

HVBD SERIES

High Voltage Battery Disconnect

300A Continuous Duty

400A Continuous Duty

600A Continuous Duty



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 1,000VDC (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.

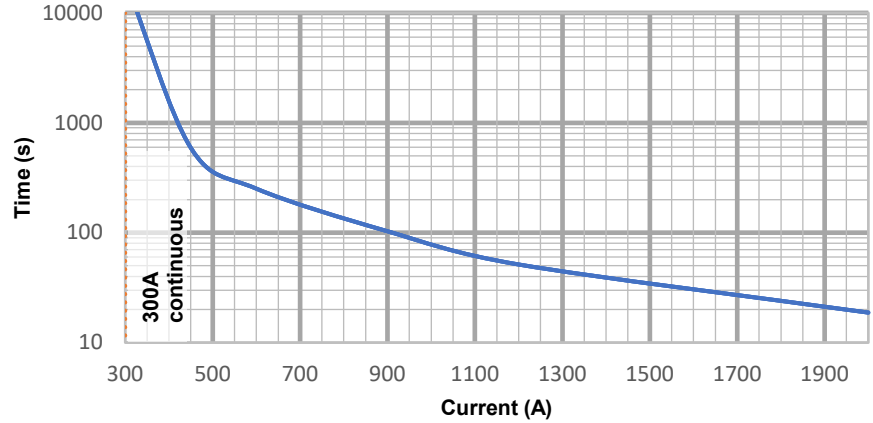
³ Gasket and or RTV required for feedthrough applications where IP67 is required at the housing flange mounting feature.

PERFORMANCE (cont.)

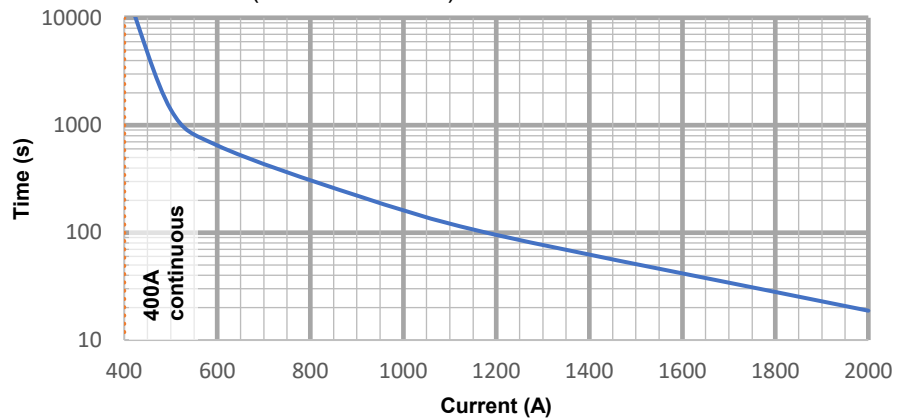
Application Notes

- 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

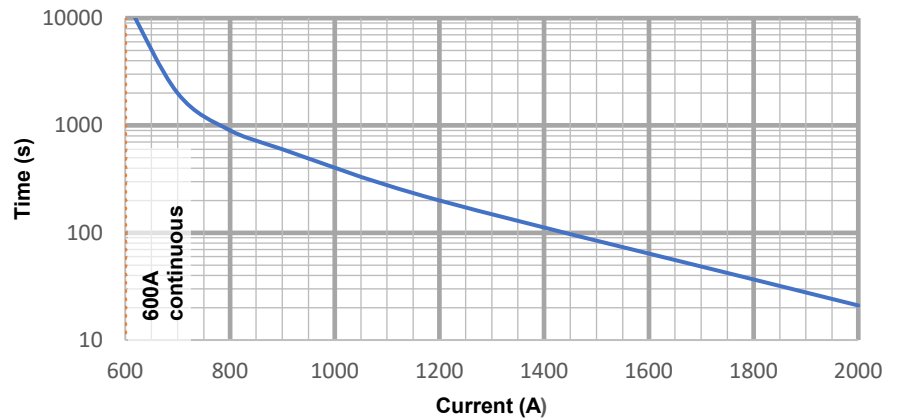
HVBD3 Series Momentary Current Carry
(68mm² busbar) / 85°C Ambient



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



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



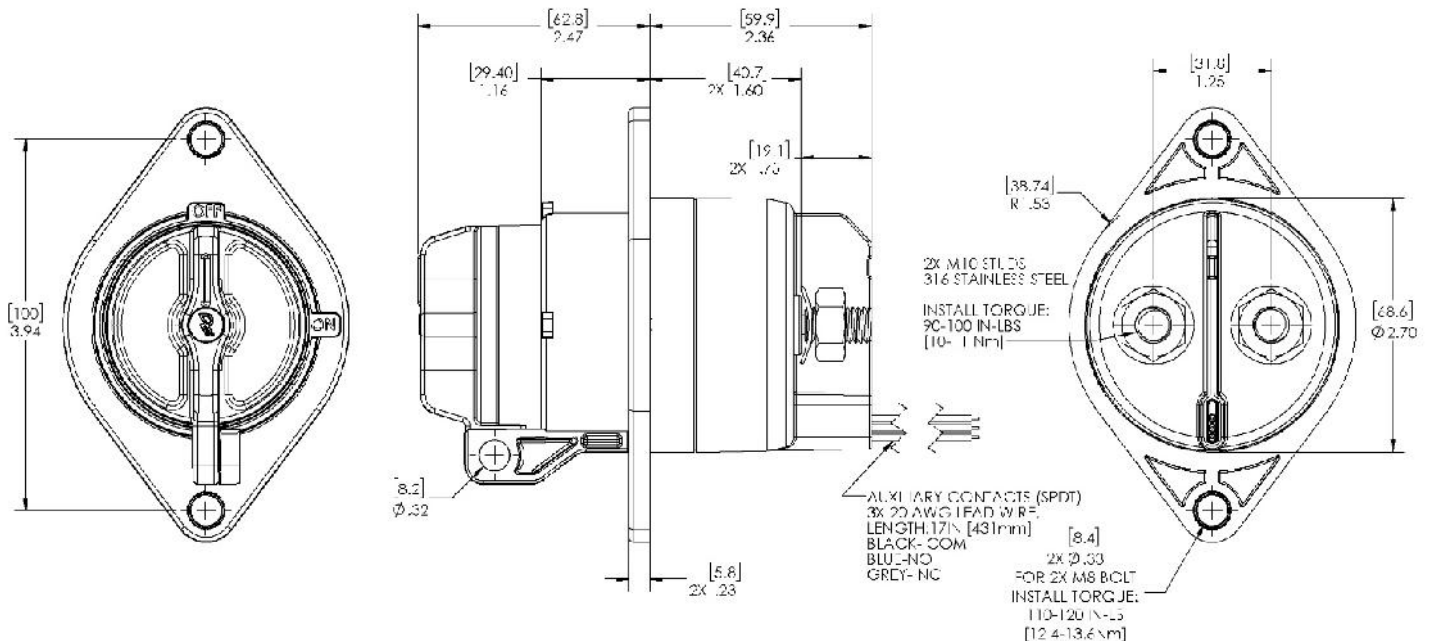
OPTIONS

| 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 | | X None | B Black |
| | 6 600 Amp | | | |

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

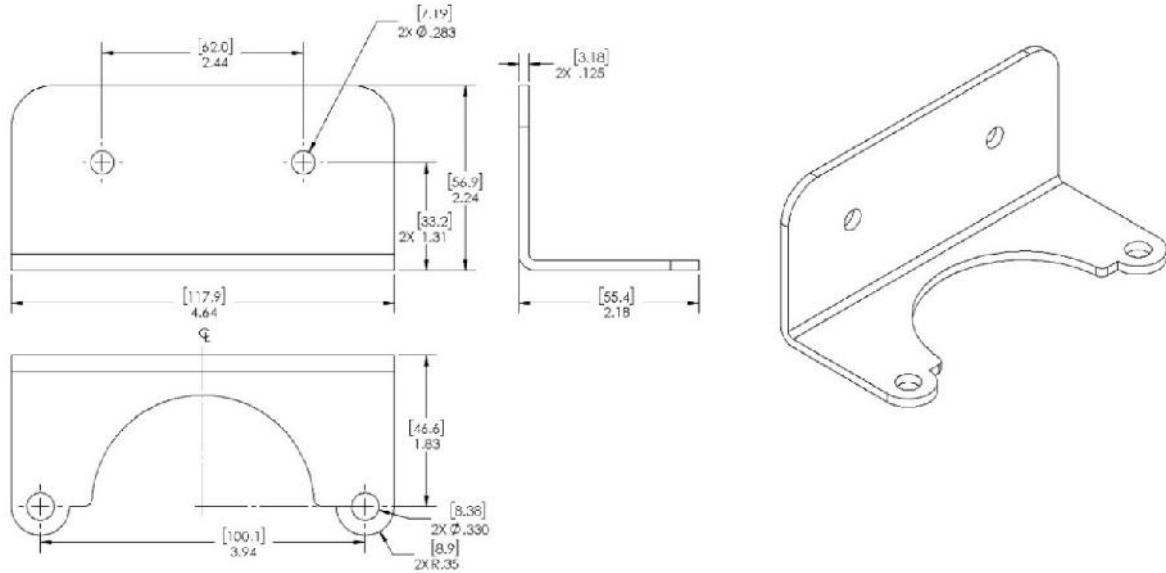
- Safe operation requires the use of an OSHA certified lockout/tagout (LOTO) padlock to ensure the switch remains in the off position
- Lockout Tagout Padlock Requirements:
 - Shackle DIA: 9/32"
 - Vertical Clearance: 3/4"
 - Horizontal Clearance: 5/8"
- Contact Rincon Power for OSHA certified lockout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



AVAILABLE ACCESSORIES (cont.)

RP2099 Mounting Bracket

- Allows for 90-degree mounting



RP2127 Mounting Gasket

