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

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

SUBCONTRACTANT / SUBCONTRACTOR

AREX CONSULT

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 Brașov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteza maximă de 160 km/h, Tronsonul : Brașov - Sighișoara
Rehabilitation of the railway line Brașov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h, Section : Brașov - Sighișoara

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

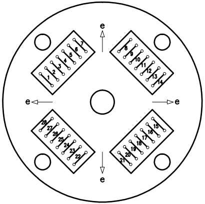
Faza / Phase:
D.E. / D.D.

Denumire desen / Drawing Title :

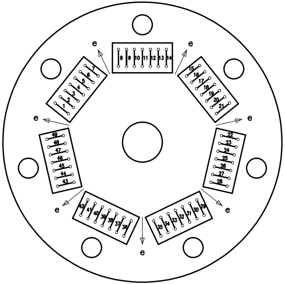
Statia / Station ALBESTI TARNAVA
Fise picheti tip pentru circuite de cale
Model boxes for track circuit equipment

Codificare / Codification System	Scara / Scale Fără / No scale	LOT / LOT	Nr. / No 01 / 29

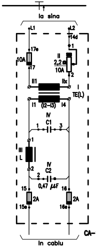
EA51 01 E 19 BX SE 01 9 2 020 1


e
1
2
3
4
5
6
7
8
9
10
11
12
13
14
e
e
28
27
26
25
24
23
22
15
16
17
18
19
20
21
e

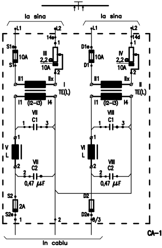
C4−28
DM1,DM2,DM6,DA2


e
e
8
9
10
11
12
13
14
7
6
5
4
3
2
1
15
16
17
18
19
20
21
e
e
49
48
47
46
45
44
43
22
23
24
25
26
27
28
e
e
42
41
40
39
38
37
36
35
34
33
32
31
30
29
e

C7−49
DM3,DM4,DR1,DR2,DR4,DS1,DS3,DS5,DS2,DS4,DS6,DS8
CUTII DE DISTRIBUTIE

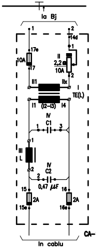

la sina
L1
L2
17e
14d
10A
II
2,2
10A
I1
I2
I4
IIx
TE(L)
(I2–I3)
IV
C1
III
L
C2
0,47 μF
15
16
2A
15e
16e
in cablu

CA–1FM(2)

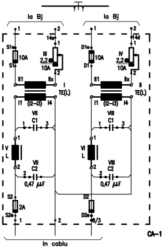

la sina
la sina
L1
L2
S1e
S1
D1e
D1
10A
III
IV
2,2
14e
14d
II1
IIx
I
II
TE(L)
I1
(I2–I3)
I4
VII
VIII
C1
C2
V
VI
L
0,47 μF
S2
S2e
2A
D2
D2e
1
2
8/3
in cablu

CA–1P(2)

NOTA: Valoarea condensatorului C1 se coreleaza cu lungimea circuitului de cale si cu tipul de circuit (monofilar sau bifilar).


la Bj
1
2
17e
14d
10A
II
2,2
10A
II1
IIx
I
TE(L)
I1
(I2–I3)
I4
IV
C1
III
L
C2
0,47 μF
15
16
2A
15e
16e
in cablu

CA–1FM(2)


la Bj
la Bj
S1e
S1
D1e
D1
10A
III
IV
2,2
14e
14d
II1
IIx
I
II
TE(L)
I1
(I2–I3)
I4
VII
VIII
C1
C2
V
VI
L
0,47 μF
S2
S2e
2A
D2
D2e
8/3
in cablu

CA–1P(2)

Scheme de conectare a aparatajului in cutii de aparataj pentru circuitul de cale

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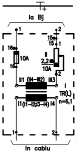
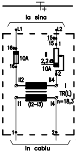
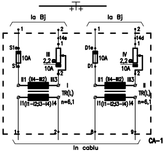

la Bj
1
2
16e
16
15e
15
10A
II
2,2
10A
II1 (II4–III2) III3
I
TR(L)
n=6,1
I1(I1–I2;I3–I4) I4
in cablu

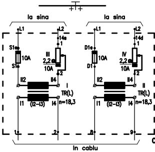
CA–1F(2)


la sina
L1
L2
16e
16
15e
15
10A
II
2,2
10A
II2
II4
I
TR(L)
n=18,3
I1 (I2–I3) I4
in cablu

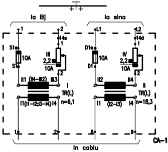
CA–1F(2)


la Bj
la Bj
S1e
S1
D1e
D1
10A
III
IV
2,2
14e
14d
II1 (II4–III2) III3
TR(L)
n=6,1
I1(I1–I2;I3–I4) I4
in cablu

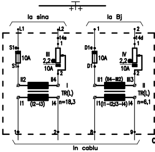
CA–1K(2)


la sina
la sina
L1
L2
S1e
S1
D1e
D1
10A
III
IV
2,2
II2
II4
TR(L)
n=18,3
I1 (I2–I3) I4
in cablu

CA–1K(2)


la Bj
la sina
S1e
S1
D1e
D1
10A
III
IV
2,2
II1 (II4–III2) III3
II2
II4
TR(L)
n=6,1
n=18,3
in cablu

CA–1K(2)

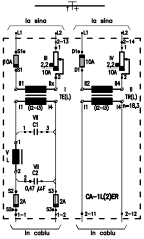

la sina
la Bj
S1e
S1
D1e
D1
10A
III
IV
2,2
II2
II4
II1 (II4–III2) III3
TR(L)
n=18,3
n=6,1
in cablu

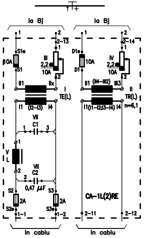
CA–1K(2)

NOTA: La circuitele la care se controleaza ramificatiile, valoarea rezistentei din aparatajul de receptie este de 6 ohmi.

Scheme de conectare a aparatajului in cutii de aparataj pentru circuitul de cale

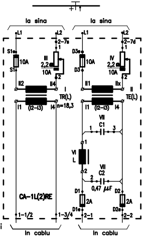
---


la sina
la sina
L1
L2
2–13
2–14
S1e
S1
D1e
D1
10A
III
IV
2,2
II1
IIx
II2
II4
TE(L)
TR(L)
n=18,3
VII
C1
C2
V
L
0,47 μF
S2
S2e
S3
S3e
2A
CA–1L(2)ER
1–1
1–2
2–11
2–12
in cablu
in cablu

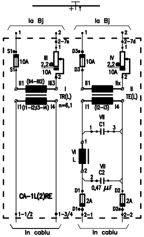

la Bj
la Bj
2–13
2–14
S1e
S1
D1e
D1
10A
III
IV
2,2
II1
IIx
II1 (II4–III2) III3
TE(L)
TR(L)
n=6,1
VII
C1
C2
V
L
0,47 μF
S2
S2e
S3
S3e
2A
CA–1L(2)RE
1–1
1–2
2–11
2–12
in cablu
in cablu

NOTA: La circuitele la care se co
aparatajul de receptie este de 6

Scheme de conecta
aparataj per


la sina
la sina
L1
L2
2-7s
S1e
S1
10A
III
2,2Ω
10A
D3e
D3
IV
2-7d
II2
II4
I1x
IIx
I
TR(L)
II
TE(L)
I1
(I2-I3)
I4
n=18,3
VII
C1
VI
L
C2
0,47 μF
D1
D2
2A
D1e
D2e
CA-1L(2)RE
1-1/2
1-3/4
2-1
2-2
In cablu
In cablu

Valoarea condensatorului C1 se coreleaza cu lungimea circuitului de cale si cu tipul de circuit (monofilar sau bifilar).

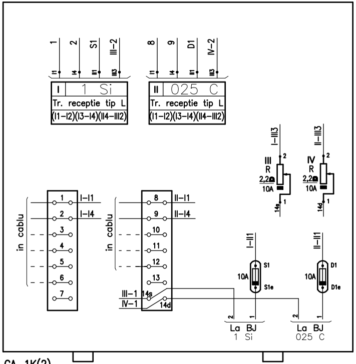

la Bj
la Bj
S1e
S1
10A
III
2,2Ω
10A
2-7s
D3e
D3
IV
2-7d
II1
(II4-III2)
III3
I
TR(L)
II
TE(L)
I1(I1-I2;I3-I4)
I4
n=6,1
(I2-I3)
VII
C1
VI
L
C2
0,47 μF
D1
D2
2A
D1e
D2e
CA-1L(2)RE
1-1/2
1-3/4
2-1
2-2
In cablu
In cablu

ntroleaza ramificatiile, valoarea rezistentei din ohmi.

re a aparatajului in cutii de ntru circuitul de cale

Tabel cu valorile condensatoarelor C1, C2 la capetele de emisie

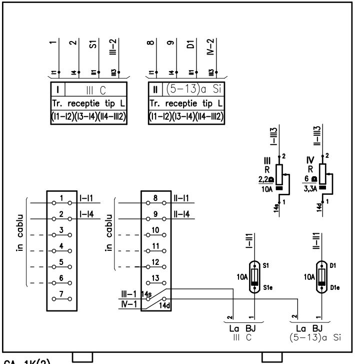
Circuitul de cale	Secventa	Tip Circuit	Lungimea circuitului de cale (m)	Valoarea capacitatii (μF)	
				C1	C2
031a C	1	bifilar	250	1 μF	0,47 μF
021a C	3	bifilar	250	1 μF	0,47 μF
031b C	3	bifilar	970	2 μF	0,47 μF
021b C	1	bifilar	970	2 μF	0,47 μF
033 C	1	bifilar	309	1 μF	0,47 μF
023 C	3	bifilar	253	1 μF	0,47 μF
3 Si	3	bifilar	340	1 μF	0,47 μF
1 Si	2	bifilar	210	0,47 μF	0,47 μF
025 C	1	bifilar	219	0,47 μF	0,47 μF
5–13 Si	3	bifilar	857	2 μF	0,47 μF
7–9 Si	3	bifilar	536	1 μF	0,47 μF
5 C	1	bifilar	762	2 μF	0,47 μF
4 C	4	bifilar	762	2 μF	0,47 μF
III C	3	bifilar	953	2 μF	0,47 μF
II C	4	bifilar	926	2 μF	0,47 μF
1 C	2	bifilar	926	2 μF	0,47 μF
16–18 Si	2	bifilar	465	1 μF	0,47 μF
10 Si	4	bifilar	260	1μF	0,47 μF
14 Si	3	bifilar	432	1 μF	0,47 μF
12 Si	4	monofilar	167	1 μF	0,47 μF
002 C	3	monofilar	86	1 μF	0,47 μF
2–8 Si	3	bifilar	551	2 μF	0,47 μF
4–6 Si	2	bifilar	470	1 μF	0,47 μF
034 C	2	bifilar	313	1 μF	0,47 μF
024 C	4	bifilar	380	1 μF	0,47 μF
032b C	4	bifilar	1140	3 μF	0,47 μF
022b C	2	bifilar	1140	3 μF	0,47 μF
032a C	2	bifilar	1040	2 μF	0,47 μF
022a C	4	bifilar	1040	2 μF	0,47 μF


1
2
S1
III-2
8
9
D1
IV-2
I1
I4
II1
III3
I 1 Si
II 025 C
Tr. receptie tip L
(I1-I2)(I3-I4)(II4-III2)
I-III3
II-III3
III
R
2,2Ω
10A
IV
14s
14d
in cablu
I-I1
I-I4
II-I1
II-I4
3
4
5
6
7
10
11
12
13
III-1
IV-1
I-II1
II-II1
S1
S1e
D1
D1e
La BJ
1 Si
La BJ
025 C

CA-1K(2)
BIF

1 Si; 025 C

CUTIE APARATAJ PENTRU DOUA RECEPTII

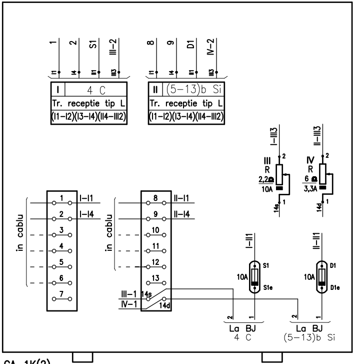

1
2
S1
III-2
8
9
D1
IV-2
I1
I4
II1
III3
I
III C
II
(5-13)a Si
Tr. receptie tip L
(I1-I2)(I3-I4)(II4-III2)
I-III3
II-III3
III
IV
R
2,2Ω
10A
6 Ω
3,3A
14s
14d
in cablu
3
4
5
6
7
10
11
12
13
I-I1
I-I4
II-I1
II-I4
III-1
IV-1
I-II1
II-II1
S1e
D1e
La BJ
III C
La BJ
(5-13)a Si

CA-1K(2)
BIF

III C; (5-13)a Si

CUTIE APARATAJ PENTRU DOUA RECEPTII

Statia: Albesti **EA51 01 E 19 BX SE 019 2 020 1 8/29**

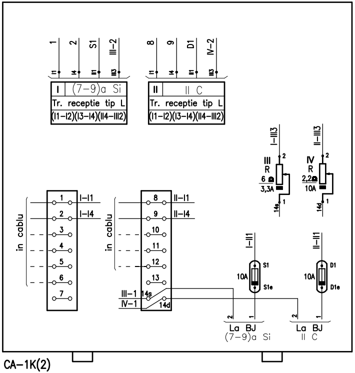

1
2
S1
III-2
8
9
D1
IV-2
I1
I4
II1
III3
I
4 C
II
(5-13)b Si
Tr. receptie tip L
(I1-I2)(I3-I4)(II4-III2)
I-III3
II-III3
III
IV
R
2,2Ω
10A
6 Ω
3,3A
14s
14d
in cablu
3
4
5
6
7
10
11
12
13
I-I1
I-I4
II-I1
II-I4
III-1
IV-1
I-II1
II-II1
S1e
D1e
La BJ
4 C
La BJ
(5-13)b Si

CA-1K(2)
BIF

4 C; (5-13)b Si

CUTIE APARATAJ PENTRU DOUA RECEPTII

Statia: Albesti **EA51 01 E 19 BX SE 019 2 020 1 9/29**

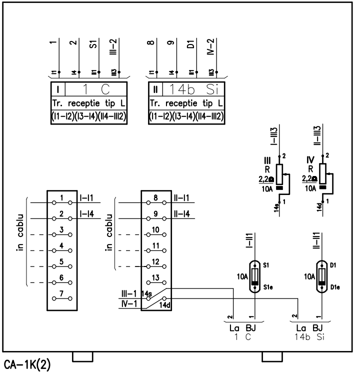

1
2
S1
III–2
8
9
D1
IV–2
I (7–9)a Si
Tr. receptie tip L
(I1–I2)(I3–I4)(II4–III2)
II II C
Tr. receptie tip L
(I1–I2)(I3–I4)(II4–III2)
I–III3
III
R
6 Ω
3,3A
IV
R
2,2Ω
10A
in cablu
I–I1
I–I4
II–I1
II–I4
III–1
IV–1
14s
14d
I–II1
II–II1
10A
S1
S1e
D1
D1e
La BJ
(7–9)a Si
La BJ
II C

CA–1K(2)
BIF

(7–9)a Si; II C

CUTIE APARATAJ PENTRU DOUA RECEPTII

Statia: Albesti **EA51 01 E 19 BX SE 019 2 020 1 10/29**

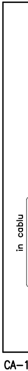

1
2
S1
III–2
8
9
D1
IV–2
I 1 C
Tr. receptie tip L
(I1–I2)(I3–I4)(II4–III2)
II 14b Si
Tr. receptie tip L
(I1–I2)(I3–I4)(II4–III2)
I–III3
II–III3
III
R
2,2Ω
10A
IV
R
2,2Ω
10A
in cablu
I–I1
I–I4
II–I1
II–I4
III–1
IV–1
14s
14d
I–II1
II–II1
10A
S1
S1e
D1
D1e
La BJ
1 C
La BJ
14b Si

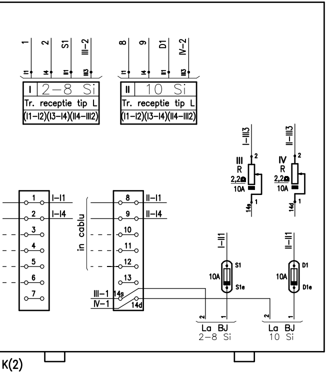
CA–1K(2)
BIF

1 C; 14b Si

CUTIE APARATAJ PENTRU DOUA RECEPTII

Statia: Albesti **EA51 01 E 19 BX SE 019 2 020 1 11/29**




1
2
S1
III-2
8
9
D1
IV-2
I1 I4 II1 III3
I 2-8 Si
Tr. receptie tip L
(I1-I2)(I3-I4)(II4-III2)
II 10 Si
Tr. receptie tip L
(I1-I2)(I3-I4)(II4-III2)
I-III3
II-III3
III
R
2,2Ω
10A
IV
R
2,2Ω
10A
14s
14d
1 I-I1
2 I-I4
3
4
5
6
7
in cablu
8 II-I1
9 II-I4
10
11
12
13
III-1 14s
IV-1 14d
I-II1
II-II1
10A S1 S1e
10A D1 D1e
La BJ
2-8 Si
La BJ
10 Si

K(2)

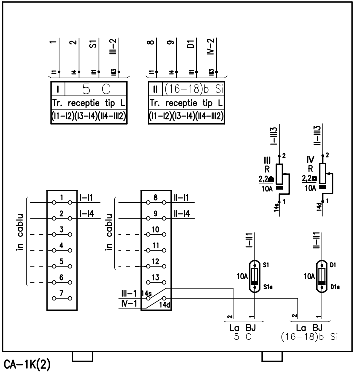
F

2-8 Si; 10 Si

CUTIE APARATAJ PENTRU DOUA RECEPTII

: Albesti

EA51 01 E 19 BX SE 019 2 020 1 12/29


1
2
S1
III-2
8
9
D1
IV-2
I1 I4 II1 III3
I 5 C
Tr. receptie tip L
(I1-I2)(I3-I4)(II4-III2)
II (16-18)b Si
Tr. receptie tip L
(I1-I2)(I3-I4)(II4-III2)
I-III3
II-III3
III
R
2,2Ω
10A
IV
R
2,2Ω
10A
14s
14d
in cablu
1 I-I1
2 I-I4
3
4
5
6
7
in cablu
8 II-I1
9 II-I4
10
11
12
13
III-1 14s
IV-1 14d
I-II1
II-II1
10A S1 S1e
10A D1 D1e
La BJ
5 C
La BJ
(16-18)b Si

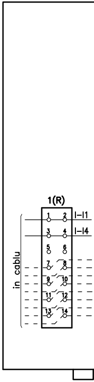
CA-1K(2)
BIF

5 C; (16-18)b Si

CUTIE APARATAJ PENTRU DOUA RECEPTII

Statia: Albesti

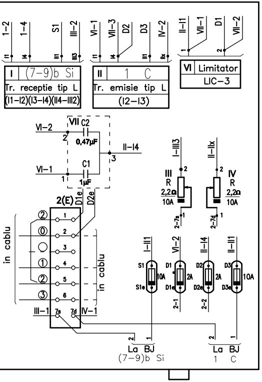
EA51 01 E 19 BX SE 019 2 020 1 13/29


1(R)
1 2 I-I1
3 4 I-I4
5 6
7 8
9 10
11 12
13 14
in cablu

CA-1L(2)RE
BIF

CUTIE A

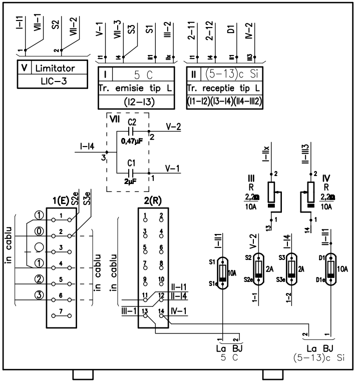
Statia: Albesti


I (7–9)b Si
Tr. receptie tip L
(I1–I2)(I3–I4)(II4–III2)
II 1 C
Tr. emisie tip L
(I2–I3)
VI Limitator
LIC–3
VII C2 0,47µF
C1 1µF
VI–2
VI–1
II–I4
III R 2,2Ω 10A
IV R 2,2Ω 10A
2(E)
in cablu
S1 10A
D1 2A
D2 2A
D3 10A
III–1
IV–1
La BJ
(7–9)b Si
La BJ
1 C

(7–9)b Si; 1 C

PARATAJ PENTRU   RECEPTIE–EMISIE

EA51 01 E 19 BX SE 019 2 020 1   14/29

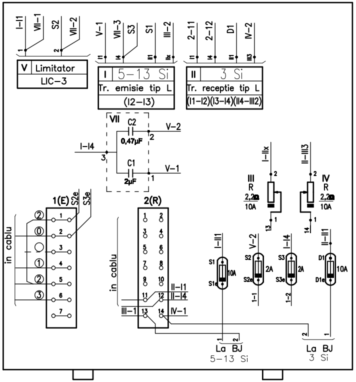

V Limitator
LIC–3
I 5 C
Tr. emisie tip L
(I2–I3)
II (5–13)c Si
Tr. receptie tip L
(I1–I2)(I3–I4)(II4–III2)
VII C2 0,47µF
C1 2µF
I–I4
V–2
V–1
III R 2,2Ω 10A
IV R 2,2Ω 10A
1(E)
2(R)
in cablu
S1 10A
S2 2A
S3 2A
D1 10A
II–I1
II–I4
III–1
IV–1
La BJ
5 C
La BJ
(5–13)c Si

CA–1L(2)ER
BIF

5 C; (5–13)c Si

CUTIE APARATAJ PENTRU   EMISIE–RECEPTIE

Statia: Albesti   **EA51 01 E 19 BX SE 019 2 020 1   15/29**

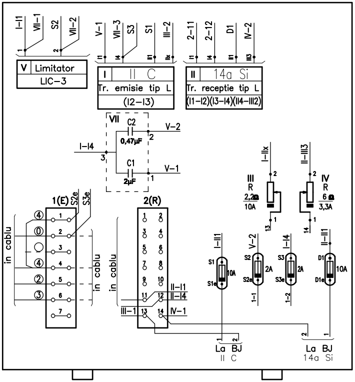

V Limitator
LIC–3
I 5–13 Si
Tr. emisie tip L
(I2–I3)
II 3 Si
Tr. receptie tip L
(I1–I2)(I3–I4)(II4–III2)
VII C2 0,47µF
C1 2µF
I–I4
V–2
V–1
III R 2,2Ω 10A
IV R 2,2Ω 10A
1(E)
2(R)
in cablu
S1 10A
S2 2A
S3 2A
D1 10A
II–I1
II–I4
III–1
IV–1
La BJ
5–13 Si
La BJ
3 Si

CA–1L(2)ER
BIF

5–13 Si; 3 Si

CUTIE APARATAJ PENTRU   EMISIE–RECEPTIE

Statia: Albesti   **EA51 01 E 19 BX SE 019 2 020 1   16/29**

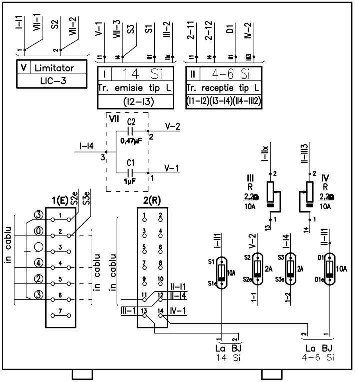

I–I1
VII–1
S2
VII–2
V–1
VII–3
S3
S1
III–2
2–11
2–12
D1
IV–2
V Limitator
LIC–3
I II C
Tr. emisie tip L
(I2–I3)
II 14a Si
Tr. receptie tip L
(I1–I2)(I3–I4)(II4–III2)
VII
C2
0,47µF
C1
2µF
I–I4
V–2
V–1
I–IIx
II–III3
III
R
2,2Ω
10A
IV
R
6Ω
3,3A
1(E)
S2e
S3e
2(R)
④
⓪
④
②
③
in cablu
in cablu
in cablu
II–I1
II–I4
III–1
IV–1
I–II1
V–2
I–I4
II–II1
S1
S1e
10A
S2
S2e
2A
S3
S3e
2A
D1
D1e
10A
1–1
1–2
La BJ
II C
La BJ
14a Si

CA–1L(2)ER

BIF

II C; 14a Si

CUTIE APARATAJ PENTRU EMISIE–RECEPTIE

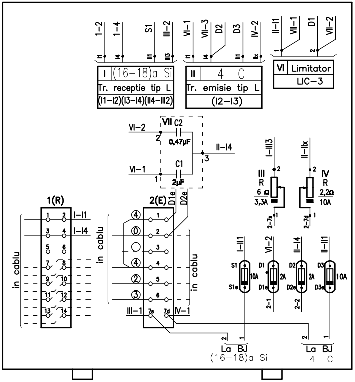

I–I1
VII–1
S2
VII–2
V–1
VII–3
S3
S1
III–2
2–11
2–12
D1
IV–2
V Limitator
LIC–3
I 14 Si
Tr. emisie tip L
(I2–I3)
II 4–6 Si
Tr. receptie tip L
(I1–I2)(I3–I4)(II4–III2)
VII
C2
0,47µF
C1
1µF
I–I4
V–2
V–1
I–IIx
II–III3
III
R
2,2Ω
10A
IV
R
2,2Ω
10A
1(E)
S2e
S3e
2(R)
③
⓪
④
②
③
in cablu
in cablu
in cablu
II–I1
II–I4
III–1
IV–1
I–II1
V–2
I–I4
II–II1
S1
S1e
10A
S2
S2e
2A
S3
S3e
2A
D1
D1e
10A
1–1
1–2
La BJ
14 Si
La BJ
4–6 Si

CA–1L(2)ER

BIF

14 Si; 4–6 Si

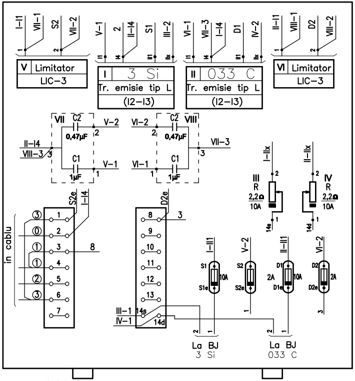
CUTIE APARATAJ PENTRU EMISIE–RECEPTIE


1−2
1−4
S1
III−2
VI−1
VII−3
D2
D3
IV−2
II−I1
VII−1
D1
VII−2
I
(16−18)a Si
Tr. receptie tip L
(I1−I2)(I3−I4)(II4−III2)
II
4 C
Tr. emisie tip L
(I2−I3)
VI
Limitator
LIC−3
VII
C2
0,47µF
C1
2µF
VI−2
VI−1
II−I4
I−III3
II−IIx
III
R
6 Ω
3,3A
IV
R
2,2Ω
10A
2−7s
2−7d
1(R)
2(E)
D1e
D2e
I−I1
I−I4
in cablu
III−1
7s
7d
IV−1
I−I1
VI−2
II−I4
II−I1
S1
S1e
10A
D1
D1e
2A
D2
D2e
2A
D3
D3e
10A
2−1
2−2
La BJ
(16−18)a Si
La BJ
4 C

CA−1L(2)RE
BIF

(16−18)a Si; 4 C

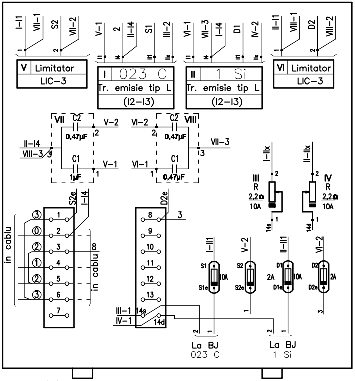
CUTIE APARATAJ PENTRU RECEPTIE−EMISIE


I−I1
VII−1
S2
VII−2
V−1
2
II−I4
S1
III−2
VI−1
VII−3
I−I4
D1
IV−2
II−I1
VIII−1
D2
VIII−2
V
Limitator
LIC−3
I
3 Si
Tr. emisie tip L
(I2−I3)
II
033 C
Tr. emisie tip L
(I2−I3)
VI
Limitator
LIC−3
VII
C2
0,47µF
C1
1µF
V−2
V−1
II−I4
VIII−3
VIII
VI−2
VI−1
VII−3
I−IIx
II−IIx
III
R
2,2Ω
10A
IV
R
2,2Ω
10A
14s
14d
S2e
I−I4
D2e
in cablu
8
3
III−1
IV−1
I−II1
V−2
II−II1
VI−2
S1
S1e
10A
S2
S2e
2A
D1
D1e
10A
D2
D2e
2A
La BJ
3 Si
La BJ
033 C

CA−1P(2)
BIF

3 Si; 033 C

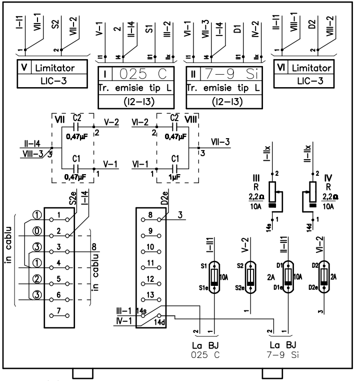
CUTIE APARATAJ PENTRU DOUA EMISII


I–I1
VII–1
S2
VII–2
V–1
2
II–I4
S1
III–2
VI–1
VII–3
I–I4
D1
IV–2
II–I1
VIII–1
D2
VIII–2
V Limitator
LIC–3
I 023 C
Tr. emisie tip L
(I2–I3)
II 1 Si
Tr. emisie tip L
(I2–I3)
VI Limitator
LIC–3
VII
C2
0,47μF
V–2
C1
1μF
V–1
II–I4
VIII–3
VI–2
C2
VIII
0,47μF
VII–3
VI–1
C1
0,47μF
I–IIx
III
R
2,2Ω
10A
14s
II–IIx
IV
R
2,2Ω
10A
14d
S2e
I–I4
D2e
3
in cablu
in cablu
8
I–II1
V–2
II–II1
VI–2
S1
S1e
10A
S2
S2e
D1
D1e
2A
10A
D2
D2e
2A
III–1
IV–1
14s
14d
La BJ
023 C
La BJ
1 Si

CA–1P(2)
BIF

023 C; 1 Si

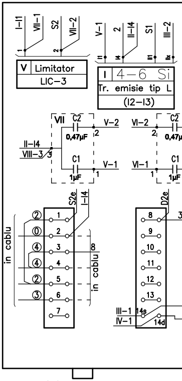
CUTIE APARATAJ PENTRU DOUA EMISII


V Limitator
LIC–3
I 025 C
Tr. emisie tip L
(I2–I3)
II 7–9 Si
Tr. emisie tip L
(I2–I3)
VI Limitator
LIC–3
VII
C2
0,47μF
C1
0,47μF
VIII
C2
0,47μF
C1
1μF
III
R
2,2Ω
10A
IV
R
2,2Ω
10A
in cablu
in cablu
La BJ
025 C
La BJ
7–9 Si

CA–1P(2)
BIF

025 C; 7–9 Si

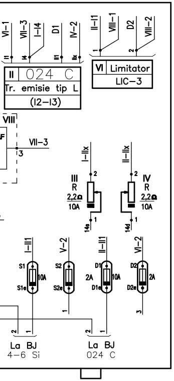
CUTIE APARATAJ PENTRU DOUA EMISII


V Limitator
LIC–3
I 4–6 Si
Tr. emisie tip L
(I2–I3)
VII
C2
0,47μF
C1
1μF
in cablu
in cablu

CA–1P(2)
BIF

4–6 Si;

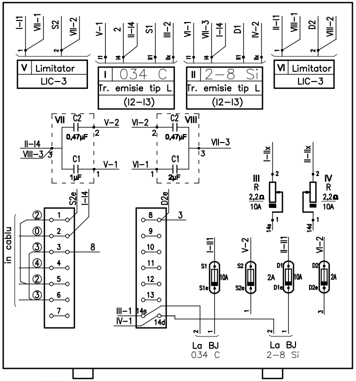
CUTIE APARATAJ PEN


VI–1
VII–3
I–I4
D1
IV–2
II–I1
VIII–1
D2
VIII–2
II 024 C
Tr. emisie tip L
(I2–I3)
VI Limitator
LIC–3
VIII
VII–3
III R 2,2Ω 10A
IV R 2,2Ω 10A
I–Ilx
II–Ilx
I–II1
V–2
II–II1
VI–2
La BJ
4–6 Si
La BJ
024 C

024 C

NTRU DOUA EMISII

1 01 E 19 BX SE 019 2 020 1 23/29

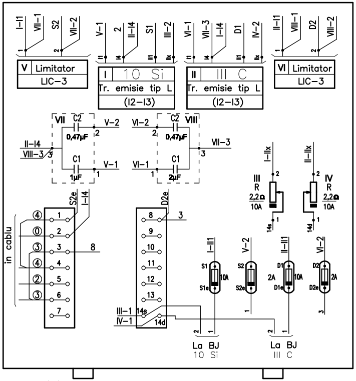

I–I1
VII–1
S2
VII–2
V–1
2
II–I4
S1
III–2
VI–1
VII–3
I–I4
D1
IV–2
II–I1
VIII–1
D2
VIII–2
V Limitator
LIC–3
I 034 C
Tr. emisie tip L
(I2–I3)
II 2–8 Si
Tr. emisie tip L
(I2–I3)
VI Limitator
LIC–3
VII C2 0,47µF
C1 1µF
V–2
V–1
II–I4
VIII–3
VI–2
VI–1
C2 0,47µF VIII
C1 2µF
VII–3
I–Ilx
II–Ilx
III R 2,2Ω 10A
IV R 2,2Ω 10A
S2e
I–I4
in cablu
D2e
3
8
III–1
IV–1
14s
14d
I–II1
V–2
II–II1
VI–2
2A
10A
La BJ
034 C
La BJ
2–8 Si

CA–1P(2)
BIF

034 C; 2–8 Si

CUTIE APARATAJ PENTRU DOUA EMISII

Statia: Albesti **EA51 01 E 19 BX SE 019 2 020 1 24/29**

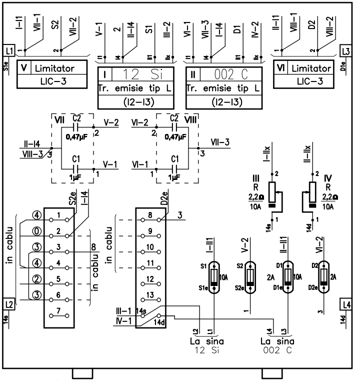

I–I1
VII–1
S2
VII–2
V–1
2
II–I4
S1
III–2
VI–1
VII–3
I–I4
D1
IV–2
II–I1
VIII–1
D2
VIII–2
V Limitator
LIC–3
I 10 Si
Tr. emisie tip L
(I2–I3)
II III C
Tr. emisie tip L
(I2–I3)
VI Limitator
LIC–3
VII C2 0,47µF
C1 1µF
VIII C2 0,47µF
C1 2µF
VII–3
III R 2,2Ω 10A
IV R 2,2Ω 10A
in cablu
3
8
III–1
IV–1
14s
14d
La BJ
10 Si
La BJ
III C

CA–1P(2)
BIF

10 Si; III C

CUTIE APARATAJ PENTRU DOUA EMISII

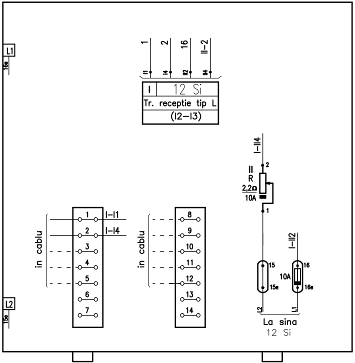
Statia: Albesti **EA51 01 E 19 BX SE 019 2 020 1 25/29**


I–I1
VII–1
S2
VII–2
V–1
2
II–I4
S1
III–2
VI–1
VII–3
I–I4
D1
IV–2
II–I1
VIII–1
D2
VIII–2
L1
L3
S1e
D1e
V Limitator
LIC–3
I 12 Si
Tr. emisie tip L
(I2–I3)
II 002 C
Tr. emisie tip L
(I2–I3)
VI Limitator
LIC–3
VII
C2
0,47μF
V–2
C1
1μF
V–1
II–I4
VIII–3
VI–2
VIII
VII–3
VI–1
I–IIx
II–IIx
III
R
2,2Ω
10A
IV
R
2,2Ω
10A
14s
14d
S2e
D2e
in cablu
L2
L4
III–1
IV–1
I–II1
V–2
II–II1
VI–2
S1
S1e
S2
S2e
D1
D1e
D2
D2e
10A
2A
La sina
12 Si
La sina
002 C

CA–1P(2)
MONO

12 Si; 002 C

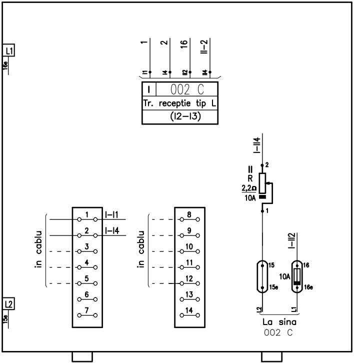
CUTIE APARATAJ PENTRU DOUA EMISII


1
2
16
II–2
L1
16e
I 12 Si
Tr. receptie tip L
(I2–I3)
I–II4
II
R
2,2Ω
10A
in cablu
I–I1
I–I4
L2
15e
I–II2
15
16
10A
La sina
12 Si

CA–1F(2)
MONO

12 Si

CUTIE APARATAJ PENTRU O RECEPTIE

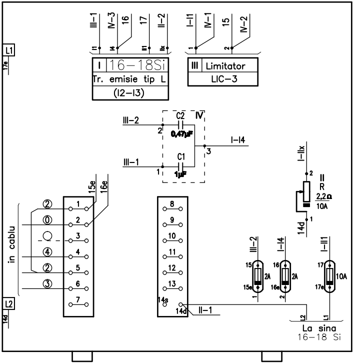

L1
16e
L2
15e
1
2
16
II-2
I1
I4
II2
II4
I
002 C
Tr. receptie tip L
(I2-I3)
I-II4
2
II
R
2,2Ω
10A
1
in cablu
1
2
3
4
5
6
7
I-I1
I-I4
in cablu
8
9
10
11
12
13
14
15
15e
16
16e
10A
I-II2
L2
L1
La sina
002 C

CA-1F(2)
MONO

002 C

CUTIE APARATAJ PENTRU O RECEPTIE

Statia: Albesti **EA51 01 E 19 BX SE 019 2 020 1 28/29**


L1
17e
L2
14d
III-1
IV-3
16
17
II-2
I-I1
IV-1
15
IV-2
I1
I4
II1
IIx
1
2
I
16-18Si
Tr. emisie tip L
(I2-I3)
III
Limitator
LIC-3
C2
IV
III-2
2
0,47µF
I-I4
3
C1
III-1
1
1µF
I-IIx
2
II
R
2,2Ω
10A
1
14d
15e
16e
in cablu
②
⓪
④
②
③
1
2
3
4
5
6
7
8
9
10
11
12
13
14s
14d
II-1
III-2
I-I4
I-II1
15
15e
2A
1
16
16e
2A
2
17
17e
10A
L2
L1
La sina
16-18 Si

CA-1FM(2)

MONO

16-18 Si

CUTIE APARATAJ PENTRU O EMISIE

Statia: Albesti **EA51 01 E 19 BX SE 019 2 020 1 29/29**