



DX 200

BSC3i S10.5

Installation Work Check List, BSC3i Installation

Site Documents

BSC3018_P

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Summary of changes

Changes between document issues are cumulative. Therefore, the latest document issue contains all changes made to previous issues.

Issue 1-0

This is the first issue.

1

Installation Work Check List, BSC3i Installation and related documents

The purpose of the installation work is to check the delivery, to install the BSC3i to the site, to prepare the network element and to check that the site is ready for commissioning. The purpose of the *Installation Work Check List, BSC3i Installation* is to ensure the quality of installation work. It provides the *Check list* and *Installation Certificate of Completion* for checking the installation of the BSC3i. The *Check list* is updated after each work phase. Also, the *Site Deficiency Report* and *Failure Report* (Nokia standard form) are generated during the work.

The following documents are referred to in the *Check list*.

<i>Engineering for BSC3i</i>	DN01154794
<i>Installation Site Requirements for BSC and TCSM2</i>	DN9815143 (CAM 70386)
<i>Installing BSC3i</i>	DN01154801
<i>BSC3i, Jumper Settings of the Plug-in Units</i>	DN01154825
<i>Site Documents</i>	
<i>Packing List / Despatch Note</i>	

2

Check list

The tables in the following sections provide check lists to be updated after each work phase.

2.1 Checking the availability of documents and tools needed for installation

Check the availability of documents and tools needed for installation.

Installation phase and related documents	Completed
Check the availability of the documents needed for installation. Acquire missing documents. <i>Installing BSC3i</i> , Chapter 2	
Check the availability of the tools needed for installation. Acquire missing tools. <i>Installing BSC3i</i> , Chapter 2	

2.2 Unpacking and checking the equipment

Prepare the equipment room and unpack and check the equipment.

Preparing the equipment room

Installation phase and related documents	Completed
<p>Ensure that all basic work such as installation of lighting, fire extinguishing and air conditioning equipment has been completed.</p> <p><i>Installing BSC3i, Chapter 3</i></p>	
<p>Check against the floor plan for the site that all cable shelves and gratings separate from the equipment itself are ready.</p> <p><i>Installing BSC3i, Chapter 3</i></p>	
<p>Ensure that the station power supply system has been properly installed and that it is ready for use.</p> <p><i>Installing BSC3i, Chapter 3</i></p>	
<p>Ensure that the ventilation equipment has been properly installed and that the temperature in the equipment room is within the limits allowed for the DX 200 equipment.</p> <p><i>Installing BSC3i, Chapter 3</i></p>	
<p>Make the needed additional holes in raised floors and correct installation floor plan.</p>	
<p>Ensure that the premises are properly cleaned.</p> <p><i>Installing BSC3i, Chapter 3</i></p>	
<p>Finally, cover the gangways in the equipment room with protective material for the duration of the installation work.</p> <p><i>Installing BSC3i, Chapter 3</i></p>	
<p>If you find any defects in the site itself or the facilities, notify the party responsible and ensure that corrective actions will be taken immediately.</p> <p><i>Installing BSC3i, Chapter 3</i></p>	

Unpacking and inspecting the equipment

Installation phase and related documents	Completed
Check visually the transport packages for external damages. Record the possible damages. <i>Installing BSC3i</i> , Chapter 3	
Remove equipment from the transport packages. Check the number of cases against the packing list . Record shortcomings. <i>Installing BSC3i</i> , Chapter 3 <i>Packing list / Despatch Note</i>	
Unpack the cases.	
Inspect the equipment for external and internal damages. Record the possible damages. <i>Installing BSC3i</i> , Chapter 3	
If there are any problems with the shipment, notify the Nokia Customer Service Center in your area immediately.	

2.3 Preparing the cabinet for installation

Prepare the cabinet for installation.

Installation phase and related documents	Completed
Remove the grounding cables between the door and the cabinet frame. <i>Installing BSC3i</i> , Chapter 5	
Remove the doors from the cabinet for the duration of the installation. <i>Installing BSC3i</i> , Chapter 5	

2.4 Installing the cabinet on its own feet

Install the cabinet on its own feet.

Installation phase and related documents	Completed
Adjust all four feet of the cabinet (or cabinets) to an initial height of about 50 mm (2 in). <i>Installing BSC3i, Chapter 6</i>	
Place the cabinet to its final place according to the floor plan for the exchange. <i>Installing BSC3i, Chapter 6</i>	
Level off the cabinet in the width and depth direction using a spirit level as a reference. <i>Installing BSC3i, Chapter 6</i>	
If there are two or more network elements (BSCC cabinets) to be installed, repeat the steps mentioned above. <i>Installing BSC3i, Chapter 6</i>	
Attach the cabinets firmly to one another, but do not use any bolts for attachment. <i>Installing BSC3i, Chapter 6</i>	

2.5 Installing the cabinet on floor rails

Install the cabinet on floor rails.

Installing the floor rails

Installation phase and related documents	Completed
Determine the insertion points on the floor for the attachment screws for the first rail. <i>Installing BSC3i, Chapter 7</i>	
Drill the holes for the screws and lodge a wedge anchor in each hole. <i>Installing BSC3i, Chapter 7</i>	
Repeat the procedure mentioned above for the other rail. <i>Installing BSC3i, Chapter 7</i>	
Place the rails to their final places and level them off. <i>Installing BSC3i, Chapter 7</i>	

Installation phase and related documents	Completed
In IBN installation, mount the insulation tube in the first hole, followed by the insulation washer, the washer and the attachment screw. Screw in the screw loosely. Repeat the procedure mentioned above to all attachment points for both rails. <i>Installing BSC3i, Chapter 7</i>	
After attaching all screws, tighten them. <i>Installing BSC3i, Chapter 7</i>	
In IBN installation, check that the attachment screws are not electrically connected to the rail. <i>Installing BSC3i, Chapter 7</i>	

Installing the Floor Rail Installation Set

Installation phase and related documents	Completed
Insert the cabinet attachment pieces inside the floor rails. <i>Installing BSC3i, Chapter 7</i>	
Place the support bars crosswise to the rails, each bar on pair of cabinet attachment pieces. <i>Installing BSC3i, Chapter 7</i>	
Move the support bars to approximately their final positions lengthwise on the rails. <i>Installing BSC3i, Chapter 7</i>	

Mounting the cabinet on floor rails

Installation phase and related documents	Completed
Remove the feet from the cabinet. <i>Installing BSC3i, Chapter 7</i>	
Place the installation ramp in front of the rail, between the support bars for the cabinet and press the support bars against the sides of the ramp. <i>Installing BSC3i, Chapter 7</i>	

Installation phase and related documents	Completed
Roll the cabinet along the ramp onto the support bars. <i>Installing BSC3i, Chapter 7</i>	
Loosely attach the cabinet to the attachment pieces using M10x40 hex bolts. <i>Installing BSC3i, Chapter 7</i>	
Push the cabinet sideways along the rails to its final position. <i>Installing BSC3i, Chapter 7</i>	

2.6 Installing the Side Cable Conduit (SCC)

Install the Side Cable Conduit (SCC).

Note

The Side Cable Conduit can be installed at either side of the cabinet.

Installation phase and related documents	Completed
Install two mounting brackets in the upper and lower holes of the cabinet using screws, washers and nuts. <i>Installing BSC3i, Chapter 8</i>	
Install the conduit panel on the mounting brackets using washers and screws. <i>Installing BSC3i, Chapter 8</i>	

Note

Install and tie the cables entering the cabinet through the conduit before you install the conduit panel.

2.7 Grounding (earthing) the cabinet

Ground (earth) the cabinet.

Connecting the standard ground cable

Installation phase and related documents	Completed
Install the main ground cable to the grounding connector. <i>Installing BSC3i</i> , Chapter 9	
Measure and cut a 25 mm ² (AWG 4) cable which connects the network element to the main ground bar of the site (one cable per network element). <i>Installing BSC3i</i> , Chapter 9	

Note

In installations on a raised floor, the main ground cable is routed through the side cable conduit (SCC) onto the cable structures under the floor, and there on to the main ground bar of the site.

Connecting the ground cable with NEBS-compliant bracket

Installation phase and related documents	Completed
Install the NEBS-compliant cable bracket to the grounding connector. <i>Installing BSC3i</i> , Chapter 9	
Install the grounding lug, with a cable crimped to it, to the grounding bracket with two M6 hex socket screws. <i>Installing BSC3i</i> , Chapter 9	
Measure and cut a 25 mm ² (AWG 4) cable which connects the network element to the main ground bar of the site (one cable per network element). <i>Installing BSC3i</i> , Chapter 9	

Note

In installations on a raised floor, the main ground cable is routed through the side cable conduit (SCC) onto the cable structures under the floor, and there on to the main ground bar of the site.

2.8 Connecting the station power supply

Connect the station power supply.

Installing Earth comb panels (CPGOs)

Installation phase and related documents	Completed
Install the Earth comb panels (CPGOs) on the top of the BSCC cabinet in the holes on either side of the Connector panel (CPRJ45) with four Allen-head screws. <i>Installing BSC3i</i> , Chapter 10	

Connecting power supply cables

Installation phase and related documents	Completed
Connect the main supply cables from the rectifiers connect to the four power connector blocks (PSCG3-B) on the top structure of the cabinet. <i>Installing BSC3i</i> , Chapter 10	

2.9 Attaching and filling in the labels and stickers

Attach and fill in the labels and stickers.

Installation phase and related documents	Completed
Attach labels (the network element identification sticker and cabinet identification and positioning sticker). <i>Installing BSC3i</i> , Chapter 11	
Fill in the labels. <i>Installing BSC3i</i> , Chapter 11	

Note

In first deliveries, the network element identification sticker is attached the cabinet at the factory.

2.10 Installing the internal cables

Install the internal cables.

Installation phase and related documents	Completed
Check that the cabling lists are available. <i>Installing BSC3i</i> , Chapter 12	
Install the internal cabling according to the cabling lists. <i>Installing BSC3i</i> , Chapter 12	

2.11 Replacing Fan Trays (FTRB)

The BSCC cabinet contains four Fan Trays (FTRB) for forced cooling. The Fan Trays have been installed at the factory into special slots contained in shelves 2 and 4. In case you have to replace them, please follow the instructions given below.

Removing a Fan Tray

Installation phase and related documents	Completed
Remove cables from the FTRB. <i>Installing BSC3i</i> , Chapter 13	
Pull the FTRB out of its shelf. <i>Installing BSC3i</i> , Chapter 13	

Installing a Fan Tray

Installation phase and related documents	Completed
Insert the FTRB into the shelf: slide the locks on the front of the FTRB towards each other and push the Fan Tray gently into its shelf (positions 2 and 4) until it clicks into place. <i>Installing BSC3i, Chapter 13</i>	
Connect cables into the FTRB: <ul style="list-style-type: none">• connect the power cable from connector P7 in the corresponding PDFU-A to the back connector of the FTRB• connect Alarm cabling from CLOC-B to the back connector of the FTRB• connect grounding cable from the shelf to the FTRB. <i>Installing BSC3i, Chapter 13</i>	

2.12 Creating a temporary ESD protected area (EPA) for fieldwork

Create a temporary ESD protected area (EPA) for field work.

Note

It is strongly recommended that the entire installation site be constructed according to EPA rules.

Installation phase and related documents	Completed
Create a temporary ESD protected area (EPA). <i>Installing BSC3i, Chapter 14</i>	

2.13 Equipping the cartridges with plug-in units

Equip the cartridges with plug-in units.

Preliminary checks

Installation phase and related documents	Completed
Check the following: <ul style="list-style-type: none">PROM versions of the plug-in unitsinterchangeability codes of the plug-in unitsjumper connectors on the plug-in units. <i>Installing BSC3i</i> , Chapter 15	

Precautions

Installation phase and related documents	Completed
Become acquainted with precautions to be taken. <i>Installing BSC3i</i> , Chapter 15	
Ensure that you are working in an electrostatic free environment. <i>Installing BSC3i</i> , Chapter 15	
Handle the plug-in units with care at all installation phases. <i>Installing BSC3i</i> , Chapter 15	

Fitting the Storage Device plug-in units with installation adapters

Installation phase and related documents	Completed
Mount the WDU (Hard Disk with HDPU-A). <i>Installing BSC3i</i> , Chapter 15	
Mount the FDU (Magneto Optical Disk Drive with ODPU-A). <i>Installing BSC3i</i> , Chapter 15	

Installing the other Plug-in units

Installation phase and related documents	Completed
Check the code of the plug-in unit positions. Record and correct the differences according to jumper setting instructions. <i>Installing BSC3i</i> , Chapter 15 <i>Site Documents, Equipment List</i>	
Use EDS wrist strap earthing device! Insert all the plug-in units (including I/O devices) in the cartridges after checking of identification labels. Leave the plug-in units unconnected. <i>Installing BSC3i</i> , Chapter 15 <i>Site Documents, Equipment List</i>	
Install the power supply units. <i>Installing BSC3i</i> , Chapter 15	
Switch power supply units on. Check the function of the units from the LED indicators. <i>Installing BSC3i</i> , Chapter 15	

2.14 Cabling to environment

Cable cables to environment.

Installation phase and related documents	Completed
Prepare E1/T1 (PCM) and X.25 cables going through the CPGO panel to proper length and install connectors. <i>Installing BSC3i</i> , Chapter 16 <i>Site Documents: Intracabinet Cables</i>	
Settle and tie E1/T1 (PCM) and X.25 cables going through the CPGO panel neatly. <i>Installing BSC3i</i> , Chapter 16	

Installation phase and related documents	Completed
Ground and tie the outgoing cables (E1/T1, X.25) in the grounding element of the CPGO panel. <i>Installing BSC3i</i> , Chapter 16	
Cut the cables to proper length and connect to the DDF. <i>Installing BSC3i</i> , Chapter 16	
Prepare and cable the cabling going to the CPRJ45 panel (LAN, LPT/VDU, Synchronization, Alarm and External Alarm Unit interfaces). <i>Installing BSC3i</i> , Chapter 16 <i>Site Documents: Intracabinet Cables</i>	

2.15 Installing the External Alarm Unit (EXAU)

Install the External Alarm Unit (EXAU).

Installation phase and related documents	Completed
Mount the External Alarm Unit on the wall and connect the alarm cable. <i>Installing BSC3i</i> , Chapter 17	

2.16 Finishing off

Finish off the installation.

Installation phase and related documents	Completed
Remove all temporary markings.	
Check the corrections in drawings used during the installation.	
Reinstall the doors. <i>Installing BSC3i</i> , Chapter 18	

Installation phase and related documents	Completed
Connect the grounding cables between the doors and the cabinet frame. <i>Installing BSC3i</i> , Chapter 18	
Clean the installation site.	
Fill in the <i>Installation Certificate of Completion</i> , see the <i>Appendix</i> .	

[illegible]

DN02198294

Date _____

Network element installed by _____
(Also Print Name)

Customer _____
(Also Print Name)

