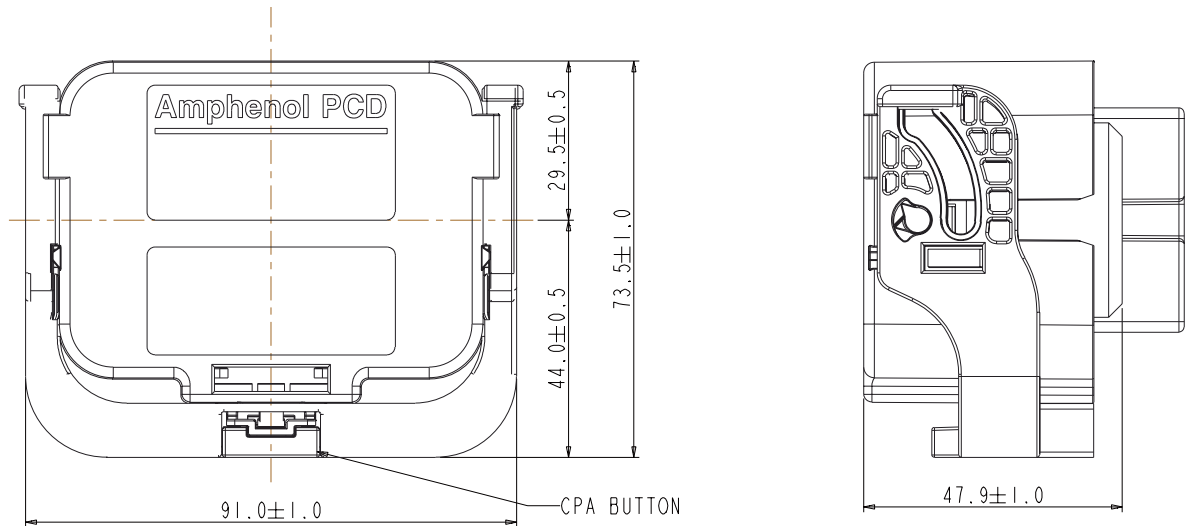
No tools required to unmate

Various fuse ratings

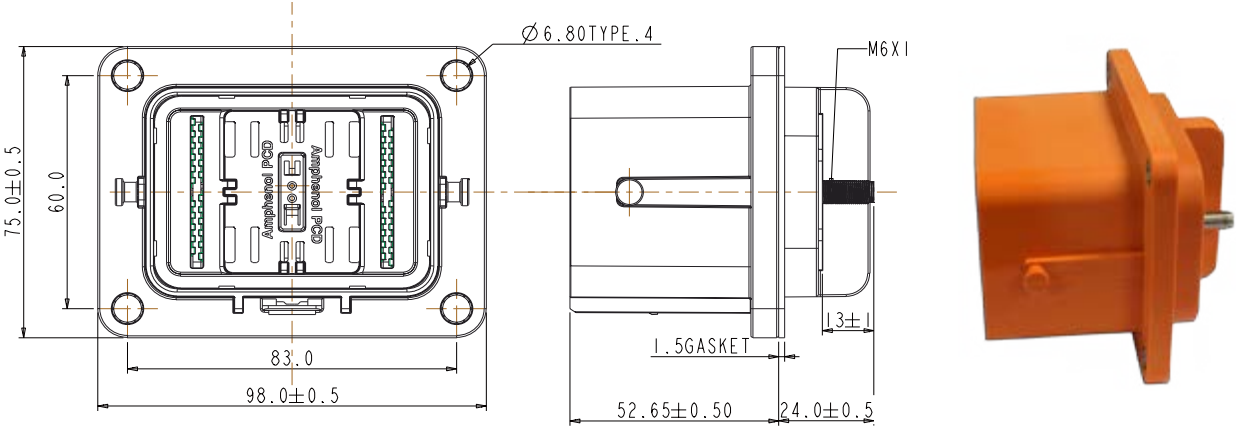
Receptacle can be front or rear mounted

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	750V 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
Flammability	UL94V0
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	

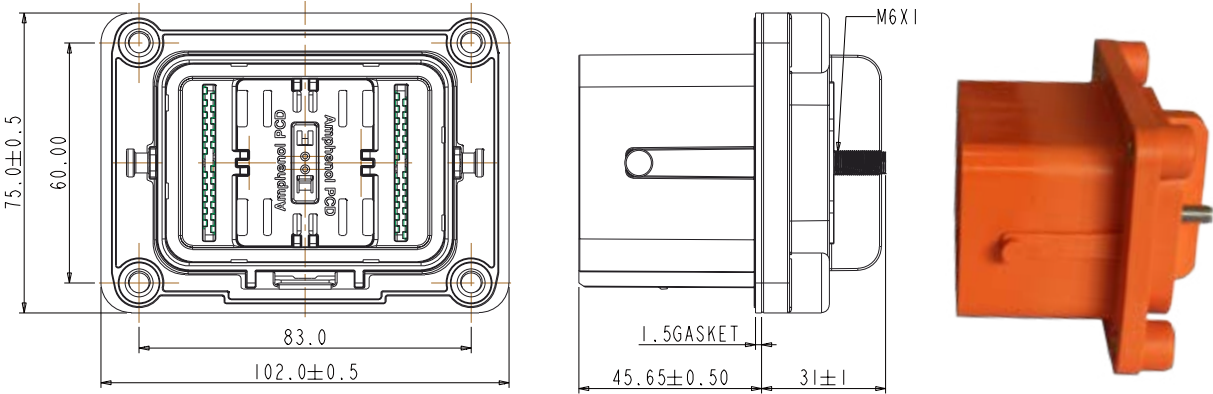
PRODUCT DIMENSIONS



FRONT MOUNTED



REAR MOUNTED



DUST CAP AVAILABLE:
P/N: C270006809



Plug

MINI MSD	M	200
Shell type: M: Plug		
Fuse rating current: 080: 80A 100: 100A 125: 125A 160: 160A 200: 200A 250: 250A 315: 315A 400: 400A 000: No fuse needed, can directly use the terminal		
Fuse brand : Bussmann (by default), other brands, please contact us.		

Receptacle

MINI MSD	F	000	F
Shell type: F: Receptacle			
Fuse rating current: 000: No fuse needed, can directly use the terminal			
Flange mounted type : F: Front mounted R: Rear mounted			

EXCEL|MATE MINI MSD V - 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 (220A Max)
Rated voltage	750V DC
With shunt:	
Rated current	220A 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
Flammability	UL94V0
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	

HOW TO ORDER - EXCEL|MATE MINI MSD V

Plug: With fuse

	MINI MSD	M	2002
Shell type:			
M: Plug			
Fuse rating current:			
0802: 80A			
1002: 100A			
1252: 125A			
1602: 160A			
2002: 200A			
2502: 250A			
3152: 315A			
4002: 400A			
Fuse brand:			
Bussmann (by default), other brands, please contact us.			

Plug: With shunt

	MINI MSD	VM	000
Shell type:			
VM: Plug, shunt			
000: No fuse needed, can directly use the terminal			

Receptacle

	MINI MSD	V	F	000	F
V: Built-in gasket seal, row connection					
V1: Built-in gasket seal, stud connection					
V2: Flat gasket seal, stud connection					
Shell type:					
F: Receptacle					
Fuse rating current:					
000: No fuse needed, can directly use the terminal					
Flange mounted type:					
F: Front mounted					
R: Rear mounted (only available for V2)					

V



V1



V2



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Amphenol PCD Shenzhen reserves the right to clarify this catalog.