NOTA: Acest desen nu constituie o obligatie de aplicare de către contractor.
El reprezintă doar un exemplu de circuit de cale utilizat la CFR si nu trebuie aplicat ca atare.

NOTE: It is not compulsory for the contractor to apply this drawing.
It is only an example of track circuit in use at CFR and shall not be applied as such.

Indice Index	Data Date	Modificare Modification/Revision	Proiectant Designer	Aprobat Consultant Approval Consultant	Aprobat CFR Approval CFR
D					
C					
B					
A					

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANŢAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

CLIENT / CLIENT

C.N.C.F. "C.F.R." - S.A.

ITALFERR
GRUPPO FERROVIE DELLO STATO
Joint Venture leader

Scott Wilson

OBERMEYER
PLANEN + BERATEN GmbH

TECNIC
Consulting Engineers

CONSULTANT / CONSULTANT

			Data Date	Semnătură Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza	12.12.2011	
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli	12.12.2011	
Verificat Checked	Expert Cheie Key Expert	P. Amodio	12.12.2011	

SUBCONTRACTANT / SUBCONTRACTOR

AREX

Aprobat Approved	Responsabil Subcontractant Subcontractant Responsible	A. Stanciu - Dinulescu	12.12.2011	
Întocmit Elaborated	Proiectant Designer	ing. Juganaru Adriana	12.12.2011	

Reabilitarea liniei de cale ferata Brasov - Simeria, parte componentă a coridorului IV Pan European, pentru circulaţia trenurilor cu viteza maximă de 160 km/h,
Tronsonul : Brasov - Sighisoara
Rehabilitation of the railway line Brasov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h,
Section : Brasov - Sighisoara

Proiect/Project
2004/RO/16/P/PA/003

Faza / Phase:
D.E. / D.D.

Denumire desen / Drawing Title :

Statia / Station VANATORI
Fise de montaj rama aparataj receptie 1
Wiring diagrams for receiving equipment frame 1

Codificare / Codification System	Scara / Scale FĂRĂ / No scale	LOT / LOT	Nr. / No 01 / 09

EA51 01 E 17 BX SE 01 7 2 013 1

420x297=0.125mp

RAMA APARATAJ RECEPTIE(FI1)

	1	2	3	4	5	6	7	8	9
9									
8									
7	PIC-1 015 CI	BDEF-4 ② 015 BDE	PIC-1 II CI	BDEF-4 ④ II BDE	PIC-1 XO-1ADa CI	BDEF-4 ③ XO-1ADa BDE			
6	PIC-1 13 Sil	BDEF-4 ① 13 BDE	PIC-1 15 Sil	BDEF-4 ③ 15 BDE	PIC-1 17 Sil	BDEF-4 ② 17 BDE	PIC-1 19 Sil	BDEF-4 ③ 19 BDE	
5	PIC-1 033 CI	BDEF-4 ① 033 BDE	PIC-1 1 Sil	BDEF-4 ① 1 BDE	PIC-1 3-11 Sil	BDEF-4 ③ 3-11 BDE	PIC-1 7-9 Sil	BDEF-4 ② 7-9 BDE	
4	PIC-1 XO-2AD CI	BDEF-4 ① XO-2AD BDE	PIC-1 XO-1ADb CI	BDEF-4 ② XO-1ADb BDE	PIC-1 013 CI	BDEF-4 ③ 013 BDE	PIC-1 023 CI	BDEF-4 ② 023 BDE	
	FI1–FATA					FI1–SPATE			
3	31 13 Si FC B	32 15 Si FC B	33 17 Si FC B	34 19 Si FC B		34A	33A	32A	31A
2	21 033 C FC B	22 1 Si FC B	23 3-11 Si FC B	24 7-9 Si FC B		24A	23A	22A	21A
1	11 XO-2AD FC B	12 XO-1ADb FC B	13 013-C FC B	14 023 C FC B		14A	13A XO-1ADa FC B	12A II C FC B	11A 015 C FC B

01	011 IP-2 XO-2AD/XO-1ADb	012 IP-2 013/023	013 IP-2 033/1	014 IP-2 3-11/7-9	015 IP-2 13/15	016 IP-2 17/19	016A	015A	014A	013A	012A IP-2 XO-1ADa	011A IP-2 015/II

001	002	003	004	005	006	007	008	009	0010	0011	0012
12x160Ω / 0,3A											

0012A	0011A	0010A	009A	008A	007A	006A	005A	004A	003A	002A	001A
3x100Ω / 0,3A											

Statia: VANATORI

EA51 01 E 17 BX SE 017 2 013 1   2/9

420x297=0.125mp

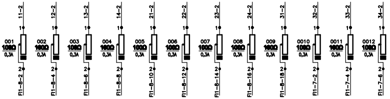
FI1–FATA

31	13 Si	32	15 Si	33	17 Si	34	19 Si
1	FI1–8–17	1	FI1–7–1	1	FI1–7–3	1	FI1–7–5
2	009–1	2	0010–1	2	0011–1	2	0012–1
3	015–1 61–11	3	015–5 63–11	3	016–1 65–11	3	016–5 67–11
4	015–2 61–71	4	015–6 63–71	4	016–2 65–71	4	016–6 67–71

21	033 C	22	1 Si	23	3–11 Si	24	7–9 Si
1	FI1–8–9	1	FI1–8–11	1	FI1–8–13	1	FI1–8–15
2	005–1	2	006–1	2	007–1	2	008–1
3	013–1 51–11	3	013–5 53–11	3	014–1 55–11	3	014–5 57–11
4	013–2 51–71	4	013–6 53–71	4	014–2 55–71	4	014–6 57–71

11	XO–2AD	12	XO–1ADb	13	013 C	14	023 C
1	FI1–8–1	1	FI1–8–3	1	FI1–8–5	1	FI1–8–7
2	001–1	2	002–1	2	003–1	2	004–1
3	011–1 41–11	3	011–5 43–11	3	012–1 45–11	3	012–5 47–11
4	011–2 41–71	4	011–6 43–71	4	012–2 45–71	4	012–6 47–71

011	XO–2AD/XO–1ADb	012	013/023	013	033/1	014	3–11/7–9	015	13/15	016	17/19
1	11–3	1	13–3	1	21–3	1	23–3	1	31–3	1	33–3
2	11–4	2	13–4	2	21–4	2	23–4	2	31–4	2	33–4
3	FI1–6–1	3	FI1–6–5	3	FI1–6–9	3	FI1–6–13	3	FI1–6–17	3	FI1–6–21
4	8 FI1–6–33	4	8 011–8	4	8 012–8	4	8 013–8	4	8 014–8	4	8 015–8
5	12–3	5	14–3	5	22–3	5	24–3	5	32–3	5	34–3
6	12–4	6	14–4	6	22–4	6	24–4	6	32–4	6	34–4
7	FI1–6–3	7	FI1–6–7	7	FI1–6–11	7	FI1–6–15	7	FI1–6–19	7	FI1–6–23
8	4 012–4	8	4 013–4	8	4 014–4	8	4 015–4	8	4 016–4	8	4 FI1–6–33



Statia: VANATORI

EA51 01 E 17 BX SE 017 2 013 1

420x297=0.125mp

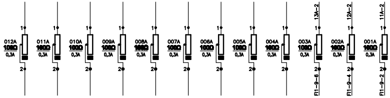
FI1–SPATE

34A		33A		32A		31A	
1		1		1		1	
2		2		2		2	
3		3		3		3	
4		4		4		4	

24A		23A		22A		21A	
1		1		1		1	
2		2		2		2	
3		3		3		3	
4		4		4		4	

14A		13A	XO–1ADa	12A	II–C	11A	015–C
1		1	FI1–9–5	1	FI1–9–3	1	FI1–9–1
2		2	003A–1	2	002A–1	2	001A–1
3		3	012A–1 75–11	3	011A–5 73–11	3	011A–1 71–11
4		4	012A–2 75–71	4	011A–6 73–71	4	011A–2 71–71

016A		015A		014A		013A		012A	XO–1ADa	011A	015/IIC
1		1		1		1		1	13A–3	1	11A–3
2		2		2		2		2	13A–4	2	11A–4
3		3		3		3		3	FI1–6–29	3	FI1–6–25
4		4		4		4		4	8 011A–8	4	8 FI1–6–35
5		5		5		5		5		5	12A–3
6		6		6		6		6		6	12A–4
7		7		7		7		7		7	FI1–6–27
8		8		8		8		8	4 FI1–6–35	8	4 012A–4



Statia: VANATORI

EA51 01 E 17 BX SE 017 2 013 1

420x297=0.125mp

RANDUL 4,5

59		58		57		56		55		54		53		52		51	
			7-9 BDE		7-9 Sil		3-11 BDE		3-11 Sil		1 BDE		1 Sil		033 BDE		033 CI
		12	0x220			12	0x220			12	0x220			12	0x220		
		11	FI1-4-30	11	24-3	11	FI1-4-26	11	23-3	11	FI1-4-22	11	22-3	11	FI1-4-18	11	21-3
				13	OS			13	OS			13	OS			13	OS
		32	7-33			32	5-33			32	3-33			32	1-33		
		31	7-53			31	5-53			31	3-53			31	1-53		
				33	8-32			33	6-32			33	4-32			33	2-32
		52	+24S2			52	+24S3			52	+24S1			52	+24S1		
		51	Ax220			51	Ax220			51	Ax220			51	Ax220		
				53	8-31			53	6-31			53	4-31			53	2-31
		72	OS			72	OS			72	OS			72	OS		
		71	FI1-4-32	71	24-4	71	FI1-4-28	71	23-4	71	FI1-4-24	71	22-4	71	FI1-4-20	71	21-4

49		48		47		46		45		44		43		42		41	
			023 BDE		023 CI		013 BDE		013 CI		XO-1ADb BDE		XO-1ADb CI		XO-2AD BDE		XO-2AD CI
		12	0x220			12	0x220			12	0x220			12	0x220		
		11	FI1-4-14	11	14-3	11	FI1-4-10	11	13-3	11	FI1- 4-6	11	12-3	11	FI1-4-2	11	11-3
				13	OS			13	OS			13	OS			13	OS
		32	7-33			32	5-33			32	3-33			32	1-33		
		31	7-53			31	5-53			31	3-53			31	1-53		
				33	8-32			33	6-32			33	4-32			33	2-32
		52	+24S2			52	+24S3			52	+24S2			52	+24S1		
		51	Ax220			51	Ax220			51	Ax220			51	Ax220		
				53	8-31			53	6-31			53	4-31			53	2-31
		72	OS			72	OS			72	OS			72	OS		
		71	FI1-4-16	71	14-4	71	FI1-4-12	71	13-4	71	FI1-4-8	71	12-4	71	FI1-4-4	71	11-4

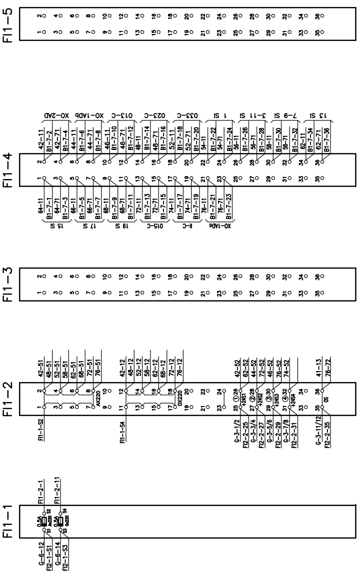
Statia: VANATORI

RANDUL 6,7

79		78		77		76		75		74		73		72		71	
							XO-1ADa BDE		XO-1ADa CI		II BDE		II CI		015 BDE		015 CI
		12				12	0x220			12	0x220			12	0x220		
		11		11		11	FI1-4-21	11	13A-3	11	FI1-4-17	11	12A-3	11	FI1-4-13	11	11A-3
				13				13	OS			13	OS			13	OS
		32				32	5-33			32	3-33			32	1-33		
		31				31	5-53			31	3-53			31	1-53		
				33				33	6-32			33	4-32			33	2-32
		52				52	+24S3			52	+24S4			52	+24S2		
		51				51	Ax220			51	Ax220			51	Ax220		
				53				53	6-31			53	4-31			53	2-31
		72				72	OS			72	OS			72	OS		
		71		71		71	FI1-4-23	71	13A-4	71	FI1-4-19	71	12A-4	71	FI1-4-15	71	11A-4

69		68		67		66		65		64		63		62		61	
			19 BDE		19 Sil		17 BDE		17 Sil		15 BDE		15 Sil		13 BDE		13 Sil
		12	0x220			12	0x220			12	0x220			12	0x220		
		11	FI1-4-9	11	34-3	11	FI1-4-5	11	33-3	11	FI1-4-1	11	32-3	11	FI1-4-34	11	31-3
				13	OS			13	OS			13	OS			13	OS
		32	7-33			32	5-33			32	3-33			32	1-33		
		31	7-53			31	5-53			31	3-53			31	1-53		
				33	8-32			33	6-32			33	4-32			33	2-32
		52	+24S3			52	+24S2			52	+24S3			52	+24S1		
		51	Ax220			51	Ax220			51	Ax220			51	Ax220		
				53	8-31			53	6-31			53	4-31			53	2-31
		72	OS			72	OS			72	OS			72	OS		
		71	FI1-4-11	71	34-4	71	FI1-4-7	71	33-4	71	FI1-4-3	71	32-4	71	FI1-4-36	71	31-4

Statia: VANATORI



Statia: VANATORI

EA51 01 E 17 BX SE 017 2 013 1 **7/9**

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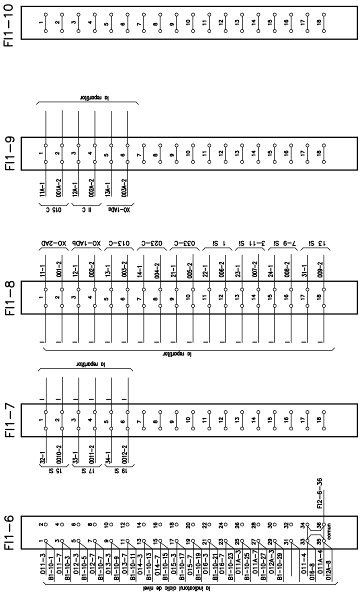

Statia: VANATORI

EA51 01 E 17 BX SE 017 2 013 1 **8/9**

420x297=0.125mp

BUCLE TENSIUNI

+24S1	+24S2	+24S3	+24S4	Ax220	0x220	0S
FI1-2-26	FI1-2-28	FI1-2-30	FI1-2-32	FI1-2-2	FI1-2-12	FI1-2-36
42-52	44-52	46-52	74-52	42-51	42-12	41-13
52-52	48-52	56-52		44-51	44-12	42-72
54-52	58-52	64-52		46-51	46-12	43-13
62-52	66-52	68-52		48-51	48-12	44-72
	72-52	76-52		FI1-2-2	FI1-2-12	45-13
				FI1-2-4	FI1-2-14	46-72
				52-51	52-12	47-13
				54-51	54-12	48-72
				56-51	56-12	58-72
				58-51	58-12	57-13
				FI1-2-4	FI1-2-14	56-72
				FI1-2-6	FI1-2-16	55-13
				62-51	62-12	54-72
				64-51	64-12	53-13
				66-51	66-12	52-72
				68-51	68-12	51-13
				FI1-2-6	FI1-2-16	61-13
				FI1-2-8	FI1-2-18	62-72
				72-51	72-12	63-13
				74-51	74-12	64-72
				76-51	76-12	65-13
				FI1-2-8	FI1-2-18	66-72
						67-13
						68-72
						76-72
						75-13
						74-72
						73-13
						72-72
						71-13
FI1-2-26	FI1-2-28	FI1-2-30				FI1-2-36

Statia: VANATORI