

MTL MK mounting kits

for the MTL700 range of shunt-diode safety barriers

1 Introduction

This instruction sheet provides the information needed to use MTL MK mounting kits for the MTL700 range barriers. The kits covered are the MK02, MK05, MK12 and MK20 for mounting up to 2, 5, 12 and 20 barriers respectively. For detailed information about installation requirements for MTL700 range barriers, refer to INM700, 'Instruction Manual for MTL700 range shunt-diode safety barriers'. The mounting kits contain all the accessories needed to mount the corresponding number of MTL700 range barriers, and provide facilities for earthing, terminating cable screens and tagging (tagging facilities are not provided with MK02 kits). Sections 2 and 3 list the parts forming each kit and provide the necessary assembly instructions.

2 MK02 kit

2.1 MK02 parts list

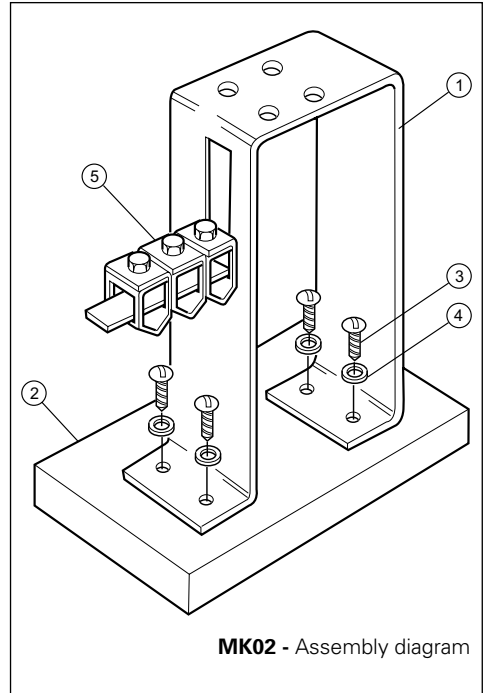
Item	Description	Quantity
1	Mounting bracket	1
2	Insulating block	1
3	3.9 x 9.5 self-tapping screws	4
4	M4 washers	4
5	Terminal clamp (4mm)	3

2.2 Assembly instructions for MK02 kits

Use the four self-tapping screws (3) and M4 washers (4) to attach the mounting bracket (1) to the insulating block (2) through the four M4 holes.

The insulating block (2) is provided to keep the IS earth (terminated on the mounting bracket (1)) separate from a structural earth but, if the mounting surface is insulated, then the insulating block may not be necessary.

Use the 4mm terminal clamps (5) to connect the IS earth and terminating cable screens to the mounting bracket.



MK02 - Assembly diagram

3 MK05, MK12, MK20 kit

3.1 MK05 parts list

Item	Description	Quantity
1	DIN rail (156mm)	1
2	Earth busbar (99mm)	1
3	Earth rail mounting brackets	2
5	Insulating mounting block	2
6	Tag label assembly	1
7	Black seal	1
8	M4 Nyloc nuts	4
9	M4 washers	4
11	Terminal clamps (16mm)	3
12	Terminal clamps (4mm)	3

3.2 MK012 parts list

Item	Description	Quantity
1	DIN rail (246mm)	1
2	Earth busbar (200.5mm)	1
3	Earth rail mounting brackets	2
4	Earth rail (215mm)	1
5	Insulating mounting block	2
6	Tag label assembly	1
7	Black seal	1
8	M4 Nyloc nuts	4
9	M4 washers	4
10	Earth rail clamp	2
11	Terminal clamps (16mm)	3
12	Terminal clamps (4mm)	6

3.3 MK20 parts list

Item	Description	Quantity
1	DIN rail (388mm)	1
2	Earth busbar (316.5mm)	1
3	Earth rail mounting brackets	2
4	Earth rail (330mm)	1
5	Insulating mounting block	2
6	Tag label assembly	1
7	Black seal	1
8	M4 Nyloc nuts	4
9	M4 washers	4
10	Earth rail clamp	2
11	Terminal clamps (16mm)	3
12	Terminal clamps (4mm)	10

Assembly instructions for MK05, MK12 and MK20 kits

Note: The MK05 kit is NOT provided with an earth rail (4) and earth rail clamps (10), so take care to follow the special instructions provided in 3.4.4 rather than 3.4.3 if using this kit.

3.4.1 Locate the busbar (2) on the fixing studs of the insulating mounting blocks (5), making sure both blocks face the same way.

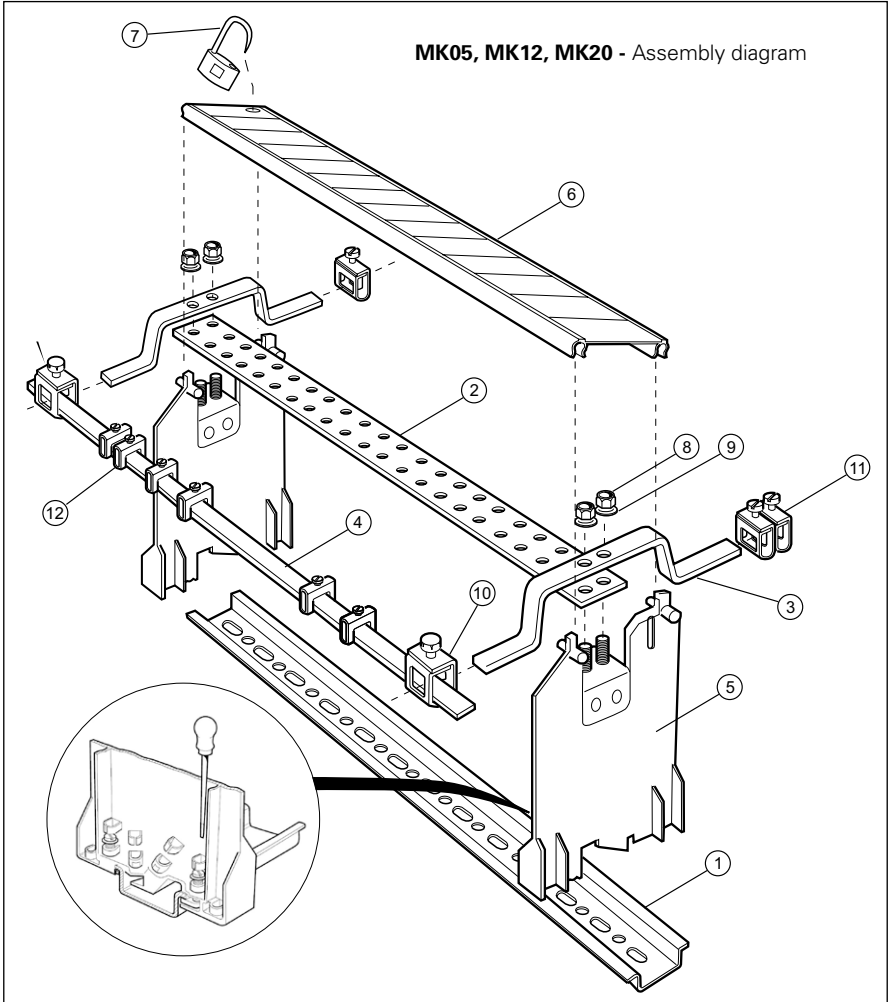
3.4.2 Fit the earth rail mounting brackets (3) onto the studs of each mounting block on top of the busbar, and secure using M4 washers (9) and Nyloc nuts (8).

3.4.3 (MK12 and MK20 only). Fit the earth rail clamps (10) onto the shorter protruding lengths of the earth rail mounting brackets (3). This is the hazardous side of the assembly. Slide the smaller (4mm) terminal clamps (12) onto the earth rail (4) and mount the earth rail onto the earth rail mounting brackets (3) with the earth rail clamps (10). Fit the larger (16mm) terminal clamps (11) onto the longer protruding lengths of the earth rail mounting brackets (3), two being mounted on one bracket and one on the other. These terminals are used for connecting the IS earth.

3.4.4 (MK05 only). Fit the smaller (4mm) terminal clamps (12) onto the shorter protruding lengths of the earth rail mounting brackets (3) and the larger (16mm) terminal clamps (11) onto the longer protruding lengths. In both cases, two are mounted on one bracket and one on the other. The smaller terminal clamps serve the same purpose as the earth rail and clamps for the MK12 and MK20 while the function of the larger terminal clamps is the same for all three kits.

3.4.5 To mount the insulating mounting blocks (5), check that the swing nuts forming part of each unit are turned away and locate the units on the DIN rail (1). Tighten the swing nut screws to pivot the swing nuts underneath the edge of the DIN rail, so securing the blocks to the rail.

3.4.6 Complete the installation by adding the tagging facilities. First, remove the label to add identification then replace and secure with the clic rivet. Next, clip the tag label assembly (6) onto the installation with the lugs on top of each insulating mounting block (5). Finally, 'seal' the tagging information to the installation by fitting the tagging strip seal (7) through the hole in the tagging strip and the vertical slot in the mounting block. The tagging strip can be unclipped from one side only and hinged open to provide access to the mounting studs and terminals of the barriers when required.



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