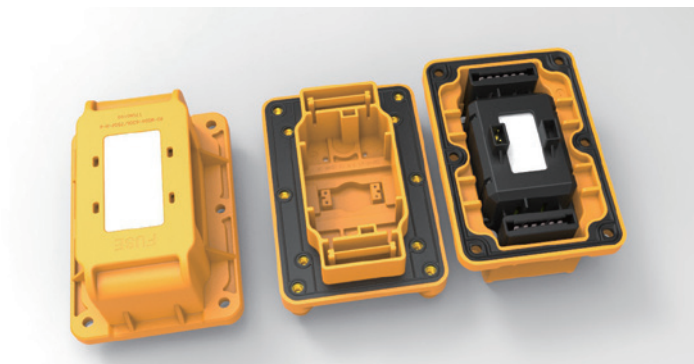




Manual Service Disconnecter (MSD4)



Features/Application

- Annren MSD4 provides stable high voltage power transmission for EV/HEV systems. The fuses in MSD4 provides overcurrent and short-circuit protection.
- Breaking structure and fuses are highly integrated inside which saves installation space and convenient for repair and maintenance.
- MSD4 is connector comprising of plug and jack. The jack is joint with cable. Back installation of socket for option. Plug and socket adopts screw locking.
- Current rating 250A and 300A in 30 mins, catch 2 pairs of HVIL.

Technical Specification

Electrical property

contact resistance:

total power contact resistance $\leq 0.5m\Omega$ (not including fuse resistance)

signal contact resistance $\leq 5m\Omega$ (not including HVIL resistance)

current rating: 25A (300A in 30 mins) temperature rise $< 55K$

voltage rating: 750V DC

voltage Resistance:

3000V DC in 1 min, Leakage current $< 0.1\text{ mA}$ (in normal status except fuse)

fuse technical specification:

voltage rating: 750V DC

current rating: 125A~630A

Mechanical Property

Mating cycle: 500 times

Vibration: 10~55GHz, amplitude 0.75mm

Mechanical shocks: 980m/s²

plug and socket divorce: $\leq 100N$

Material

Shell: thermoplastic flame-retardant

Contact: copper alloy silver plated

Seal: silicon rubber

Environment Property

Working temperature: $-40^{\circ}C \sim +125^{\circ}C$

Relative humidity: 95%(40°C)

Sealing: IP68 (plug and socket Insert or state, 1 metre depth, Immerse 48h, no leakage);

plug meet IPXXB separately

Ordering information

The plug and socket are separate as default, if you need whole part connected with "&".
For example, RC-MSD4-630A/750V-H-A&RC-MSD4-Z-H-A means Equipped with 630A/750V ZhongRong fuse, with HVIL plug and socket whole part.

Plug

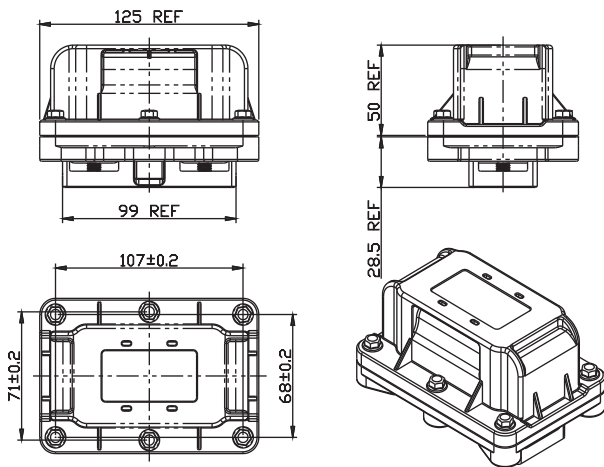
RC-MSD4-630A/750V-H-A-TW
A:Extensive character,
A:ZhongRong
B:ZhongBei
H:HVIL(non-HVIL unmarked)
Fuse voltage rating:750V DC
Fuse current rating:200A~630A
Serial code
Product Serial

Note:

1. Model "RC-MSD4-630A/750V-H-A" means fitting 630A/750V melt brand melting Breaker, MSD4Plug with high pressure interlock;
2. Model "RC-MSD4-630A/750V-H-B" means fitting 630A/750V Zhongbei brand melting Breaker, MSD4Plug with high pressure interlock;
2. Plug type without fuses without high voltage interlock: RC-MSD4-A;
3. Plug type with high voltage interlock without fuse: RC-MSD4-H-A;
4. Influenced by the temperature rise of the fuse itself, the rated working current of the product and the rated current value of the fuse
The recommendations are as follows:

Size

Plug Jack Mated(plate thick is 0.8mm)



Remarks:
Jack tail lock copper row nut defaults to use M8 hexagon without elastic pad, flat padFlange nut, the national standard is GB/T 6177.1-2000.

Special statement:

This series of Jack (Z1) can meet the IP68 protection level alone, only for extreme cases (Plug is not assembled, Plug and Jack are not locked).

Tightening seal failure, etc.) Blocking External Environment Property continues to cause further damage to the subsystem, but it does not mean that jack can work normally without any further processing or repair after suffering from extreme conditions.

Jack

RC-MSD4-Z-H-A-TW
Extensive character
H:HVIL(non-HVIL unmarked)
Z:normal socket, Z1: waterproof socket
Serial code
Product Serial

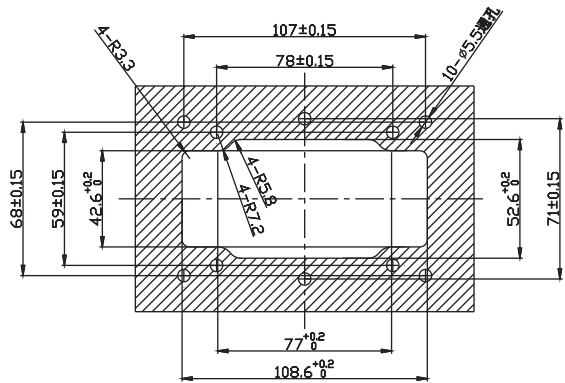
NOTE:

1. Normal socket can't be waterproof alone, waterproof socket meet IP67 level alone, socket has dustproof cover as default.
2. The plug and socket with HVIL together meet function, HVIL is designed together as default.

Item	Rating Current	Fuse rating current	Note
1	250A	630A	This watch is a recommendation consider of a product meeting the case of temperature rise $\geq 55K$ and different rated current valueshow much current can withstand.
2	220~240A	500A	
3	180~220A	400A	
4	150~180A	350A	
5	120~150A	315A	

The selection of the rated current of the fuse needs to be comprehensively evaluated in combination with the following points: the fuse is expected protection mode, line rated working current value, instantaneous current impact value and its impact frequency, wiring specifications, the breaking current is long and long, the time current curve of the fuse, the pre-arc Joule integral value.

Recommended mounting hole dimension



Remarks:It is recommended to install the panel thickness of 0.8mm~1.5mm.