

APX Rack Mount Enclosure – NEMA 3R

Specification Sheet

I. General

A. The purpose of this specification is to provide details of an enclosure that protects internal equipment from rain, dust, vandalism and other conditions found in an outdoor or otherwise harsh environment.

B. The manufacturer must be able, upon request, to produce part numbers on all components for repair purposes. Certificates of compliance may be requested on each cabinet or on any component or part thereof.

II. Performance

A. The enclosure(s) will meet or exceed the requirements of a NEMA 3R rating and will be UL Listed.

III. Cabinet Construction

A. General

1. The cabinet and door will be constructed from 5052-H32 sheet aluminum alloy which has a thickness of 0.125". Alternate material is type 304 stainless steel, minimum thickness 14 gauge. Specifier must choose either aluminum or stainless steel construction. External welds will be made by using the Heliarc welding method; whereas, internal welds will be made by the wire welding method. All welds will be neatly formed and free of cracks, blow holes and other irregularities.

2. All inside and outside edges of the cabinet will be free of burrs.

3. The cabinet will be designed with a crowned top to prevent the accumulation of water on its top surface.

4. The door opening will be double flanged on all four (4) sides. Flanges increase strength around opening and keep dirt and liquids from entering the enclosure when the door is open.

5. A door restraint will be provided to prevent door movement in windy conditions.

B. Door/Hardware

1. The cabinet door will be a minimum of 80% of the front surface area and will be hinged on the same side when facing the cabinet.

a) The doors will be furnished with a gasket that satisfies the physical properties as found in UL 508, and will form a weather-tight seal between the cabinet and door.

b) The closed door will be flush with the side of the enclosure.

2. The hinges will be bolted to the cabinet and door utilizing ¼-20 stainless steel carriage bolts and nylock nuts.

a) The hinges will be made of 0.075" stainless steel with a 0.250" diameter stainless steel hinge pin.

b) The hinge pin will be capped top and bottom by weld to render it tamperproof.

3. The latching mechanism will be a 3-point draw roller type.

a) Pushrods will be turned edgewise at the outward supports and will be 0.250" by 0.750" aluminum, minimum.

b) Rollers will have a minimum diameter of 0.875" and will be made of nylon. The center catch will be fabricated from 0.187 aluminum, minimum.

4. An operating handle will be furnished.

a) The handle will be stainless steel with a ¾" diameter shank.

b) The latching handles will have a provision for padlocking in the closed position.

c) The lock will be keyed dead bolt #200725 or equivalent. Two (2) keys will be furnished with each lock.

5. A light/alarm switch bracket will be provided.

C. Switch Compartment (Optional)

1. A switch compartment with a removable back panel is supplied on the enclosure.

a) The door will be furnished with a gasket that satisfies the physical properties as found in UL 508, and will form a weather-tight seal between the cabinet and door.

2. The switch compartment door lock is a keyed slam latch #200698, or equal, and has a keyhole cover.

3. The switch compartment door hinge is 0.063" stainless steel with a 0.120" diameter stainless steel hinge pin.

IV. Cabinet Ventilation

A. A cabinet requiring ventilation will be provided with louvered vents in the front door with a removable air filter.

1. Louvers will satisfy the NEMA rod entry test for 3R ventilated enclosures.
2. The filter will cover the vents and will be held firmly in place with bottom and top brackets, as well as a spring-loaded upper clamp.
3. Exhaust air will be vented out the top of the cabinet and door.
 - a) The exhaust area will be screened with a material having a maximum hole diameter of 0.125".
4. The ventilation plenum area will be equipped with a removable plate with provisions for mounting an optional fan assembly.

B. The ventilation system will be designed to handle a minimum of 100 cubic feet or air per minute.

V. Equipment Mounting

A. The enclosure will be equipped with mounting brackets that accommodate the mounting of a 19" rack frame assembly.

VI. Cabinet Finish

A. Unless otherwise specified, the outside surface of the cabinet will have a smooth, uniform, natural aluminum finish.

B. If painted, the following steps will be taken as a minimum requirement:

1. The cabinet, door and any other parts to be painted will be treated with an iron phosphate coating conversion technique.
2. After phosphatizing, the parts will be baked to eliminate any moisture in seams.
3. The finished coat of a polyester powder will be baked for ten (10) minutes at 400-450° F.
4. The finish will be commercially smooth, substantially free of flow lines, paint washout, streaks, blisters and other defects that would impair serviceability or detract from general appearance.

VII. Cabinet Mounting

A. Pole Mounted Enclosure

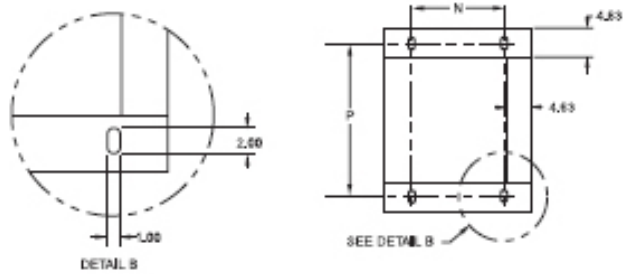
1. Enclosures intended for pole mounting will be provided with 0.125" thick aluminum stiffener plates, welded to the top and bottom of the side wall for added strength and rigidity.

B. Pedestal Mounted Enclosure

1. Enclosures intended for pedestal mounting will be provided with a reinforced base plate.

C. Pad Mounted Enclosure

1. Enclosures intended for pad mounting will be construed with the following pattern:



VIII. Approved Manufacturer

A. Cabinet is to be manufactured by APX Enclosures, Inc. or an approved UL Listed equivalent.

APX Enclosures, Inc.