



Pro-Stock™ XT5 circuit breaker kits, 400A

Introduction

These instructions describe the installation of a Pro-Stock XT5 two- and three-phase main circuit breaker kit into a ReliaGear® panelboard. These kits are not for use in standard, factory-assembled panelboards.

The catalog numbers for the single-phase kits are MBM324, MBM124WB (breaker included) and MBM324WB (Breaker Included) and the lists of parts are found in Tables 1 and 2. The catalog numbers for the three-phase kits are MBM334, MBM134WB (breaker included) and MBM334WB (Breaker included) and the lists of parts are found in Tables 1 and 3.

Table 1. Parts list for the XT5 two phase breaker sub assembly circuit breaker installation kit MBM324

Item #	Description	Part #	Qty.
1	XT5 breaker	–	1
2	Nut, 5/16-18	N269P23B6	2
3	Screw, steel T-roll 10-32 x 3/8	N722P16006B6	2
4	Metric Hex Socket Head Cap Screw, M4X95	L15P12095B70	2
5	XT5 – 400A/600A top strap	30016666269P2	2
6	XT5 – 400A/600A mounting bracket	139C5473P119	1
7	Metric Hex Socket HD cap screw, M10X25	L15P19025B70	2
8	Serrated Belleville washer M10	10110823P1	2
9	Line side barrier-XT5	30016895488P4	1
10	Rivet (plastic)	315A7371P3	2
11	XT5-Load side BR A&C	30016895488P6	1
14	Shield Insert AE	139C5504P200	1
	Shield Insert AQ	139C5504P201	1
15	Screw, steel T-roll 10-32 x 3/8	N722P16006B6	4
16	Main Label	315A7337P1	1

Table 2. Parts list for the XT5 three phase breaker sub assembly circuit breaker installation kit MBM334

Item #	Description	Part #	Qty.
1	XT5 breaker	–	1
2	Nut, 5/16-18	N269P23B6	3
3	Screw, steel T-roll 10-32 x 3/8	N722P16006B6	2
4	Metric Hex Socket Head Cap Screw, M4X95	L15P12095B70	2
5	XT5 – 400A/600A top strap	30016666269P2	3
6	XT5 – 400A/600A mounting bracket	139C5473P119	1
7	Metric Hex Socket HD cap screw, M10X25	L15P19025B70	3
8	Serrated Belleville washer M10	10110823P1	3
9	Line side barrier-XT5	30016895488P4	1
10	Rivet (plastic)	315A7371P3	2
12	XT5 100mm Phase Barrier	1SDA107801R1	2
13	XT5 Load side BR assy	30016895488G1	1
14	Shield Insert AE	139C5504P200	1
	Shield Insert AQ	139C5504P201	1
15	Screw, steel T-roll 10-32 x 3/8	N722P16006B6	4
16	Main Label	315A7337P1	1

Table 3. Parts list for the XT5 two phase breaker sub assembly circuit breaker installation kit MBM324WB and MBM124WB

Item #	Description	Part #	Qty.
1	XT5 breaker Subassembly	–	1
2	Nut, 5/16-18	N269P23B6	2
3	Screw, steel T-roll 10-32 x 3/8	N722P16006B6	2
5	XT5 – 400A/600A top strap	30016666269P2	2
7	Metric Hex Socket HD cap screw, M10X25	L15P19025B70	2
8	Serrated Belleville washer M10	10110823P1	2
10	Rivet (plastic)	315A7371P3	2
11	XT5-Load side BR A&C	30016895488P6	1
14	Shield Insert AE (For MBM324WB)	139C5504P200	1
	Shield Insert AQ (For MBM124WB)	139C5504P201	1
15	Screw, steel T-roll 10-32 x 3/8	N722P16006B6	4
16	Main Label	315A7337P1	1

Table 4. Parts list for the XT5 three phase breaker sub assembly circuit breaker installation kit MBM334WB and MBM134WB

Item #	Description	Part #	Qty.
1	XT5 breaker Subassembly	–	1
2	Nut, 5/16-18	N269P23B6	3
3	Screw, steel T-roll 10-32 x 3/8	N722P16006B6	2
5	XT5 – 400A/600A top strap	30016666269P2	3
7	Metric Hex Socket HD cap screw, M10X25	L15P19025B70	3
8	Serrated Belleville washer M10	10110823P1	3
10	Rivet (plastic)	315A7371P3	2
12	XT5 100mm Phase Barrier	1SDA107801R1	2
13	XT5 Load side BR assy	30016895488G1	1
14	Shield Insert AE (For MBM334WB)	139C5504P200	1
	Shield Insert AQ (For MBM134WB)	139C5504P201	1
15	Screw, steel T-roll 10-32 x 3/8	N722P16006B6	4
16	Main Label	315A7337P1	1

Table 5. Parts list for the XT5 two-phase or three-phase breaker installation kit, catalog number MBM324 and MBM334

Item #	Description	Part #	Qty.
1	XT5 breaker	–	1
3	Screw, steel T-roll 10-32 x 3/8	N722P16006B6	2
6	XT5 – 400A/600A mounting bracket	139C5473P119	1
10	Rivet (plastic)	315A7371P3	2
11	XT5-Load side BR A&C	30016895488P6	1

Installation

Use the following procedure to install a Pro-Stock XT5 circuit breaker kit into a ReliaGear 400 A lighting panelboard. Call-out numbers in the illustrations and numbers in brackets in the text refer to the Item Numbers in Tables 1, 2, 3, and 4.

Installation of an MBM324 or MBM324WB kit 400A into ReliaGear is illustrated in Figure 1 and 2. Installation of MBM334 or MBM334WB kit 400A into ReliaGear is illustrated in Figure 3 and 4.



WARNING: Before attempting to install this kit, remove all power from the panelboard.

1. Remove the interior assembly from its packaging and verify that all parts are present, as given in the packing list.
2. Remove the eight screws securing the shield to the panelboard interior. Lift off the shield and place it and the screws aside.
3. Remove the circuit breaker kit from its packaging and verify that all parts are present, as given in the packing list.
4. Subassembly circuit breaker (step b and c are also for WB kits):
 - a. Fasten M4X95 screws [4] into the breaker with line side barrier [9] and XT5 mounting bracket [6].
 - b. Align washers M10 [8] over XT5 top straps [5] and tighten M10X25 screws [7].
 - c. Insert XT5 100 MM between the straps. (only for three phase circuit breaker)

5. Place the load side barrier [11] and tighten it with plastic rivet [10]
6. Mount the sub assembly circuit breaker [1]. Hand-tighten t-roll 10-32 screws [3] with mounting bracket holes [6]
7. Align over XT5 top straps [5] over bus bars and fasten the nut 5/16-18 [2]
8. Tighten t-roll 10-32 screws [3]
9. Install the shield insert according to the type of breaker installation as follows. Note that each kit is supplied with two shield inserts for 480 Vac panels. Discard the unused insert.
 - a. If this is a main breaker installation, place the shield insert [14] over the shield so that the four same-size holes line up with the threaded holes in the shield, as illustrated in Figure 4. Fasten the shield insert to the shield with four #10-32 x 3/8 screws [15] tightened to 27–36 in-lb. Attach the MAIN label [16] to the front of the shield insert, as shown in Figure 2.
 - b. If this is a subfeed breaker installation, place the new shield insert [14] supplied with the kit over the shield so that the four same-size holes line up with the threaded holes in the shield, as illustrated in Figure 4. Fasten the shield insert to the shield with four #10-32 x 3/8 screws [15] tightened to 27–36 in-lb.

Note: AQ Shield insert has an identification hole, see Figure 5.

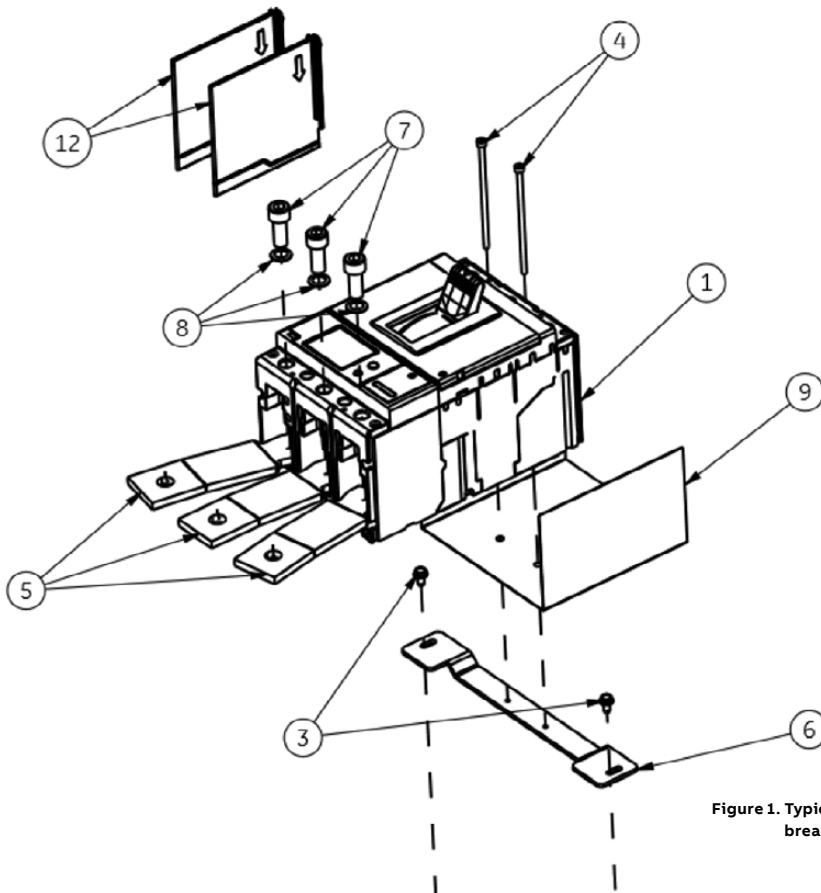


Figure 1. Typical Installation of a subassembly Pro-Stock breaker kit, catalog number MBM324 and MBM334.

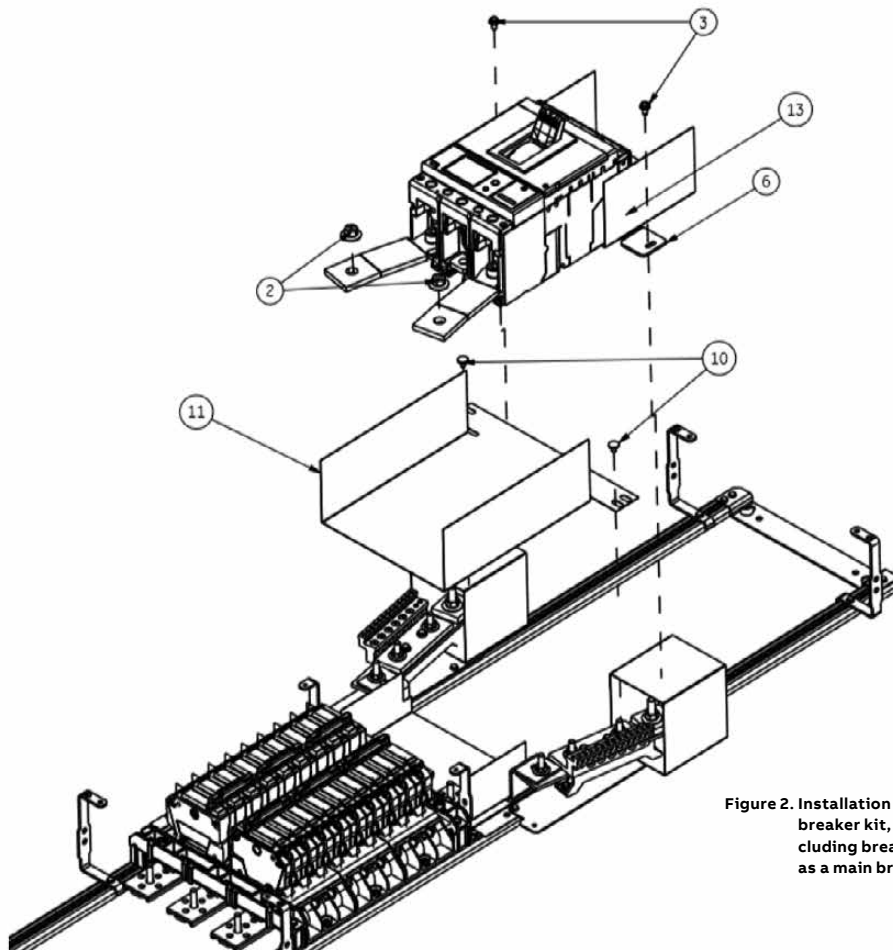


Figure 2. Installation of a Pro-Stock XT5 two phase circuit breaker kit, catalog number MBM324, MBM324WB (including breaker) and MBM124WB (including breaker), as a main breaker 400 A lighting panelboard.

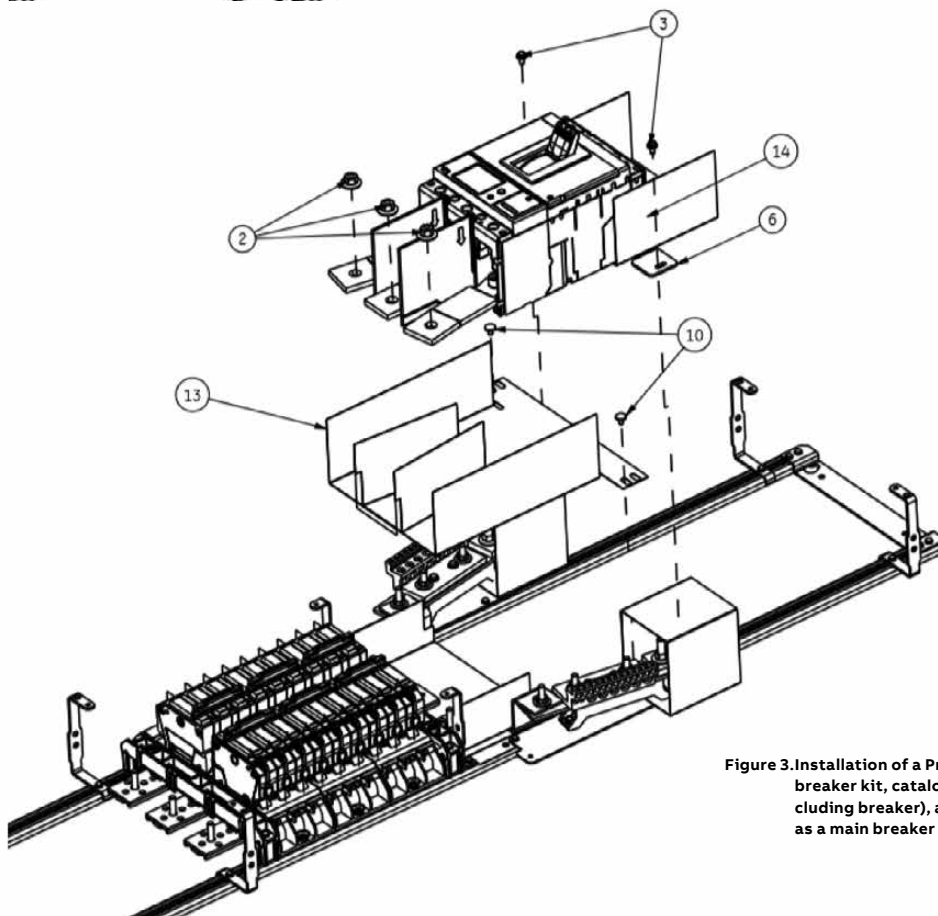


Figure 3. Installation of a Pro-Stock XT5 three phase circuit breaker kit, catalog number MBM334, MBM334WB (including breaker), and MBM314WB (Including breaker) as a main breaker 400 A lighting panelboard.

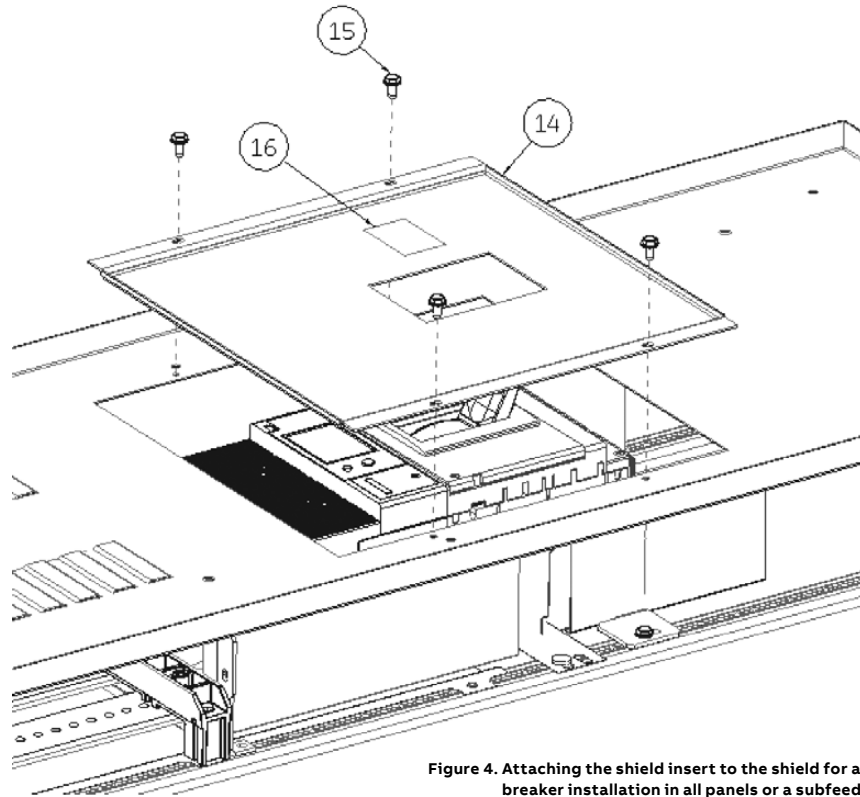


Figure 4. Attaching the shield insert to the shield for a main breaker installation in all panels or a subfeed breaker in 400A panels

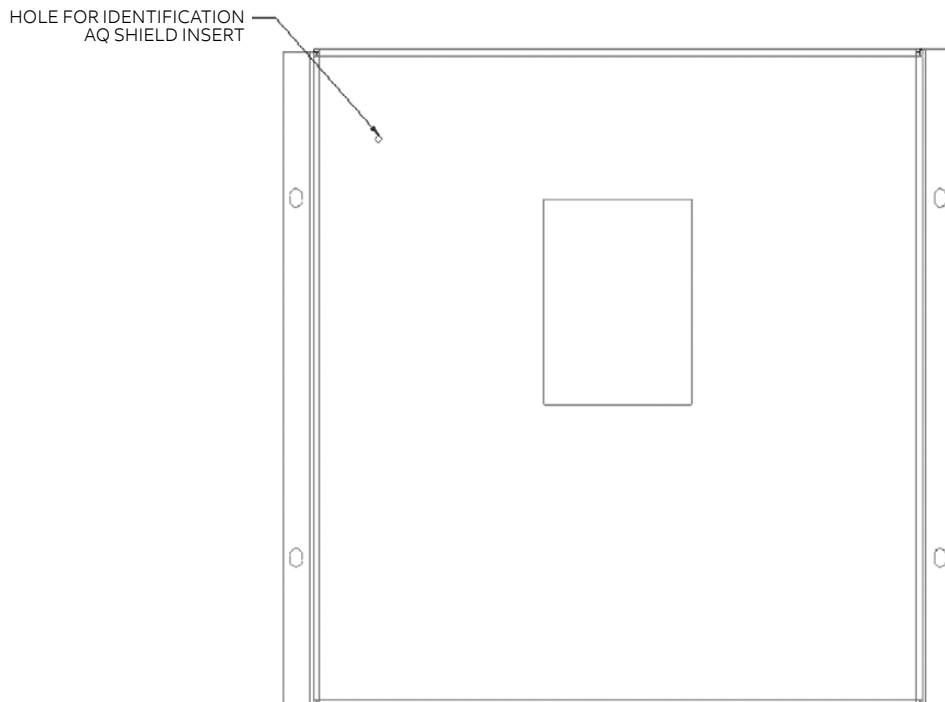


Figure 5. AQ Shield insert identification.