

Formateur du train BBut

A partir des informations provenant:

- de l'unité 101 par l'intermédiaire du convertisseur Anal. Digit. Dymec
- du train M
- de l'impulsion caractéristique BS.

Forme les trains B \nearrow B \searrow B₁₀ \nearrow B₁₀ \searrow (Annexe 1).

Composition

Chassis de 3 unités de haut, formé de 7 plug-in dans l'ordre de fonctionnement:

- 1) preset compteur C
- 2) pulse burst generateur
- 3) Dymec pulse divided
- 4) Dymec pulse divided
- 5) Summing
- 6) Pulse divided par 10
- 7) alimentation.

Preset compteur C (annexe 2) Daems, rapport MPS/CO Electronique 69-5

- permet de sélectionner 1 impulsion dans le train M, reset à MW,
- choisit l'emplacement des impulsions fictives précédant le train B.

Pulse Burst Generator (annexe 3). Van der Schüren. Note 68-2

A partir de l'impulsion provenant du preset counter C, produit un train de 49 impulsions distantes de 0,04 ms.

Note: la 1ère vraie impulsion liée au champ magnétique est la B.S. Donnée par une peaking-streap de l'unité 101, block no. 4, elle correspond a 50 gauss. (Valeur toujours plus grande que le champ rémanent P.S.).

Il a fallu rapporter 49 impulsions permettant de lire directement sur les compteurs la valeur exacte du champ. C'est le rôle du pulse burst générateur.

Dymec pulse divided (annexe 4). Daems.

- Entre une impulsion Start B.S. et une impulsion Reset MW, il effectue une première division du train venant du dymec.
- Aux deux sorties du Dymec ($\frac{dB}{dt} +$, $\frac{dB}{dt} -$) correspondent 2 tiroirs Dymec pulse divided ↗ et ↘.

Summing (annexe 5). Daems.

- Il reçoit le train en provenance du Pulse Burst Générateur, l'ajoute au train venant du Dymec pulse divided ↗ et distribue le train B ↗ suivant le schéma.

Train fictif (49 pulses) + train réel B ↗ = train B ↗ distribué.

- Il distribue le train B ↘.
- Il permet le contrôle Neon de chacune des impulsions intéressantes Burst, B.S., B dymec ↗, $\lesssim B ↗$, B ↘.

Division par 10 (annexe 6). Daems.

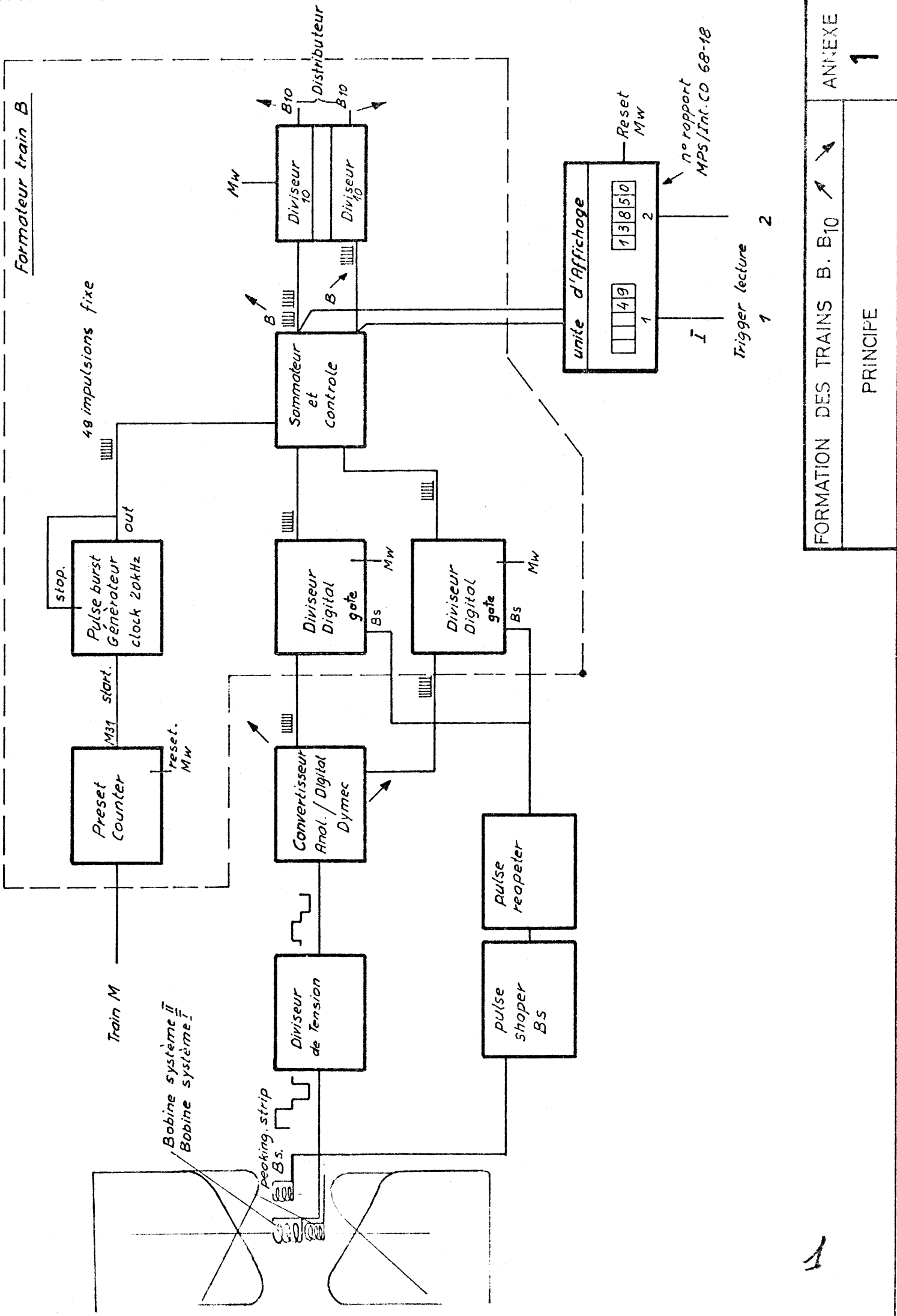
Reçoit le train B ↗ et B ↘ qu'il divise, et distribue $B_{10} ↗$ et $B_{10} ↘$.
Reset du comptage en MW.

Alimentation (annexe 7).

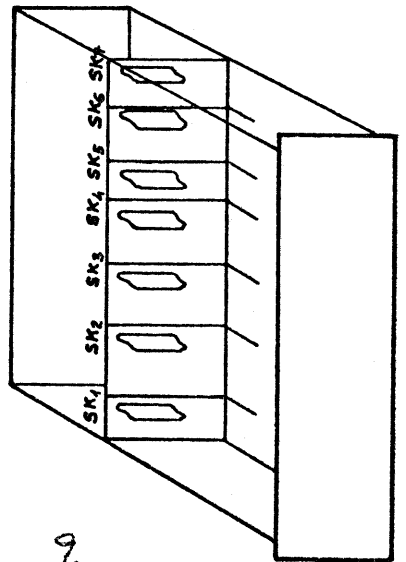
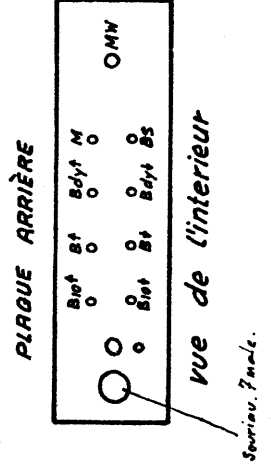
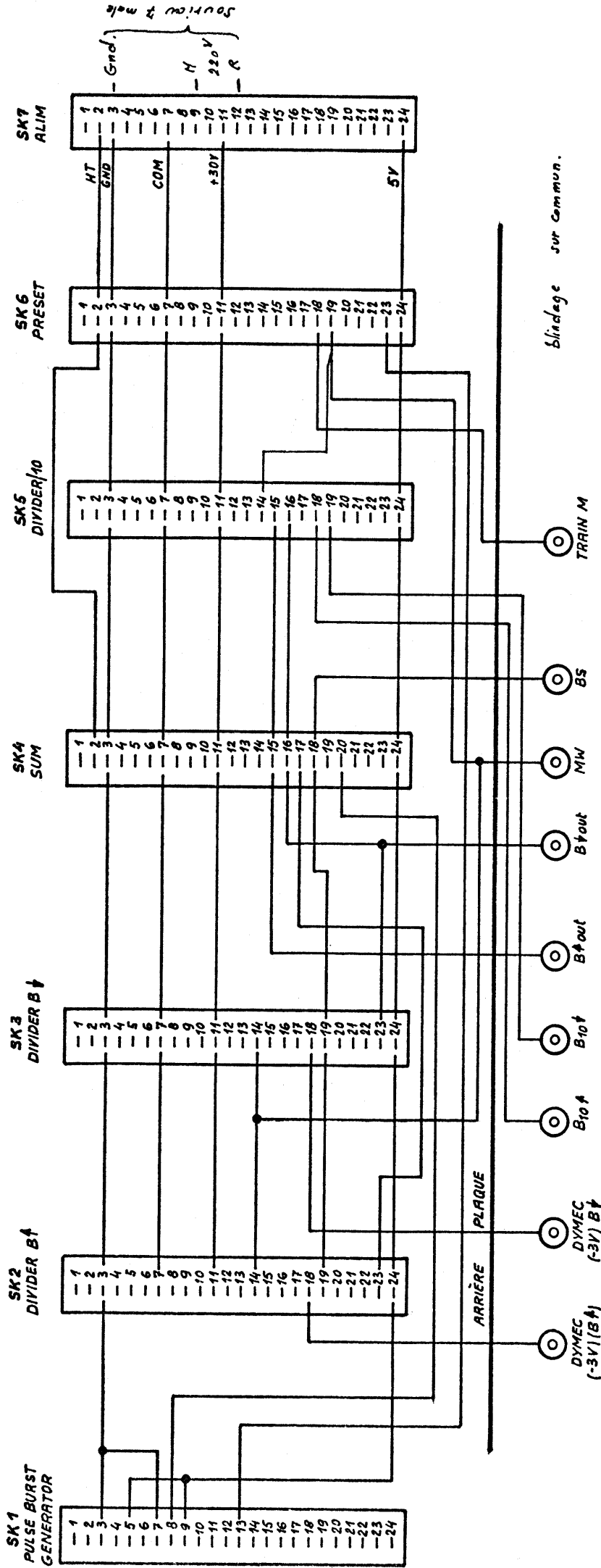
Distribution:

Section Aimant du Groupe SR
PS Operation

Formateur train B



1



Blindage sur commun.

Souriau 7 male
Gnd.
H
220V
R

SK7 ALIM
1 HT
2 GND
3
4
5 COM
6
7
8
9
10 +30V
11
12
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14
15
16
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18
19
20
21
22
23
24 5V

SK6 PRESET
1
2
3
4
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6
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11
12
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SK5 DIVIDER/10
1
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SK4 SUM
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SK3 DIVIDER B4
1
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SK2 DIVIDER B4
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SK1 PULSE BURST GENERATOR
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24

ARRIERE
DYMEC (-3V) B4
DYMEC (-3V) B4

TRAIN M

BS

MW

Bout

Bout

B10A

B10B

B10C

B10D

B10E

B10F

B10G

B10H

B10I

B10J

B10K

B10L

B10M

B10N

B10O

B10P

B10Q

B10R

B10S

B10T

B10U

B10V

B10W

B10X

B10Y

B10Z

B10AA

B10AB

B10AC

B10AD

B10AE

B10AF

B10AG

B10AH

B10AI

B10AJ

B10AK

B10AL

B10AM

B10AN

B10AO

B10AP

B10AQ

B10AR

B10AS

B10AT

B10AU

B10AV

B10AW

B10AX

B10AY

B10AZ

B10BA

B10BB

B10BC

B10BD

B10BE

B10BF

B10BG

B10BH

B10BI

B10BJ

B10BK

B10BL

B10BM

B10BN

B10BO

B10BP

B10BQ

B10BR

B10BS

B10BT

B10BU

B10BV

B10BW

B10BX

B10BY

B10BZ

B10BA

B10BB

B10BC

B10BD

B10BE

B10BF

B10BG

B10BH

B10BI

B10BJ

B10BK

B10BL

B10BM

B10BN

B10BO

B10BP

B10BQ

B10BR

B10BS

B10BT

B10BU

B10BV

B10BW

B10BX

B10BY

B10BZ

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B10BE

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B10BG

B10BH

B10BI

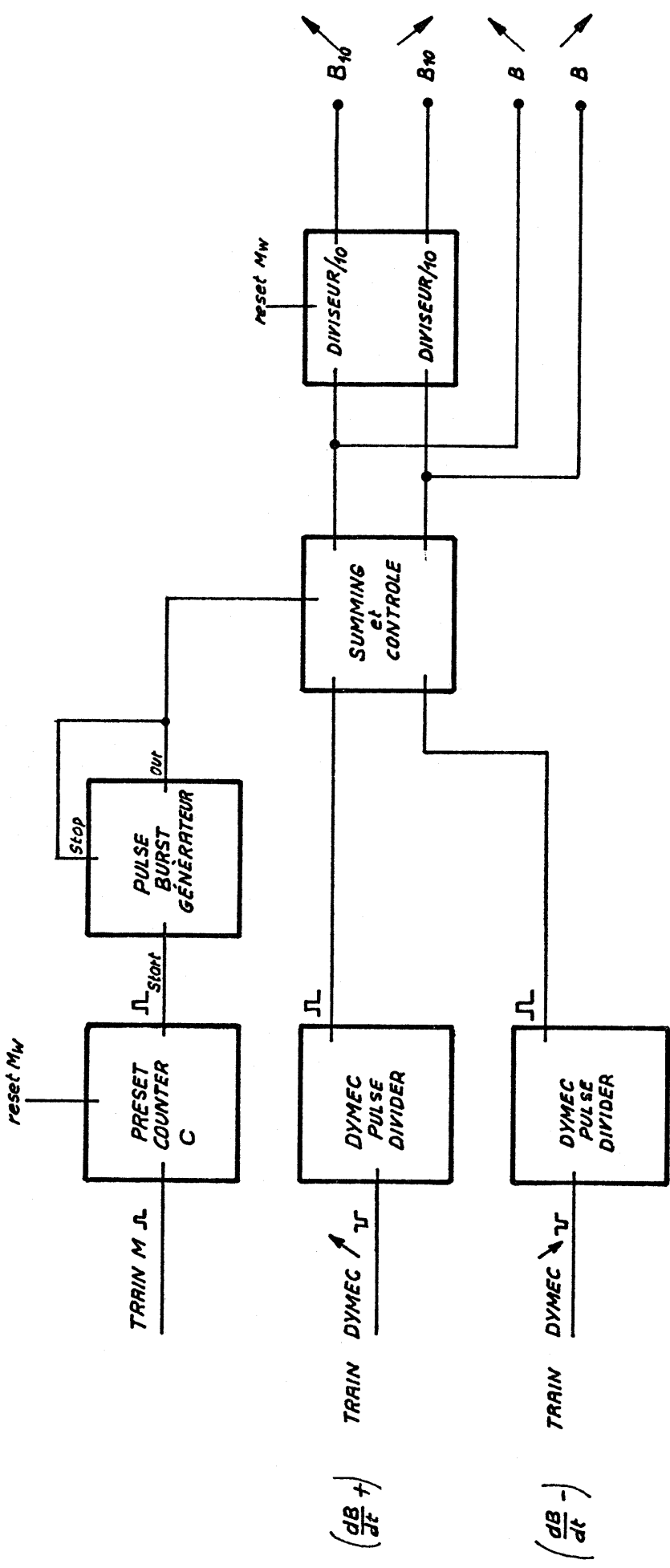
B10BJ

B10BK

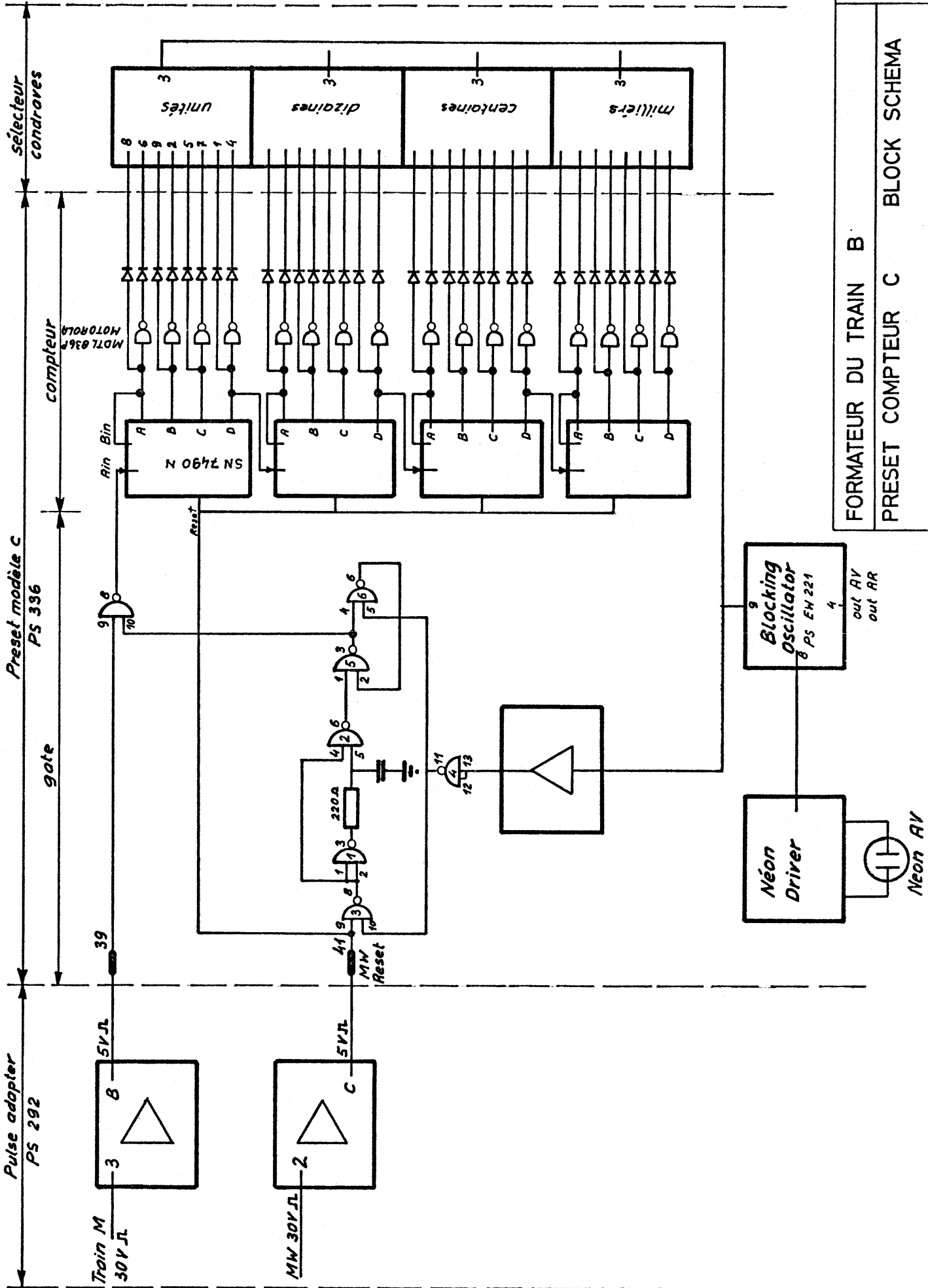
B10BL

B10BM

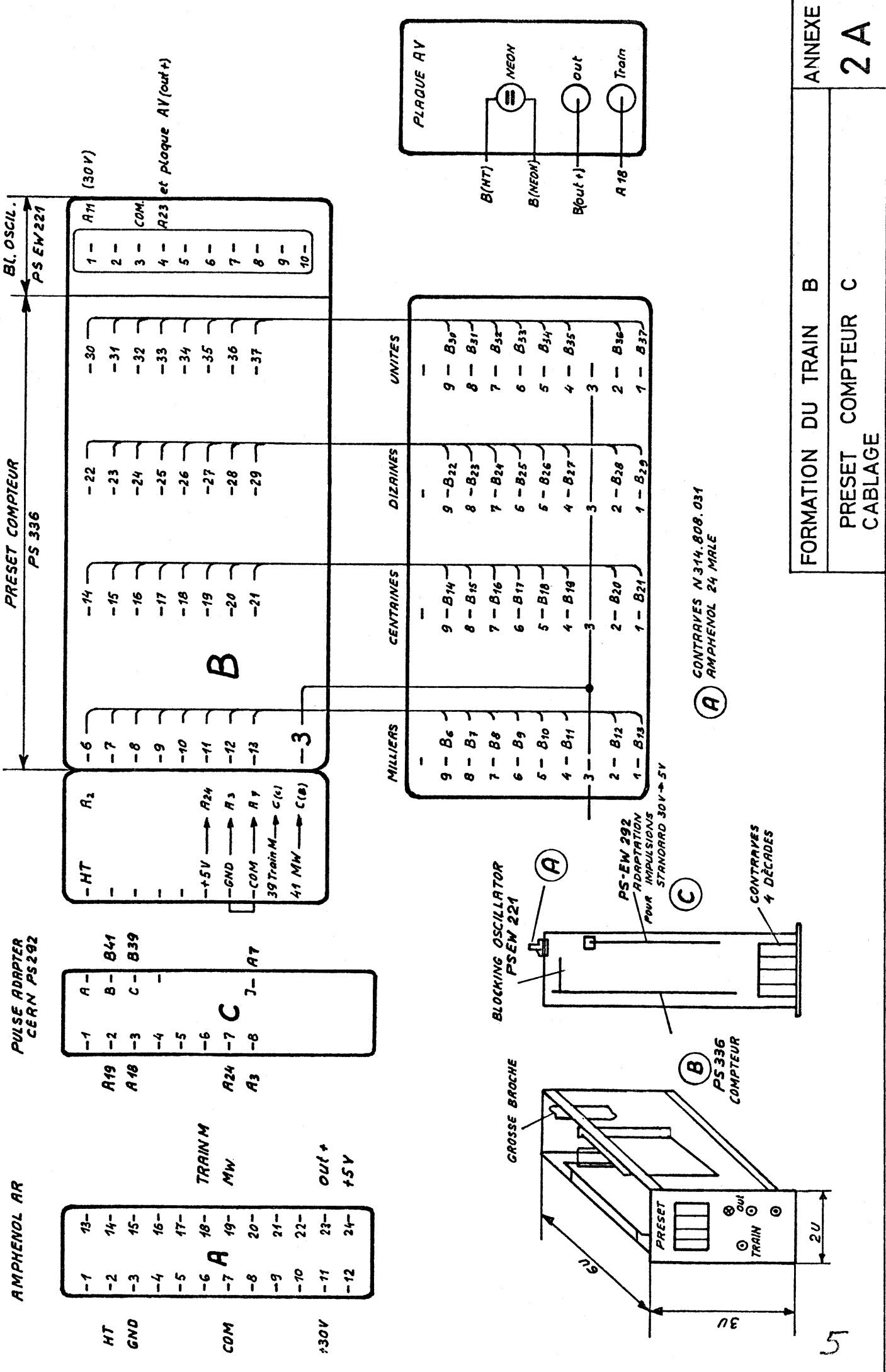
B10BN



W



11



ANNEXE

FORMATION DU TRAIN B

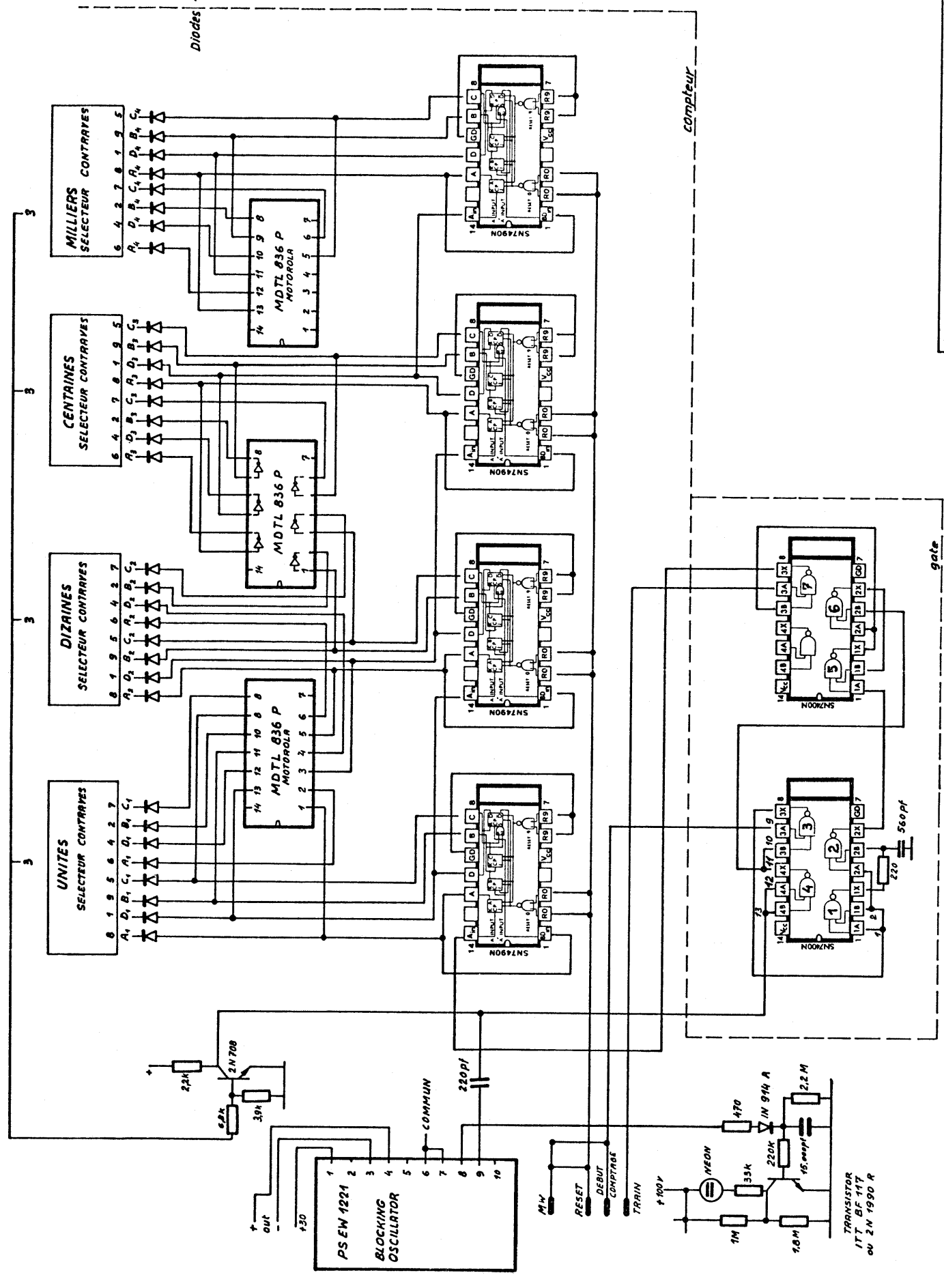
PRESET COMPTEUR C

CABLAGE

2A

57

Diodes 1N 914 A

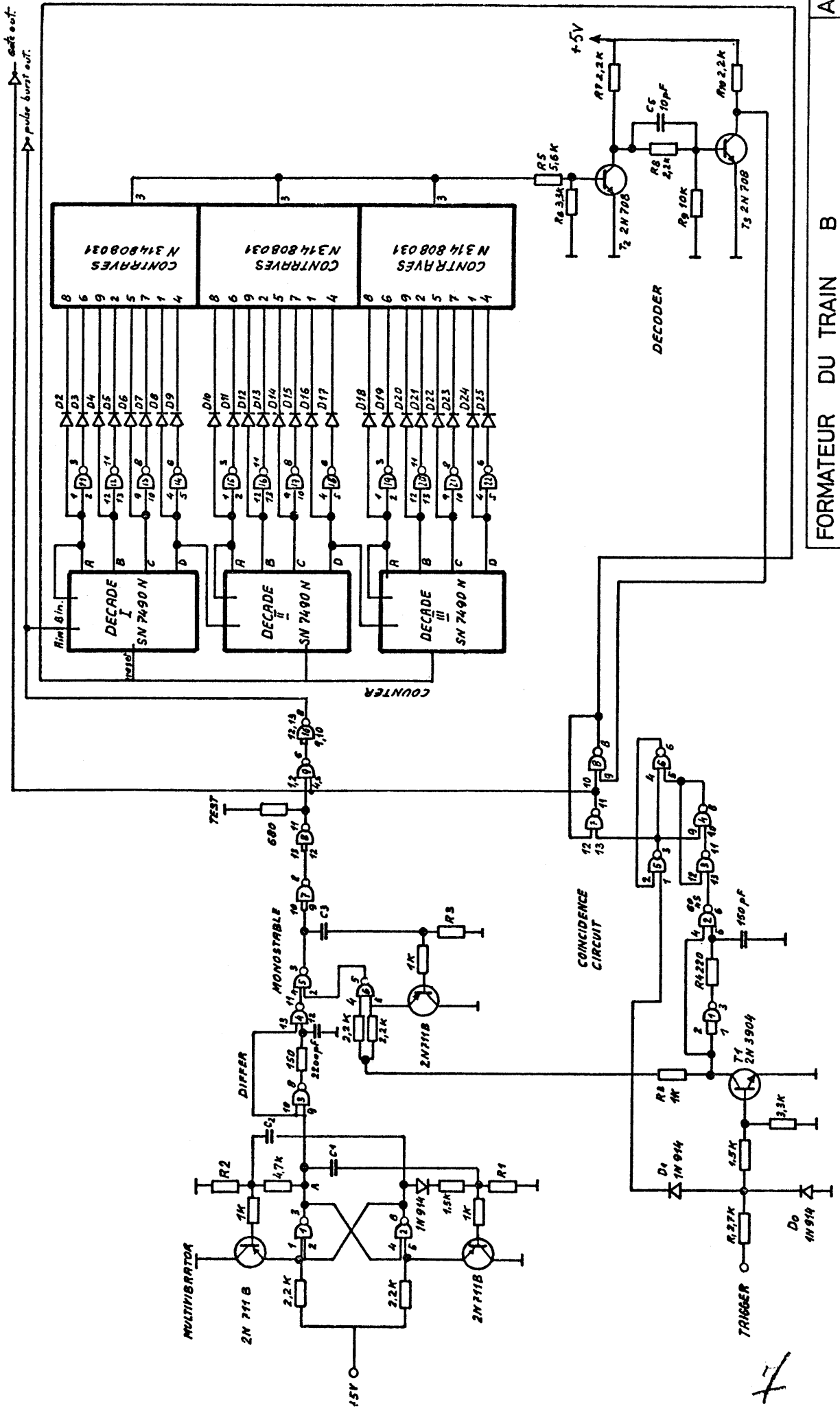


compteur

gate

FORMATEUR DU TRAIN B

PRESET COMPTEUR C
CARTE PS 336

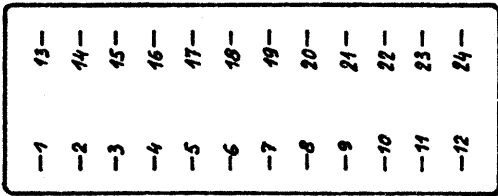


FORMATEUR DU TRAIN B
 PULSE BURST GENERATOR
 BLOCK SCHEMA

d'après 106-1920-3A CERN-MPS
 105-1918-4A LINAC

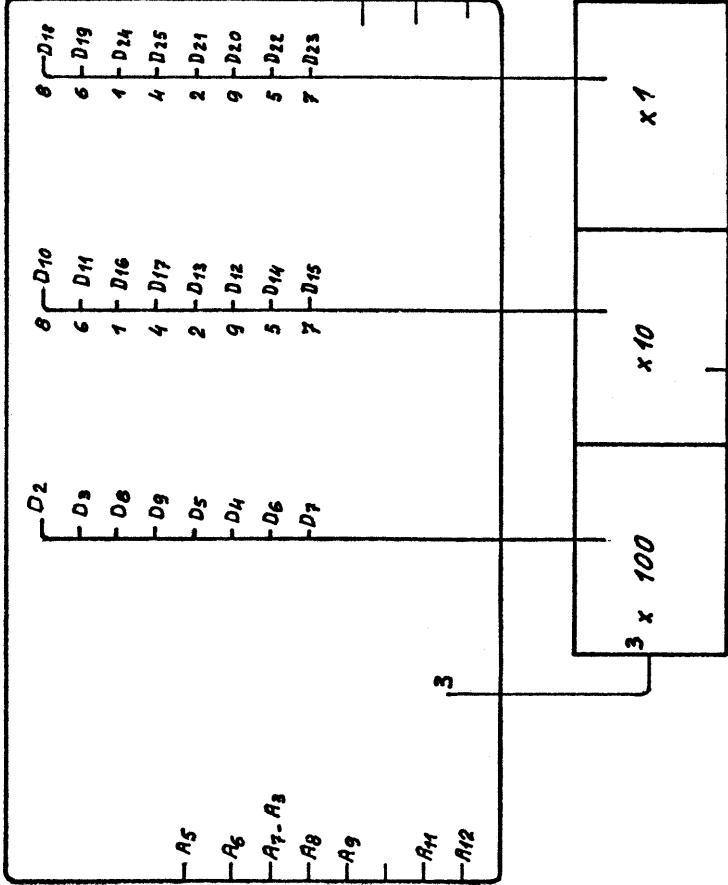
7

AMPHENOL 24MALE

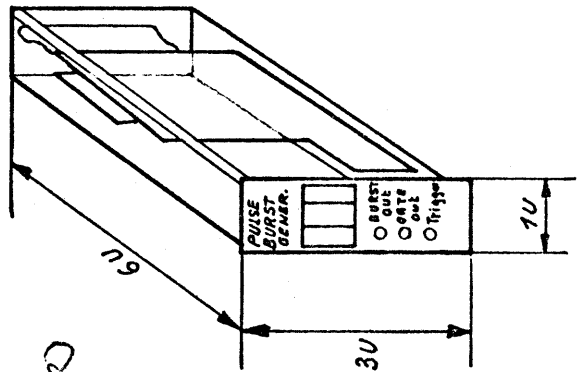
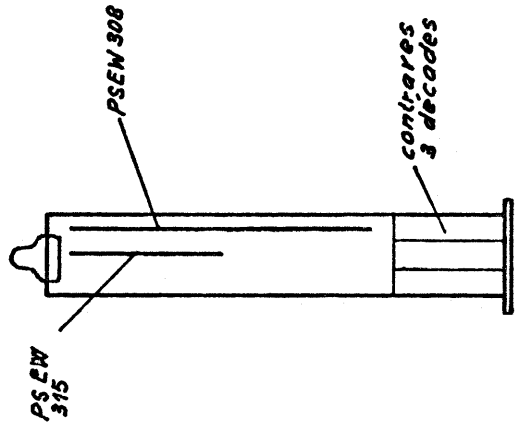
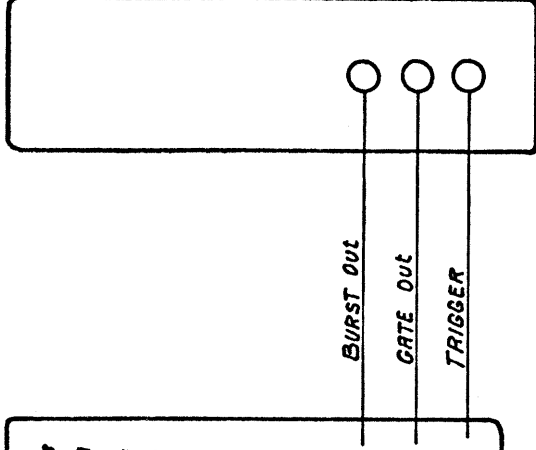


GND -A3
 +5V -A5
 GATE -A6
 AT -A7
 out -A8
 +5V -A9
 30V -A11
 TRIGGER-A12

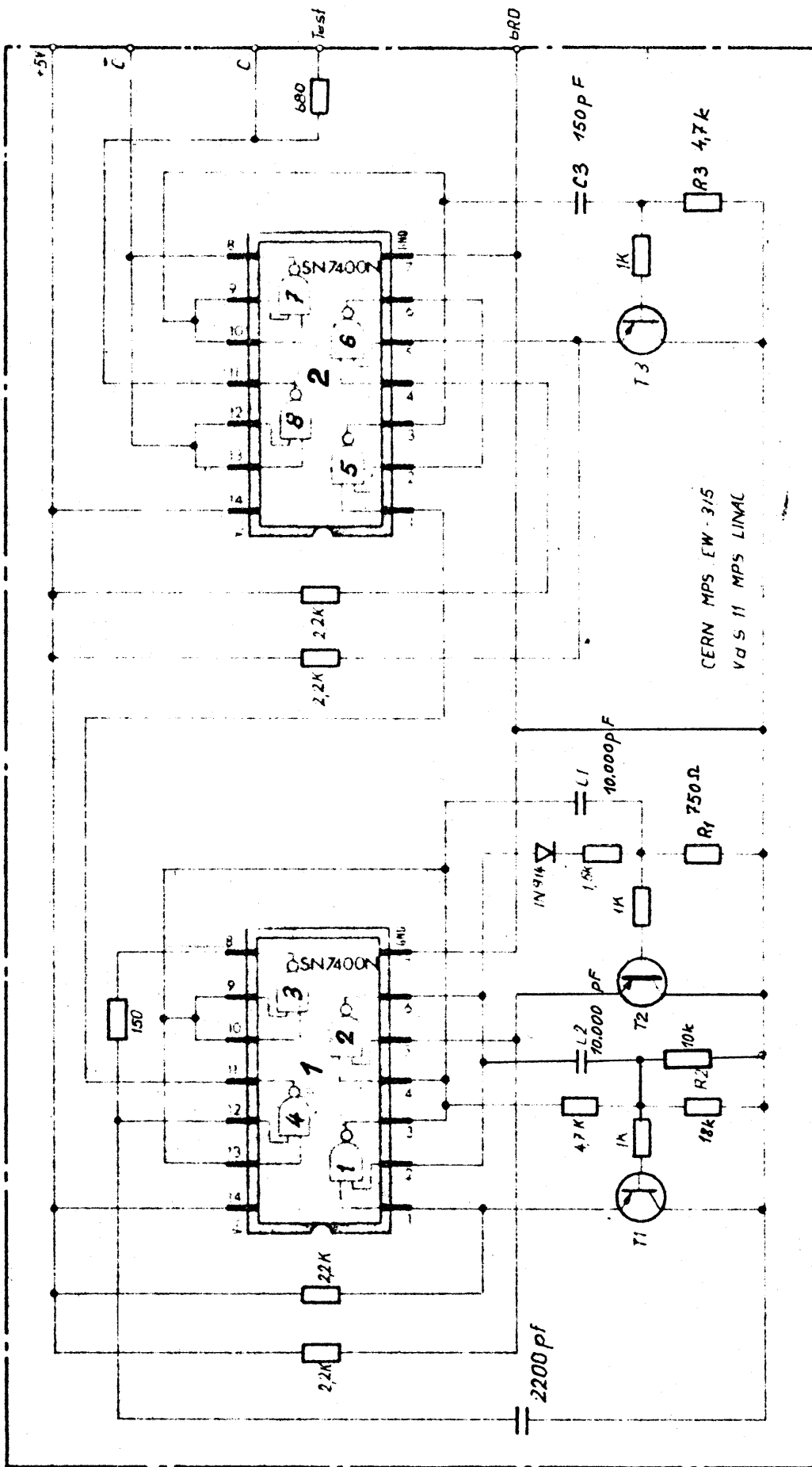
PSEW 308



PLAQUE AV



7 151



R3 = 4.7kΩ
C3 = 450pF
Supply 5V = 20mA

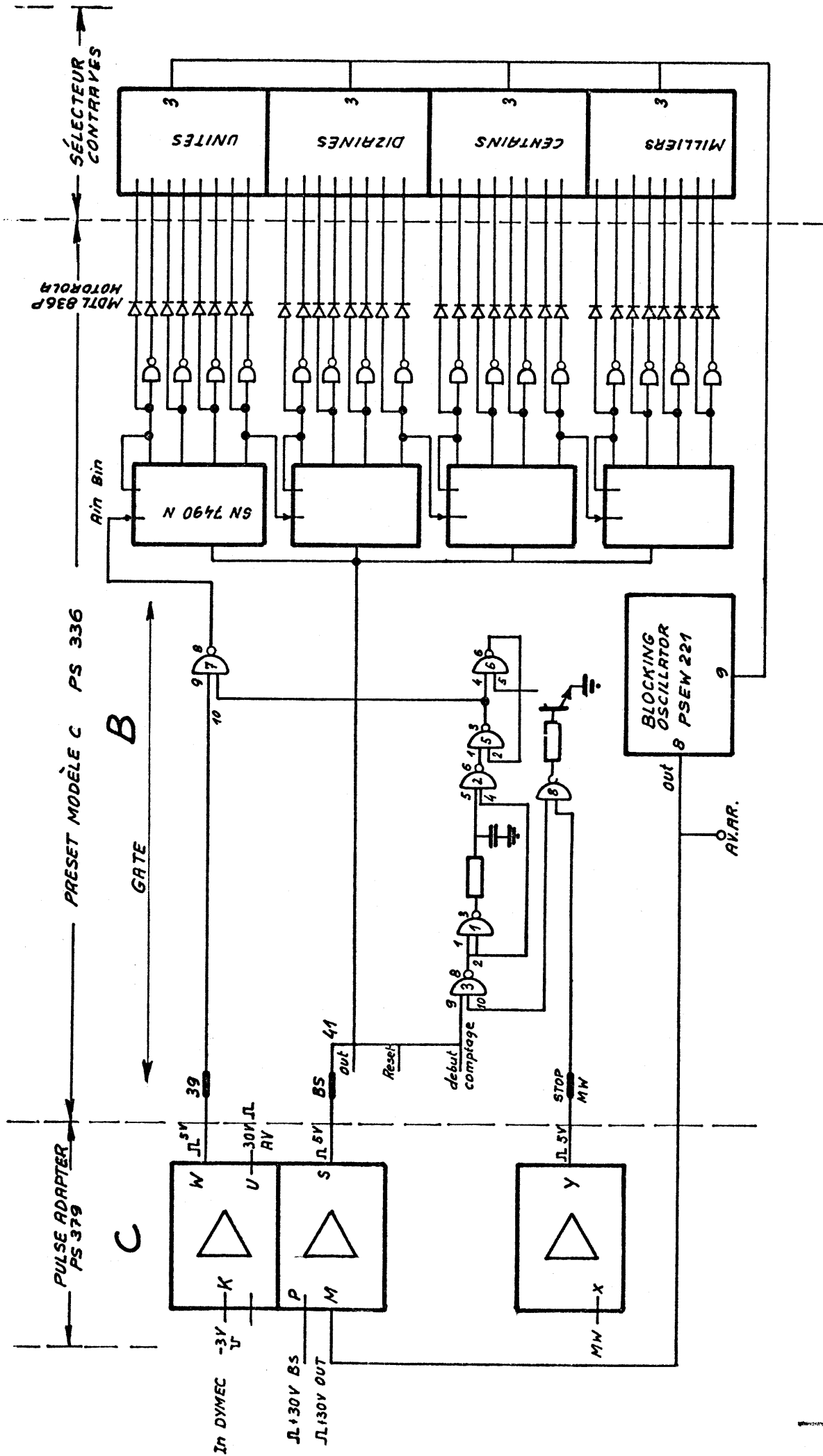
R1 = 750Ω
R2 = 40k/18k
C1 = 10nF
C2 = 10nF

T1, T2, T3 = 2N711B

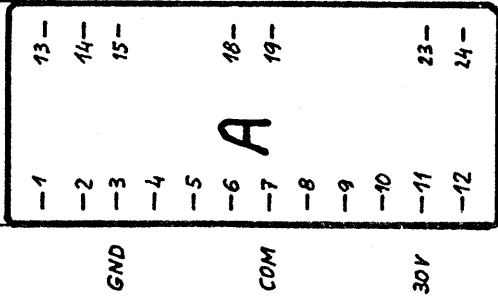
CERN MPS EW-315
VDS 11 MPS LINAC

Circuit diagram
Slow clock for PBB Mark II
MPS 4561
CERN - MPS LINAC
105-1952-4A
16.1.68 *frederic*

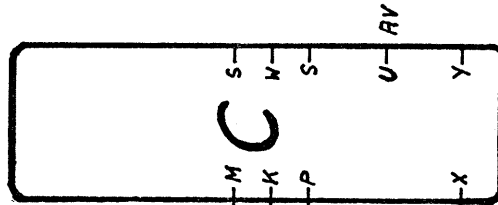
N. 29.68 *frederic*



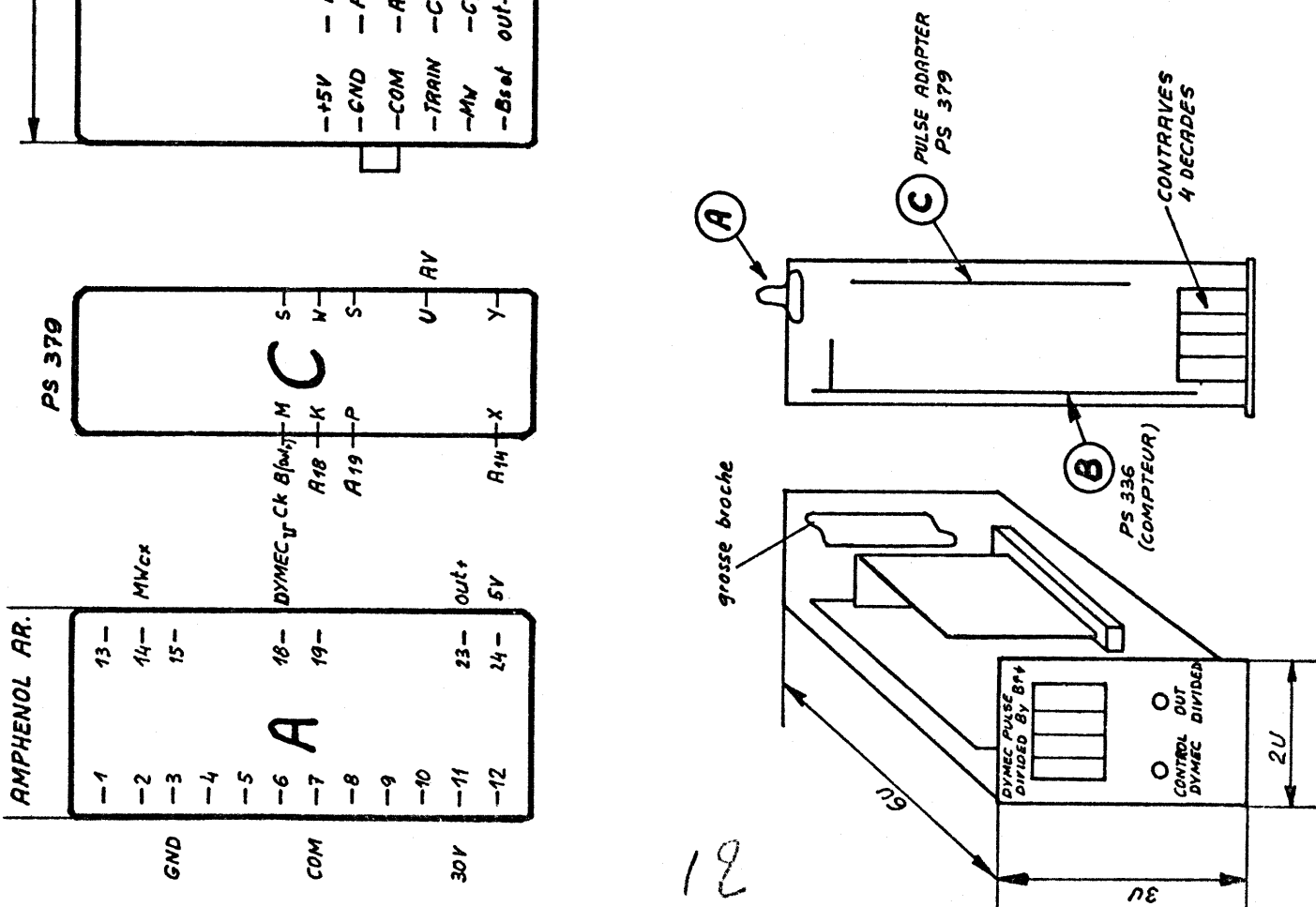
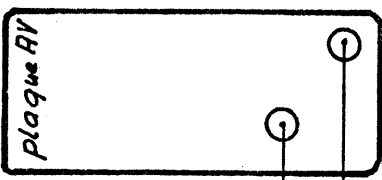
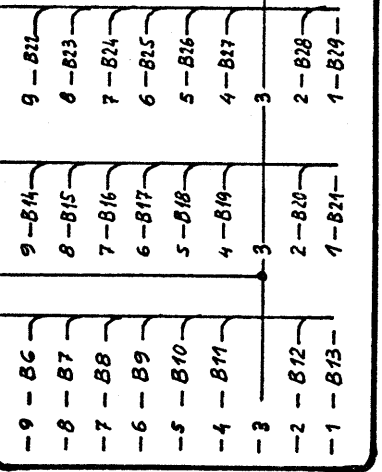
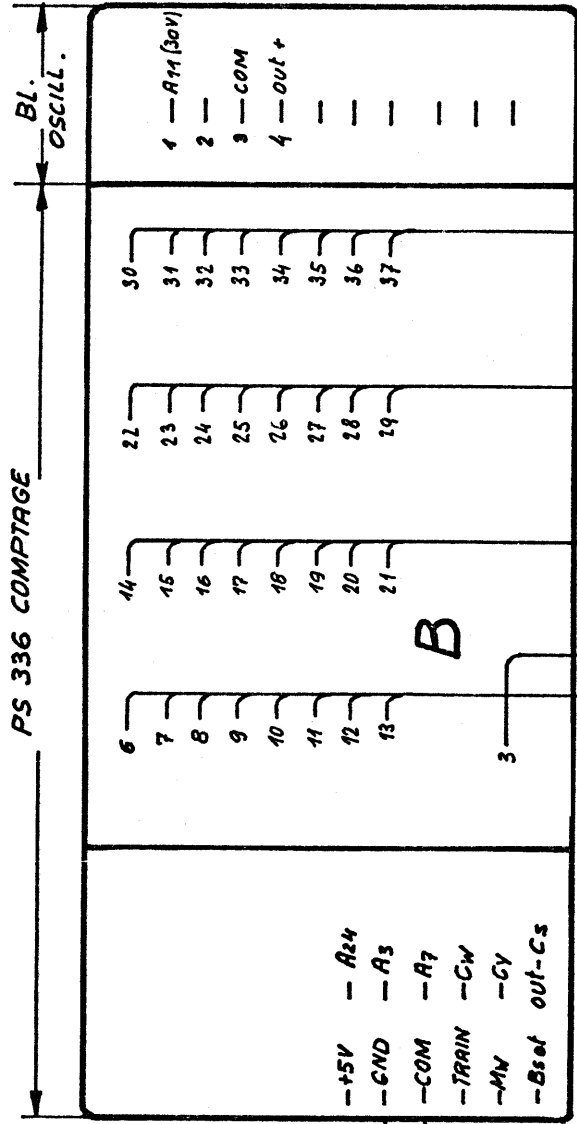
AMPHENOL AR.



PS 370



PS 336 COMPTAGE

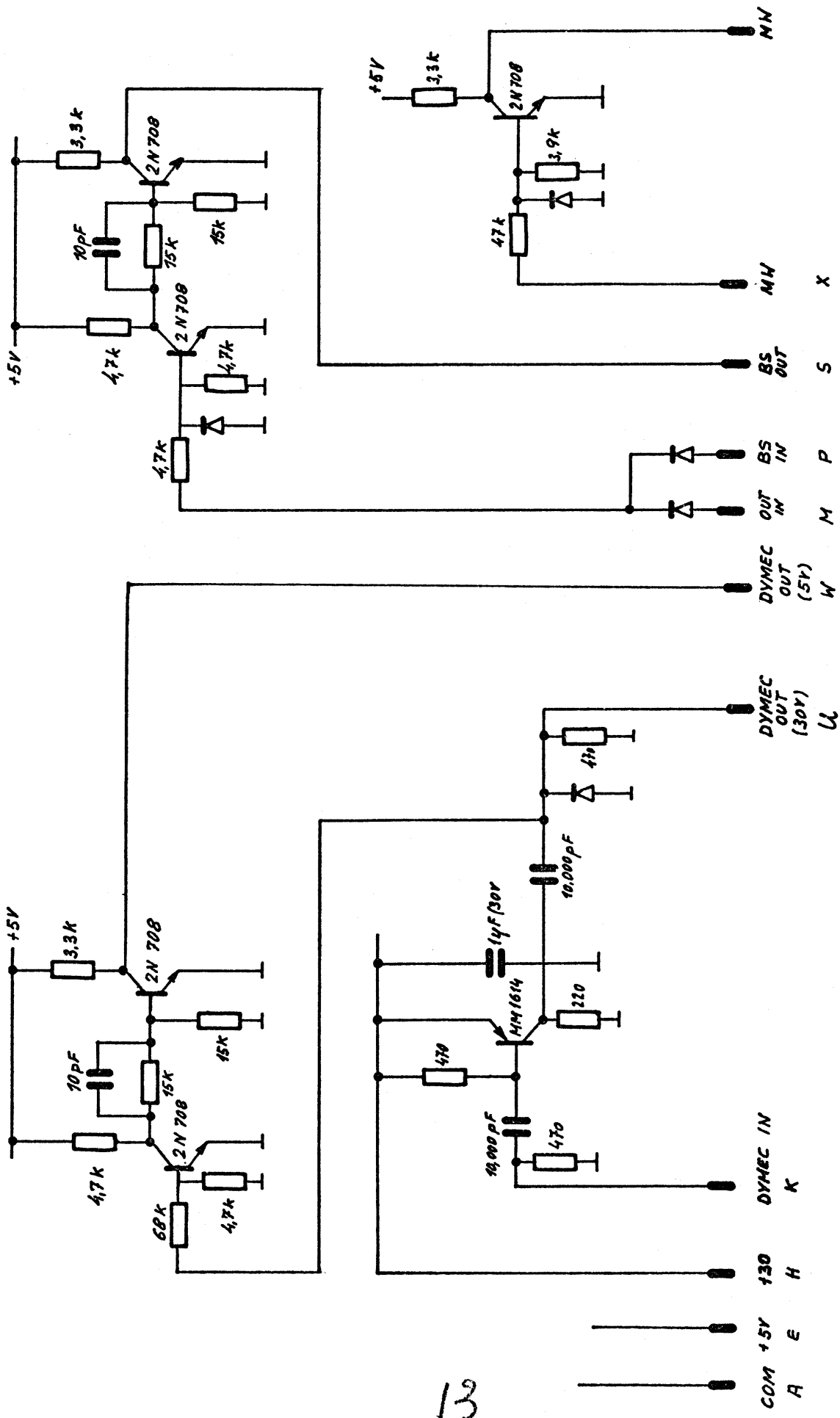


CONTRAVES 314.808.031

(A) AMPHENOL 24 MALE

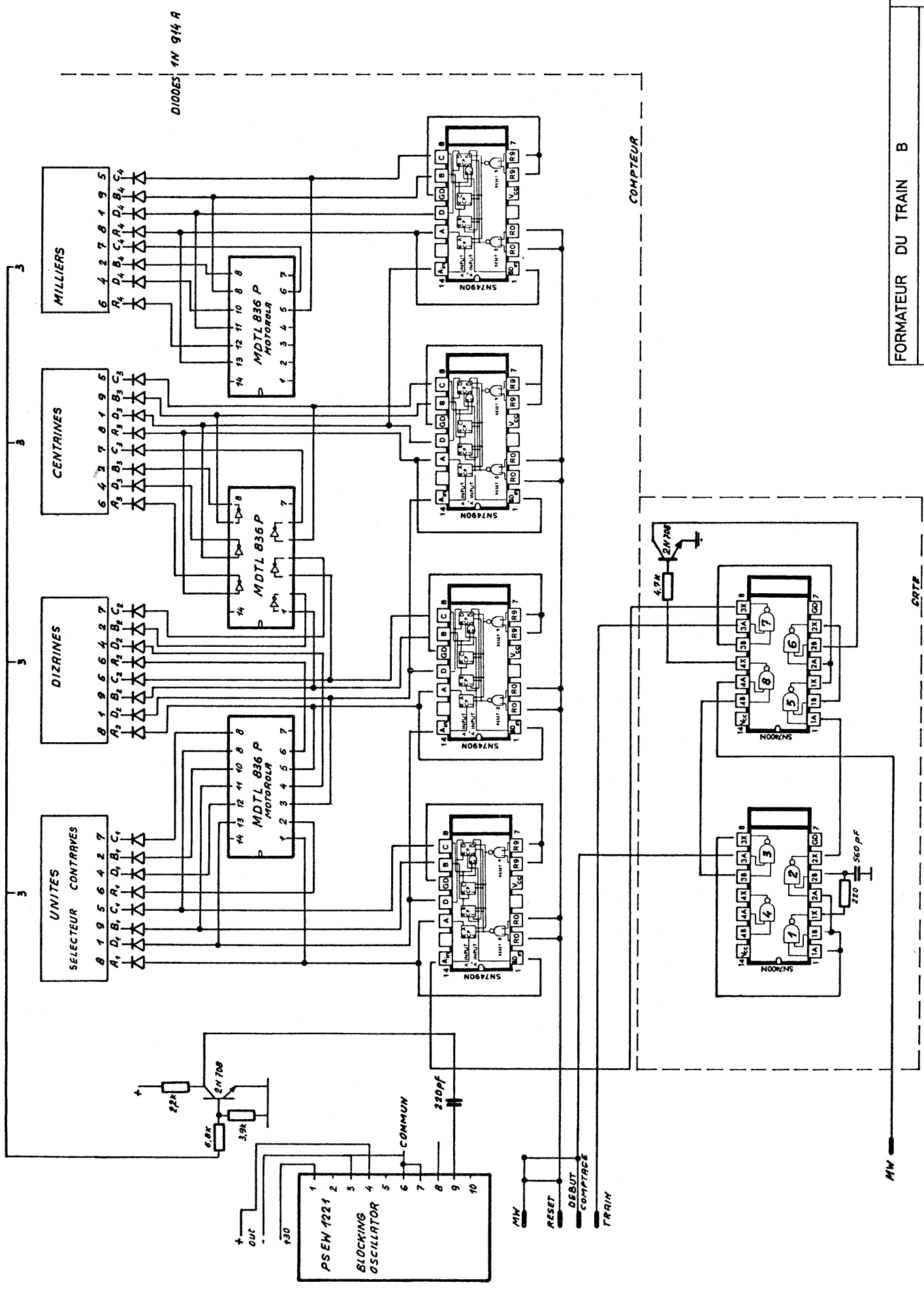
ANNEXE
FORMATION DU TRAIN B
DYMEC PULSE DIVIDED CABLAGE
4 A

12



13

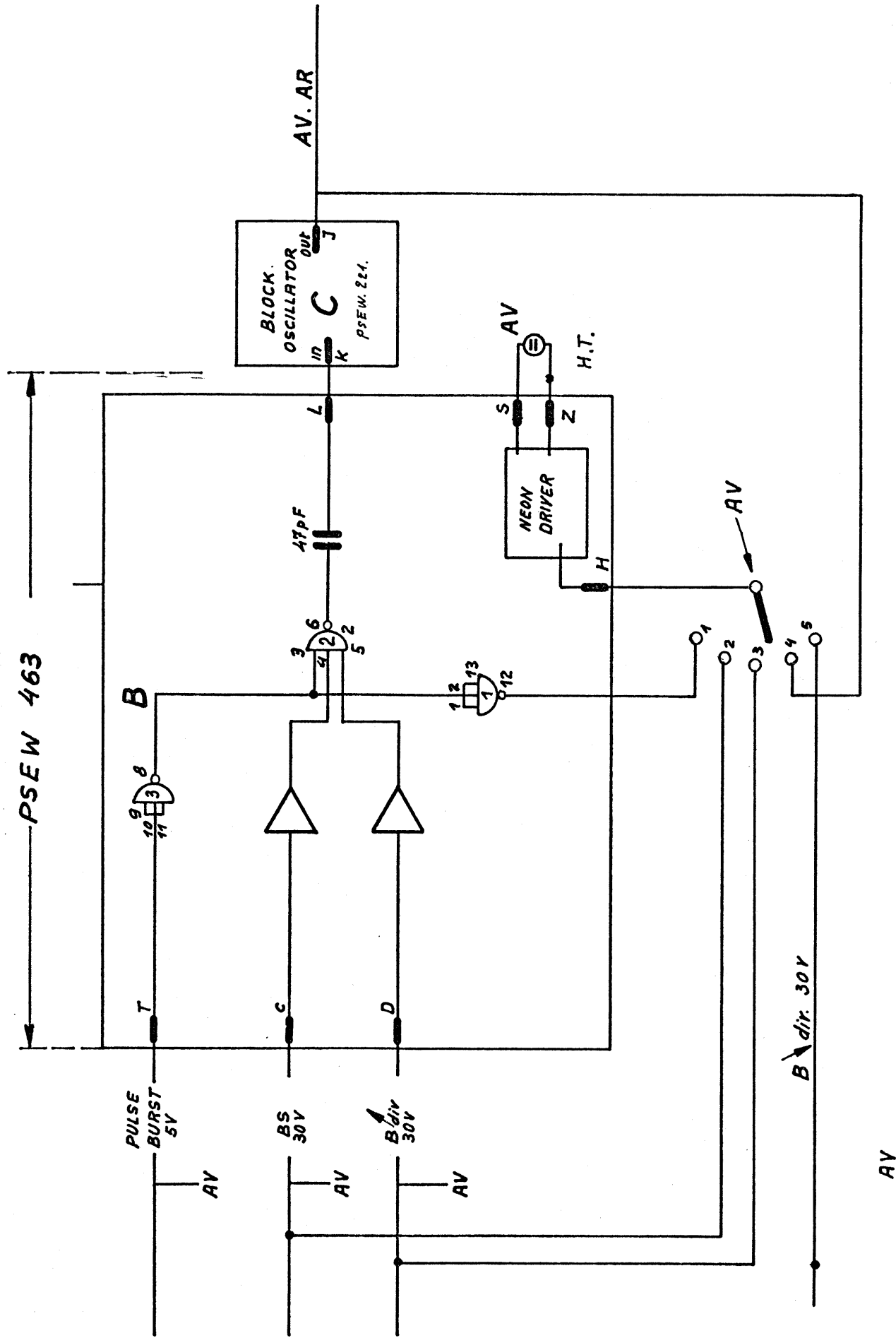
CARTE P.S. 379



M/W

COTE

COMPTEUR

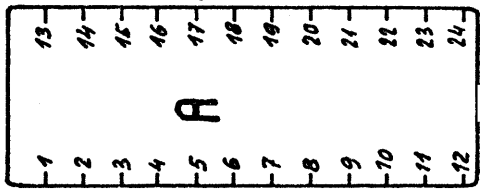


ANNEXE	FORMATEUR DU TRAIN B
5	SUMMING BLOCK SCHEMA

57

SOMMATEUR PSEW 463 BL. OSCILLATEUR PSEW 221

AMPHENOL RR



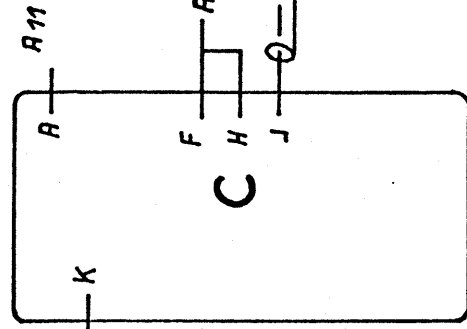
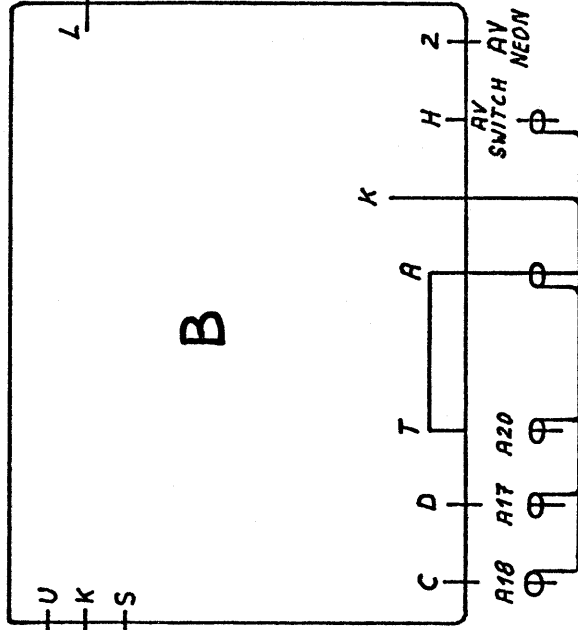
AVneon-Bs - HT

Bk - COM

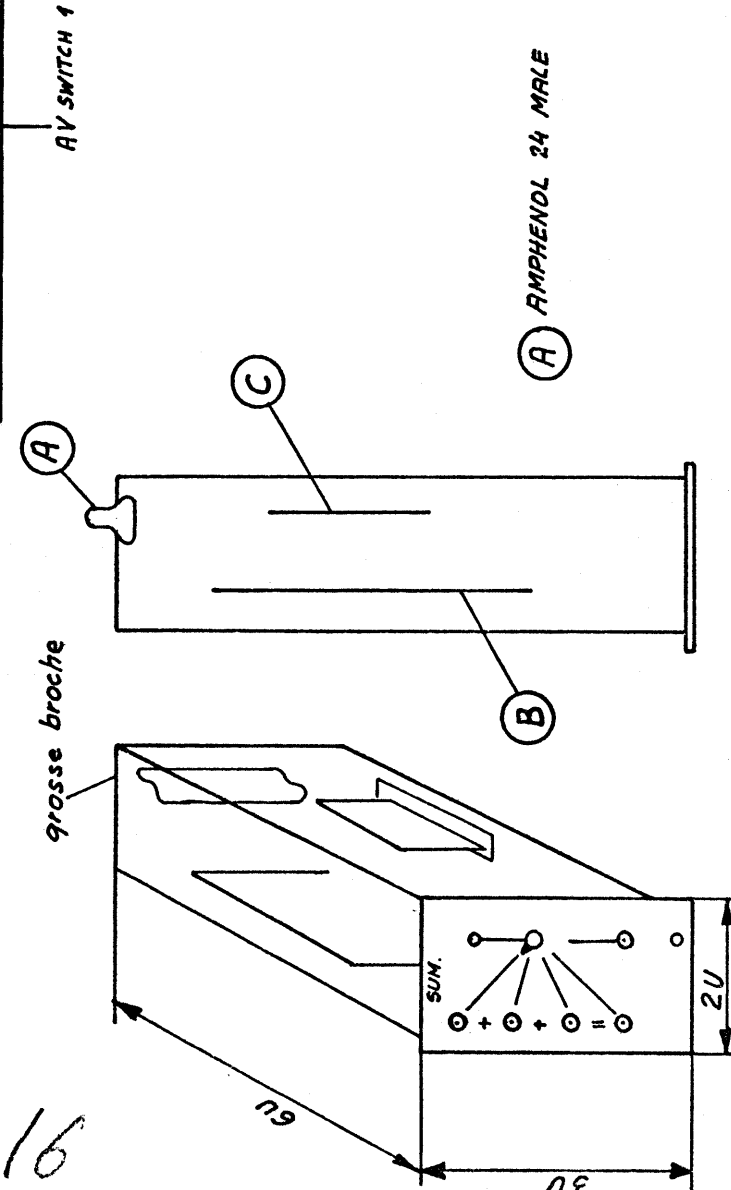
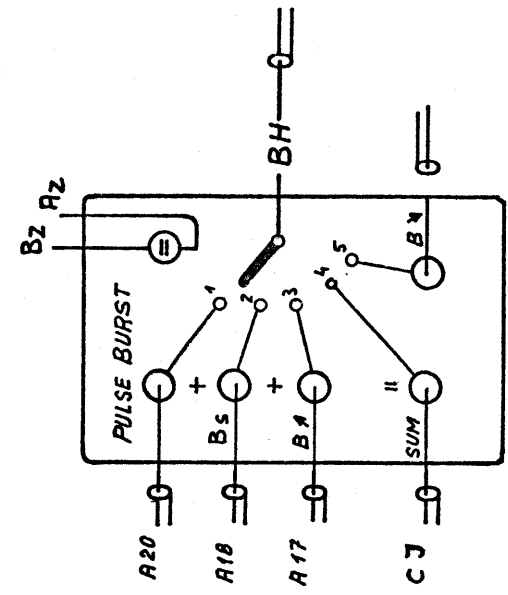
+30V

5V-BU

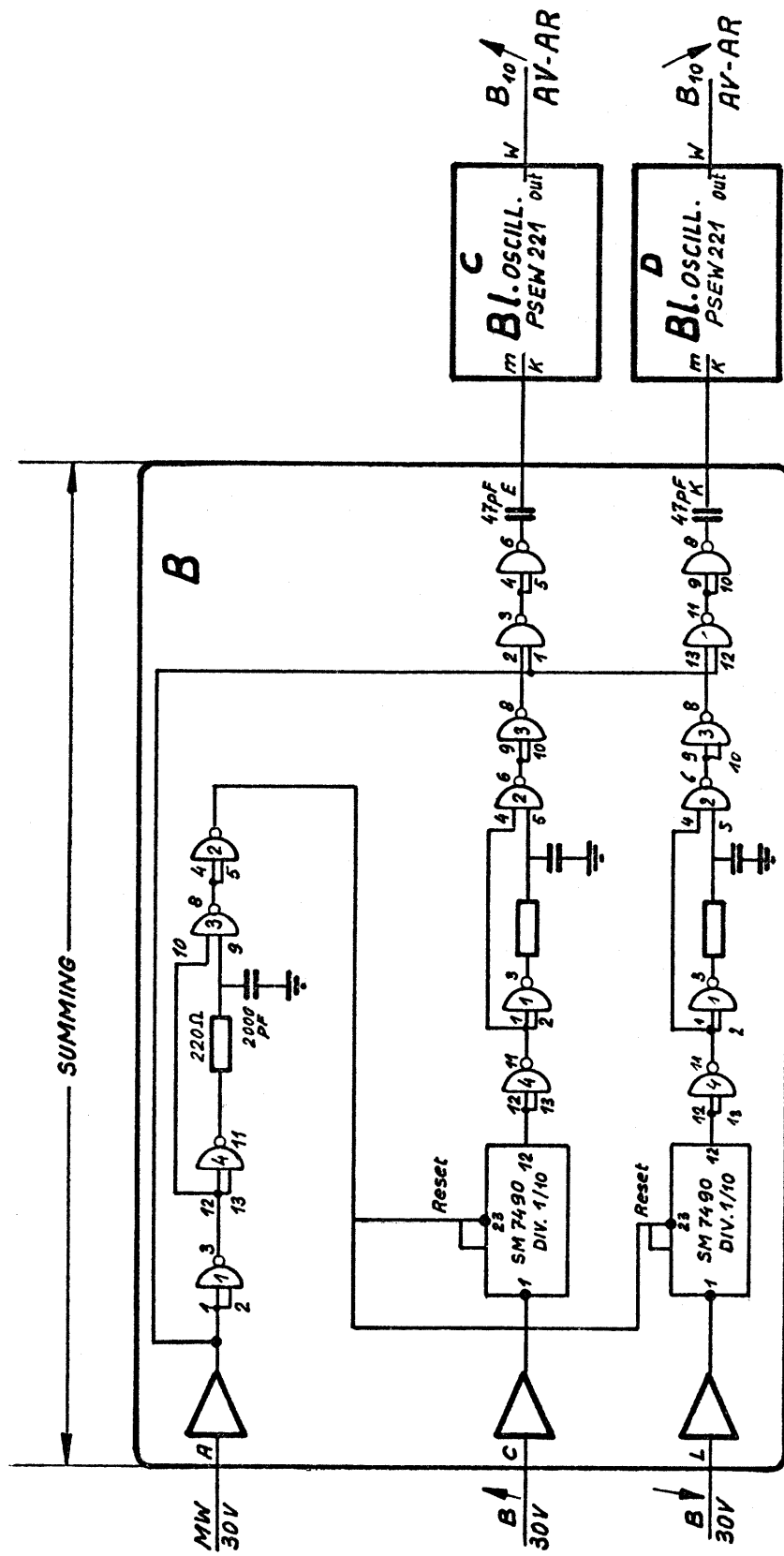
15 - Cj
16 - B₁-AV-SWITCH 5
17 - B₁-AV-SWITCH 3 - BD
18 - B₅-AV-SWITCH 2 - BC
19 - PULS BURST AV BT SWITCH 1



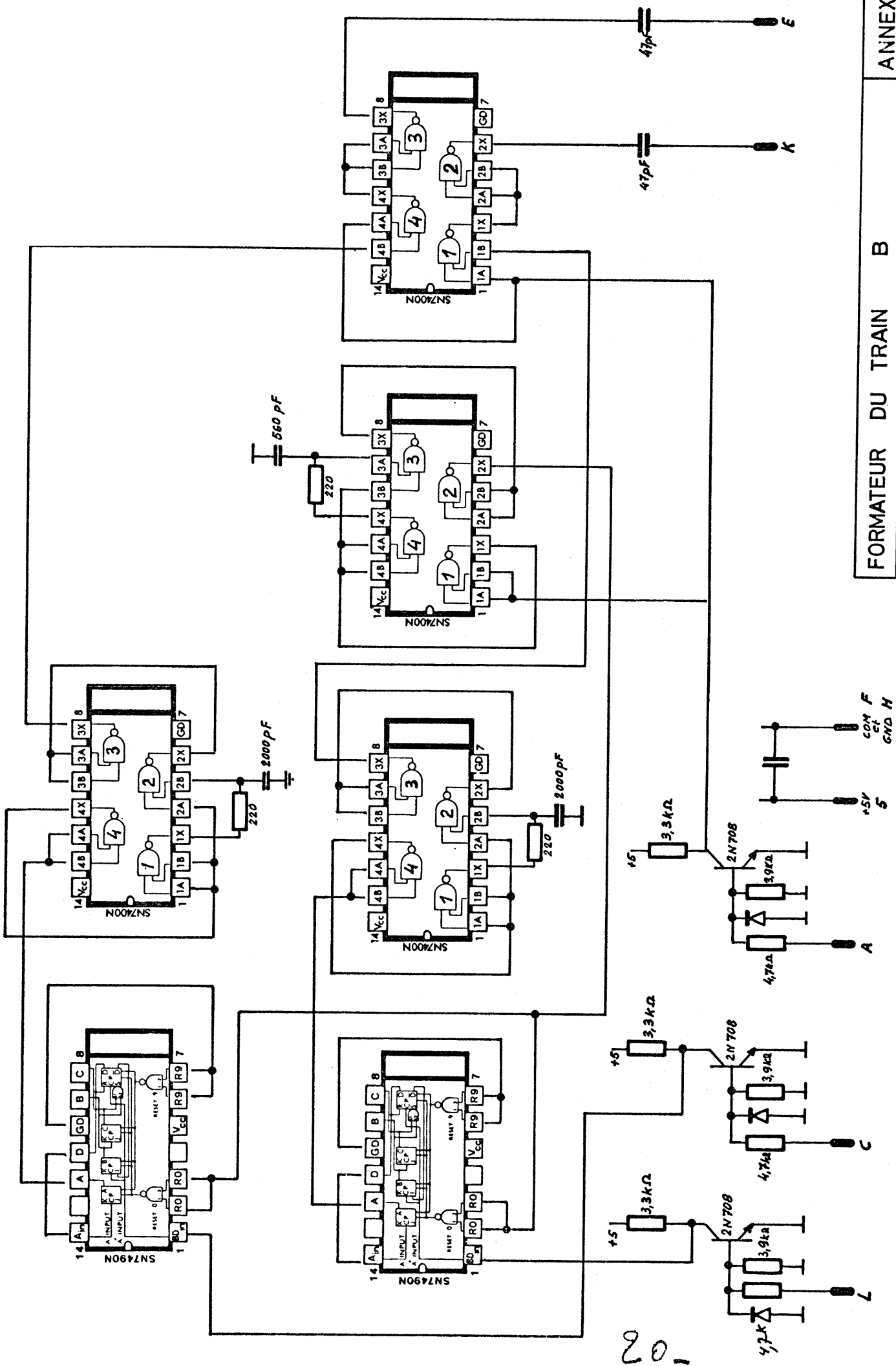
out. sum. B₁ AV-A15 SWITCH 4



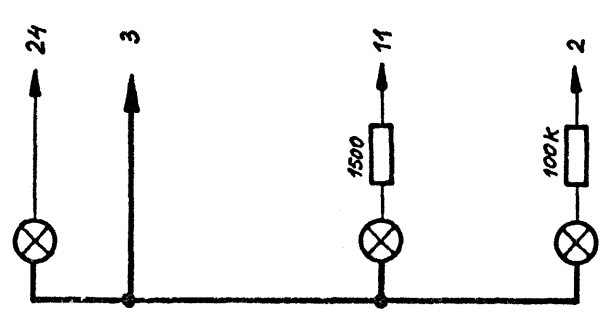
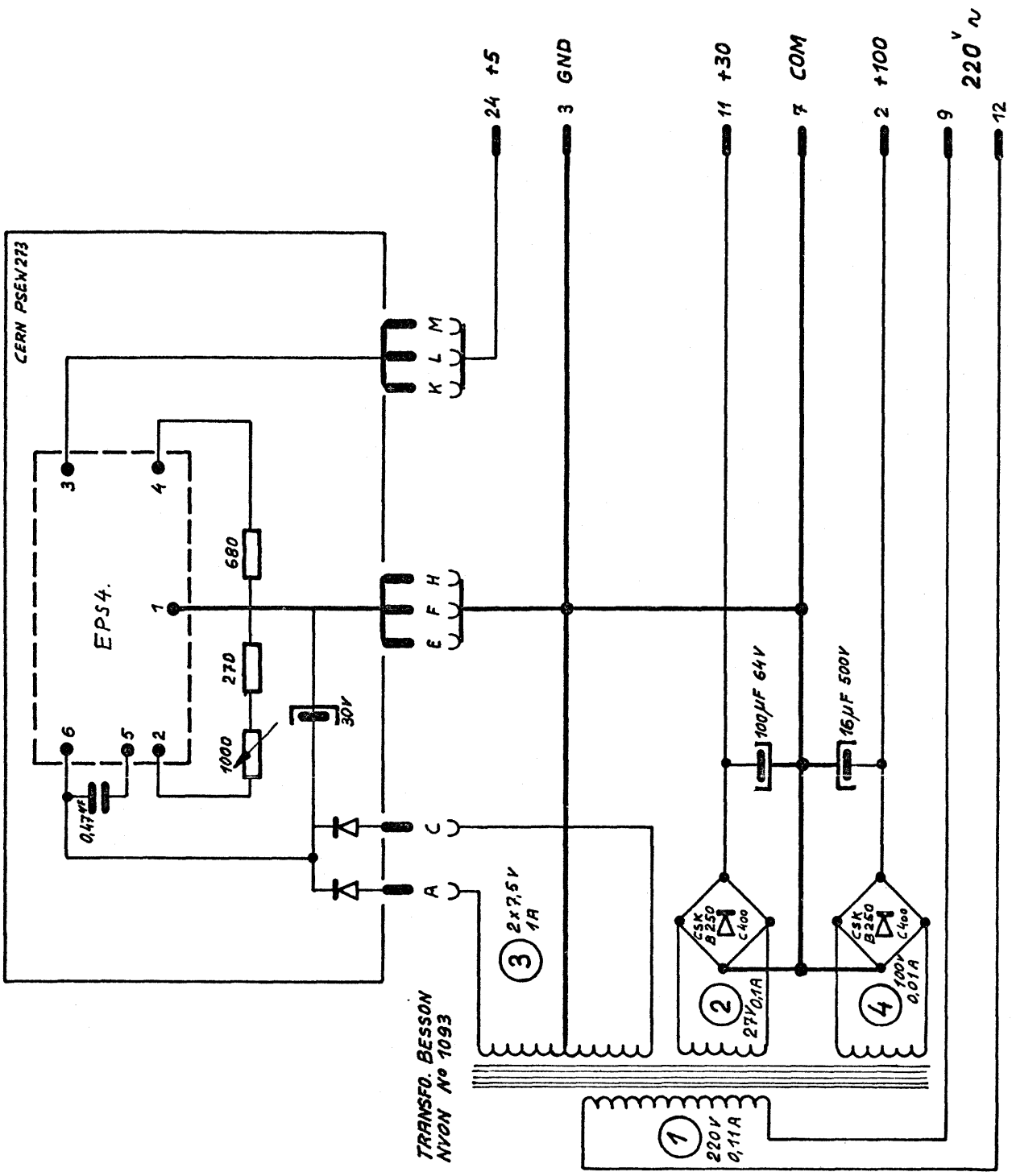
(A) AMPHENOL 24 MALE



18.



20.



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