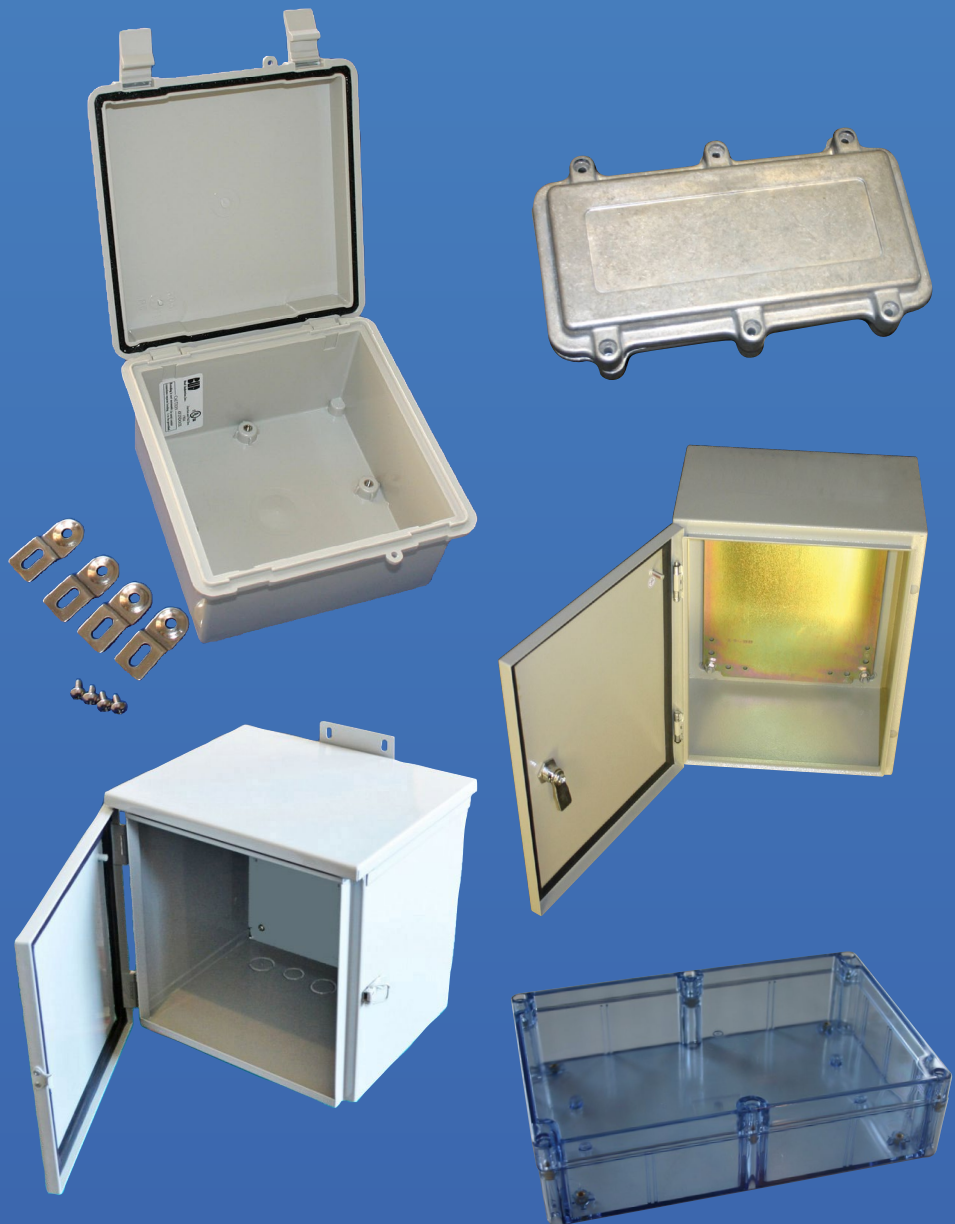


Bud Industries, Inc.

ENCLOSURES *Right Now, Right Price.*

NEMA Catalog



From steel to aluminum, plastic to fiberglass, the Bud line of NEMA enclosures is affordably priced and available fast, with many enclosures shipping on the same day they are ordered.

440-946-3200 • www.budind.com



Screw-Down Plastic Enclosures

Our plastic NEMA boxes feature some of our best-selling enclosures that provide superior moisture protection for sensitive electronics. The BT Series offers the first completely transparent NEMA 4X enclosure in the industry, allow inspection and indication without the need to open the cover.

Series: PN, PNR, BT

Sizes: 2.56" × 2.28" × 1.38" to 11.81" × 9.06" × 3.39"

Material: ABS, polycarbonate, and other plastic

Features: NEMA 1, 2, 4, 4X, 12, and 13 protection with screw-down covers. The PN Series boxes come with clear or opaque covers. Covers for the PNR Series feature a recessed area. Wall-mount brackets are optional. Most have guides or bosses for mounting PCBs.



See video on polycarbonate NEMA boxes.

<http://bit.ly/BudNEMAPlastic>



Hinged Plastic Enclosures

See more styles at
www.budind.com/sealed_plastic.php

Our plastic NEMA enclosures with hinged covers provide a tight seal yet convenient access. They are ideal for wet, dirty and corrosive environments. Choose from a wide variety of options, including a choice of materials and opaque or see-through covers.

Series: NBA, NBB, NBC, NBD, NBF, NBE

Sizes: 5.11" × 3.93" × 2.75" to 32.05" × 24.18" × 11"

Material: ABS, polycarbonate, and other plastic

Features: In addition to NEMA 1, 4, and 4X ratings, most of these enclosures are also rated to IP66. All-plastic construction (including hinges and latches). Most of these enclosures come with your choice of clear or opaque covers, as well as indoor or outdoor versions.



Polycarbonate 10% Glass-Fiber Filled Boxes

Made with polycarbonate plastic that is 10% glass-fiber filled, these enclosures offer tight tolerances, impact resistance, and a smooth finish. They are rated IP67 and meet UL 508/ NEMA 1, 2, 4, and 4X type 6 specifications. The PIP Series features a screw-down cover, while the PTQ Series features a hinged cover, latches, and optional clear polycarbonate plastic cover.

Series: PIP, PTQ

Sizes: 5.118" × 3.15" × 1.378" to 24.8" × 20.87" × 10.04"

Material: Polycarbonate plastic 10% glass-fiber filled

Features: Suitable for outdoor use with respect to ultraviolet light, water exposure and immersion in accordance with UL 746C. UL industrial controls and CE Low Voltage directive 2006/95/ EC listed. Non-chlorinated and non-brominated flame retardant with UL-94 V0 (for PIP) or UL-94 5VA (for PTQ) rating. Covers made of polycarbonate plastic.



See video on PIP Series NEMA enclosures.

<http://bit.ly/1Gjk9ZZ>



Die-Cast Enclosures

See more styles at www.budind.com/NEMAalum

These boxes offer NEMA 1, 2, 4, 4X, 12, and 13 protection and give electronics superior protection from atmospheric and marine corrosion. Some even meet IP67 submersible ratings. Options for Bud's line of aluminum NEMA 4 enclosures include mounting brackets, hinged covers, and EMI/RFI shielding. They are offered with a natural finish or powder coated.

Series: AN, CN, ANS, IPS

Sizes: 3.54" × 1.42" × 1.18" to 9.85" × 9.85" × 4.01"

Material: ADC-12 die-cast aluminum alloy

Features: Covers incorporate a recessed gasket on AN and CN enclosures. The AN Series offers mounting bosses and card guides while the CN offers only card guides. The ANS Series provides NEMA and EMI/RFI shielding.



See video on IP67 Enclosures.

<http://bit.ly/BudIP67>



Sheet Metal Enclosures

See more styles at www.budind.com/sealed_sheet_metal.php

These NEMA enclosures are ideal for a wide variety of applications ranging from industrial equipment to medical devices. Options include stainless steel for harsh environments.

Series: Steel NEMA Boxes (SN, SNB, SNC), stainless-steel NEMA Boxes (SNB-SS), Junction Boxes (JB)

Sizes: Steel NEMA Series: 6" × 4" × 3" to 24" × 24" × 10"
Junction Boxes: 4" × 4" × 3" to 10" × 10" × 6"

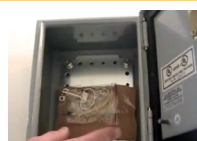
Material: 14 ga. steel (SN, SPB), 16 ga. steel (JB, SNB, SNC), 304 stainless steel (SNB-SS)

Features: The SN, SNB, and SNC offer NEMA 1, 2, 4, 4X, 12, and 13 protection. These series offer various locking mechanisms from clamps (SN) to a unique tool lock (SNB) to screw-down covers (SNC). SN, SNB, and SNC have bonding studs and wall mounting provisions. Junction Boxes are available with a NEMA 1 protection rating and come with or without knockouts.



See video on Stainless Steel Enclosures.

<http://bit.ly/BudStainless>



See video on SNB and SNC NEMA Enclosures.

<http://bit.ly/BudSNB-SNC>



See video on SN Series Enclosures.

<http://bit.ly/BudSNSeries>



Fiberglass Enclosures

Our fiberglass line offers low-cost chemical-resistant protection to be used in all types of industrial applications. These are used in washdown environments, terminal wiring applications, control housings, and junction box applications.

Series: NF, NFL

Sizes: 7.75" × 7.75" × 4.80" to 15.78" × 13.90" × 6.80"

Material: Fiberglass

Features: NEMA 1, 2, 4, 4X, 12, and 13 protection. The NF Series uses two captive stainless-steel screws to lock. The NFL has a quick-release stainless steel latch. Both have a hinged cover and a light gray finish and include a removable 14 ga. powder-coated steel inner panel.



See video on fiberglass enclosures.

<http://bit.ly/BudFiber>



Tablet Enclosures

These NEMA tablet enclosures are designed for 4.3", 5.7", 7.0", 8.4" and 10.4" LCD- or touch-screen displays. They are ideal for portable, desktop, or wall-mounted electronic applications. A silicon sponge gasket is included to meet IP65 rating of waterproof and dust resistance.

Series: TBG

Sizes: 5.512" × 3.97" × 1.181" to 12.677" × 9.134" × 1.181"

Material: ABS plastic

Features: Made of high impact ABS plastic, which is flame retardant to both UL94-V0 and UL94-HB, and offered in black or white colors. Lid and base incorporate a tongue and groove sealing design.



Push Button Boxes

Our NEMA-rated push button boxes have gasketed covers to seal out dust, water and oil. Choose from sturdy steel or cost-effective plastic. They come with machined cut-outs designed to fit one to four 22.5-mm or 30.5-mm push buttons.

Series: SPB, PBB

Sizes: 3.5" × 2.5" × 2.75" to 10.25" × 3.25" × 2.75"

Material: 14 gauge steel, polycarbonate plastic/polycarbonate 10% fiber filled

Features: Steel boxes are made of heavy-duty 14-gauge steel and welded seams. Plastic boxes are made of polycarbonate 10% glass-fiber filled (cover made of polycarbonate). Steel box has oil resistant gasket to achieve NEMA and UL-508A Type 4, 12 and 13 ratings. Plastic box uses continuous gasket to achieve IP-67, as well as NEMA 4X and 6 ratings. Both are suitable for outside use.



NEMA 3R Boxes

These powder-coated galvanized steel boxes provide excellent corrosion protection. They meet NEMA 1, NEMA 3R and UL-50 ratings, making them well suited for a variety of outdoor applications. External mounting brackets allow installation on vertical surfaces without the need to open the cover and expose internal components.

Series: N3R

Sizes: 6" x 4" x 4" to 13" x 12" x 10.25"

Material: Galvanized steel

Features: Provides protection against rain, sleet, snow and dripping water. Heavy-duty 16-gauge galvanized steel with spot welded construction. Drip-shielded top and seam-free sides, back and front. Hinged cover with weather-resistant Neoprene gasket and padlockable latch. Knockouts on bottom for standard conduit sizes.



See video on NEMA 3R enclosures.

<http://bit.ly/1K70aeT>



Accessories

Bud offers a full line of accessories for NEMA enclosures and electronics cabinets, including vents, cable glands, mounting panels, pole mount brackets, and locks.

Series: IPV, MPG, IPG, HPG, PIX, NBX, PBM

See more styles at
www.budind.com/accessories.php

Guide to Common NEMA Ratings

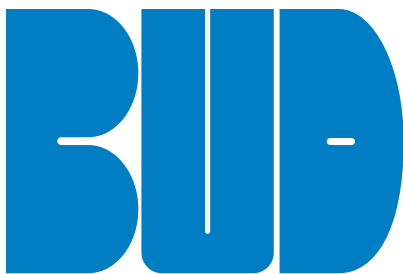
The National Electrical Manufacturers Association created NEMA ratings in order to provide a common set of standards for enclosure design and selection. They define the level of protection that an enclosure will provide. Many enclosures are specified incorrectly, resulting in either inadequate protection or overkill protection that increases cost unnecessarily.

- NEMA 1:** The enclosure protects against falling dirt and incidental contact with the internal equipment. This is a basic level of protection; it mostly prevents fingers from entering the enclosure.
- NEMA 3R:** Provides protection from falling dirt plus rain, snow, and sleet. NEMA 3R enclosures may be ventilated. They do not protect against windblown dust.
- NEMA 4:** Protects internal components from windblown dust, as well as rain, sleet, and snow. It also protects against hose directed water (washdown).
- NEMA 4X:** Protects internal components from windblown dust, as well as rain, sleet, and snow. It also protects against hose directed water (washdown), and corrosion.
- NEMA 6:** Protects internal components from windblown dust, hose-directed water (washdown) and temporary submersion, as well as rain, sleet, and snow.
- NEMA 12:** The most misunderstood rating. It provides protection against falling dirt, circulating dust, and dripping and lightly splashing water. It also protects against seeping and splashing oil and coolant. For indoor use only.
- NEMA 13:** Provides protection against falling dirt, circulating dust, and dripping and lightly splashing water. It also protects against seeping, splashing and spraying oil and coolant. For indoor use only.

Guide to Common IP Ratings

IP ratings are described by IEC Publication 60529. They serve the same function as NEMA enclosure ratings, but as the conditions tested are slightly different, the two ratings systems cannot be equated.

- IP65** Protection from total dust ingress and low pressure water jets from any direction.
- IP66** Protection from total dust ingress and high pressure water jets from any direction.
- IP67** Protection from total dust ingress and immersion between 15 centimeters and 1 meter in depth.
- IP68** Protection from total dust ingress and long term immersion up to a specified pressure.



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At Bud, Custom Enclosures Are Standard

Complete Design Support

Let our experts help you develop the most cost-effective solution to your special design needs. Download drawings from our webpage to modify, and then email them back to us at saleseast@budind.com.

Creating Unique Designs to Meet Your Specific Needs

Our state-of-the-art production means low tooling costs and rapid production of custom products with the ability to modify dimensions or colors on any of our standard products.

Modifying a Standard Product

Modifications include adding holes, slots and other cutouts for rapid installation of your equipment.

Mounting Accessories to Provide Turnkey Solutions

We speed your installation process by adding shelves, power outlet strips, fans or any accessory at the factory.



See video on Custom Enclosures.

<http://bit.ly/BudCustom>