

RBS Installation Instructions

RBS 2409

INSTALLATION INSTRUCTION

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Contents

| | | |
|----------|--------------------------------|----------|
| 1 | Introduction | 1 |
| 1.1 | Revision Information | 1 |
| 2 | Preconditions | 1 |
| 3 | Tools and Instruments | 3 |
| 3.1 | Tools for Installation | 3 |
| 4 | Installation Procedure | 3 |
| 4.1 | Unpacking RBS | 4 |
| 4.2 | Installing the RBS | 4 |
| 4.3 | Attaching the RBS | 6 |
| 4.4 | Installing DC power | 8 |
| 4.5 | Connecting Cables | 8 |
| 4.6 | Replacing Front Cover | 9 |
| 4.7 | Testing the Installation | 10 |
| 4.8 | Performing Concluding Routines | 10 |

1 Introduction

This document provides instructions for installing an RBS 2409.

The RBS 2409 can be installed either on a wall, or hanging from a ceiling. Both stand-alone and master-extension configurations are possible.

Target Group

The target group for this instruction is personnel involved in the installation of an RBS.

Technicians working on Ericsson products or systems must have the necessary training and competence required to perform their work correctly.

1.1 Revision Information

Other than editorial changes, this document has been revised as follows:

- Information about chapter Preconditions updated

2 Preconditions

This section provides preconditions that must be met before starting the installation work.

Documentation

This section presents additional documents required for the installation procedure.

The following documentation is referenced in this document.

Ensure that the following documents are read and understood:

- *Personal Health and Safety Information*, 124 46-2885
- *System Safety Information*, 124 46-2886

Ensure that the following documents are available:

- Completed and approved record prepared during site preparation
- *Site Installation Documentation*, specific for the site (prepared by the Installation Engineering department)
- *Setting IDB Parameters*, 46/1543-LZA 701 0001
- *Verifying RBS Installations at Site*, 11/1532-LZA 701 0001

General Preconditions

Before starting site work, ensure the following:

- Site access permission has been received
- Ordered RBS, equipment, specified tools and other necessary facilities have been delivered
- Site power is available
- Transmission line from the BSC is available

If any of the above preconditions cannot be complied with, then contact the site supervisor or person responsible for the activity that has been missed.

Additional Preconditions for Wall or Ceiling Mounted RBS

Before installing the RBS, ensure that the following preconditions are met:

- The type of fasteners are suitable for the kind of material on which the RBS is to be mounted
- Vertical installation, which is important for correct cooling
- 100 mm free distance from top and/or bottom, if medium generates heat
- 75 mm free distance from top and/or bottom, if medium does not generate heat
- 200 mm free distance from the sides

Note: Horizontal distance between two operational BSU is also possible with less distance. However, the opening mechanism requires insertion of a tool from the side of the cabinet. So, the actual minimum horizontal distance is depending on the tool used to open the cabinet.

If any of the above preconditions cannot be complied with, then contact the site supervisor or person responsible for activity that has been missed.

3 Tools and Instruments

This section contains lists of all tools and instruments recommended for the complete installation of the RBS.

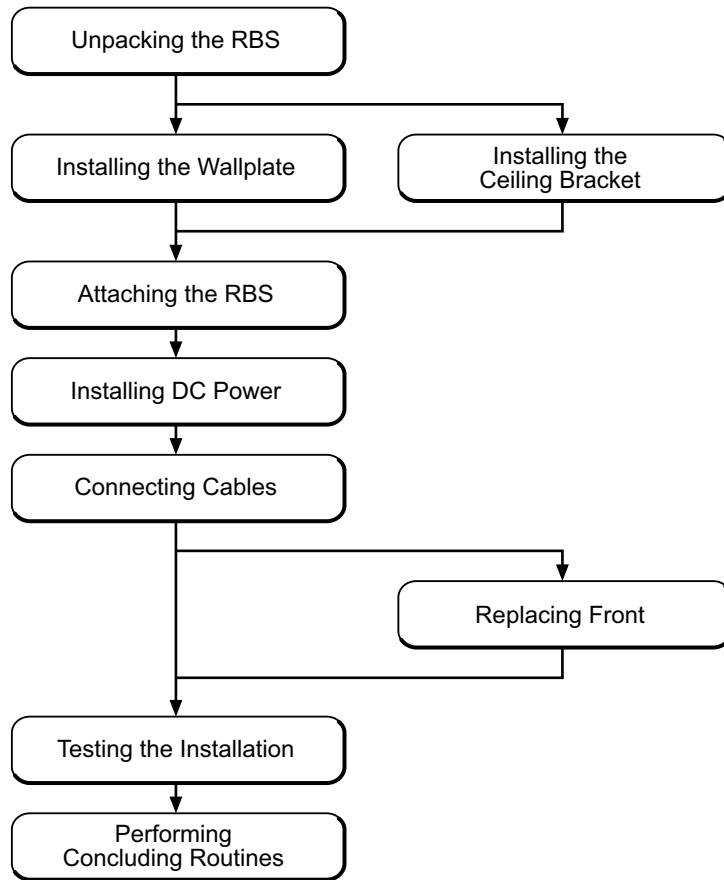
3.1 Tools for Installation

Table 1 Basic Tools for Installation

| Description | Specification |
|-------------------------|----------------------------------------------|
| Drilling machine | – |
| Screwdriver | Torx: T10 |
| Knife | – |
| Screws for installation | 4 screws for plate, and 2 screws for adapter |

4 Installation Procedure

This section describes the installation procedure for the RBS.



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Figure 1 Installation Flowchart

4.1 Unpacking RBS

Unpack the RBS on-site. To avoid damage, the RBS must not be unpacked elsewhere and then transported to site.

Ensure that the correct material has been delivered. If the material is damaged, then complain immediately to the supervisor or the transport company.

4.2 Installing the RBS

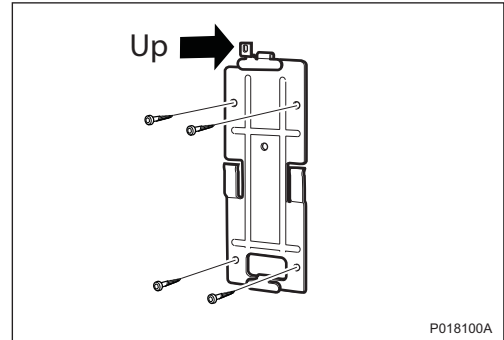
This section describes how to install the RBS attached on a wall or to a ceiling.

Note: When installing, keep in mind the minimum required distances around the RBS.

4.2.1 Installing the Wall Plate

1. Place the wall plate in a vertical position where the RBS is to be located.

Make sure the hole for the cable cover is facing upwards.

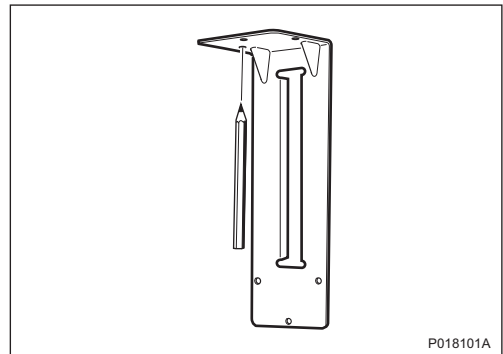


2. Install the wall plate and secure it in position.

Note: Depending on the wall, it may be necessary to drill holes for the screws.

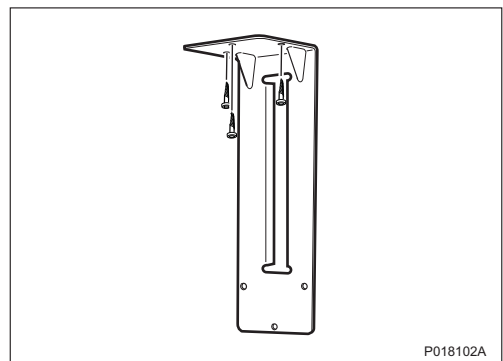
4.2.2 Installing the Wall Plate on a Ceiling Bracket (Optional)

1. Place the ceiling bracket in the position where the RBS is to be located.
2. Mark the position of the holes to be drilled.



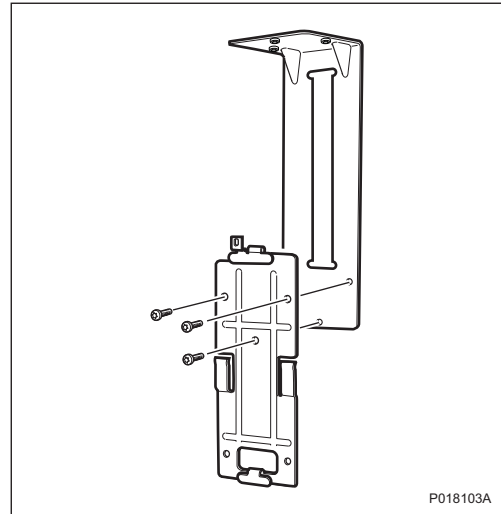
3. Remove the mount and drill the holes for the screws.

Note: Depending on the surface, it may be possible to secure it into position without drilling any holes.



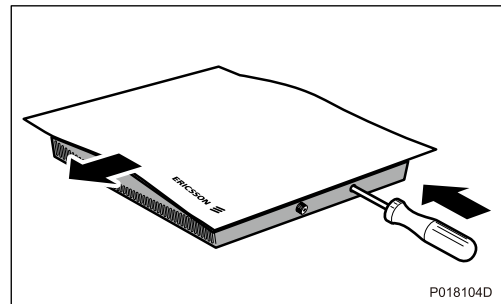
4. Install the bracket and secure it in position.

5. Attach the plate and secure it.

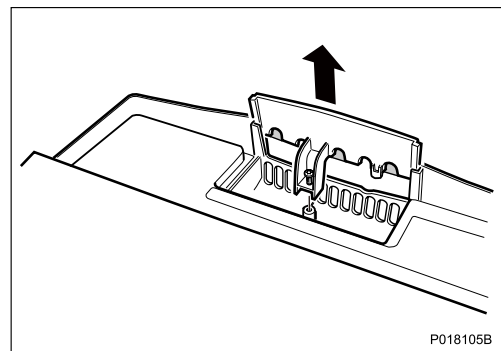


4.3 Attaching the RBS

1. Insert and press a screwdriver in the upper hole to release the front cover, and slide the cover down 75 mm.

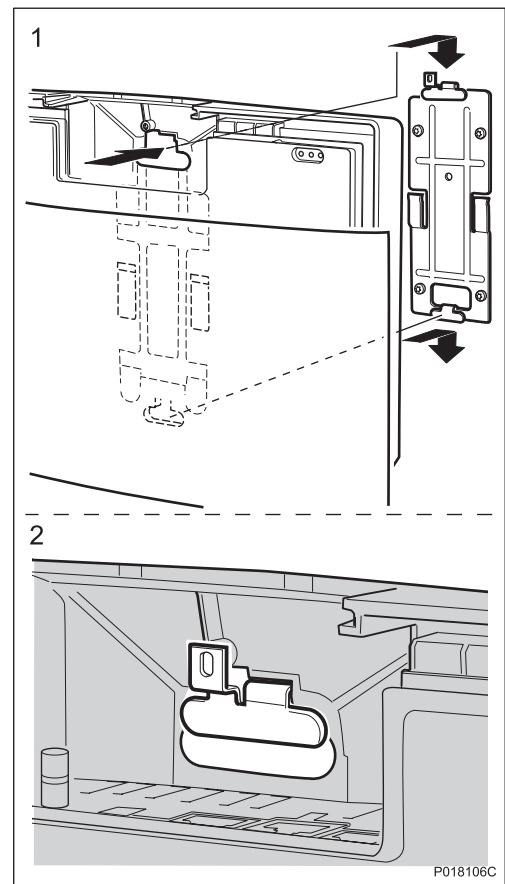


2. Detach the cable cover without releasing the screw.



3. Attach the RBS in its position and press it down.

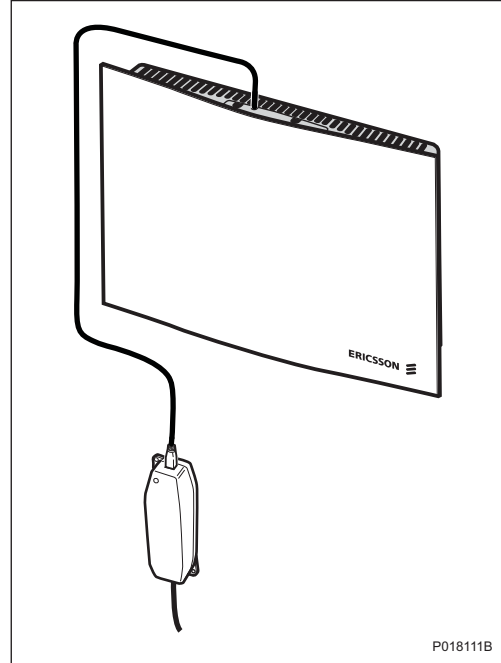
Make sure the hole on the bracket and the hole on the RBS are aligned (see 2 in figure to right).



4.4 Installing DC power

1. Install the PSU-AC-41 in the position where it is to be located.

Note: Depending on the wall, it may be necessary to drill the holes for the screws.



4.5 Connecting Cables

Following interfaces in the RBS 2409 are available:

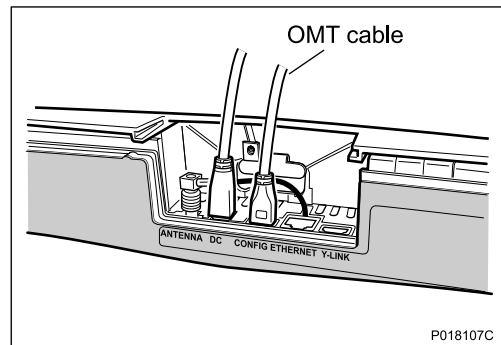
- Ethernet (transmission)
- DC power
- External Antenna (optional)
- Y-link (if using extension RBS)
- Configuration (Configuring the RBS or the STN)

1. Connect the OMT cable to the configuration port for configuration of the RBS.

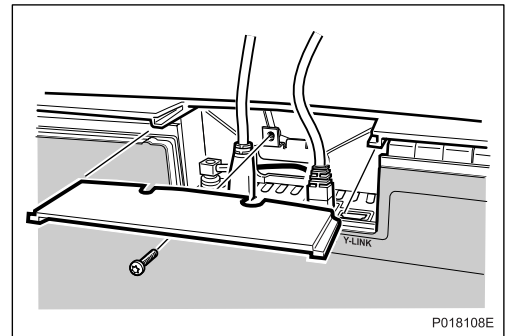
Make sure the RBS is powered up.

For parameter settings, see the *Site Installation Documentation* and document *Setting IDB Parameters*.

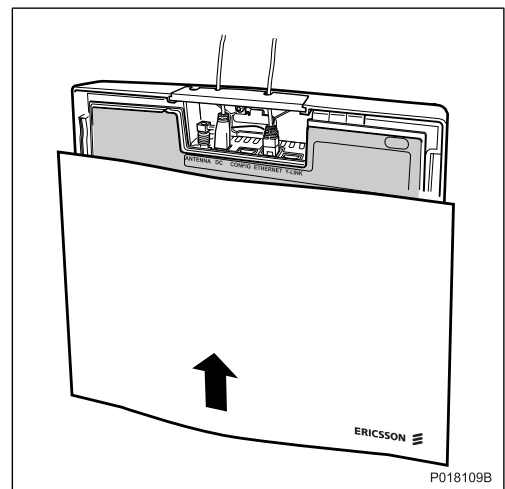
When finished configuring, detach the OMT cable.



2. Connect the ethernet cable and attach the cable cover.

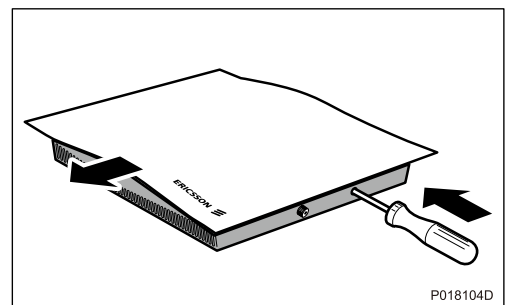


3. Close the front cover, by sliding it up until there is a clicking sound.

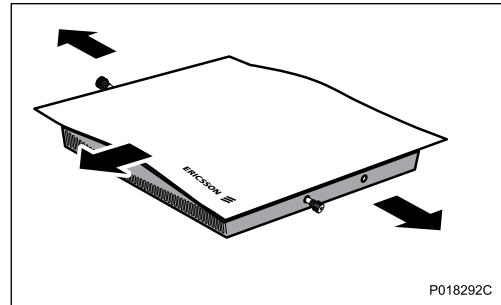


4.6 Replacing Front Cover

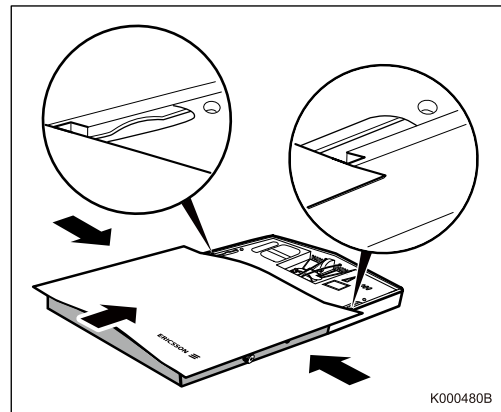
1. Insert and press a screwdriver in the upper hole to release the front cover, and slide the cover down 75 mm.



2. Loosen the captive screws on both sides to release the front cover, using a hand or a Torx 10 screwdriver.



3. Align the upper edge of the new front cover with the two marks on the rear cover, and slide the cover up all the way. Tighten the captive screws fingertight or tighten them properly using a Torx 10 screwdriver.



4.7 Testing the Installation

The RBS is now ready for verification of the site installation.

The verification must be performed directly after the completion of the RBS installation, see document *Verifying RBS Installations at Site*.

After the installation and integration testing is completed, perform concluding routines as described below.

4.8 Performing Concluding Routines

This section describes the routines to be completed before leaving the site.

Note: Ericsson strongly advises that when cleaning up after installing the RBS, the personnel performing the installation pay particular attention to the environment. Primarily, recycle all waste materials that can be recycled and sort waste so that it can be disposed of according to local regulations.

Table 2 Objects to Be Recycled or Disposed of After RBS Installation

| Item | Sort or Recycle? |
|----------------------------------------------------|------------------------------|
| Cable insulation from crimping, brazing or welding | Sorted with plastics |
| Packing chips | |
| Foam | |
| Polystyrene | |
| Bubble plastic | |
| Cable tie clippings | |
| Paper and wood | Paper recycling |
| Waste metal from cable ladders | Recycled or sorted as metals |
| Pieces of cable | |
| Nuts, bolts, washers and screws | |

Note: All packing material must be recycled, and shock absorbers disposed of, in accordance with local recycling regulations.

4.8.1 Updating the Site Installation Documentation

1. Check the *Site Installation Documentation* for deviations from the installation.
2. Update the documents with the changes that apply.
3. Send the documents to the person responsible for Site Installation Engineering.

4.8.2 Performing Final Checks

Before leaving the site, make sure that the following tasks have been completed:

Table 3 Checklist

| Check the following: | OK |
|----------------------------------------------------|----|
| 1. All cables are properly routed and connected. | |
| 3. The site is clear of waste materials. | |
| 4. The Site Installation Documentation is updated. | |

| Check the following: | OK |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 5. The modified Site Installation Documentation has been handed over to the person responsible for the site. | |
| 6. The RBS is powered up if the surrounding temperature changes between hot and cold and the RBS installation is not completed within 48 hours. ⁽¹⁾ | |

(1) See document *Verifying RBS Installations at Site*.