

# **SERIES High Voltage Battery Disconnect**

**300A Continuous Duty** 

**400A Continuous Duty** 

600A Continuous Duty

## **APPLICATIONS**



**Systems** 



Off-Road Vehicles



Marine



**Construction &** Minina

### **FEATURES**

#### HVBD is the next level in battery disconnect technology

- Robust metal-ceramic hermetic seal
- Industry leading dielectric withstand voltage
- High temperature performance
- Ultra-low contact resistance over life
- Ready for harsh environments

Designed for OSHA compliant lockout/tagout (LOTO)

Emergency

Vehicles

- Optional integrated auxiliary contacts
- Patent pending .
- CE compliant

## PERFORMANCE

TABLE 1. SPECIFICATIONS		
CHARACTERISTIC	MEASURE	
Contact Arrangement	Form X, SPST	
Operating Voltage <sup>1</sup>	Up to 1,500VDC (no switching under load)	
Dielectric Withstand Voltage	5,375VDC, 1 minute	
Continuous Current <sup>2</sup>	300A, 400A, or 600A continuous	
Overload Current <sup>2</sup>	See graphs on next page	
Make and Break <sup>1</sup> (400A @ 24VDC)	5,000 cycles	
Voltage Drop (Max at nominal load)	40mV	
Min Insulation Resistance	100Mohm	
Shock, 1/2 Sine, 11ms	25G	
Vibration, Sinusoidal (10-500Hz Peak)	4G	
Vibration, Sinusoidal (500Hz-2000Hz Peak)	20G	
Operating Temperature <sup>2</sup>	-55°C to 85°C	
Ingress Protection (Sealed Contacts)	Exceeds IP69, (Hermetically Sealed)	
Ingress Protection (Housing Feedthrough) <sup>3</sup>	IP67	
Weight	425g	
Case Material	PA GF	
Switch Lever Material	PA GF	
Mounting	100mm   C:C, 2X M8	
Mounting Position	Any	
Auxiliary Contacts	SPDT, 3A Continuous Duty	

<sup>&</sup>lt;sup>1</sup> The HVBD is designed to isolate at voltages up to 1500VDC. The HVBD is not intended for make/break switching above 100V.

<sup>&</sup>lt;sup>2</sup> 170°C max terminal temperature.

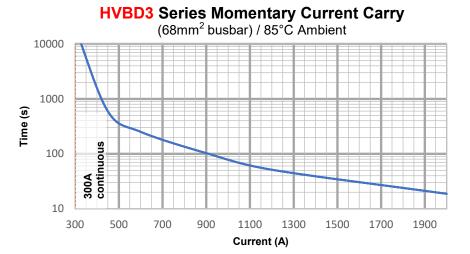
<sup>&</sup>lt;sup>3</sup> Gasket and or RTV required for feedthrough applications where IP67 is required at the housing flange mounting feature.



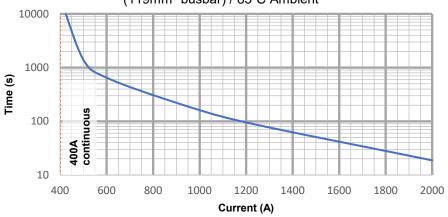
#### **PERFORMANCE** (cont.)

#### **Application Notes**

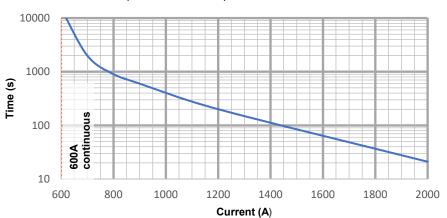
- Current carry @ 85°C Ambient (75°C for 600A version)
- 170°C max terminal temperature
- Graphs provided for design reference; user to verify system temperatures



HVBD4 Series Momentary Current Carry (119mm<sup>2</sup> busbar) / 85°C Ambient







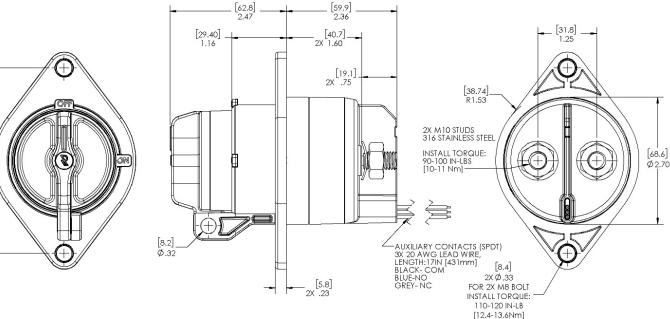
## **OPTIONS**

TABLE 2. PRODUCT NOMENCLATURE					
	CURRENT RATING	MOUNTING	AUXILIARY CONTACTS	HANDLE COLOR	
HVBD	<b>3</b> 300 Amp	A 100 mm C:C	A Included	R Red	
	<b>4</b> 400 Amp			<b>N</b> Reu	
	6 600 Amp		X None	B Black	

#### **Optional SPDT auxiliary switch details**

- Main contacts close before auxiliary contacts when switching from OFF to ON
- Auxiliary contacts open before main contacts when switching from ON to OFF
- IP67 sealed
- Auxiliary contacts rated to (3A @ 12VDC 100k cycles)

# **PRODUCT DIMENSIONS IN. [mm]**



# **AVAILABLE ACCESSORIES**

#### LOTO Padlock

[100]

- Safe operation requires the use of an OSHA certified lockout/tagout (LOTO) padlock to ensure the switch remains in the off position
- Lockout Tagout Padlock Requirements:
  - Shackle DIA: 9/32"
  - Vertical Clearance: 3/4"
  - Horizontal Clearance: 5/8"
- Contact Rincon Power for OSHA certified lockout tagout padlock

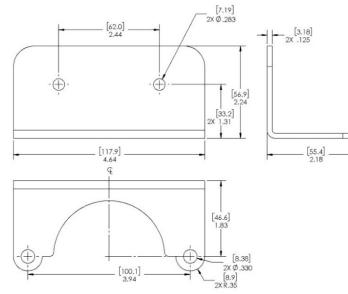


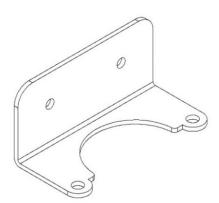


# AVAILABLE ACCESSORIES (cont.)

# **RP2099 Mounting Bracket**

Allows for 90-degree mounting





## **RP2127 Mounting Gasket**

