

HVBD SERIES

High Voltage Battery Disconnect

300A, 400A, 600A
CONTINUOUS DUTY
1500VDC
SYSTEM VOLTAGE



APPLICATIONS



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

PERFORMANCE

TABLE 1. SPECIFICATIONS	
CHARACTERISTIC	MEASURE
Contact Arrangement	Form X, SPST
Operating Voltage ¹	Up to 1500VDC (no switching under load)
Dielectric Withstand Voltage	5,375VDC, 1 minute
Continuous Current ²	300A, 400A, or 600A continuous
Overload Current ²	See graphs on next page
Make and Break ¹ (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 ²	-55°C to 85°C
Ingress Protection (Sealed Contacts)	Exceeds IP69, (Hermetically Sealed)
Ingress Protection (Housing Feedthrough) ³	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

¹ The HVBD is designed to isolate at voltages up to 1500VDC. The HVBD is not intended for make/break switching above 100V.

² 170°C max terminal temperature.

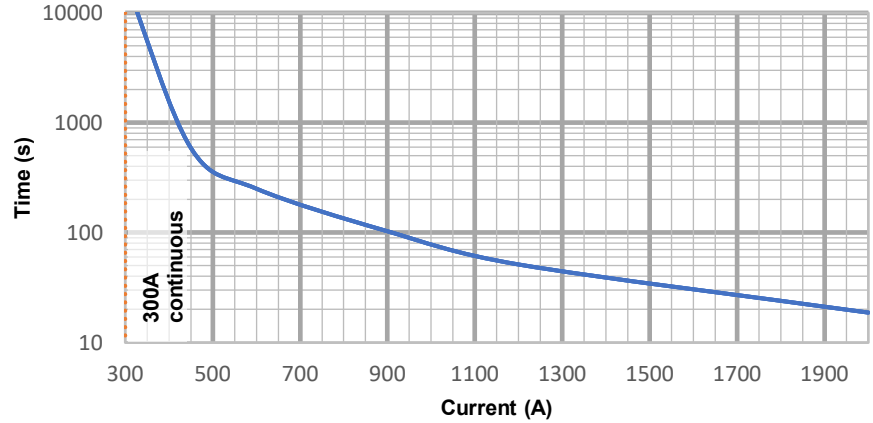
³ Gasket and or RTV required for feedthrough applications where IP67 is required at the housing flange mounting feature.

PERFORMANCE (cont.)

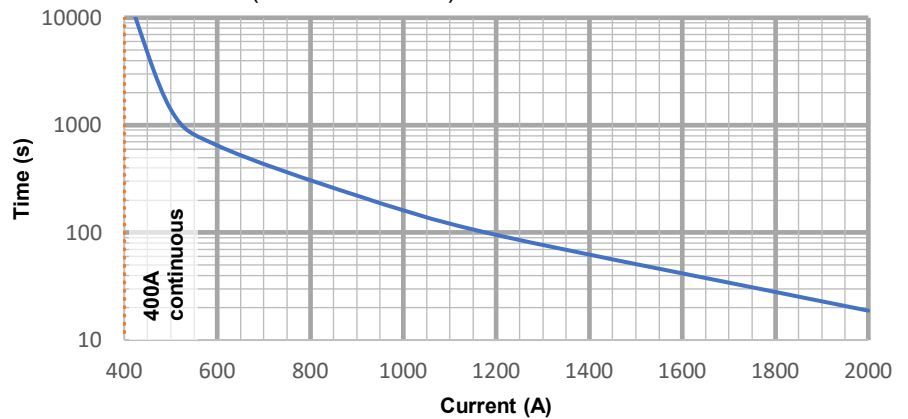
Application Notes

- 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

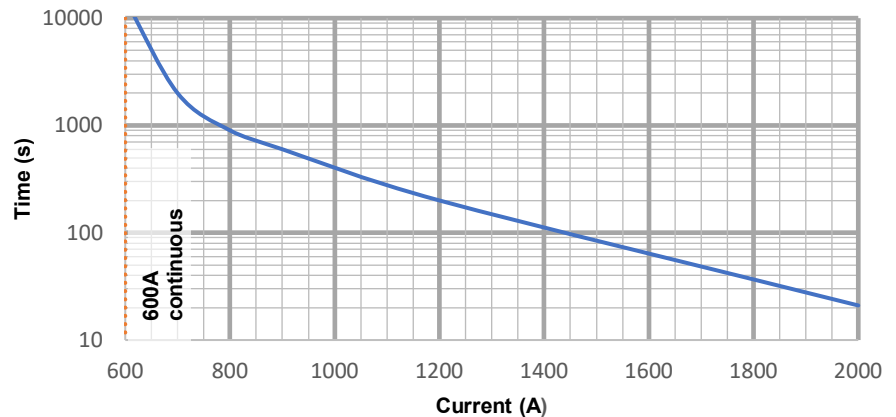
HVBD3 Series Momentary Current Carry
(68mm² busbar) / 85°C Ambient



HVBD4 Series Momentary Current Carry
(119mm² busbar) / 85°C Ambient



HVBD6 Series Momentary Current Carry
(250mm² busbar) / 75° C Ambient



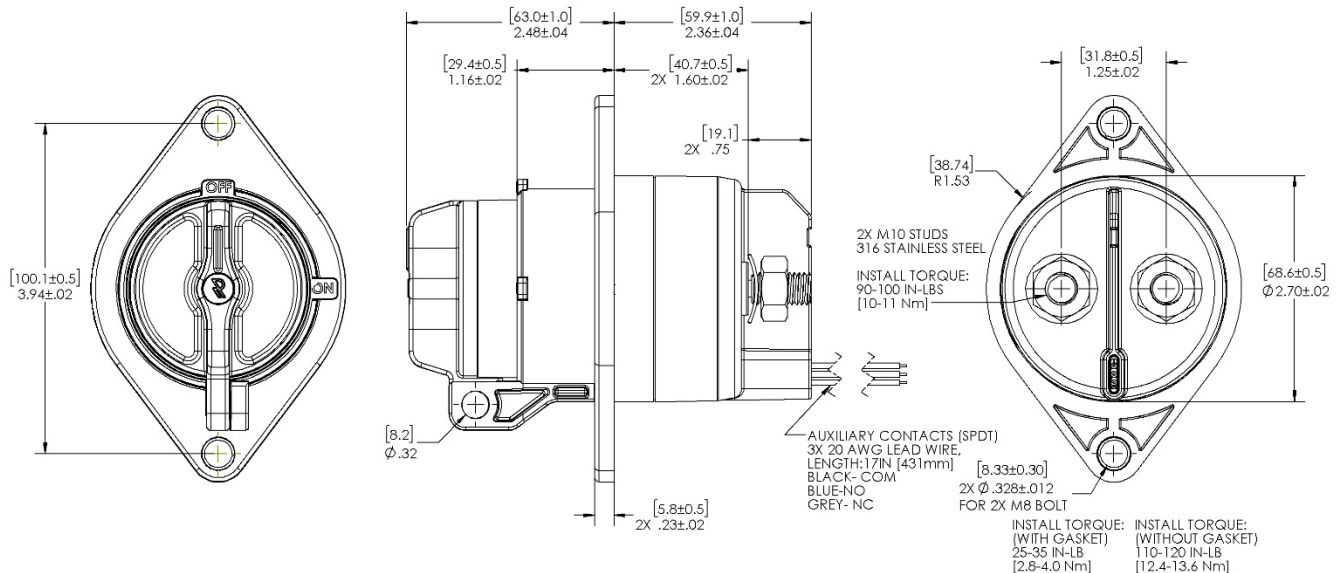
OPTIONS

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

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

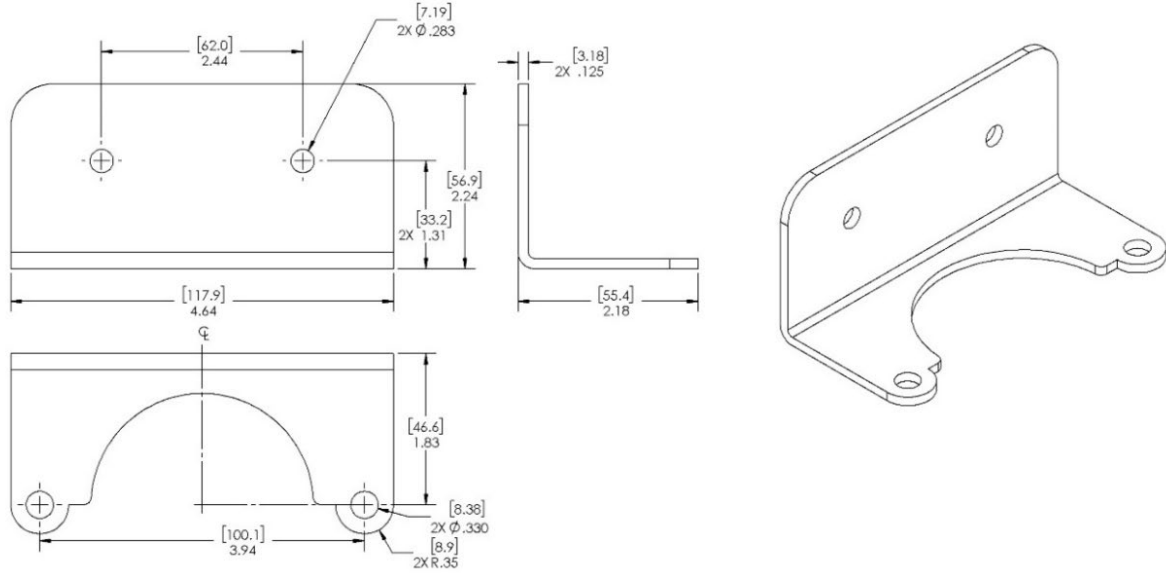
- Safe operation requires the use of an OSHA certified lockout/tagout (LOTO) padlock to ensure the switch remains in the off position
- Lockout Tagout Padlock Requirements:
 - Shackle DIA: 9/32"
 - Vertical Clearance: 3/4"
 - Horizontal Clearance: 5/8"
- Contact Rincon Power for OSHA certified lockout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



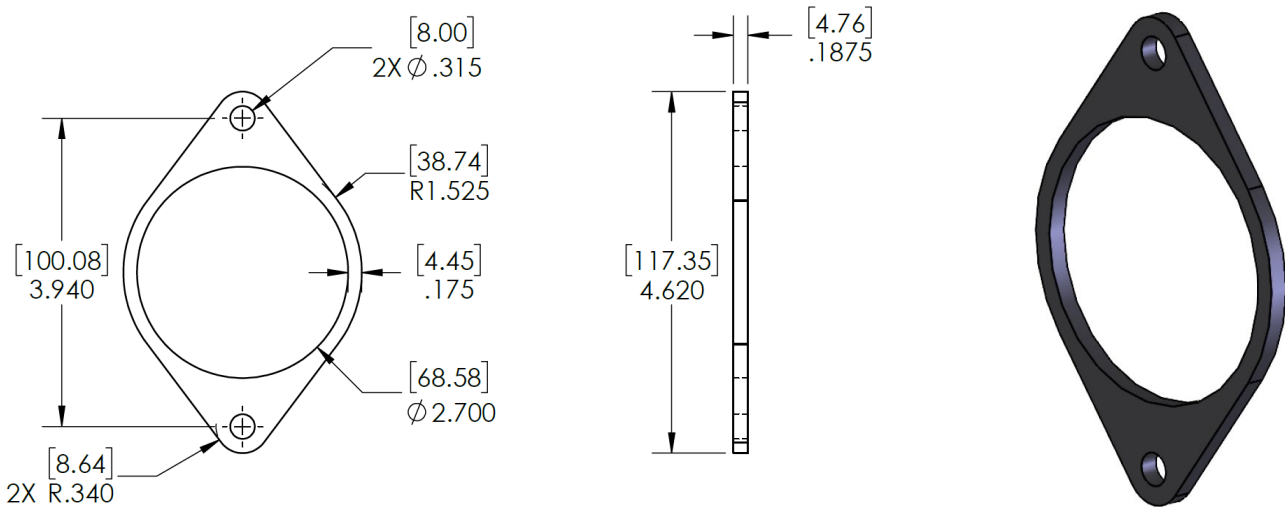
AVAILABLE ACCESSORIES (cont.)

RP2099 Mounting Bracket

- Allows for 90-degree mounting



RP2127 Mounting Gasket



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