SIEMENS

Installation Instructions
Document No. 553-130
January 18, 2023

19” and 34” PX Series Enclosure Assemblies

Product Description

The 19” and 34” PX series enclosures (see Figure 1 and Figure 2) are UL Smoke Control listed for indoor use to:

- provide a degree of protection to personnel against incidental contact with the enclosed Siemens Building Control devices
- provide a degree of protection for those devices against falling dirt

The 19” and 34” PX series enclosures are factory-equipped with the following:

- Factory-installed backplane assembly, which includes wire tie down rails and DIN rails
- Mounting features for PX series service box
- Removable hinged door with key lock and label pouch
- Conduit knockouts and venting

The 19” and 34” PX series enclosures, when installed per this instruction, are certified to comply with IBC 2009 and CBC 2010 and may be used with following List of Equipment/Components with HCAI Special Seismic Certification Preapproval (OSP)

- OSP-217 and OSP-218

Product Numbers

PXA-ENC34 34” PX Series Enclosure Assembly

PXA-ENC19 19” PX Series Enclosure Assembly

See Figures 4 and 5 for enclosure dimensions.

Caution Notation

CAUTION:		Equipment damage or loss of data may occur if you do not follow the procedure as specified.

Expected Installation Time

30 minutes

Required Tools and Materials

- Adjustable wrench or pliers
- Electric drill
- Punch
- Hammer
- Level
- Marker
- Screwdrivers, small and medium Phillips
- Tape measure
- Tie-wraps
- Wire stripper/side cutters
- Four corrosion resistant 1/4” - 20 Bolts, flat washers and nuts

To mount on concrete or masonry:

- Hammer drill
- 1/2 inch carbide tipped masonry bit
- Four 1/4-20 corrosion resistant wall anchors

Prerequisites

CAUTION:

Do not mount the enclosure on ductwork, HVAC components, or any other vibrating surface.

- Mount the enclosure at least 12 feet (3.7 m) away from devices that can generate Radio Frequency Interference (RFI), such as Electro-pneumatic devices (EPs), relays, and walkie-talkies.
- Mount the enclosure at least 5 feet (1.5 m) away from 100 kVa or larger motors and variable frequency drives (VFD).

CAUTION:

Anchorage is not preapproved for Seismic Certification and must be approved by the Inspector of Record before installation.

Seismic Certification Preapproval requires:

- Installed Equipment is listed in OSP.
- Enclosures are non-isolated wall mounted using four 1/4” minimum diameter bolts.
- Enclosure assembly certification includes enclosure with door, service box, installed equipment and wiring.
- Total assembly weight not to exceed 50 lbs. for 19” enclosure assembly or 100 lbs. for 34” enclosure assembly.
- Center of gravity is located from origin at enclosure lower left mounting hole to 9 x 8 x 2 inches for 19” assembly or 10 x 16 x 2.5 inches for 34” assembly. Variance due to installed components is < 10%.
- DIN Rails mounted on backplane using three supplied screws each.
- Listed equipment not capable of being installed on DIN rails may be fastened to the backplane with supplied screws.
- Listed communication devices may be fastened to enclosure or backplane and power packs to outlet with 3M® Dual Lock® Reclosable Fasteners SJ3560 (Type 250). Use two pair for devices and one pair for power packs. Minimum 1” square per 2 lbs.

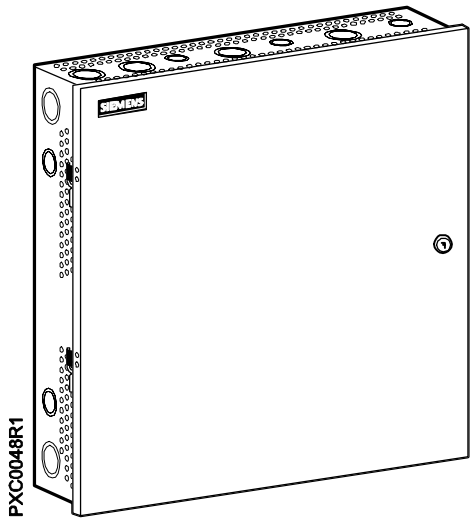

Figure 1. 19” PX Series Enclosure Assembly.

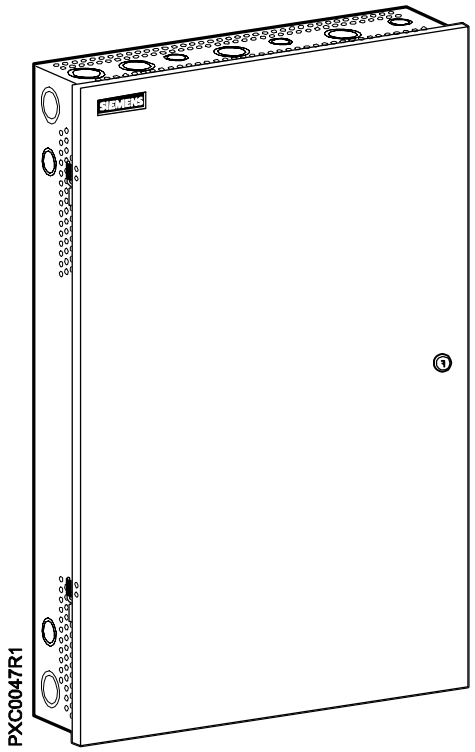

Figure 2. 34” PX Series Enclosure Assembly.

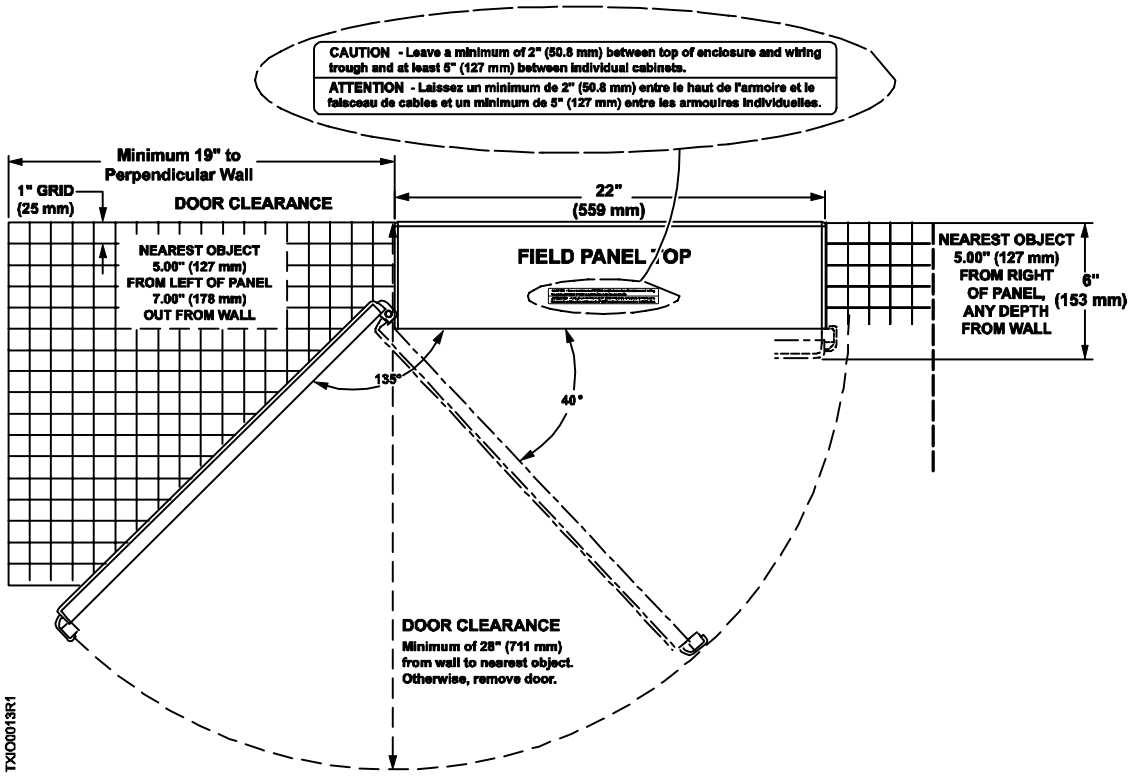

Figure 3. Spacing Requirements.

Installation

NOTE: Follow all safety regulations and local codes when installing this equipment.

1. Determine the mounting location of the enclosure using the spacing requirements shown in Figure 3 and Figure 6. See Figure 4 and Figure 5 for panel dimensions.
   - Minimum spacing between the panel and any left (hinged side) obstruction is 1 inch spacing for every 1 inch of depth, starting at 5 inches (127 mm) to the left (see Figure 6).
   - Minimum spacing between the panel and any right (lock side) obstruction is 5 inches (127 mm) to the right at any depth (see Figure 6).
   - Space between door panel and opening obstruction must be at least 11 inches (279.4 mm) to allow for door removal at 40 degrees, or 28 inches (711 mm) with a cabinet mounting at least 19 inches (483 mm) from the left side wall to allow door to completely open at 135 degrees.
2. Draw a level line 6 feet (1.8 m) above the floor on the wall or surface where the enclosure will be mounted.
3. Draw a horizontal line 1.5 inches down from the 6 foot mark.
4. Mark two vertical centerlines, 16 inches apart and at least 8 inches from any adjacent wall.
5. Drill through each marked centerline to create the mounting holes.
6. Use hammer and punch to remove knockouts:
   a. Punch one entrance on the right-most knockout (either on the top or side) for the line voltage wiring to the service box.
   b. Punch additional entrances as needed making sure the Class 2 wiring knockout is at least 2 inches (50.8 mm) from other wiring knockouts.

WARNING:

Separate knockouts should be used for high voltage and low voltage wiring. Leave at least a 2-inch (50.8 mm) space between the Class 2 and other wires in the panel.

7. Partially insert mounting bolts in holes.
8. Mount the enclosure to the wall. Check the enclosure to be sure it is level.
9. Tighten the mounting bolts.
10. Drill the two lower mounting holes.
11. Insert and tighten the remaining mounting bolts.
12. Mount the door on the enclosure.
13. Connect the door grounding wire to the stud inside the enclosure.
14. Run conduit and pull wires into the panel. Be sure to leave enough wire for future changes or additions, and to allow for full door swing clearance (see Figure 6).
15. Label each wire.
16. Place the product layout sheet in the label pouch inside the door.

The installation is now complete.

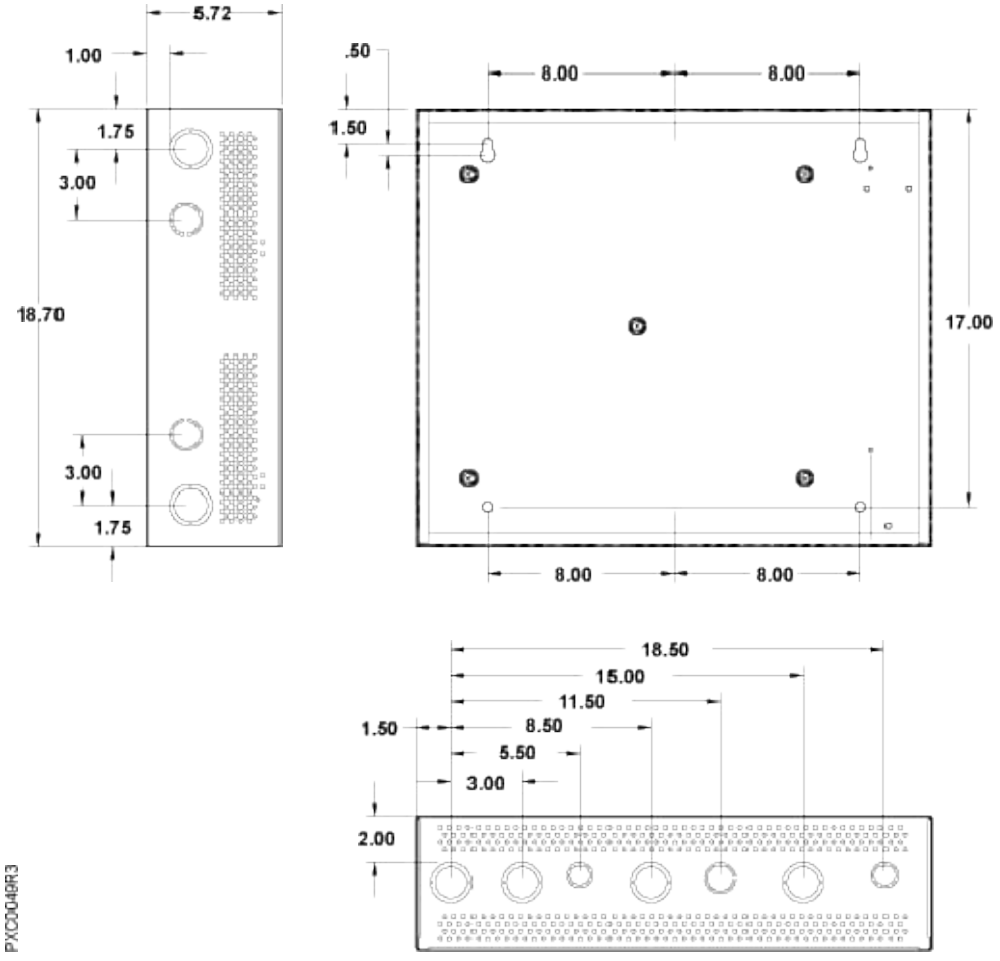

Figure 4. 19” PX Series Enclosure Dimensions.

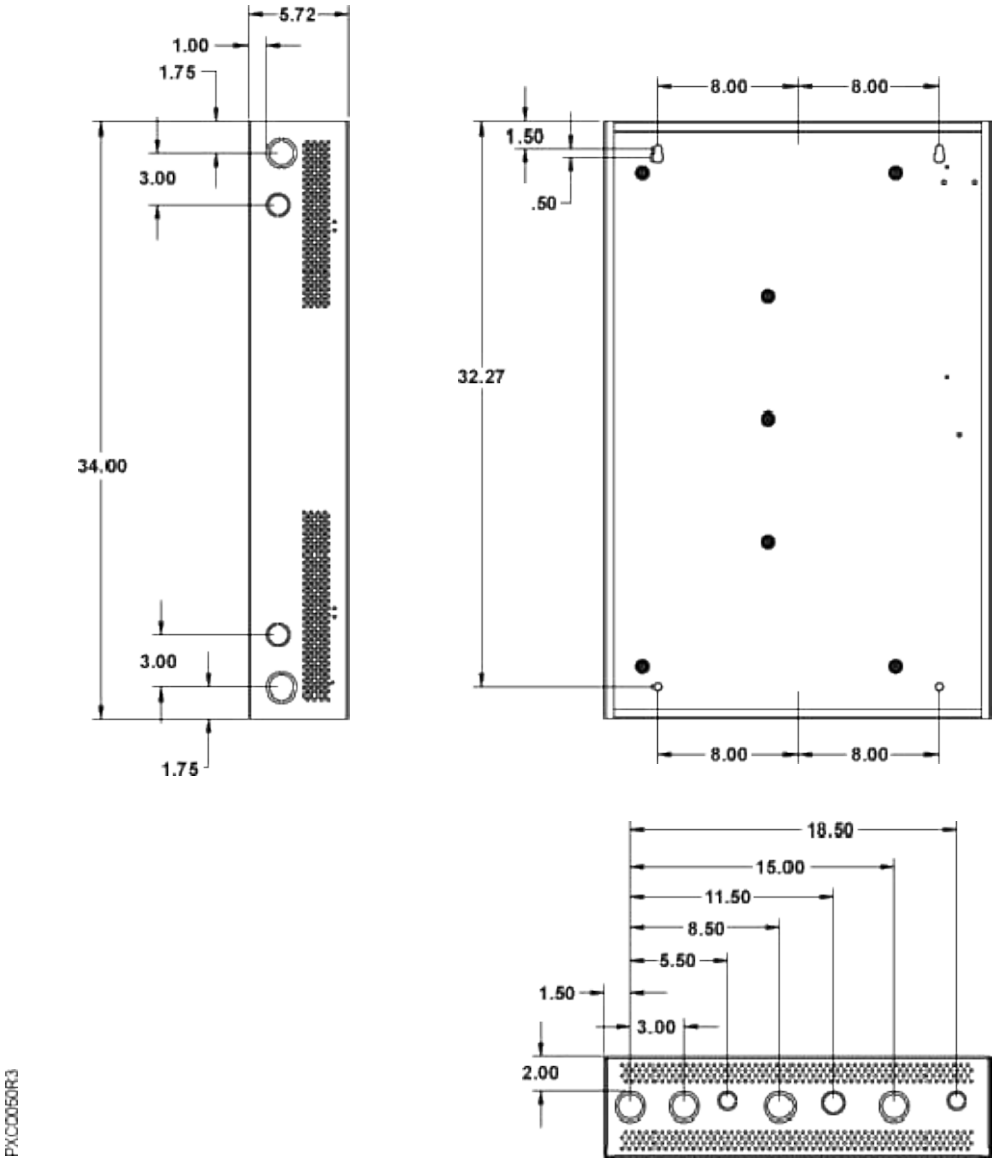

Figure 5. 34" PX Series Enclosure Dimensions.

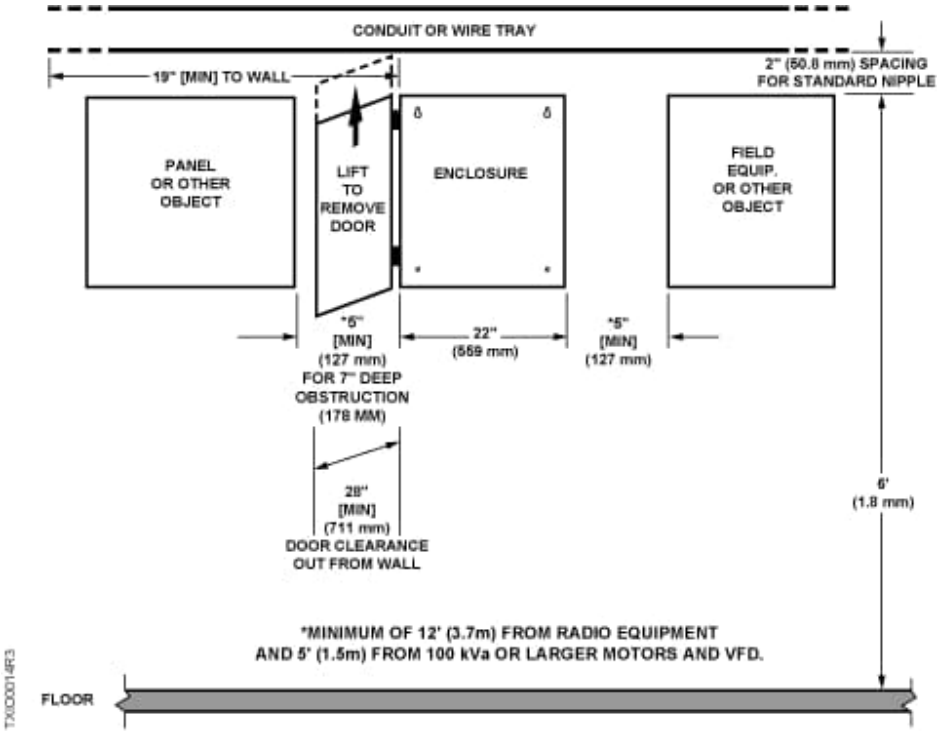

Figure 6. 19” and 34” PX Series Enclosure Placement.

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