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.

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

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

CFR

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

CLIENT / CLIENT

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 Secțiune 1 Section 1 Coordinator	C. Gambelli	12.12.2011	
Verificat Checked	Expert Cheie Key Expert	P. Amodio	12.12.2011	

SUBCONTRACTANT / SUBCONTRACTOR AREX COMPANY

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

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

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

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

Denumire desen / Drawing Title :

Statia / Station ALBESTI TARNAVA
Fise de montaj rama aparataj receptie 2
Wiring diagrams for receiving equipment frame 2

Codificare / Codification System	Scara / Scale Fără / No scale	LOT / LOT	Nr. / No 01 / 89
E A 5 1 0 1 E 1 9 B X S E 0 1 9 2 0 1 5 1			

ESTE INTERZISA MODIFICAREA, INSTRAINAREA, COPIEREA SI MULTIPLICAREA ACESTOR SCHEME ELECTRICE SUB FORMA TIPARITA SAU ELECTRONICA, FARA APROBAREA SCRISA A ISPCF, CARE ARE DREPTUL DE PROPRIETATE INTELECTUALA ASUPRA ACESTORA

ISPCF ISI REZERVA DREPTUL DE A MODIFICA ACESTE SCHEME ELECTRICE ATUNCI CAND ESTE NECESAR.

RAMA APARATAJ REC

	1	2	3	4	5
8	1-CI	② 1-BDE	5-CI	① 5-BDE	002-CI
7	14a-Sil	③ 14a-BDE	14b-Sil	③ 14b-BDE	(16-18)a-Sil
6	2-8-Sil	③ 2-8-BDE	4-6-Sil	② 4-6-BDE	10-Sil
5	YF-1AD(a)	② YF-1AD(a)	Y-1AD(a)	④ Y-1AD(a)	024-CI
	F12 - FATA				
4	41 FC-B 2-8-Si	42 FC-B 4-6-Si	43 FC-B 10-Si	44 FC-B 12-Si	
3	31 FC-B YF-1AD(a)	32 FC-B Y-1AD(a)	33 FC-B 024-C	34 FC-B 034-C	
2	2x0,5A	22 NF1-2000 14b-Si	23 NF1-2000 (16-18)b-Si	24	25
1	11 IP-2 YF-1AD(a)/Y-1AD(a)	12 IP-2 024/034	13 IP-2 2-8/4-6	14 IP-2 10/12	

01	02	03	04	05	06	07	08	09
								15x100a/0,3A

Statia: Albesti

EPTIE 2(FI2)

6	7	8	9
③ 002-BDE			
② (16-18)a-BDE	(16-18)b-Sil	② (16-18)b-BDE	
④ 10-BDE	12-Sil	④ 12-BDE	
④ 024-BDE	034-CI	② 034-BDE	
FI2 - SPATE			
44A	43A FC-B 002-C	42A FC-B 5-C	41A FC-B 1-C
34A FC-B (16-18)b-Si	33A FC-B (16-18)a-Si	34A FC-B 14b-Si	31A FC-B 14a-Si
26	27	28	29
16 IP-2 14a/14b	17 IP-2 (16-18)a/(16-18)b	18 IP-2 1/5	19 IP-2 002

010	011	012	013	014	015	016

ESTE INTERZISA MODIFICAREA, INSTRAINAREA, COPIEREA SI MULTIPLICAREA ACESTOR SCHEME ELECTRICE SUB FORMA TIPARITA SAU ELECTRONICA, FARA APROBAREA SCRISA A ISPCF, CARE ARE DREPTUL DE PROPRIETATE INTELECTUALA ASUPRA ACESTORA
ISPCF ISI REZERVA DREPTUL DE A MODIFICA ACESTE SCHEME ELECTRICE ATUNCI CAND ESTE NECESAR.

FI2-RANDUL 2

	9		8		7		6		5		4		3		2		1
Nr. crt.		Nr. crt.		Nr. crt.		Nr. crt.		Nr. crt.		Nr. crt.		Nr. crt.	(16-18)b-Si	Nr. crt.	14b-Si	Nr. crt.	
1		1		1		1		1		1		1		1		S1 0.5A	**Ax220** FI2-1-1
2		2		2		2		2		2		2	78-11	2	74-11	S2	FI2-1-2
3		3		3		3		3		3		3		3		S3 0.5A	**0x220** FI2-1-9
4		4		4		4		4		4		4	78-71	4	74-71	S4	FI2-1-10
12		12		12		12		12		12		12	76-11	12	72-11		
11		11		11		11		11		11		11	FI2-6-5	11	FI2-6-3		
13		13		13		13		13		13		13		13			
22		22		22		22		22		22		22		22			
21		21		21		21		21		21		21		21			
23		23		23		23		23		23		23		23			
32		32		32		32		32		32		32		32			
31		31		31		31		31		31		31		31			
33		33		33		33		33		33		33		33			
42		42		42		42		42		42		42		42			
41		41		41		41		41		41		41		41			
43		43		43		43		43		43		43		43			
52		52		52		52		52		52		52		52			
51		51		51		51		51		51		51		51			
53		53		53		53		53		53		53		53			
62		62		62		62		62		62		62		62			
61		61		61		61		61		61		61		61			
63		63		63		63		63		63		63		63			
72		72		72		72		72		72		72		72			
71		71		71		71		71		71		71		71			
73		73		73		73		73		73		73		73			
82		82		82		82		82		82		82		82			
81		81		81		81		81		81		81		81			
83		83		83		83		83		83		83		83			

FI2-2

Statia: Albesti

ESTE INTERZISA MODIFICAREA, INSTRAINAREA, COPIEREA SI MULTIPLICAREA ACESTOR SCHEME ELECTRICE SUB FORMA TIPARITA SAU ELECTRONICA, FARA APROBAREA SCRISA A ISPCF, CARE ARE DREPTUL DE PROPRIETATE INTELECTUALA ASUPRA ACESTORA
ISPCF ISI REZERVA DREPTUL DE A MODIFICA ACESTE SCHEME ELECTRICE ATUNCI CAND ESTE NECESAR.

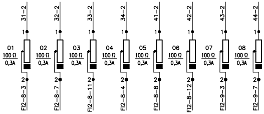
Statia: Albesti

FI2-FATA

41	2-8-Si	42	4-6-Si	43	10-Si	44	12-Si
1	FI2-8-6	1	FI2-8-10	1	FI2-9-1	1	FI2-9-5
2	05-1	2	06-1	2	07-1	2	08-1
3	13-1 61-11	3	13-5 63-11	3	14-1 65-11	3	14-5 67-11
4	13-2 61-71	4	13-6 63-71	4	14-2 65-71	4	14-6 67-71

31	YF-1AD(a)	32	Y-1AD(a)	33	024-C	34	034-C
1	FI2-8-1	1	FI2-8-5	1	FI2-8-9	1	FI2-8-2
2	01-1	2	02-1	2	03-1	2	04-1
3	11-1 51-11	3	11-5 53-11	3	12-1 55-11	3	12-5 57-11
4	11-2 51-71	4	11-6 53-71	4	12-2 55-71	4	12-6 57-71

11	YF-1AD(a)/Y-1AD(a)	12	024/034	13	2-8/4-6	14	10/12
1	31-3	1	33-3	1	41-3	1	43-3
2	31-4	2	33-4	2	41-4	2	43-4
3	FI2-3-1	3	FI2-3-5	3	FI2-3-9	3	FI2-3-13
4	8 FI2-4-2	4	8 11-8	4	8 12-8	4	8 13-8
5	32-3	5	34-3	5	42-3	5	44-3
6	32-4	6	34-4	6	42-4	6	44-4
7	FI2-3-3	7	FI2-3-7	7	FI2-3-11	7	FI2-3-2
8	4 12-4	8	4 13-4	8	4 14-4	8	4 16-4



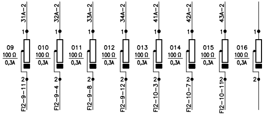
ESTE INTERZISA MODIFICAREA, INSTRAINAREA, COPIEREA SI MULTIPLICAREA ACESTOR SCHEME ELECTRICE SUB FORMA TIPARITA SAU ELECTRONICA, FARA APROBAREA SCRISA A ISPCF, CARE ARE DREPTUL DE PROPRIETATE INTELECTUALA ASUPRA ACESTORA
ISPCF ISI REZERVA DREPTUL DE A MODIFICA ACESTE SCHEME ELECTRICE ATUNCI CAND ESTE NECESAR.

FI2-SPATE

44A		43A	002-C	42A	5-C	41A	1-C
1		1	FI2-10-9	1	FI2-10-5	1	FI2-10-1
2		2	015-1	2	014-1	2	013-1
3		3	19-1 85-11	3	18-5 83-11	3	18-1 81-11
4		4	19-2 85-71	4	18-6 83-71	4	18-2 81-71

34A	(16-18)b-Si	33A	(16-18)a-Si	32A	14b-Si	31A	14a-Si
1	FI2-9-10	1	FI2-9-6	1	FI2-9-2	1	FI2-9-9
2	012-1	2	011-1	2	010-1	2	009-1
3	17-5 77-11	3	17-1 75-11	3	16-5 73-11	3	16-1 71-11
4	17-6 77-71	4	17-2 75-71	4	16-6 73-71	4	16-2 71-71

16	14a/14b	17	(16-18)a/(16-18)b	18	1/5	19	002
1	31A-3	1	33A-3	1	41A-3	1	43A-3
2	31A-4	2	33A-4	2	41A-4	2	43A-4
3	FI2-3-4	3	FI2-3-8	3	FI2-3-12	3	FI2-4-1
4	8 14-8	4	8 16-8	4	8 17-8	4	8 18-8
5	32A-3	5	34A-3	5	42A-3	5	
6	32A-4	6	34A-4	6	42A-4	6	
7	FI2-3-6	7	FI2-3-10	7	FI2-3-14	7	
8	4 17-4	8	4 18-4	8	4 19-4	8	4



Statia: Albesti

ESTE INTERZISA MODIFICAREA, INSTRAINAREA, COPIEREA SI MULTIPLICAREA ACESTOR SCHEME ELECTRICE SUB FORMA TIPARITA SAU ELECTRONICA, FARA APROBAREA SCRISA A ISPCF, CARE ARE DREPTUL DE PROPRIETATE INTELECTUALA ASUPRA ACESTORA
ISPCF ISI REZERVA DREPTUL DE A MODIFICA ACESTE SCHEME ELECTRICE ATUNCI CAND ESTE NECESAR.

FI2–RANDUL 6

69		68		67		66		65		64		63		62		61	
			12–BDE		12–Sil		10–BDE		10–Sil		4–6–BDE		4–6–Sil		2–8–BDE		2–8–Sil
		12	0X220			12	0X220			12	0X220			12	0X220		
11		11	FI2–6–1	11	44–3	11	FI2–5–13	11	43–3	11	FI2–5–11	11	42–3	11	FI2–5–9	11	41–3
13				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				33	8–32			33	6–32			33	4–32			33	2–32
		52	+24S4			52	+24S4			52	+24S2			52	+24S3		
		51	AX220			51	AX220			51	AX220			51	AX220		
53				53	8–31			53	6–31			53	4–31			53	2–31
		72	OS			72	OS			72	OS			72	OS		
71		71	FI2–6–2	71	44–4	71	FI2–5–14	71	43–4	71	FI2–5–12	71	42–4	71	FI2–5–10	71	41–4

FI2–RANDUL 5

59		58		57		56		55		54		53		52		51	
			034–BDE		034–CI		024–BDE		024–CI		Y–1AD(a) BDE		Y–1AD(a) CI		YF–1AD(a) BDE		YF–1AD(a) CI
12		12	0X220			12	0X220			12	0X220			12	0X220		
11		11	FI2–5–7	11	34–3	11	FI2–5–5	11	33–3	11	FI2–5–3	11	32–3	11	FI2–5–1	11	31–3
				13	OS			13	OS			13	OS			13	OS
32		32	7–33			32	5–33			32	3–33			32	1–33		
31		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		52	+24S2			52	+24S4			52	+24S4			52	+24S2		
51		51	AX220			51	AX220			51	AX220			51	AX220		
				53	8–31			53	6–31			53	4–31			53	2–31
72		72	OS			72	OS			72	OS			72	OS		
71		71	FI2–5–8	71	34–4	71	FI2–5–6	71	33–4	71	FI2–5–4	71	32–4	71	FI2–5–2	71	31–4

ESTE INTERZISA MODIFICAREA, INSTRAINAREA, COPIEREA SI MULTIPLICAREA ACESTOR SCHEME ELECTRICE SUB FORMA TIPARITA SAU ELECTRONICA, FARA APROBAREA SCRISA A ISPCF, CARE ARE DREPTUL DE PROPRIETATE INTELECTUALA ASUPRA ACESTORA
ISPCF ISI REZERVA DREPTUL DE A MODIFICA ACESTE SCHEME ELECTRICE ATUNCI CAND ESTE NECESAR.

FI2–RANDUL 8

89		88		87		86		85		84		83		82		81	
							002–BDE		002–CI		5–BDE		5–CI		1–BDE		1–CI
		12				12	0X220			12	0X220			12	0X220		
		11		11		11	FI2–6–11	11	43A–3	11	FI2–6–9	11	42A–3	11	FI2–6–7	11	41A–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	+24S1			52	+24S2		
		51				51	AX220			51	AX220			51	AX220		
				53				53	6–31			53	4–31			53	2–31
		72	OS			72	OS			72	OS			72	OS		
		71		71		71	FI2–6–12	71	43A–4	71	FI2–6–10	71	42A–4	71	FI2–6–8	71	41A–4

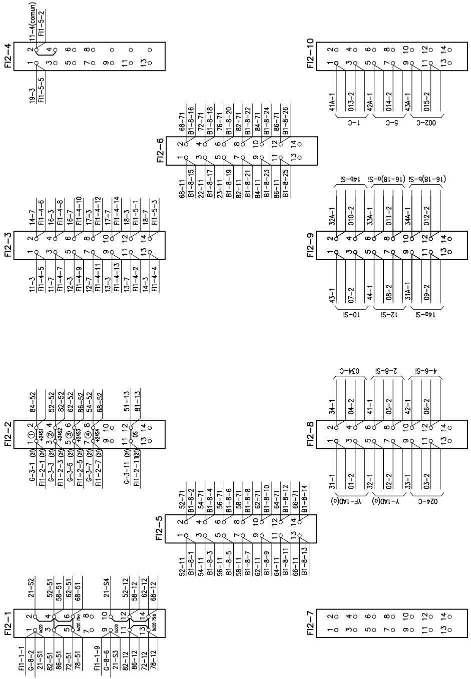
FI2–RANDUL 7

79		78		77		76		75		74		73		72		71	
			(16–18)b BDE		(16–18)b Sil		(16–18)a BDE		(16–18)a Sil		14b–BDE		14b–Sil		14a–BDE		14a–Sil
		12	0X220			12	0X220			12	0X220			12	0X220		
		11	23–2	11	34A–3	11	23–12	11	33A–3	11	22–2	11	32A–3	11	22–12	11	31A–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	+24S2			52	+24S3			52	+24S3		
		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	23–4	71	34A–4	71	FI2–6–6	71	33A–4	71	22–4	71	32A–4	71	FI2–6–4	71	31A–4

ESTE INTERZISA MODIFICAREA, INSTRAINAREA, COPIEREA SI MULTIPLICAREA ACESTOR SCHEME ELECTRICE SUB FORMA TIPARITA SAU ELECTRONICA, FARA APROBAREA SCRISA A ISPCF, CARE ARE DREPTUL DE PROPRIETATE INTELECTUALA ASUPRA ACESTORA
ISPCF ISI REZERVA DREPTUL DE A MODIFICA ACESTE SCHEME ELECTRICE ATUNCI CAND ESTE NECESAR.

BUCLE TENSIUNI

+24S1	+24S2	+24S3	+24S4	Ax220	0x220	0S
FI2-2-2	FI2-2-4	FI2-2-6	FI2-2-8	FI2-1-4	FI2-1-12	FI2-2-12
84-52	52-52	62-52	54-52	52-51	52-12	51-13
	58-52	72-52	56-52	54-51	54-12	52-72
	64-52	74-52	66-52	56-51	56-12	53-13
	76-52	86-52	68-52	58-51	58-12	54-72
	78-52			FI2-1-4	FI2-1-12	55-13
	82-52			FI2-1-6	FI2-1-14	56-72
				62-51	62-12	57-13
				64-51	64-12	58-72
				66-51	66-12	68-72
				68-51	68-12	67-13
				FI2-1-6	FI2-1-14	66-72
				FI2-1-5	FI2-1-13	65-13
				72-51	72-12	64-72
				74-51	74-12	63-13
				76-51	76-12	62-72
				78-51	78-12	61-13
				FI2-1-5	FI2-1-13	71-13
				FI2-1-3	FI2-1-11	72-72
				82-51	82-12	73-13
				84-51	84-12	74-72
				86-51	86-12	75-13
						76-72
				FI2-1-3	FI2-1-11	77-13
						78-72
						86-72
						85-13
						84-72
						83-13
						82-72
						81-13
	FI2-2-4	FI2-2-6	FI2-2-8			FI2-2-12

ESTE INTERZISA MODIFICAREA, INSTRAINAREA, COPIEREA SI MULTIPLICAREA ACESTOR SCHEME ELECTRICE SUB FORMA TIPARITA SAU ELECTRONICA, FARA APROBAREA SCRISA A ISPCF, CARE ARE DREPTUL DE PROPRIETATE INTELECTUALA ASUPRA ACESTORA
ISPCF ISI REZERVA DREPTUL DE A MODIFICA ACESTE SCHEME ELECTRICE ATUNCI CAND ESTE NECESAR.