

ReliaGear® Merchandised XT4 circuit breaker kits, 225 A–400 A



These instructions describe the installation of a ReliaGear Merchandised 225 A–400 A type XT4 three-phase circuit breaker kit into a ReliaGear® lighting panelboard.

Introduction

The catalog number for the XT4 three-pole, 225 A kit is MBB33 (table 1). The catalog number for the XT4 six-pole, 400 A kit is MBB36 (table 2).

Table 1. Parts list for XT4, three-pole 225 A breaker installation kit, catalog number MBB33.

Item #	Description	Part #	Qty.
1	Shield insert, RE	139C5504P185	1
	Shield insert, RQ	139C5504P199	1
4	Thread rolling screw and washer	315A7034P6	3
3	Screw, #10–32 x 3/8	N722 EP16006B6	4
5	Screw, #10–32 x 3/8	N722 EP16006B6	1
6	Circuit breaker base 3P	–	2
7	Nut, 5/16–18	N269P23B6	1
8	XT4 circuit breaker subassembly	–	3
13	Label, “MAIN”	315A7337P1	1
19	Finger-safe barrier lug assembly	3000243437P2	1

Table 2. Parts list for XT4, six-pole 400 A breaker installation kit, catalog number MBB36.

Item #	Description	Part #	Qty.
1	Shield Insert, RE	13 9C5504P1 86	1
	Shield insert, RQ	139C5504P198	1
4	Thread rolling screw and washer	31 5A7034P6	6
3	Screw, #10–32 x 3/8	N722EP16006B6	4
5	Screw, #10–32 x 3/8	N722EP16006B6	4
6	Circuit breaker base 6P	–	4
7	Nut, 5/16–18	N269P23B6	1
8	XT4 circuit breaker subassembly	–	3
13	Label, “MAIN”	31 5A7337P 1	2
19	Finger-safe barrier lug assembly	3000243437P 2	1
20	XT4 25 mm phase barrier	1 SDA075 914 R1	1

01 Attaching the shield insert to the shield for installation of an MBB33 kit.

Table 3. Parts list for XT4 subassembly circuit breaker installation kit.

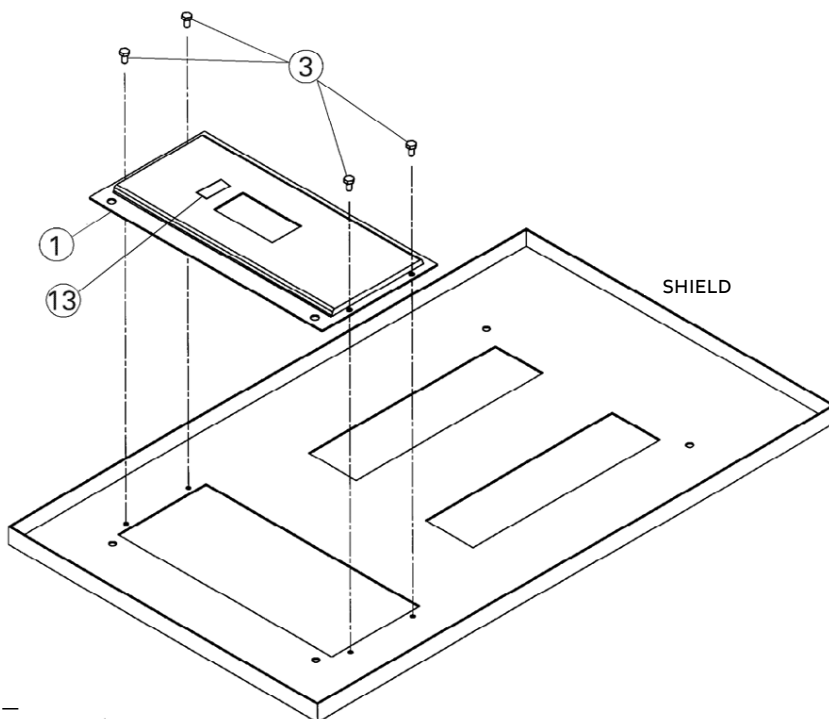
Item #	Description	Part #	Qty.
2	XT4 breaker	–	1
9	XT4 25 mm phase barrier	1 SDA075 914 R1	2
10	Screw steel cap 6x3	N170P13 048B70	2
11	AM mtg bracket XT4 2/3P	3001 4876551 P2	1
12	Al insul mtg bkt XT4 2/3P	3001 4877 432P2	1
14	AC spool 250 A XT4 silver	3001 4876527P2	3
15	Screw, steel CA ¼–20 x ¾	N170P210 10 B70	3
16	Lock washer steel spring ¼	N405P41 B6	3
17	Washer steel plain ¼	N402P41 B6	3

Installation

Use the appropriate procedure to install a ReliaGear® Merchandised XT4 circuit breaker kit into a ReliaGear lighting panelboard. Call-out numbers in the illustrations and numbers in brackets in the text refer to the item numbers in tables 1, 2 and 3.

WARNING

Before attempting to install one of these kits, remove all power from the panelboard.



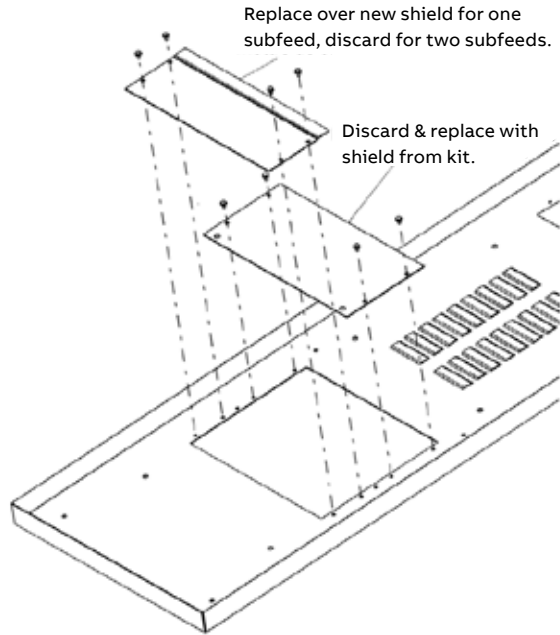
- Remove the interior assembly from its packaging and verify that all parts are present, as outlined on the packing list.
- Remove the four screws (225 A panels) or eight screws (400 A panels) securing the shield to the panelboard interior. Lift off the shield and set it and the screws aside.
- Remove the circuit breaker kit from its packaging and verify that all parts are present, as outlined on the packing list.
- First, mount the circuit breaker base assembly [6] on the interior by aligning the holes in the bus bars (three for three-phase) protruding from the circuit breaker base over the three bolts in the bus bars of the interior assembly. Secure with three ⅝–18 nuts [7] tightened to 100–120 in-lb.
- Subassembly circuit breaker:
 - Wrap mounting bracket insulation [12] around the mounting bracket [11].
 - Align breaker mounting holes with the mounting bracket and insulation assembly.
 - Fasten the breaker to the mounting bracket using the two steel cap screws 6x3 [10]
 - Fasten the spools [14] with screws [15], lock washer [16] and steel plain washer [17] to the breaker.
 - Place the barriers [9].
- Align spools [14] with breaker terminal holes and hand tighten the self-rolling screws [4] to locate the breaker assembly. Align the mounting bracket [11] on the breaker assembly over the interior rail holes.
- Once aligned, tighten the two #10–32 screws [5] to 27–36 in-lb. Tighten the self-rolling screw [4] to 42 lb-in.
- Install finger-safe barrier [19] on lug side.
- Shield insert installation differs depending on the panel size, as follows. Discard the unused insert.
 - For a 225 A panel, place the shield insert [1] over the shield so that the four same-size holes line up with the threaded holes in the shield, as shown in figure 2. Fasten the shield insert to the shield with four #10–32 x ⅝ slotted screws [3] tightened to 27–36 in-lb. If the breaker will be used as a main, attach the MAIN label [13] to the front of the shield insert, as shown in figure 2.
 - For a single subfeed breaker in a 400 A panel, remove the two blank inserts from the shield, as illustrated in figure 3. Install the new shield insert [1] supplied with the kit over the shield so that the four same-size holes line up with the threaded holes in the shield. Fasten the shield insert to the shield with four #10–32 x ⅝ screws [3] tightened to 27–36 in-lb. Reinstall the bent insert removed earlier over the top of the new insert, securing it with the screws removed with the insert, tightened to 27–36 in-lb.

02 Removing the shield insert from the shield for installation of an MBB36.

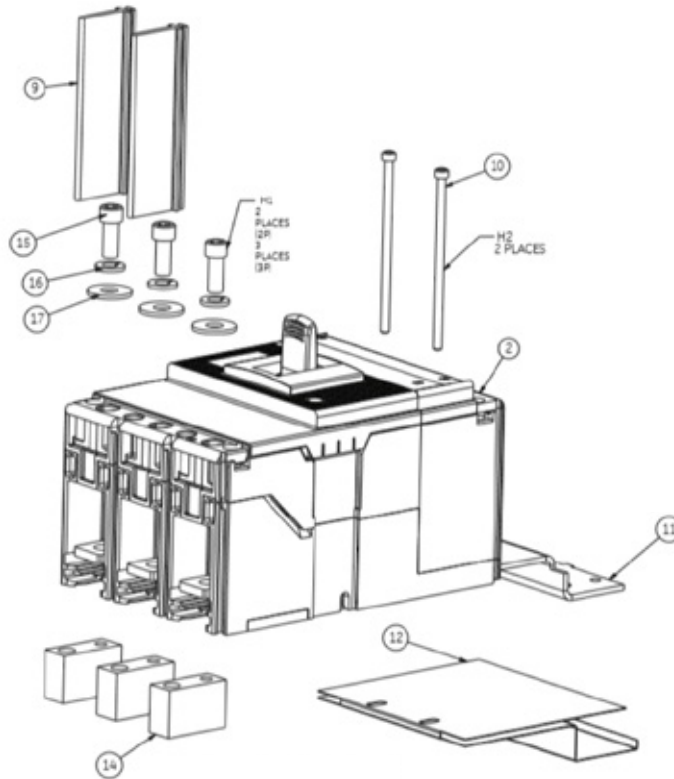
03 Typical installation of a subassembly ReliaGear® Merchandised breaker kit, catalog number MBB33 and MBB36, into a ReliaGear 125 A or 225 A lighting panelboard.

c) For the first subfeed breaker in a 400 A panel, remove the two blank inserts from the shield, as illustrated in figure 3. Discard both shields removed, along with both shields supplied with the kit, since only the shield from the second subfeed kit is used.

10. Unless installing a second subfeed breaker at this time (400 A panel only), reattach the shield to the interior with the four or eight screws removed in step 2. Tighten the screws to 27-36 in-lb.



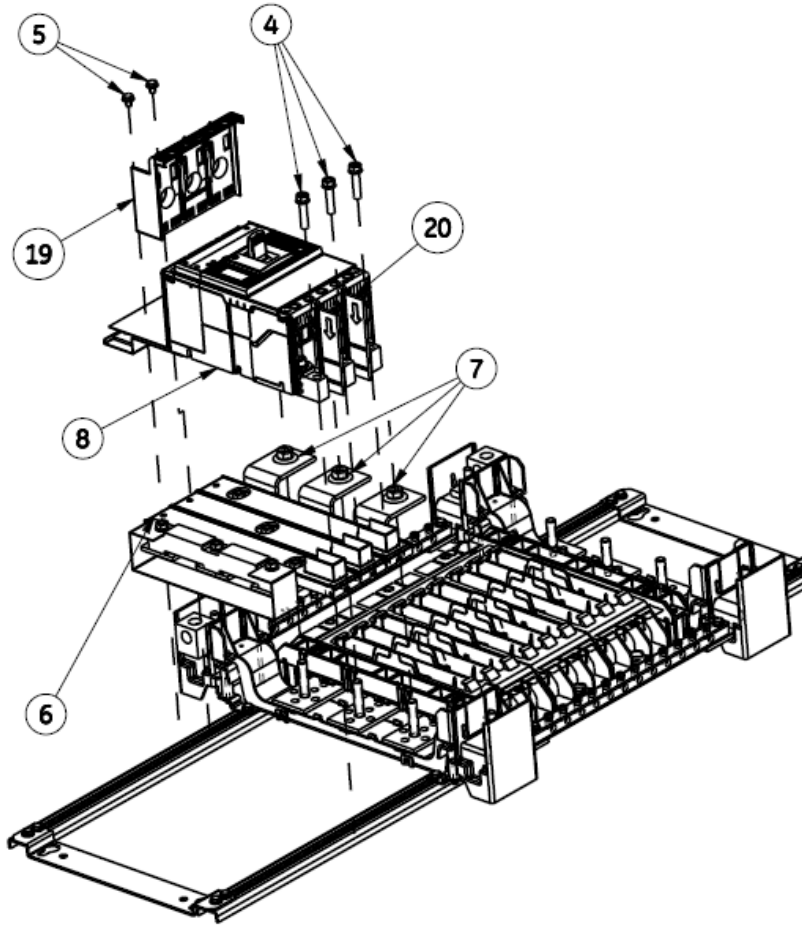
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Tightening torques	
Fastener ID	Torque value lb-in
H1	40-50
H2	9-11

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04 Typical installation of a ReliaGear® Merchandised breaker kit, catalog number MBB33, into a ReliaGear 225 A lighting panelboard.



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