



AMPHENOL PCD SHENZHEN



EXCEL | MATE MSD

Manual Service Disconnect

www.amphenolpcd.com.cn

INDUSTRIAL@AMPHENOL
TRUSTED GLOBALLY

CONTENTS

EXCEL MATE MSD	2
EXCEL MATE MSD - TECHNICAL CHARACTERISTICS	3
PRODUCT DIMENSIONS	4
HOW TO ORDER EXCEL MATE MSD	6
EXCEL MATE MSD V - TECHNICAL CHARACTERISTICS	7
HOW TO ORDER EXCEL MATE MSD V	8
EXCEL MATE MSD XL - TECHNICAL CHARACTERISTICS	9
PRODUCT DIMENSIONS	10
HOW TO ORDER EXCEL MATE MSD XL	13
EXCEL MATE MINI MSD	14
EXCEL MATE MINI MSD - TECHNICAL CHARACTERISTICS	15
PRODUCT DIMENSIONS	16
HOW TO ORDER EXCEL MATE MINI MSD	18



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

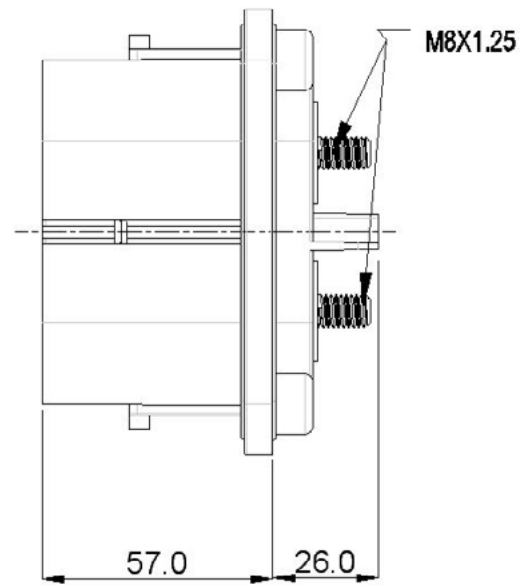
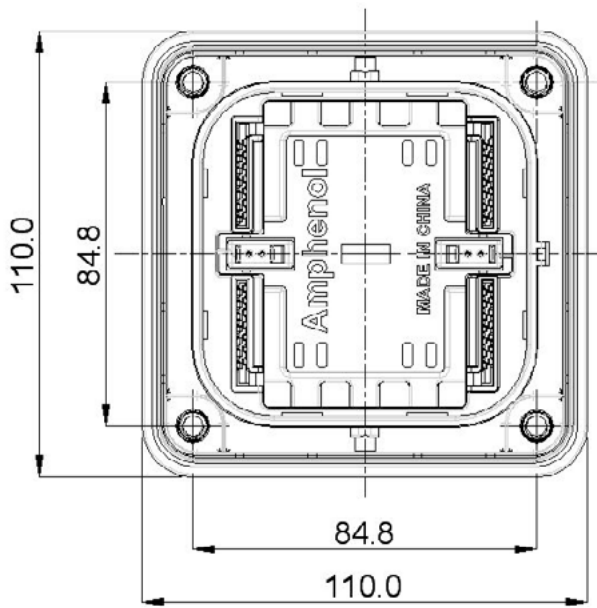
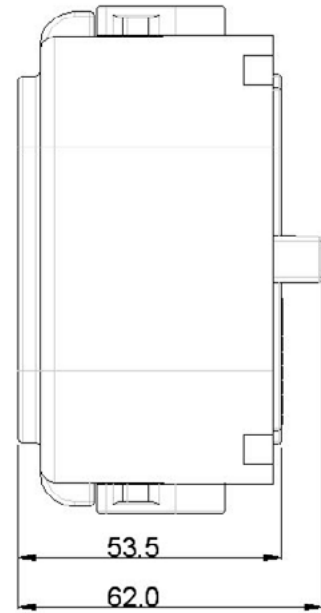
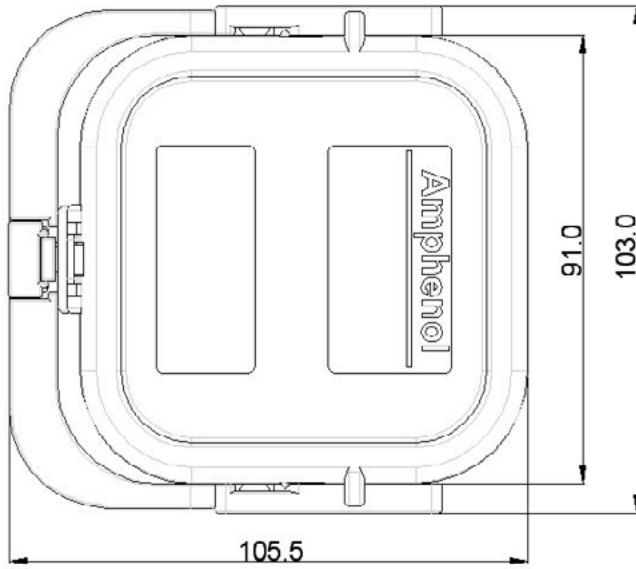
No tools required to unmate

Various fuse ratings

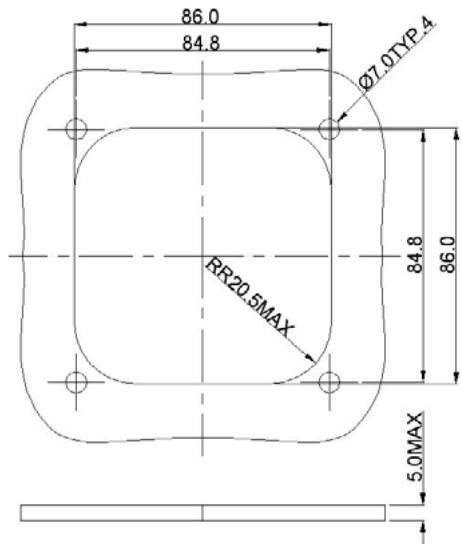
Receptacle can be front or rear mounted

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	

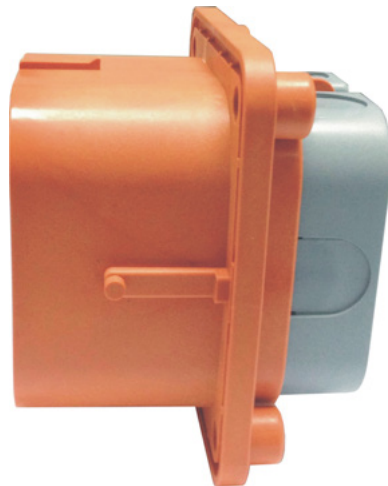
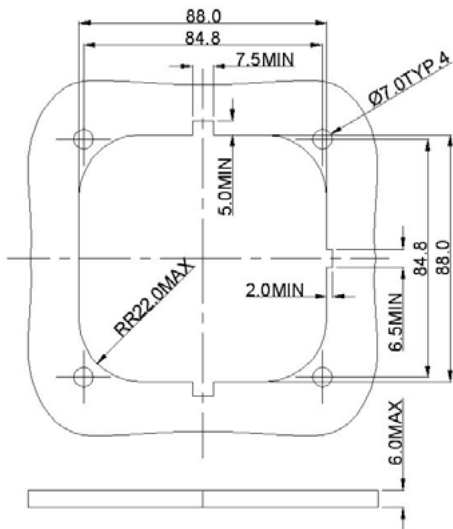
PRODUCT DIMENSIONS



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

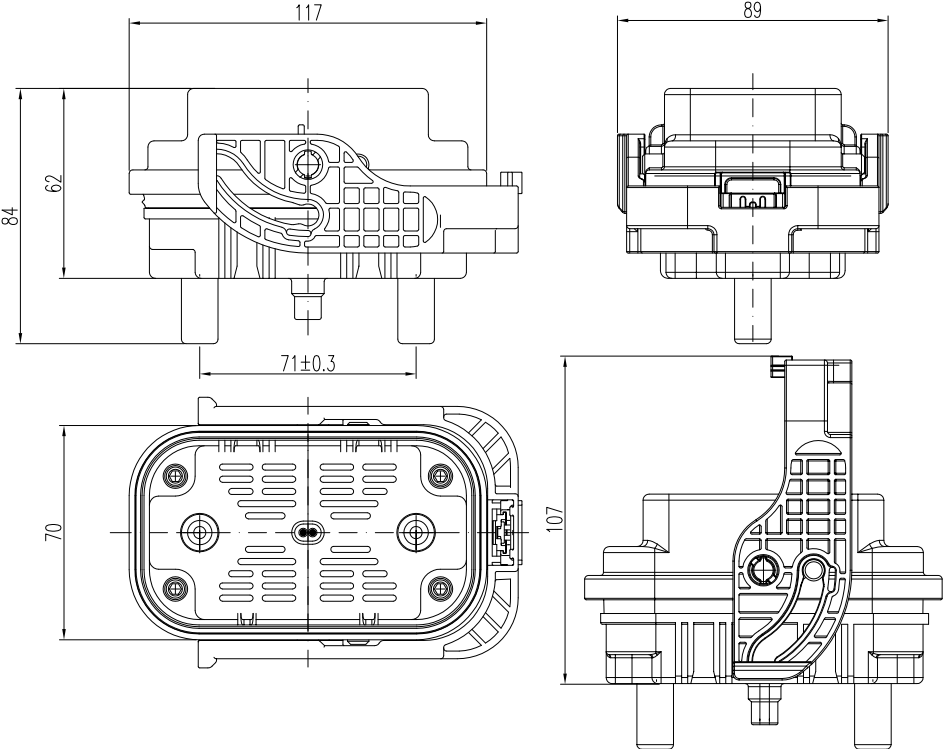


KEY FEATURES

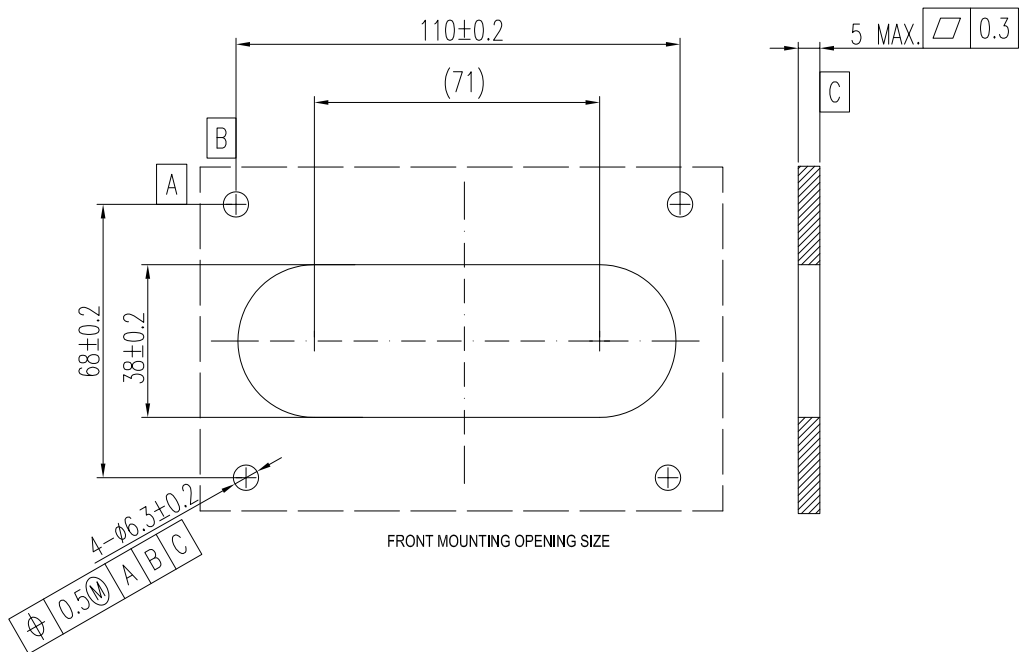
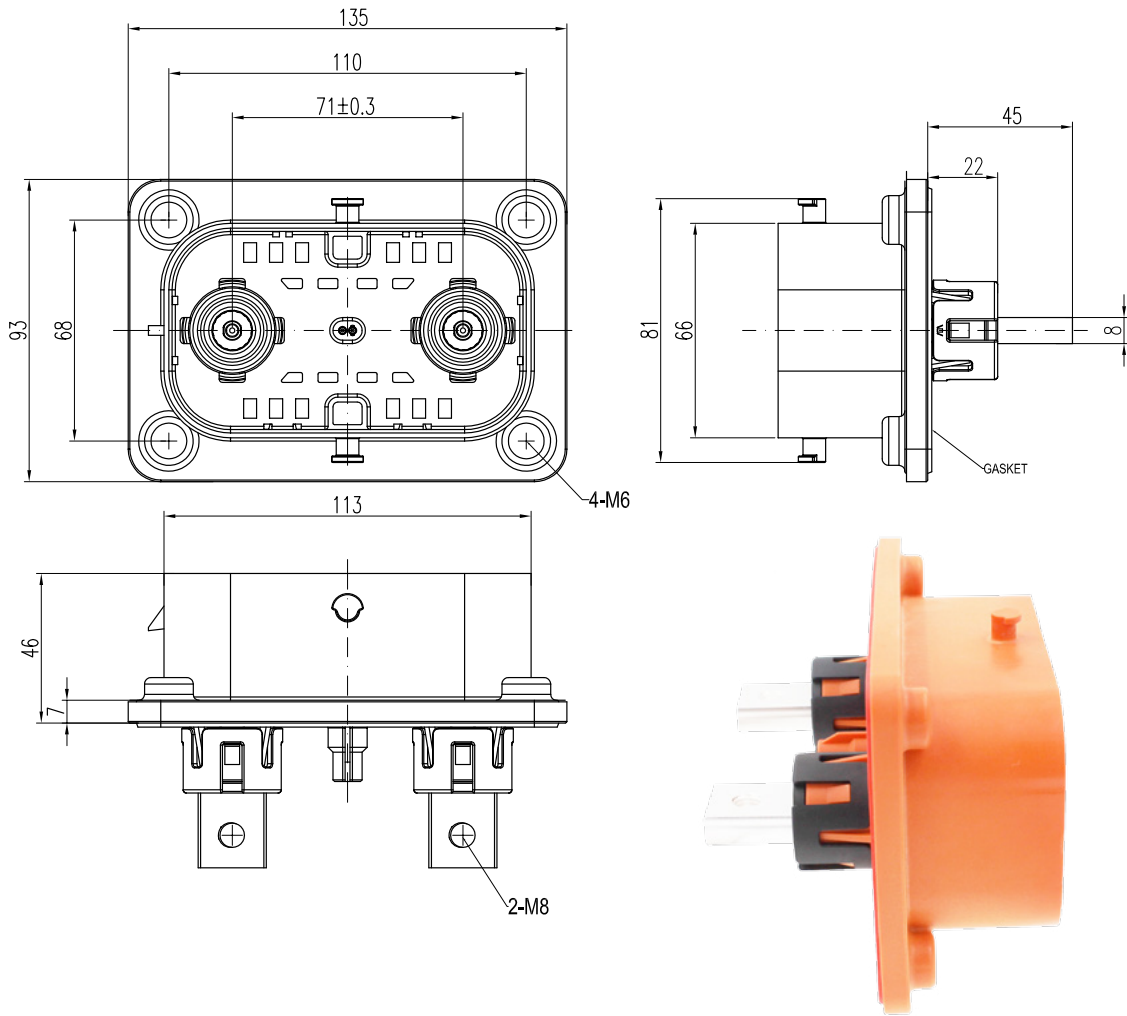
- 1 x integrated internal HVIL
- Unique cooling structure
- High current contacts with Amphenol Radsok technology
- No tools required to unmate
- Various fuse ratings
- Receptacle can be front or rear mounted

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

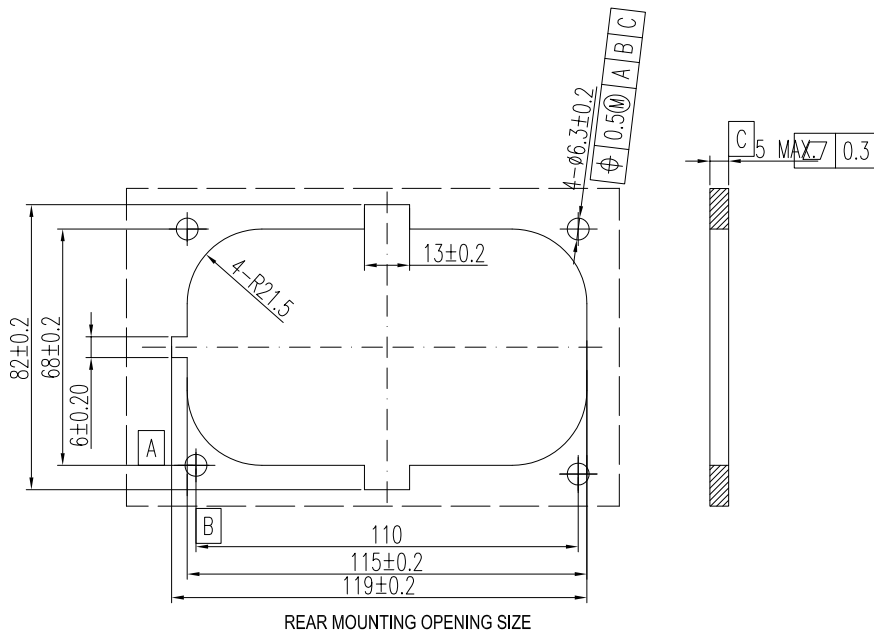
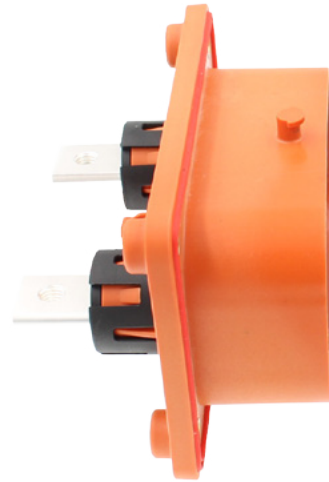
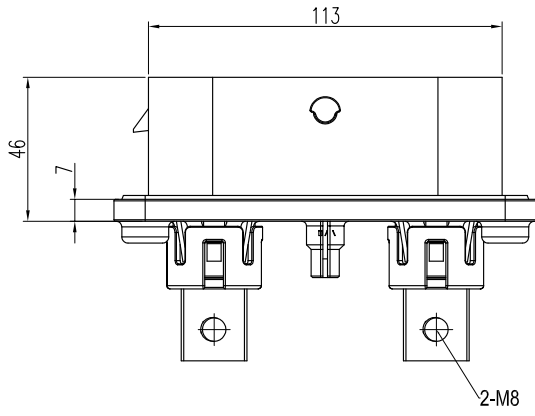
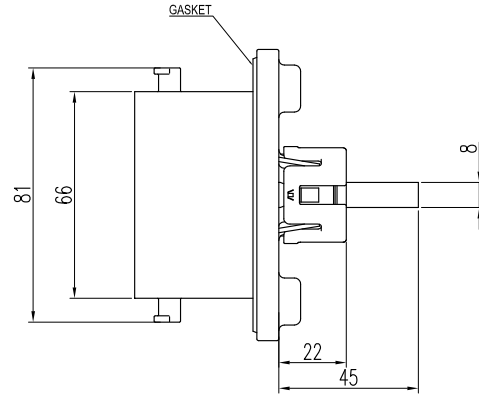
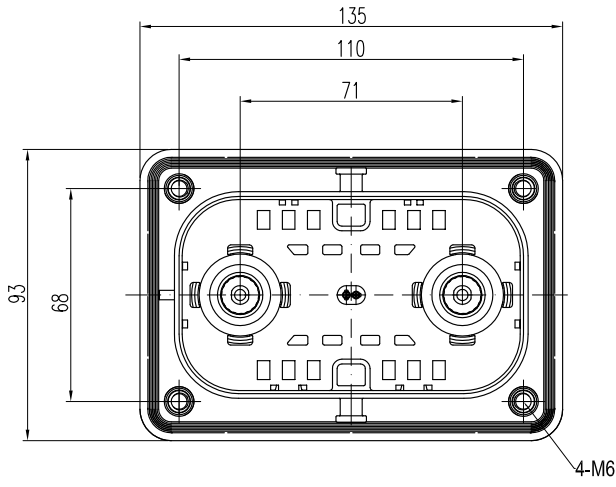


FRONT MOUNTED



FRONT MOUNTING OPENING SIZE

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

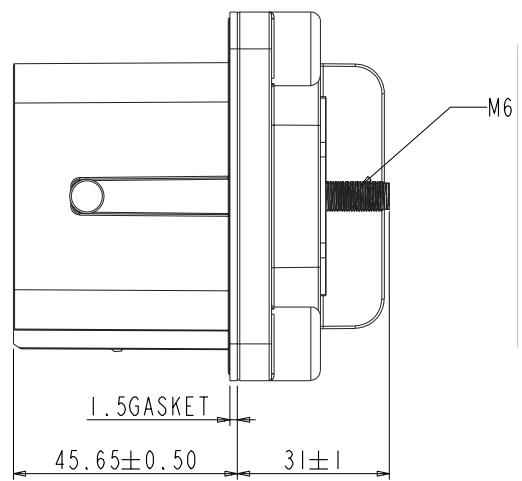
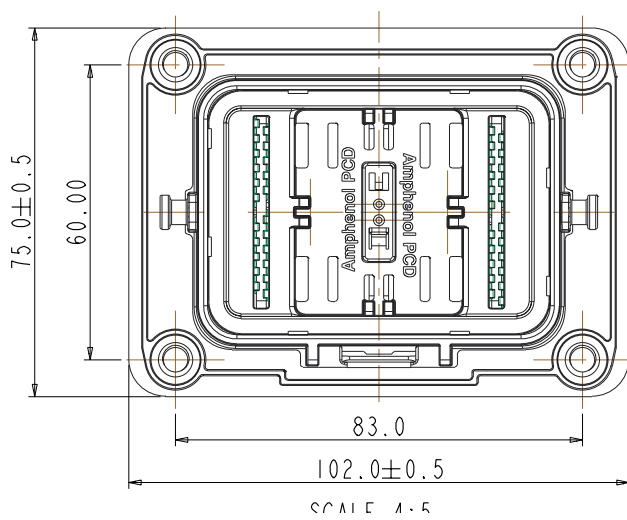
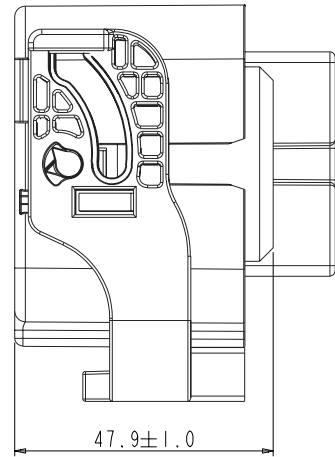
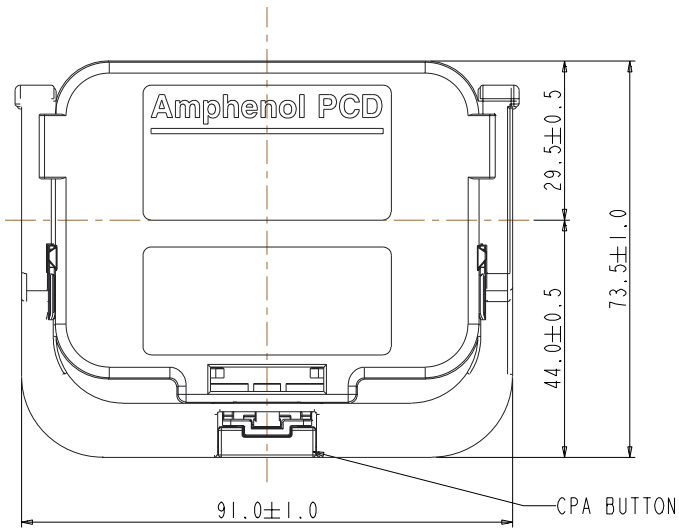
No tools required to unmate

Various fuse ratings

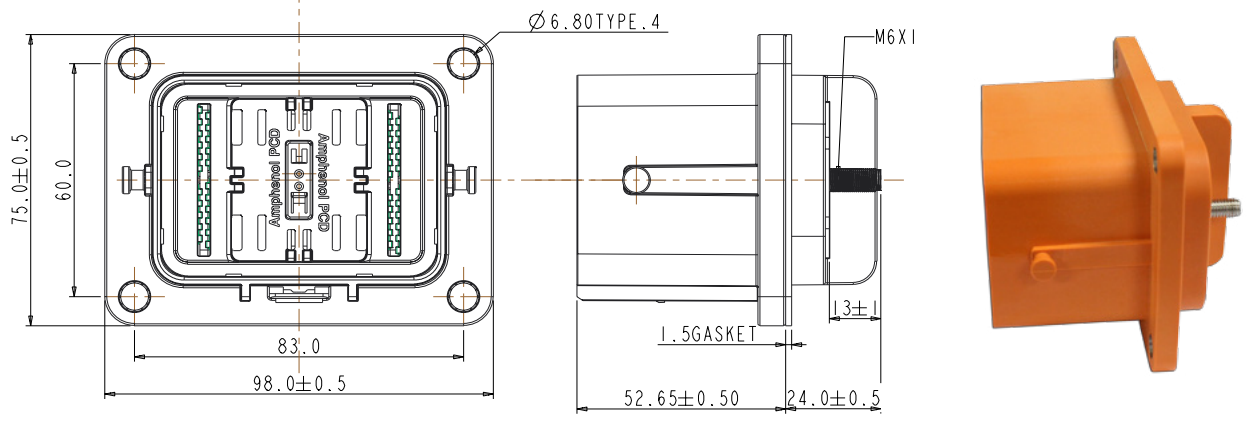
Receptacle can be front or rear mounted

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	

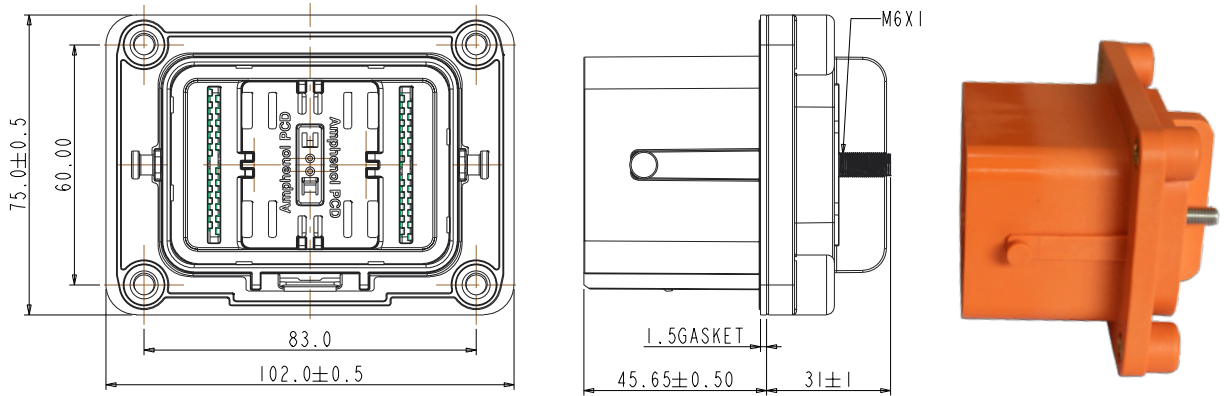
PRODUCT DIMENSIONS



FRONT MOUNTED



REAR MOUNTED



DUST CAP AVAILABLE:
P/N: C270006809



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					

Amphenol PCD Shenzhen

Building 21
1st Liao Keng Industrial Zone
Shi Yan Street, Bao An District Shenzhen 518108
China

Tel.: +86 755-8173-8000
Fax: +86 755-8173-8180
Email: inquiry@amphenolpcd.com.cn

www.amphenolpcd.com.cn

Notes:

Amphenol PCD Shenzhen has made every effort to ensure that the information contained in this catalog is accurate at the time of publication. Specifications or information stated in this publication are subject to change without notice.

Amphenol PCD Shenzhen reserves the right to clarify this catalog.