PLANURI DE REFERINTA ALÇATEL
REFERENCE DRAWINGS ALCATEL :

ESTW L90 RO-BV-162.5 1-13/13

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 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	12.2011	
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli	12.2011	
Verificat Checked	Expert Cheie Key Expert	P. Amodio	12.2011	

SUBCONTRACTANT / SUBCONTRACTOR

AREX COMPANY

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A. Stanciu - Dinulescu	12.2011	
Întocmit Elaborated	Proiectant Designer	Angelescu Sergiu	12.2011	

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulaţia trenurilor cu viteza maximă de 160 km/h,
Tronsonul : Braşov - Sighişoara
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

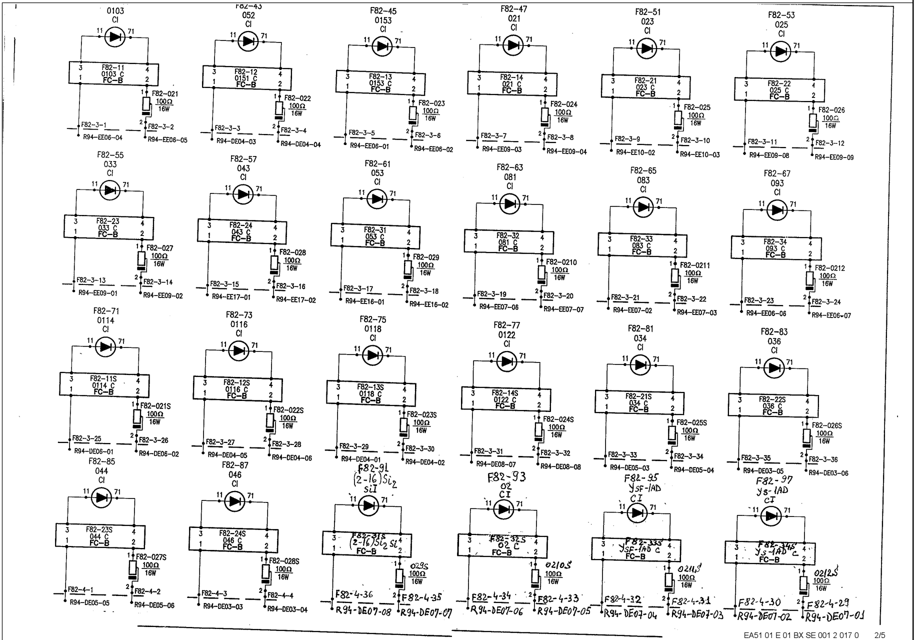
Faza / Phase:
D.E. / D.D.

Denumire desen / Drawing Title : Statia / Station BRASOV

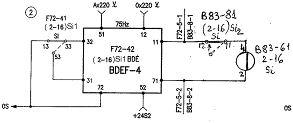
Schema circuitelor de cale C4-64
Pt introducerea c.d.c C4-64: (2-16)Si2;02C;YSF-1AD;YS-1AD
Scheme for track circuits type C4-64
For introducing track circuits type C4-64: (2-16)Si2;02C;YSF-1AD;YS-1AD

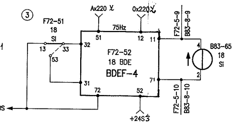
Codificare / Codification System	Scara / Scale Fără / No scale	LOT / LOT	Nr. / No 01 / 05

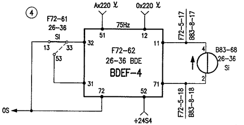
E A 5 1 | 0 1 | E | 0 1 | B X | S E | 0 0 | 1 | 2 | 0 1 7 | 0

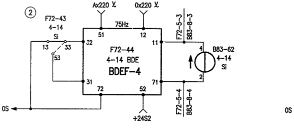

0103
CI
F82-11
0103 C
FC-B
F82-021
100Ω
16W
F82-3-1
R94-EE06-04
F82-3-2
R94-EE06-05
F82-43
052
CI
F82-12
0151 C
FC-B
F82-022
100Ω
16W
F82-3-3
R94-DE04-03
F82-3-4
R94-DE04-04
F82-45
0153
CI
F82-13
0153 C
FC-B
F82-023
100Ω
16W
F82-3-5
R94-EE06-01
F82-3-6
R94-EE06-02
F82-47
021
CI
F82-14
021 C
FC-B
F82-024
100Ω
16W
F82-3-7
R94-EE09-03
F82-3-8
R94-EE09-04
F82-51
023
CI
F82-21
023 C
FC-B
F82-025
100Ω
16W
F82-3-9
R94-EE10-02
F82-3-10
R94-EE10-03
F82-53
025
CI
F82-22
025 C
FC-B
F82-026
100Ω
16W
F82-3-11
R94-EE09-08
F82-3-12
R94-EE09-09
F82-55
033
CI
F82-23
033 C
FC-B
F82-027
100Ω
16W
F82-3-13
R94-EE09-01
F82-3-14
R94-EE09-02
F82-57
043
CI
F82-24
043 C
FC-B
F82-028
100Ω
16W
F82-3-15
R94-EE17-01
F82-3-16
R94-EE17-02
F82-61
053
CI
F82-31
053 C
FC-B
F82-029
100Ω
16W
F82-3-17
R94-EE16-01
F82-3-18
R94-EE16-02
F82-63
081
CI
F82-32
081 C
FC-B
F82-0210
100Ω
16W
F82-3-19
R94-EE07-06
F82-3-20
R94-EE07-07
F82-65
083
CI
F82-33
083 C
FC-B
F82-0211
100Ω
16W
F82-3-21
R94-EE07-02
F82-3-22
R94-EE07-03
F82-67
093
CI
F82-34
093 C
FC-B
F82-0212
100Ω
16W
F82-3-23
R94-EE06-06
F82-3-24
R94-EE06-07
F82-71
0114
CI
F82-11S
0114 C
FC-B
F82-021S
100Ω
16W
F82-3-25
R94-DE06-01
F82-3-26
R94-DE06-02
F82-73
0116
CI
F82-12S
0116 C
FC-B
F82-022S
100Ω
16W
F82-3-27
R94-DE04-05
F82-3-28
R94-DE04-06
F82-75
0118
CI
F82-13S
0118 C
FC-B
F82-023S
100Ω
16W
F82-3-29
R94-DE04-01
F82-3-30
R94-DE04-02
F82-77
0122
CI
F82-14S
0122 C
FC-B
F82-024S
100Ω
16W
F82-3-31
R94-DE08-07
F82-3-32
R94-DE08-08
F82-81
034
CI
F82-21S
034 C
FC-B
F82-025S
100Ω
16W
F82-3-33
R94-DE05-03
F82-3-34
R94-DE05-04
F82-83
036
CI
F82-22S
036 C
FC-B
F82-026S
100Ω
16W
F82-3-35
R94-DE03-05
F82-3-36
R94-DE03-06
F82-85
044
CI
F82-23S
044 C
FC-B
F82-027S
100Ω
16W
F82-4-1
R94-DE05-05
F82-4-2
R94-DE05-06
F82-87
046
CI
F82-24S
046 C
FC-B
F82-028S
100Ω
16W
F82-4-3
R94-DE03-03
F82-4-4
R94-DE03-04
F82-91
(2-16)Si2
siI
F82-31S
(2-16)Si2 Si
FC-B
029S
100Ω
16W
F82-4-36
R94-DE07-08
F82-4-35
R94-DE07-07
F82-93
02
CI
F82-32S
02 C
FC-B
0210S
100Ω
16W
F82-4-34
R94-DE07-06
F82-4-33
R94-DE07-05
F82-95
YSF-1AD
CI
F82-33S
YSF-1AD C
FC-B
0211S
100Ω
16W
F82-4-32
R94-DE07-04
F82-4-31
R94-DE07-03
F82-97
Ys-1AD
CI
F82-34S
Ys-1AD C
FC-B
0212S
100Ω
16W
F82-4-30
R94-DE07-02
F82-4-29
R94-DE07-01

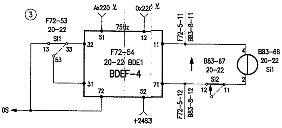
]

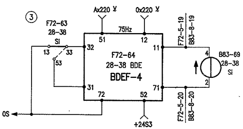

②
F72-41
(2-16)Si1
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-42
(2-16)Si1 BDE
BDEF-4
31
71
72
52
+24S2
OS
F72-5-1
B83-8-1
F72-5-2
B83-8-2
B83-81
(2-16)Si2
Si
12
11
4
2
B83-61
2-16
Si

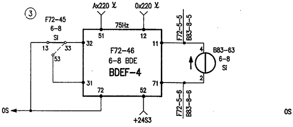

③
F72-51
18
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-52
18 BDE
BDEF-4
31
71
72
52
+24S3
OS
F72-5-9
B83-8-9
F72-5-10
B83-8-10
4
2
B83-65
18
Si

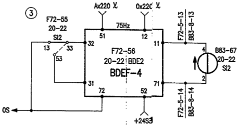

④
F72-61
26-36
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-62
26-36 BDE
BDEF-4
31
71
72
52
+24S4
OS
F72-5-17
B83-8-17
F72-5-18
B83-8-18
4
2
B83-68
26-36
Si

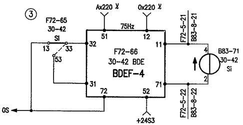

②
F72-43
4-14
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-44
4-14 BDE
BDEF-4
31
71
72
52
+24S2
OS
F72-5-3
B83-8-3
F72-5-4
B83-8-4
4
2
B83-62
4-14
Si

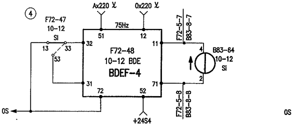

③
F72-53
20-22
Si1
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-54
20-22 BDE1
BDEF-4
31
71
72
52
+24S3
OS
F72-5-11
B83-8-11
F72-5-12
B83-8-12
B83-67
20-22
Si2
12
11
4
2
B83-66
20-22
Si1

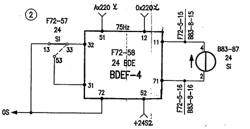

③
F72-63
28-38
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-64
28-38 BDE
BDEF-4
31
71
72
52
+24S3
OS
F72-5-19
B83-8-19
F72-5-20
B83-8-20
4
2
B83-69
28-38
Si

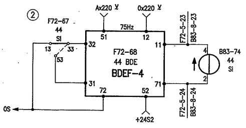

③
F72-45
6-8
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-46
6-8 BDE
BDEF-4
31
71
72
52
+24S3
OS
F72-5-5
B83-8-5
F72-5-6
B83-8-6
4
2
B83-63
6-8
Si

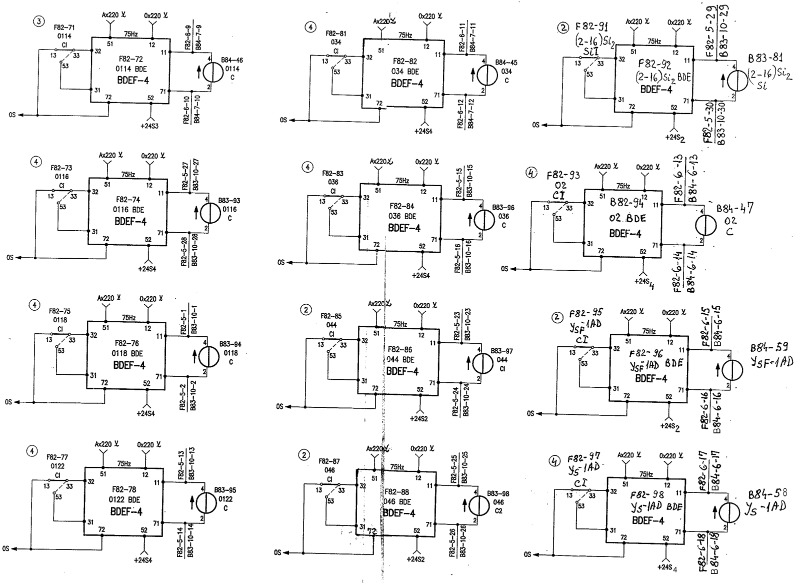

③
F72-55
20-22
Si2
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-56
20-22 BDE2
BDEF-4
31
71
72
52
+24S3
OS
F72-5-13
B83-8-13
F72-5-14
B83-8-14
4
2
B83-67
20-22
Si2

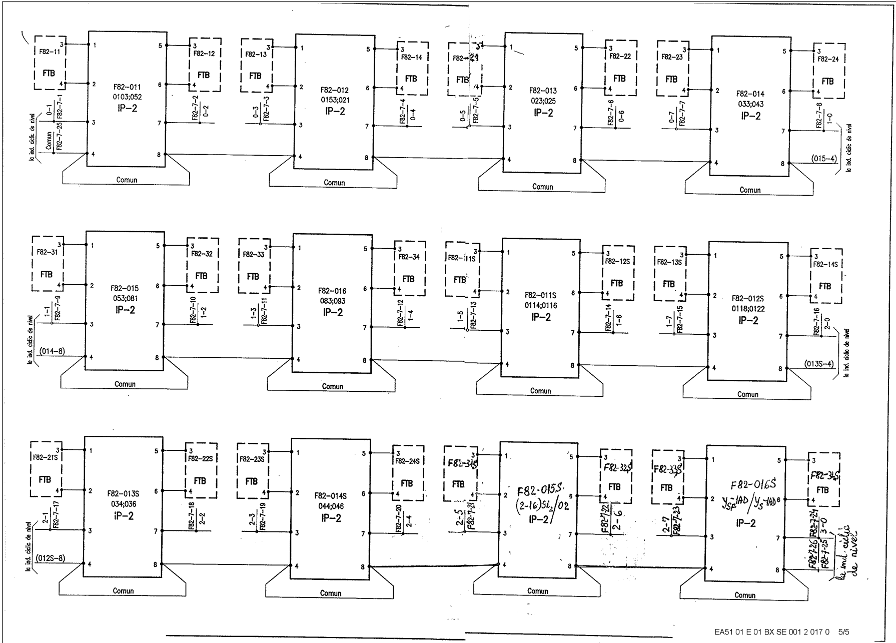

③
F72-65
30-42
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-66
30-42 BDE
BDEF-4
31
71
72
52
+24S3
OS
F72-5-21
B83-8-21
F72-5-22
B83-8-22
4
2
B83-71
30-42
Si


④
F72-47
10-12
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-48
10-12 BDE
BDEF-4
31
71
72
52
+24S4
OS
F72-5-7
B83-8-7
F72-5-8
B83-8-8
4
2
B83-64
10-12
Si


②
F72-57
24
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-58
24 BDE
BDEF-4
31
71
72
52
+24S2
OS
F72-5-15
B83-8-15
F72-5-16
B83-8-16
4
2
B83-87
24
Si


②
F72-67
44
Si
13
33
53
Ax220 V
0x220 V
75Hz
51
12
32
11
F72-68
44 BDE
BDEF-4
31
71
72
52
+24S2
OS
F72-5-23
B83-8-23
F72-5-24
B83-8-24
4
2
B83-74
44
Si


③
F82–71
0114
CI
Ax220 V
0x220 V
75Hz
F82–72
0114 BDE
BDEF–4
F82–6–9
B84–7–9
B84–46
0114
C
F82–6–10
B84–7–10
OS
+24S3
④
F82–81
034
CI
Ax220 V
0x220 V
75Hz
F82–82
034 BDE
BDEF–4
F82–6–11
B84–7–11
B84–45
034
C
F82–6–12
B84–7–12
OS
+24S4
② F82-91
(2-16)Si2
SiI
Ax220 V
0x220 V
75Hz
F82-92
(2-16)Si2 BDE
BDEF–4
F82-5-29
B83-10-29
B83-81
(2-16)Si2
Si
F82-5-30
B83-10-30
OS
+24S2
④
F82–73
0116
CI
Ax220 V
0x220 V
75Hz
F82–74
0116 BDE
BDEF–4
F82–5–27
B83–10–27
B83–93
0116
C
F82–5–28
B83–10–28
OS
+24S4
④
F82–83
036
CI
Ax220 V
0x220 V
75Hz
F82–84
036 BDE
BDEF–4
F82–5–15
B83–10–15
B83–96
036
C
F82–5–16
B83–10–16
OS
+24S4
④ F82-93
02
CI
Ax220 V
0x220 V
75Hz
B82-94
02 BDE
BDEF–4
F82-6-13
B84-6-13
B84-47
02
C
F82-6-14
B84-6-14
OS
+24S4
④
F82–75
0118
CI
Ax220 V
0x220 V
75Hz
F82–76
0118 BDE
BDEF–4
F82–5–1
B83–10–1
B83–94
0118
C
F82–5–2
B83–10–2
OS
+24S4
②
F82–85
044
CI
Ax220 V
0x220 V
75Hz
F82–86
044 BDE
BDEF–4
F82–5–23
B83–10–23
B83–97
044
CI
F82–5–24
B83–10–24
OS
+24S2
② F82-95
YSF-1AD
CI
Ax220 V
0x220 V
75Hz
F82-96
YSF-1AD BDE
BDEF–4
F82-6-15
B84-6-15
B84-59
YSF-1AD
F82-6-16
B84-6-16
OS
+24S2
④
F82–77
0122
CI
Ax220 V
0x220 V
75Hz
F82–78
0122 BDE
BDEF–4
F82–5–13
B83–10–13
B83–95
0122
C
F82–5–14
B83–10–14
OS
+24S4
②
F82–87
046
CI
Ax220 V
0x220 V
75Hz
F82–88
046 BDE
BDEF–4
F82–5–25
B83–10–25
B83–98
046
C2
F82–5–26
B83–10–26
OS
+24S2
④ F82-97
YS-1AD
CI
Ax220 V
0x220 V
75Hz
F82-98
YS-1AD BDE
BDEF–4
F82-6-17
B84-6-17
B84-58
YS-1AD
F82-6-18
B84-6-18
OS
+24S4
13
33
53
32
51
12
11
4
2
31
72
52
71


F82-11
FTB
F82-011
0103;052
IP-2
F82-12
FTB
0-1
F82-7-1
Comun
F82-7-25
F82-7-2
0-2
la ind. ciclic de nivel
Comun
F82-13
FTB
F82-012
0153;021
IP-2
F82-14
FTB
0-3
F82-7-3
F82-7-4
0-4
F82-21
FTB
F82-013
023;025
IP-2
F82-22
FTB
0-5
F82-7-5
F82-7-6
0-6
F82-23
FTB
F82-014
033;043
IP-2
F82-24
FTB
0-7
F82-7-7
F82-7-8
1-0
(015-4)
F82-31
FTB
F82-015
053;081
IP-2
F82-32
FTB
1-1
F82-7-9
F82-7-10
1-2
(014-8)
F82-33
FTB
F82-016
083;093
IP-2
F82-34
FTB
1-3
F82-7-11
F82-7-12
1-4
F82-11S
FTB
F82-011S
0114;0116
IP-2
F82-12S
FTB
1-5
F82-7-13
F82-7-14
1-6
F82-13S
FTB
F82-012S
0118;0122
IP-2
F82-14S
FTB
1-7
F82-7-15
F82-7-16
2-0
(013S-4)
F82-21S
FTB
F82-013S
034;036
IP-2
F82-22S
FTB
2-1
F82-7-17
F82-7-18
2-2
(012S-8)
F82-23S
FTB
F82-014S
044;046
IP-2
F82-24S
FTB
2-3
F82-7-19
F82-7-20
2-4
F82-31S
FTB
F82-015S
(2-16)Si_2/02
IP-2
F82-32S
FTB
2-5
F82-7-21
F82-7-22
2-6
F82-33S
FTB
F82-016S
y_{SF}-1AD/y_S-1AD
IP-2
F82-34S
FTB
2-7
F82-7-23
F82-7-24
3-0
F82-7-26
F82-7-25
la ind. ciclic de nivel
1
2
3
4
5
6
7
8