

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other)		Nr - No.	
EAB/UKH/HR Magnus Johansson		1/1070-BFE306055 Uen	
Dokansv/Godkänd - Doc respons/Approved	Kontr - Checked	Datum - Date	Rev
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Internal cables for ANA 90102/1 standard cabinet configurations

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1REVISION HISTORY

Rev.	Comments
PA1	Created from 1/1070-BFE 306 045 rev. PC2
PA2	Replaced TP with NSP4 nomenclature like PM and the figures are updated
A	Updated according to 2/1776-BFE 306 055
B	New SS7 cable inserted TSR 491 374, old product (-72) wrong.
C	New picture and new labels on SS7 Server

2INTRODUCTION

This cabling information describes the internal cables needed for ANA 901 02/1 standard cabinet configurations. The external cabling is described in 2/1070-BFE 306055.

The cables shall be marked according to the marking instruction 10201-BYB 501+.

3NODE CONFIGURATION

Smaller nodes (Mini and Midi) consist of different configurations of the base cabinet. For larger nodes (Maxi) different configurations of the extension cabinet is added. The internal cabling of the cabinets described in Table 1 and Table 2 corresponds to Maxi node configurations.

Cabinet 0

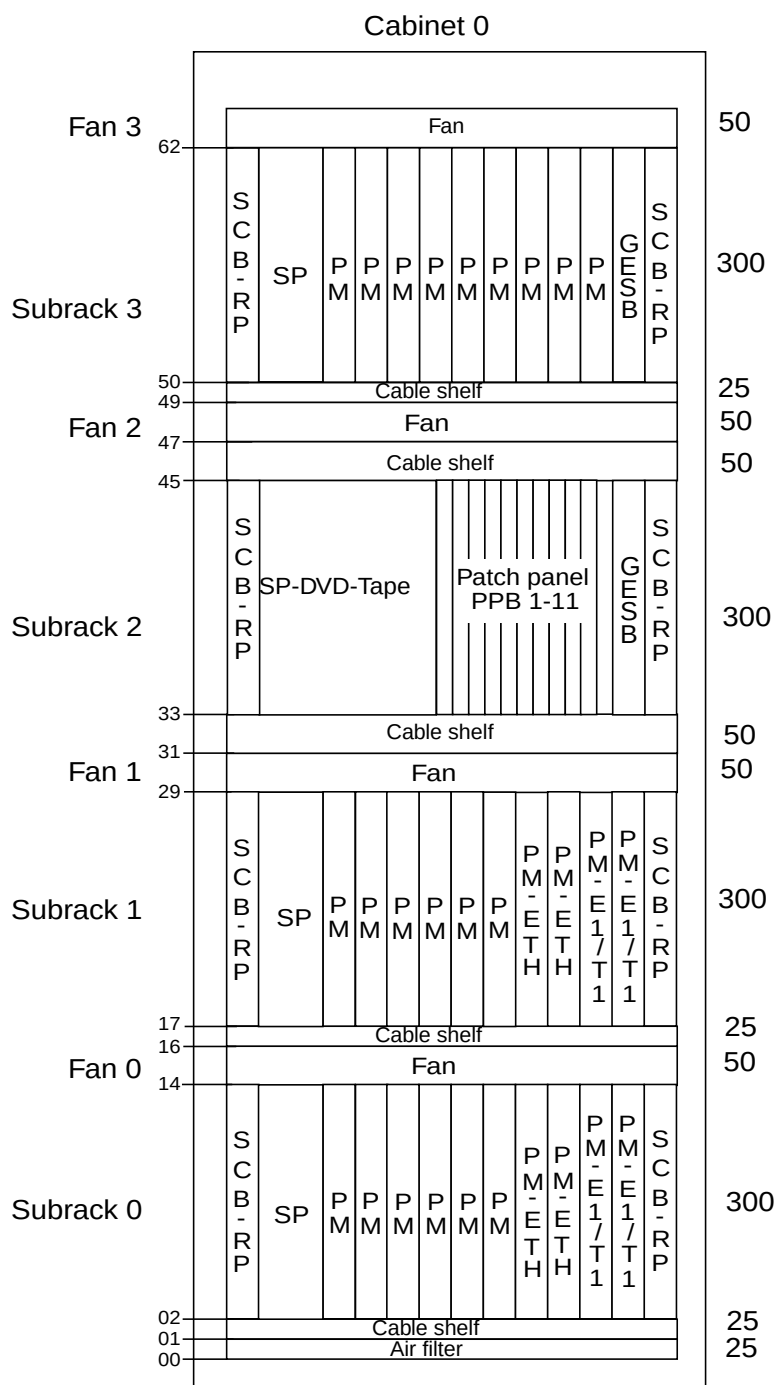
Cabinet 1

BFE 306 055 Base	BFE 306 056 Extension
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BASE CABINET BFE 306 055 CONFIGURATION



Cabinet dimensions:

H x W x D = 1800 x 600 x 400 mm

Board widths:

TP = 30 mm

TP-IP = 30 mm

TP-SS7 = 30 mm

SP = 60 mm

SP-DVD-Tape = 165 mm

SCB-RP = 30 mm

GES = 30 mm

PPB = 15 mm

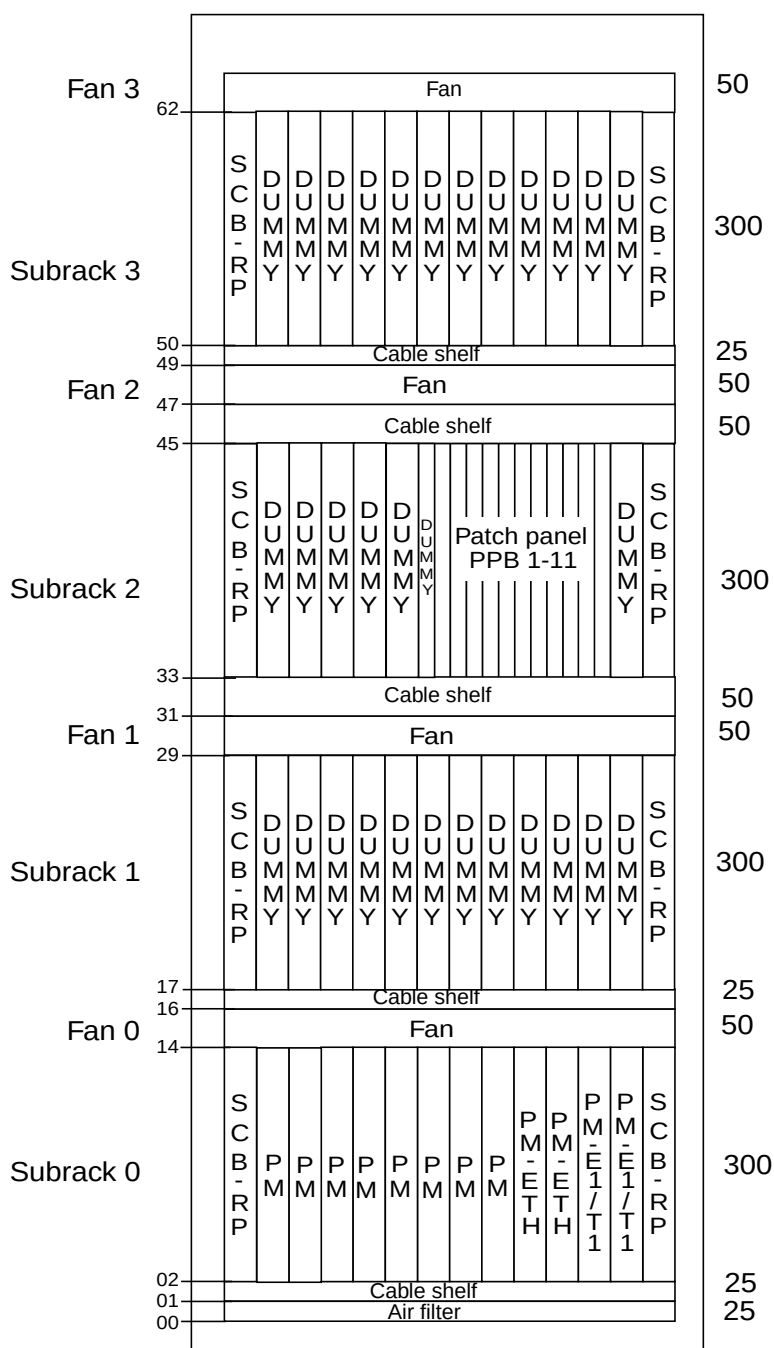
DUMMY = 15 mm

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EXTENSION CABINET BFE 306 056 CONFIGURATION

Cabinet 1



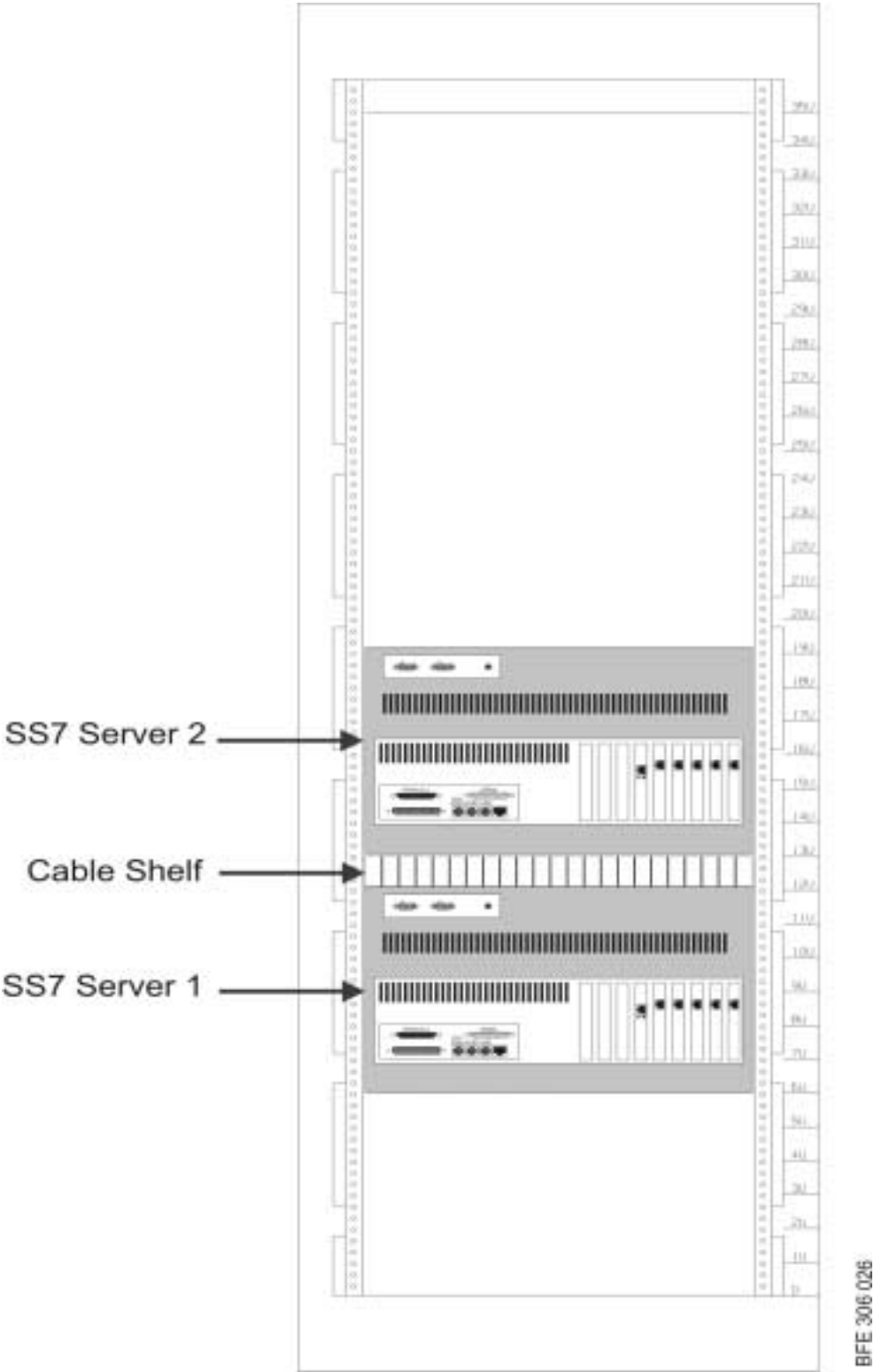
Cabinet dimensions:
H x W x D = 1800 x 600 x 400 mm

Board widths:
TP = 30 mm
TP-IP = 30 mm
TP-SS7 = 30 mm
SCB-RP = 30 mm
PPB = 15 mm
DUMMY = 15 and 30 mm

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6 SS7 EXTENSION CABINET BFE 306 026 CONFIGURATION

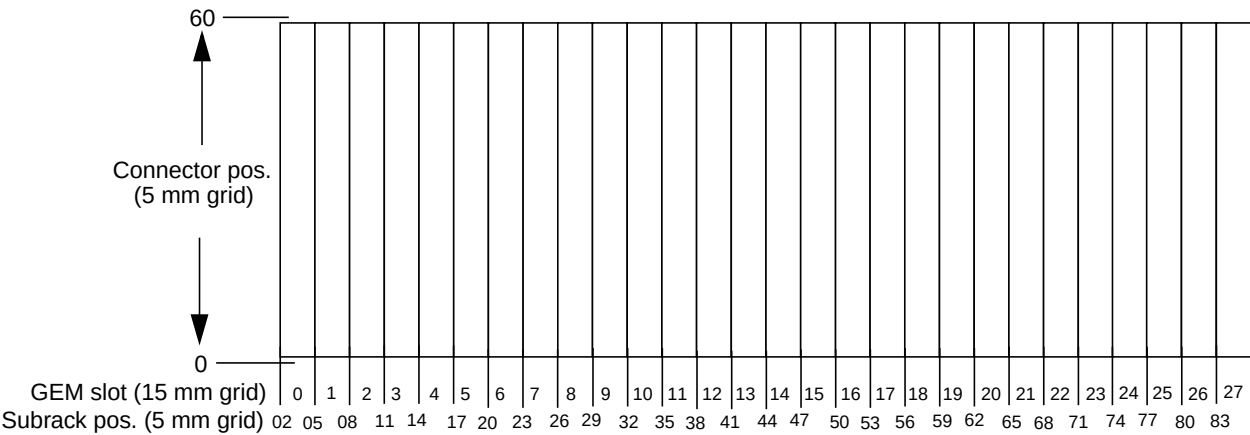
Cabinet 2



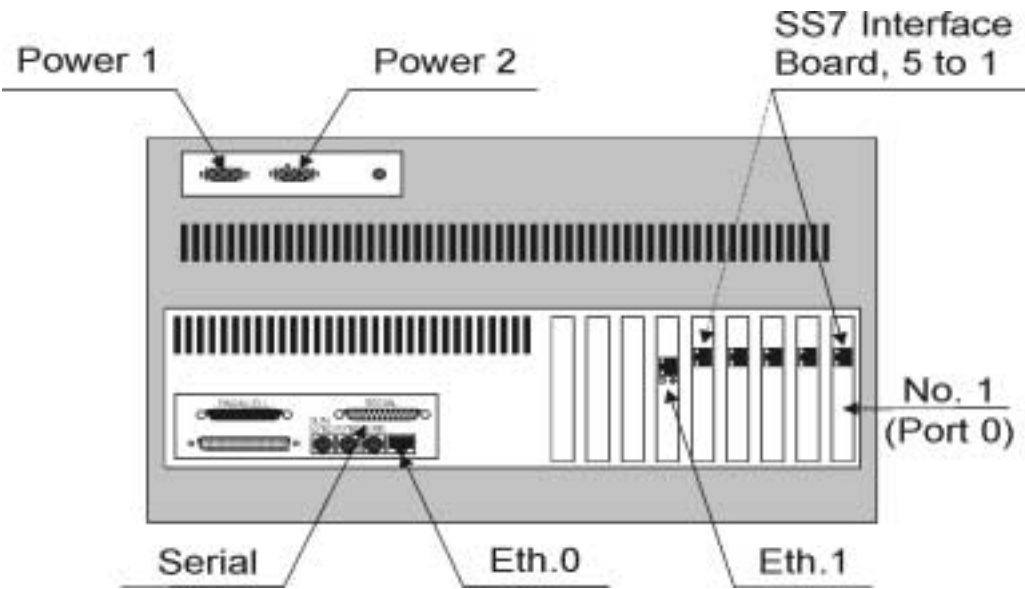
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7 CABLE TYPES AND CABLE POSITIONS

7.1 GEM BOARD AND CONNECTOR POSITIONS



7.2 SS7 (AXMP) SERVER CONNECTOR POSITIONS



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7.3 BASE CABINET BFE 306 055 INTERNAL CABLING

Table 1 describes the internal cabling of a Maxi node configured base cabinet.

Table 1: Base cabinet BFE 306 055 internal cabling

From				Cable	To			
Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.		Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.
1. Ethernet 1000Base-T: SCB-RP --> GESB (8-pol concept - 8-pol concept, cross-over)								
0	0302	06	26	TSR 491 0273/1600	0	0333	75	11
0	0302	84	26	TSR 491 0273/1800	0	0350	75	11
0	0317	06	26	TSR 491 0273/1300	0	0333	75	15
0	0317	84	26	TSR 491 0273/1400	0	0350	75	15
0	0333	06	26	TSR 491 0273/700	0	0333	75	19
0	0333	84	26	TSR 491 0273/1000	0	0350	75	19
0	0350	06	26	TSR 491 0273/1400	0	0333	75	23
0	0350	84	26	TSR 491 0273/350	0	0350	75	23
2. PM-ETH 100Base-TX: PM-ETH--> Patch panel (8-pol concept - 8-pol concept, straight)								
0	0302	59	39	TSR 491 0225/1800	0	0333	48	11
0	0302	59	47	TSR 491 0225/1900	0	0333	48	15
0	0302	65	39	TSR 491 0225/1900	0	0333	51	11
0	0302	65	47	TSR 491 0225/1900	0	0333	51	15
0	0317	59	39	TSR 491 0225/1200	0	0333	54	11
0	0317	59	47	TSR 491 0225/1200	0	0333	54	15
0	0317	65	39	TSR 491 0225/1100	0	0333	57	11
0	0317	65	47	TSR 491 0225/1100	0	0333	57	15
3. Network redundancy 100Base-TX: SCB-RP --> Patch panel (8-pol concept - 8-pol concept, straight)								
0	0333	06	35	TSR 491 0225/600	0	0333	48	27
0	0333	84	35	TSR 491 0225/500	0	0333	51	27
4. SS7 server 100Base-TX: SCB-RP --> Patch panel (8-pol concept - 8-pol concept, straight)								
0	0302	06	35	TSR 491 0225/1700	0	0333	60	27
0	0302	84	35	TSR 491 0225/1900	0	0333	63	27
0	0317	06	35	TSR 491 0225/1400	0	0333	66	27
0	0317	84	35	TSR 491 0225/1500	0	0333	69	27
5. SP-Ethernet 100Base-TX: SP --> Patch panel (RJ45 - 8-pol concept, straight)								
0	0302	11	24	TSR 491 0274/1400	0	0333	48	19

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Table 1: Base cabinet BFE 306 055 internal cabling

From				Cable	To			
Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.		Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.
0	0317	11	24	TSR 491 0274/1000	0	0333	51	19
0	0333	11	24	TSR 491 0274/400	0	0333	54	19
0	0350	11	24	TSR 491 0274/1200	0	0333	57	19
6. SS7 E1/T1: PM-E1/T1 --> Patch panel (8-pol concept (17.5 mm) - 8-pol concept (17.5mm), straight 110 ohm)								
0	0302	71	39	TSR 491 374/1900	0	0333	42	8
0	0302	71	47	TSR 491 374/1900	0	0333	42	12
0	0302	77	39	TSR 491 374/1900	0	0333	42	16
0	0302	77	47	TSR 491 374/1900	0	0333	42	20
0	0317	71	39	TSR 491 374/1500	0	0333	45	8
0	0317	71	47	TSR 491 374/1500	0	0333	45	12
0	0317	77	39	TSR 491 374/1500	0	0333	45	16
0	0317	77	47	TSR 491 374/1500	0	0333	45	20
7. RS-232: SP --> Patch panel (9-pin MicroD-Sub - 8-pin concept, straight)								
0	0333	13	43	TSR 493 10/600	0	0333	54	27
0	0350	13	43	TSR 493 10/1500	0	0333	57	27
8. Fan supervision: SCB-RP --> Fan (8-pol concept - 9-pol D-sub)								
0	0302	03	35	TSR 909 058/600	0	0314	36	4
0	0317	03	35	TSR 909 058/600	0	0329	36	4
0	0333	03	35	TSR 909 058/600	0	0347	36	4
0	0350	03	35	TSR 909 058/600	0	0362	36	4
9. External alarms: SCB-RP --> Patch panel (8-pol concept - 8-pol concept, straight)								
0	0302	03	39	TSR 491 0225/1600	0	0333	51	23
0	0302	81	39	TSR 491 0225/1500	0	0333	54	23
0	0317	03	39	TSR 491 0225/1300	0	0333	57	23
0	0317	81	39	TSR 491 0225/1100	0	0333	60	23
0	0333	03	39	TSR 491 0225/650	0	0333	63	23
0	0333	81	39	TSR 491 0225/600	0	0333	66	23
0	0350	03	39	TSR 491 0225/1500	0	0333	69	23

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Table 1: Base cabinet BFE 306 055 internal cabling

From				Cable	To			
Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.		Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.
0	0350	81	39	TSR 491 0225/1100	0	0333	72	23
10. Power: SCB-RP/Fan --> Power cabinet (3-part power cabling)								
0	0302 0302 0314	03 03 28	12 17 4	1/TSR 490 0901/3	0	C-device		
0	0302 0302 0314	81 81 57	12 17 4	1/TSR 490 0901/3	0	C-device		
0	0317 0317 0329	03 03 28	12 17 4	1/TSR 490 0901/3	0	C-device		
0	0317 0317 0329	81 81 57	12 17 4	1/TSR 490 0901/3	0	C-device		
0	0333 0333 0347	03 03 28	12 17 4	1/TSR 490 0901/3	0	C-device		
0	0333 0333 0347	81 81 57	12 17 4	1/TSR 490 0901/3	0	C-device		
0	0350 0350 0362	03 03 28	12 17 4	1/TSR 490 0901/3	0	C-device		
0	0350 0350 0362	81 81 57	12 17 4	1/TSR 490 0901/3	0	C-device		

7.4

EXTENSION CABINET BFE 306 056 INTERNAL CABLING

Table 2 describes the internal cabling of a Maxi node configured extension cabinet. All cables are internal, except for the 1000Base-T cables, which are drawn between the two cabinets (Base - Extension cabinet).

Table 2: Extension cabinet BFE 306 056 internal cabling

From				Cable	To			
Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.		Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.
1. Ethernet 1000Base-T: SCB-RP --> GESB (8-pol concept - 8-pol concept, cross-over)								
1	0302	06	26	TSR 491 0273/10000	0	0333	75	27
1	0302	84	26	TSR 491 0273/10000	0	0350	75	27

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Table 2: Extension cabinet BFE 306 056 internal cabling

From				Cable	To			
Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.		Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.
1	0317	06	26	TSR 491 0273/10000	0	0333	75	33
1	0317	84	26	TSR 491 0273/10000	0	0350	75	33
1	0333	06	26	TSR 491 0273/10000	0	0333	75	37
1	0333	84	26	TSR 491 0273/10000	0	0350	75	37
1	0350	06	26	TSR 491 0273/10000	0	0333	75	41
1	0350	84	26	TSR 491 0273/10000	0	0350	75	41
2. PM-ETH 100Base-TX: PM-ETH --> Patch panel (8-pol concept - 8-pol concept, straight)								
1	0302	59	39	TSR 491 0225/1800	1	0333	48	11
1	0302	59	47	TSR 491 0225/1900	1	0333	48	15
1	0302	65	39	TSR 491 0225/1900	1	0333	51	11
1	0302	65	47	TSR 491 0225/1900	1	0333	51	15
3. SS7 E1/T1: PM-E1/T1 --> Patch panel (8-pol concept (17.5 mm) - 8-pol concept (17.5mm), straight 110 ohm)								
1	0302	71	39	TSR 491 374/1900	1	0333	42	8
1	0302	71	47	TSR 491 374/1900	1	0333	42	12
1	0302	77	39	TSR 491 374/1900	1	0333	42	16
1	0302	77	47	TSR 491 374/1900	1	0333	42	20
4. Fan supervision: SCB-RP --> Fan (8-pol concept - 9-pol D-sub)								
1	0302	03	35	TSR 909 058/600	1	0314	36	4
1	0317	03	35	TSR 909 058/600	1	0329	36	4
1	0333	03	35	TSR 909 058/600	1	0347	36	4
1	0350	03	35	TSR 909 058/600	1	0362	36	4
5. External alarms: SCB-RP --> Patch panel (8-pol concept - 8-pol concept, straight)								
1	0302	03	39	TSR 491 0225/1600	1	0333	51	23
1	0302	81	39	TSR 491 0225/1500	1	0333	54	23
1	0317	03	39	TSR 491 0225/1300	1	0333	57	23
1	0317	81	39	TSR 491 0225/1100	1	0333	60	23
1	0333	03	39	TSR 491 0225/650	1	0333	63	23
1	0333	81	39	TSR 491 0225/600	1	0333	66	23
1	0350	03	39	TSR 491 0225/1500	1	0333	69	23
1	0350	81	39	TSR 491 0225/1100	1	0333	72	23

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Table 2: Extension cabinet BFE 306 056 internal cabling

From				Cable	To			
Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.		Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.
6. Power: SCB-RP/Fan --> Power cabinet (3-part power cabling)								
1	0302 0302 0314	03 03 28	12 17 4	1/TSR 490 0901/3	1	C-device		
1	0302 0302 0314	81 81 57	12 17 4	1/TSR 490 0901/3	1	C-device		
1	0317 0317 0329	03 03 28	12 17 4	1/TSR 490 0901/3	1	C-device		
1	0317 0317 0329	81 81 57	12 17 4	1/TSR 490 0901/3	1	C-device		
1	0333 0333 0347	03 03 28	12 17 4	1/TSR 490 0901/3	1	C-device		
1	0333 0333 0347	81 81 57	12 17 4	1/TSR 490 0901/3	1	C-device		
1	0350 0350 0362	03 03 28	12 17 4	1/TSR 490 0901/3	1	C-device		
1	0350 0350 0362	81 81 57	12 17 4	1/TSR 490 0901/3	1	C-device		

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7.5 SS7 EXTENSION CABINET BFE 306 026 INTERNAL CABLING

Table 3 describes the internal cabling of a SS7 extension cabinet. The cabinet is not a GEM cabinet, its a cPCI standard cabinet.

Table 3: SS7 Extension cabinet BFE 306 026 internal cabling

From				Cable	To			
Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.		Cabinet No.	Subrack pos.	Connector hor. pos.	Connector vert. pos.
1. SS7 Server-Ethernet 100Base-TX: Server --> Patch panel (RJ45 - 8-pol concept, straight)								
2	1	Eth0	-	TSR 491 0274/3000	0	0333	60	49
2	1	Eth1	-	TSR 491 0274/3000	0	0333	63	49
2	2	Eth0	-	TSR 491 0274/3000	0	0333	66	49
2	2	Eth1	-	TSR 491 0274/3000	0	0333	69	49
2. RS232 S-Lan: SS7 Server 1 --> SS7 Server 2 (2*25-pol D-sub female - 2*25-pol D-sub male)								
2	1	Serial	-	TSR 903 0088/2	2	2	Serial	-
3. Power: SS7 Server --> Power cabinet (TS-HOD 500W)								
2	1	Power 1	-	TSR 903 0103/2000	2	C-device		
2	1	Power 2	-	TSR 903 0103/2000	2	C-device		
2	2	Power 1	-	TSR 903 0103/2000	2	C-device		
2	2	Power 2	-	TSR 903 0103/2000	2	C-device		

For Connector hor./vert. position, see chapter 6