Power Disconnect Device – PDD 5.1

Product Description:

A pyrotechnic igniter drives a piston, which separates the electrical conductor and thus galvanically interrupts the current flow.

Current carrying capability 350A at 85°C
Suitable for voltage levels up to 900VDC
Max current breaking capability up to 20kA
Max. inductive switching capacity 50µH
Non-reversible device; for galvanic disconnection

* Each parameter must be considered independently. Maximum values combination of all parameters is not applicable.

Contact Data

Rated voltage Load current and cut off 900V bi-directional

Busbar (Current Bar)

Contact raw-material:

Copper

Busbar profiles:

A)	Cross-section nominal 60 mm ²
B)	(on request) xx mm ²

Operation Time

Release time < 2 ms (@1.75A) 1.0ms @ 900V / 15000A / 25μH (@1.75A) 1.0ms @ 920V / 16000A / 10μH (@1.75A)

Other Data

IP Class IP52	
Vibration resistance acc. to	LV 124
Mech. Shock resistance acc. to	LV 124
Temperature cycle resistance acc. to	LV 124
High Temp. Endurance acc. to	LV 124
Corrosion Resistance acc. to	LV 124
Chemical loads resistance acc. to	LV 124

Terminal type:

on busbar M6 screw interface VDA-AK 2 unsealed / sealed interface according to ISO 19072

Weight:

220 gr.

Typical Applications:

Battery disconnect to prevent fire caused by short circuits or electrical shock during/after an accident.

Resistance & Insulation Data

Busbar resistance (at 23°C)	
before ops.	< 50 μΩ
after ops.	> 10 MΩ

Temperature Range

Surface temperature max.	+120°C
Environmental temperature	-40°C/ +85°C
Storage temperature	-40°C/ +85°C
Self-ignition	≥ 290°C

Initiator Data

Qualified by AK-LV 16 & USCAR					
Initiator resistance	≥1.7	7 Ω and ≤2.5 Ω			
Initiator resistance after triggering $\geq 100 \Omega$					
All-fire current		≥1.75 A / 0.5 ms			
	or	≥1.20 A / 2.0 ms			
No-fire current		≤0.4 A			
	or	≤5.0 A / ≤4 µs			
Monitor current:		≤160 mA			

Qualification & Logistic

Excluded from Transport Classification 1 Classified as "no dangerous Goods" CE conformity certified in progress DOT conformity Certification



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Product Characteristics

<u>6.8</u>

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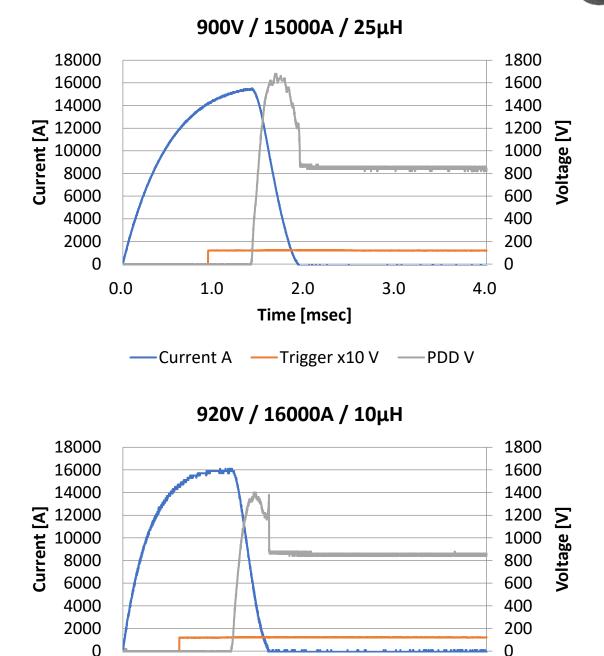
20 ဖ × က Ø6.8 44 68.85 2.3 88 43 80 က



 3×6

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Performance Characteristics : PDD 5.1



2.0

Time [msec]

-Trigger x10 V

3.0

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1.0

Current A

0.0



4.0

-PDD V

