



XT4 Service Barrier Installation Instruction Guide

Suitable for the Lug Range: 3/0 AWG-350Kcmil

Introduction

This Installation Guide should be used when installing service entrance barrier kit for XT4 Breaker having lug range capacity 3/0 AWG-350Kcmil.

These barriers are required when the breaker is used as a single service entrance main device inside a lighting panel in compliance with UL67/2018, Clause 6.4. Barrier installation is required on the line side of the main device prior to energizing in forward or reverse feed applications, ensuring isolation from live parts on the line side when the main breaker is turned off.

If a lug barrier is removed from a circuit breaker for maintenance while the incoming line is shut off, it must be reinstalled prior to reenergizing in order to maintain isolation.

Contents per Installation Kit

XT4P3SB1 – XT4 Lug Service Barrier Kit

Description	Qty.
XT4 Finger Safe Barrier	1
Terminal Cover	1
Terminal Screw (M3)	1

Installation

A service entrance panelboard with XT4 as a main circuit breaker will require three lug barriers and one terminal cover.

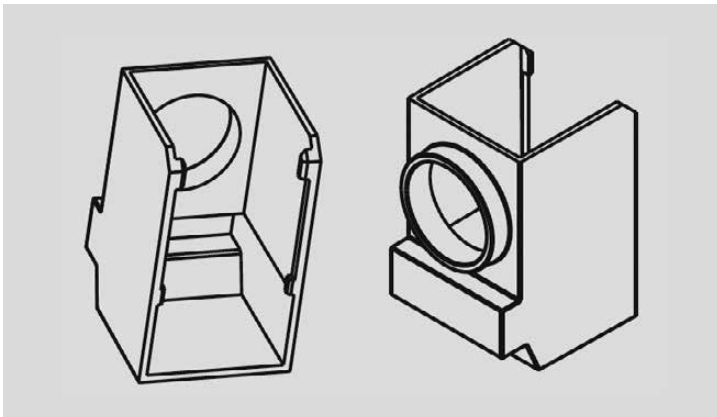


Figure 1: XT4 Finger Safe Barrier



NOTICE: These instructions do not purport to cover all details or variations in equipment or to provide for every possible contingency to be met in connection with the installation, operation or maintenance. Should further information be desired, or should particular problems arise which are not covered sufficiently for the purposes, the matter should be referred to ABB. These instructions are intended for use by qualified and trained personnel only.

Hazard Classifications

The following important highlighted information appears throughout this document to warn of potential hazards or to call attention to information that clarifies a procedure.

Carefully read all instructions and become familiar with the devices before trying to install, operate, service or maintain this equipment.



DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



CAUTION: Indicates that if the hazard is not avoided could result in minor or moderate injury.



NOTICE: Is used to notify of practices not related to personal injury.




DANGER: Electrical arc flash hazard. Personal protection equipment required. Turn off power to the equipment before working inside.

Kit Installation Steps

To install Finger Safe Barrier follow steps provided under this installation procedure.

This Finger Safe Barrier must be installed prior to the wire connection to the circuit breaker.

- Item A Phase Barrier
- Item B Finger Safe Barrier
- Item C Terminal Cover
- Item D Finger Safe Barrier Screw (M3, Dome-Headed, Cross-Slotted )

- Step 1: Remove Item A
- Step 2: Assemble Item B to all Lugs
- Step 3: Lug and Finger Safe Barrier detailed assembly
- Step 4: Assemble Item C using Item D with two fingers tight

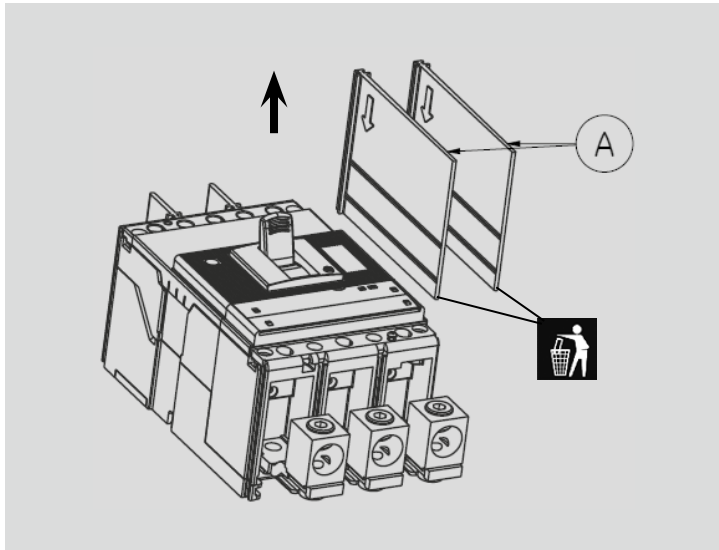


Figure 2: Remove Item A from Circuit Breaker

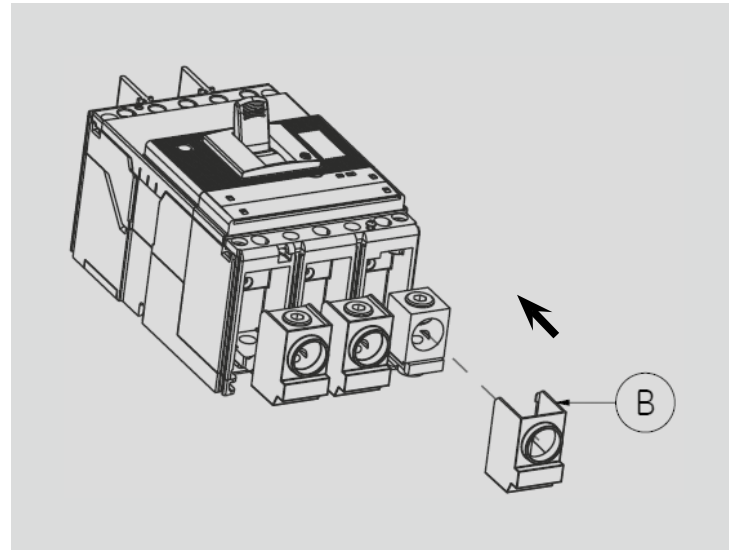


Figure 3: Assemble Item B to Lugs

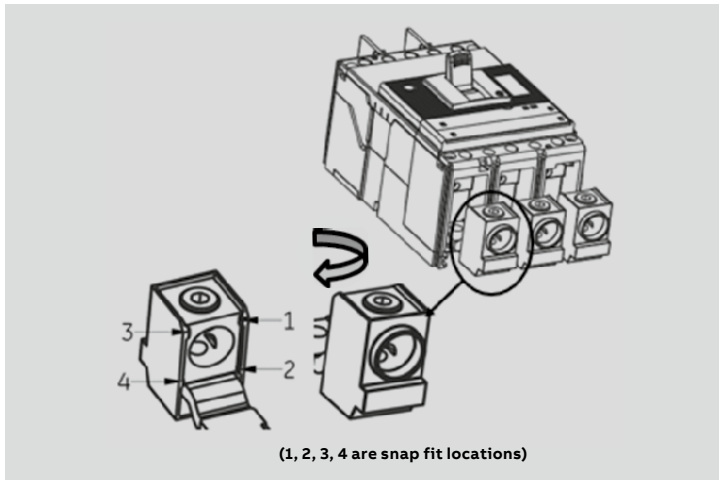


Figure 4: Item B Assembly Process

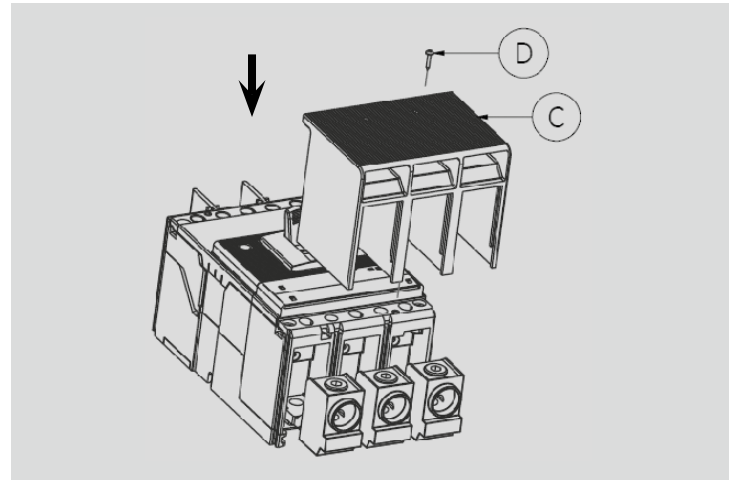


Figure 5: Assemble Item C and D on Circuit Breaker

WARNING: Lug service barriers must be correctly installed on the line side of a main device in ABB Lighting Panels.

WARNING: Installing size wire other than the specified sizes for each circuit breaker frame will negate the barrier's ability to protect personnel from exposed live components.

Cable Installation

Before installing the cable, assemble the finger safe barrier shown in Figure 6.

The wires must be stripped to the correct length to maintain isolation. After stripping the wires to the required length, the wires can be installed as shown in Figure 8. The barrier must be correctly installed to maintain electrical isolation from accidental contact. Torque the wires according to the torque specification on the breaker.

Table 1: Shows the allowable wire sizes for the barrier.

Lug	Range	Strip Length
250 A	3/0 AWG to 350Kcmil Cu/Al	1.220"

Before installing the cable, remove necessary knock outs as shown in Figure 7.

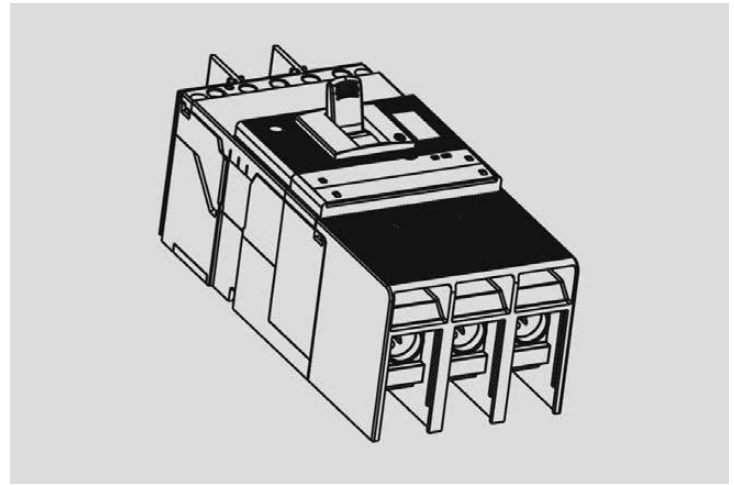


Figure 6: After Assembly of Item C and D after removing knock outs

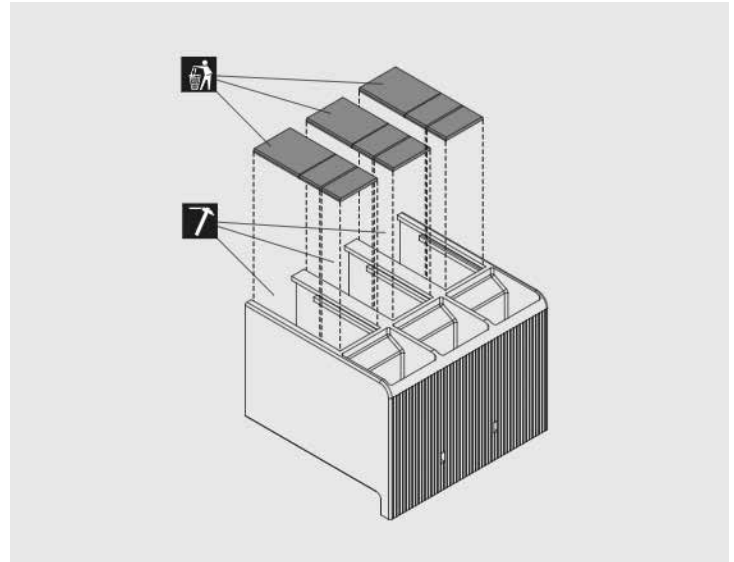


Figure 7: Removing knock outs on terminal cover after wiring installation

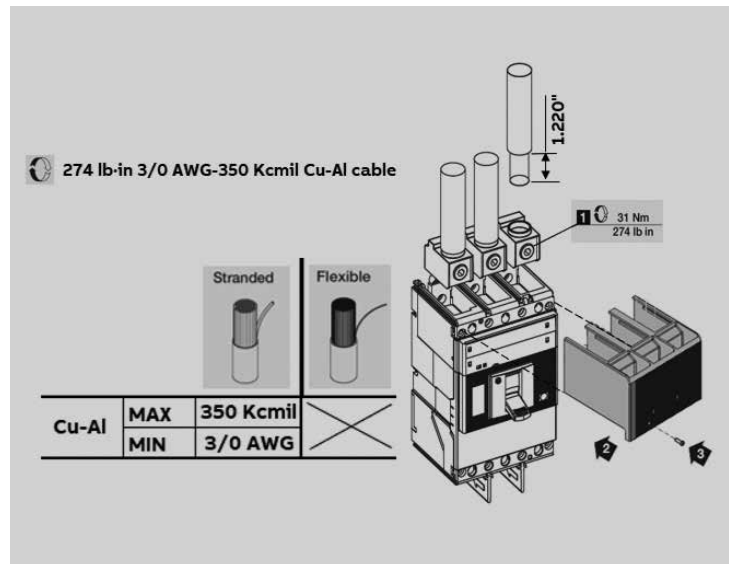


Figure 8: Maximum Wire Strip Length

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