INTRODUCTION

These instructions explain how to use Combined Mounting & Earthing (CME) kits to simultaneously mount and earth ABB OVR Surge Protection Devices (SPDs) with one or two central earth studs on their top face.

OVR CME 4, OVR CME 8, OVR CME 16, OVR CME 32

1. Safety note:
Warning! Installation by person with electrotechnical expertise only.

WARNING! Installation nur durch elektrotechnische Fachkraft.

Avertissement! Installation uniquement par des personnes qualifiées en électrotechnique.

Advertencia! La instalación deberá ser realizada únicamente por electricistas especializados.

2. Contents
2.1 Each unit consists of a pre-drilled earth bar, mounting pillars, nuts and washers (for fixing the pillars to the earth bar) and a choice of countersunk and pan head screws, plus both shakeproof and plain washers (for fixing the pillars).

<table>
<thead>
<tr>
<th>OVR CME 4</th>
<th>OVR CME 8</th>
<th>OVR CME 16</th>
<th>OVR CME 32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth bar</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mounting pillars</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Nuts</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Plain washers</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Shakeproof washers</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Countersunk screws</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Pan head screws</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

3. Installation

3.1 Positioning the OVR CME kit

The OVR CME kit(s) will need to be installed so that:

(a) they have a short connection to earth (see Section 3.6 - Connect to earth)

(b) individual SPDs can be easily removed after installation (see Figure 2)

(c) SPD’s clean cables are kept away from their dirty line cables and earth cables (see Figure 3)

3.2 Mark and drill mounting holes for the OVR CME kit

OVR CME kits are installed with a mounting pillar at each end with, in the case of the OVR CME 16 and OVR CME 32, additional pillars evenly spaced between (see Figure 4, overleaf).

3.3 Fix the mounting pillars

Using either a countersunk or pan head screw (as required), together with a washer, and (if required) a shakeproof washer, fix each mounting pillar to the panel or enclosure base plate.

3.4 Fix the enclosure base plate to the base of the enclosure

Where the mounting pillars have been fixed to an enclosure base plate, this should be fixed to the enclosure base (as per its installation instructions).

3.5 Bolt the earth bar, earth connections and pillars together

Secure the earth bar to the mounting pillars with the nuts and washers provided (see Figure 5, overleaf). See also Section 3.6 - Connect to earth).

3.6 Connect to earth

SPDs should be connected to the same earth as the equipment they are protecting. The OVR CME kit should therefore be bonded to the earth star point (or main electrical earth).

This is the point where all the earths of the system converge.

For outdoor installations, such as CCTV cameras, the OVR CME kit should also be cross-bonded to the pole or mast.

As a general rule we recommend one connection to earth per mounting pillar (although a single earth connection is usually acceptable for an OVR CME 4).

Theses earth connections should be kept at least 5 cm apart and away from SPD’s clean side cables and each other.

Use 10 mm² stranded green/yellow cable for the earth bond(s).

Earth bonds of 2, 3 or 4 metres are allowed if:

(a) 2, 3 or 4 parallel earth bonds are used and these parallel earth bonds are kept at least 5 cm apart from each other, or

(b) both the main earth bar and the OVR CME kit (and SPDs) are located on a large metal sheet, the OVR CME kit can be bonded to the metal sheet which in turn is bonded to the earth bar.
In circumstances where the cabling cannot ideally be re-routed, the OVR CME kit can alternatively be connected to the electrical earth local to the equipment being protected (eg the earth bar of the local power distribution board).

3.7 Mount SPDs on the OVR CME kit

Fix SPDs to the OVR CME kit with the nut(s) and washer(s) supplied with the SPD(s).

Then make electrical connections to the SPDs in accordance with the SPDs’ installation instructions.

Note: Do NOT use power driven screwdrivers to make connections to OVR SPDs. Hand tighten only.

Where even 4 metres of connecting lead is not sufficient, data/signal/power cabling should be re-routed to bring it within 4 metres of the OVR CME kit and its SPDs.

Environment
Consider the protection of the environment!
Used electrical and electronic equipment must NOT be disposed of with domestic waste. The device contains valuable raw materials which can be recycled. Therefore, contact ABB for disposal of this equipment.