



## 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

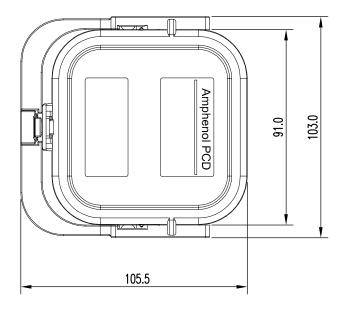
Receptacle can be front or rear mounted

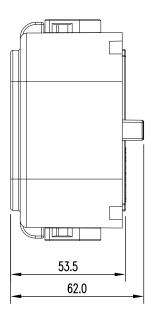
#### APPLICATION

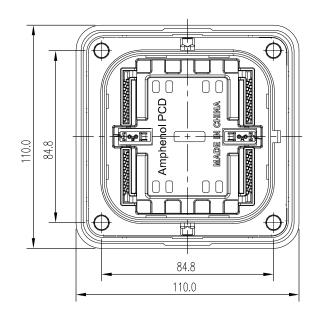
It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit.

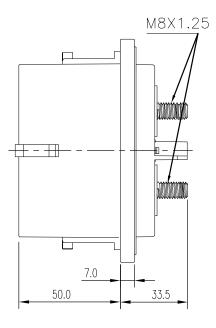
MECHANICAL		
Mating cycles	≥ 50 cycles	
ELECTRICAL		
Fuse specification	up to 630A	
With fuse:		
Rated current	Current is approximately 1/3 the fuse rating	
Rated voltage	500V DC to 600V DC	
With shunt:		
Rated current	260A Max @ Ambient 70°C	
Rated voltage	1000V DC Max	
ENVIRONMENTAL		
Protection degree	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

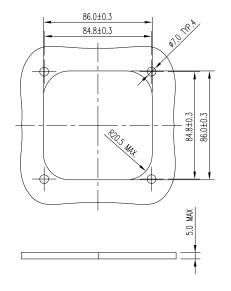






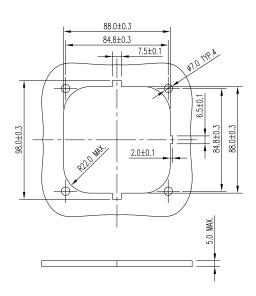


#### FRONT MOUNTED





#### **REAR MOUNTED**





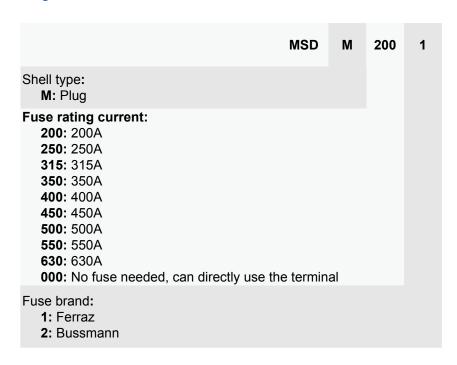
DUST CAP AVAILABLE P/N: C270006810

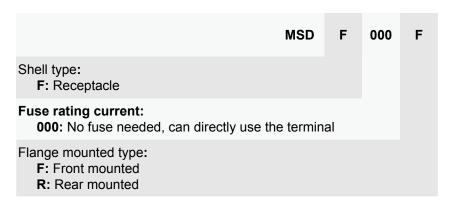




#### HOW TO ORDER - EXCEL|MATE MSD

#### Plug





#### 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

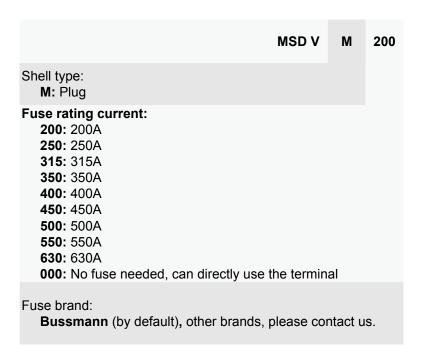
Receptacle can be front or rear mounted

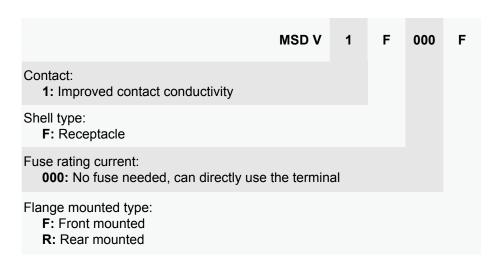
#### APPLICATION

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





#### EXCEL|MATE MSD XL - TECHNICAL CHARACTERISTICS



#### **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	
	·	

# 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

#### **KEY FEATURES**

1 x integrated internal HVIL

Unique cooling structure

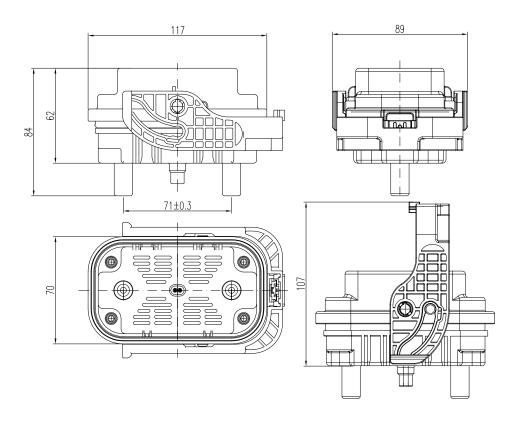
High current contacts with Amphenol Radsok technology

No tools required to unmate

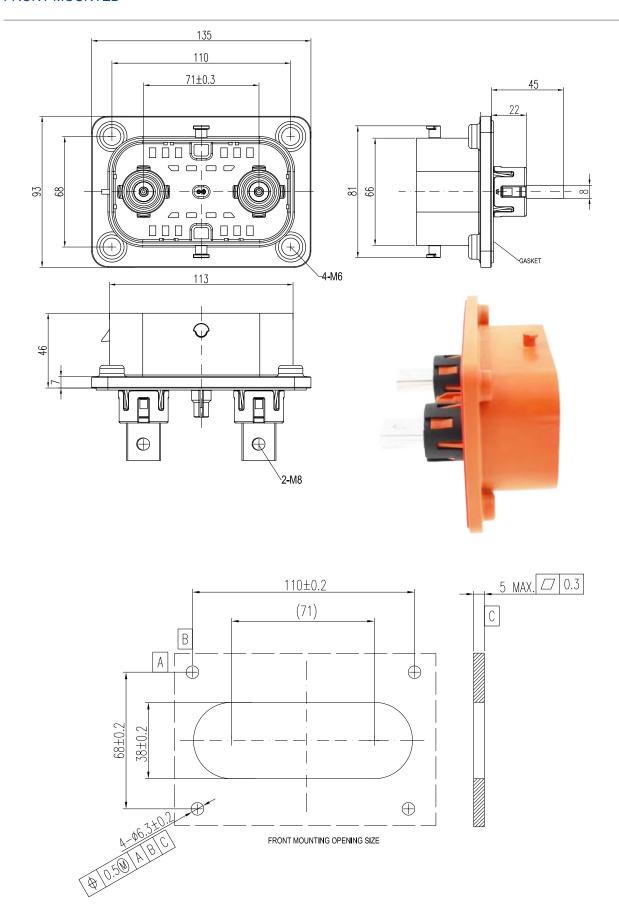
Various fuse ratings

Receptacle can be front or rear mounted

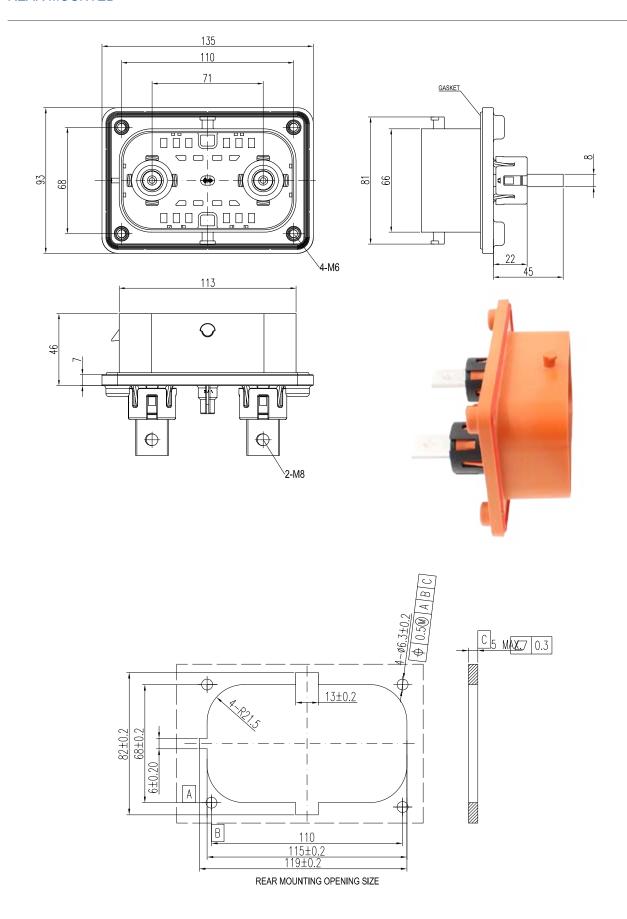
#### PRODUCT DIMENSIONS



#### FRONT MOUNTED

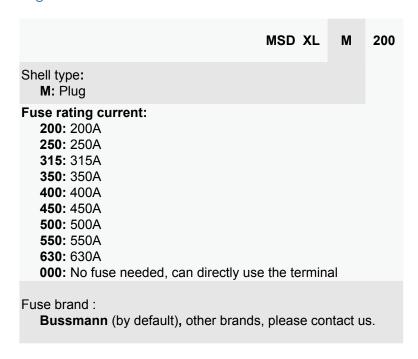


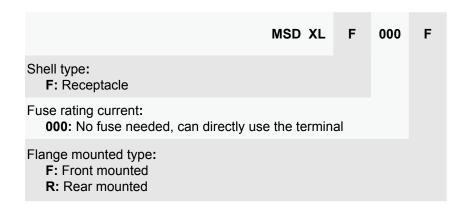
#### **REAR MOUNTED**



#### HOW TO ORDER - EXCEL|MATE MSD XL

#### Plug





#### EXCELIMATE MINI MSD



#### Amphenol PCD MINI Manual Service Disconnect

Mini MSD has been developped 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.



#### **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

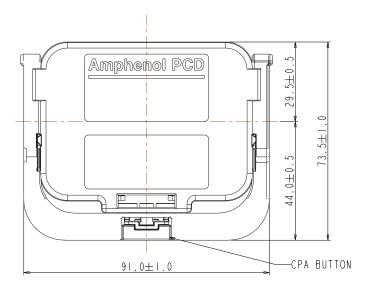
Receptacle can be front or rear mounted

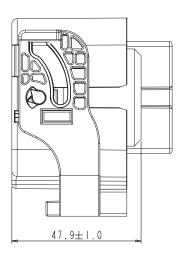
#### **APPLICATION**

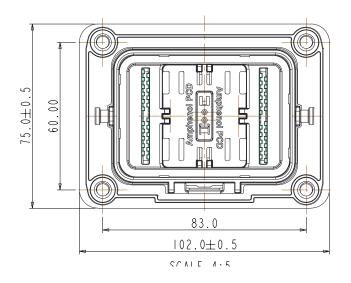
It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short circuit.

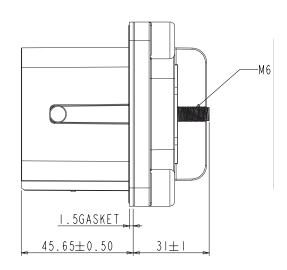
Λ./	1ECHANICAI	
MECHANICAL		
Mating cycles	≥ 50 cycles	
ELECTRICAL		
Fuse specification	up to 400A	
With fuse:		
Rated current	Current is approximately 1/3 the fuse rating (170A Max)	
Rated voltage	750V DC	
With shunt:		
Rated current	170A Max	
Rated voltage	1500V DC Max	
EN	VIRONMENTAL	
Protection degree	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

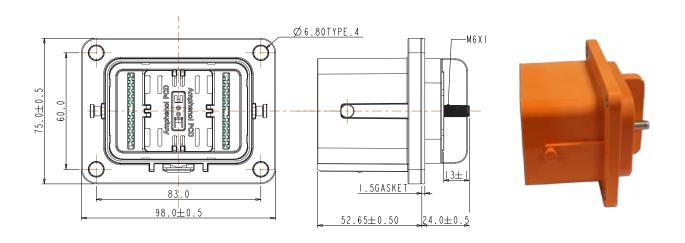




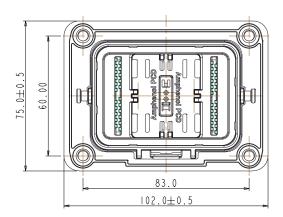


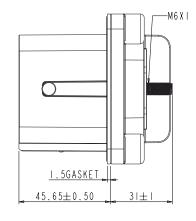


#### FRONT MOUNTED



#### **REAR MOUNTED**





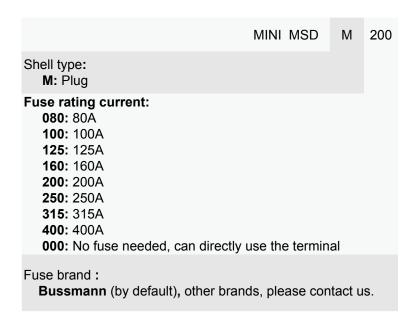


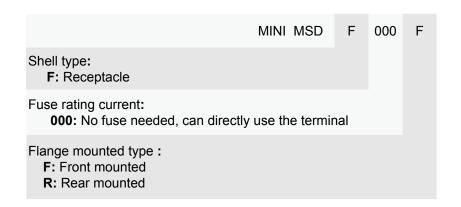
DUST CAP AVAILABLE: P/N: C270006809





#### Plug







**MECHANICAL** 

**APPLICATION** 

It is a tool-free solution for disconnecting the internal high voltage battery pack and protecting it from short

Mating cycles ≥ 50 cycles

#### ELECTRICAL

Fuse specification up to 400A

#### With fuse:

USCAR-37

LV-215

RoHS

circuit.

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

#### **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

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			

#### HOW TO ORDER - EXCELIMATE 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

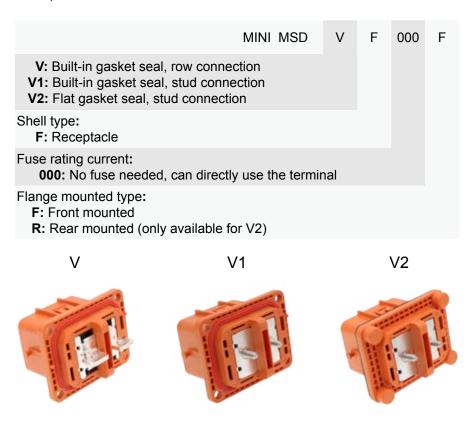
Fuse brand:
 Bussmann (by default), other brands, please contact us.

Plug: With shunt

MINI MSD VM 000

Shell type:
VM: Plug, shunt

000: No fuse needed, can directly use the terminal





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#### Notes:

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