# BullDog///

### Setting a Higher Standard for ADA Push Buttons

Let the BullDog III take a BITE out of your Pushbutton Maintenance costs!

With budget & personnel cuts, how much are your old "Micro-Switch" buttons costing you in time and maintenance costs?
Cost/benefit analysis proves value!

### Meets or Exceeds the Following Standards:

- ADA, MUTCD and TAC
- NEMA TS2, TS4 (Reliability) and 250 6P
- GR-1089 CORE
- FCC part 15



## **BullDog**

- Easy to Activate,
   Difficult to Destroy
- Tested to 300 Million Activations
- Improved and Proven Technology

## 5 Year Warranty!

- Transient protection that meets and exceeds NEMA specifications. Independent lab tested and certified!
- Activated with less than 2 lbs force
- Withstands severe impacts from Skate Boards, Baseball Bats, Hockey Sticks etc...
- Provides two tone audible confirmation as well as visual confirmation.
- Cannot be jammed or stuck on
- Wind, Hail, Vibration have no negative effects. Requires push action to activate.
- Superior grade pre-treatment and Powder coat. Independently lab tested to NEMA 250-6P.
- 316 Marine grade Stainless Steel plunger Competition uses lesser/cheaper grades.

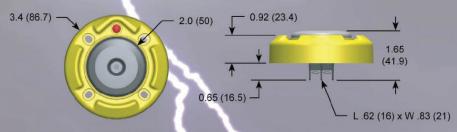
Don't Take Chances with Unproven, Untested Product!

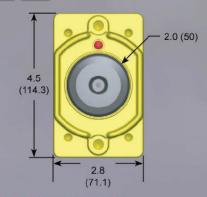


Warlin Controls Inc.

**Mechanical Outlines** 

# BullDog ///





#### **Operating Specifications**

Parameter	Rating	
Operating Modes	Momentary and Latching LED	
Backwards Compatible	Full compatibility with BDLM2 and BDLL2 series products	
Operating Temperature Range	-34C to +74C (-29°F to +165°F)	
Operating Voltage Range	12-36 VDC, 9-25 VAC RMS (18 VDC Typical)	
Operating Force	2.0 lbs Maximum	
MTBF	8,800,000 hours Typical	
Switch Operating Life	Greater than 300 Million Operations	
"Off" Current	15 microamperes Typical	
"On" Resistance	85 ohms Typical (Momentary)	
Maximum "On" Current	250 milliamperes (over current protection) Typical	
Minimum "On" Time	240 milliseconds Typical	
Maximum "On" Time	11 seconds Typical	
Debounce Time	85 milliseconds Typical	
Luminous Intensity	0.3 Lux @ 1 meter Minimum (Red)	
Viewing Angle	155° Typical	
LED Flash	Press – 25 milliseconds Typical (Momentary Mode)	
Beeper Volume	68 dB @ 1 meter Typical	
Beeper Tones	Press - 2.6 kHz, Release 2.3 kHz 50 milliseconds Typical	

### **Design Compliance**

Test Type	Compliance	
Activation Force	MUTCD 2009 - 4E	
Temperature and Humidity	NEMA TS 2	
Transient Voltage Protection	NEMA TS 2	
Transient Suppression	IEC 61000-4-4, IEC 6100-4-5	
Lightning and Power Protection	GR-1089-CORE, Extended to 6000V-400A, 25 reps, 120VAC-15 mins.	
Electronic Noise	FCC Title 47, Part 15, Class A	
Mechanical Shock and Vibration	NEMA TS 2	
Ingress of Water	NEMA 250 - 6P, Rain, Snow, etc.	
Ingress of Water	NEMA 250 – 6P, Submersion	
Salt Spray and Corrosion	NEMA 250 - 6P	
Ingress of Foreign Objects	NEMA 250 – 6P	
Electrical Reliability	NEMA TS 4	

Note: Applicable sections only of referenced standards.

#### For operation in Latching Mode the BullDog-3 requires either a PBCU or an LPBCU controller



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PBUC Controller

- Fully MUTCD-2009 4E compliant for Latching and Momentary operation
- · Full type 242 functionally
- Use one PBCU in place of two type 242 card slots, or two detector card slots
- Will disable BDL3's during Flashing mode (no beeps, LED flashes, or calls)
- Control up to 16 BullDog buttons, maximum of four per phase
- A two card slot replacement for the LPBCU
- Failsafe operation: places a constant call on all four phases in event of an internal failure
- Each phase has dedicated front panel LED's and push button switches which provide service technicians full diagnostic capabilities
- WALK OPTION: In Latching Mode, the BullDogs will place a call during the WALK INTERVAL
- NEMA TS 2 Certification via independent laboratory



LPBCU Controller

LPBCU is a shelf mount control unit. Use if card slots are not available. Refer to website for specifications. Mounting accessories available - Refer to website.

### **Product Information**

Model Number	Style	Color
BDL3-B BDL3-G	Round	Black Green
BDL3-Y	Round	Yellow
RBDL3-B	Rectangular	Black
RBDL3-G	No pre-drilled	Green
RBDL3-Y	Holes	Yellow
RBDL3-B-2H	Rectangular	Black
RBDL3-G-2H	2 Mounting	Green
RBDL3-Y-2H	Holes	Yellow
RBDL3-B-4H	Rectangular	Black
RBDL3-G-4H	4 Mounting	Green
RBDL3-Y-4H	Holes	Yellow

