
Société Nationale des Chemins de fer belges



LIVRET HLT
Fascicule 12
Chapitre XXIII
1^e et 2^e partie

Locomotives
électriques
B - B type 126.2

M.A. 24-12

figures

Direction M.A.

Bureau 24-12

Section 8

LOCOMOTIVE ELECTRIQUE

Bo-Bo type 126.2

Liste des figures et schémas

Figures- Fig.1 à Fig. 49

Schémas- Fig.51 à Fig.71

Courbes- Fig.72 à Fig.76

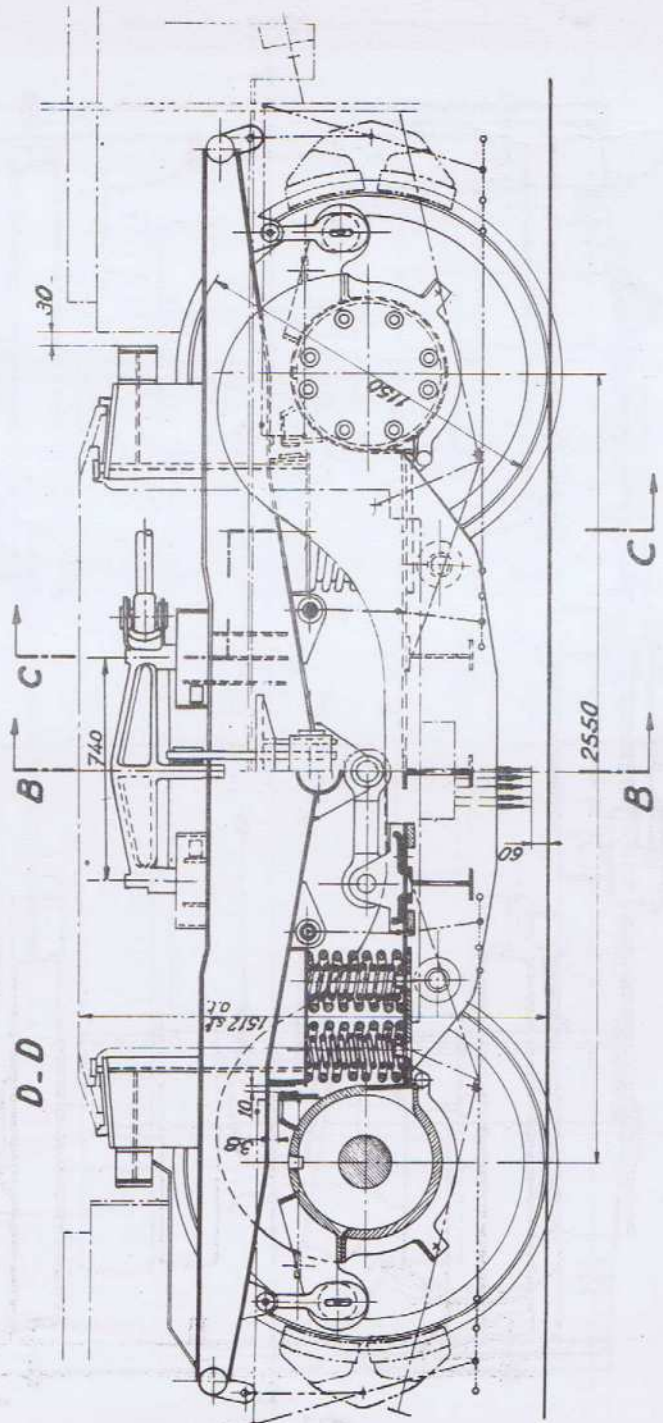
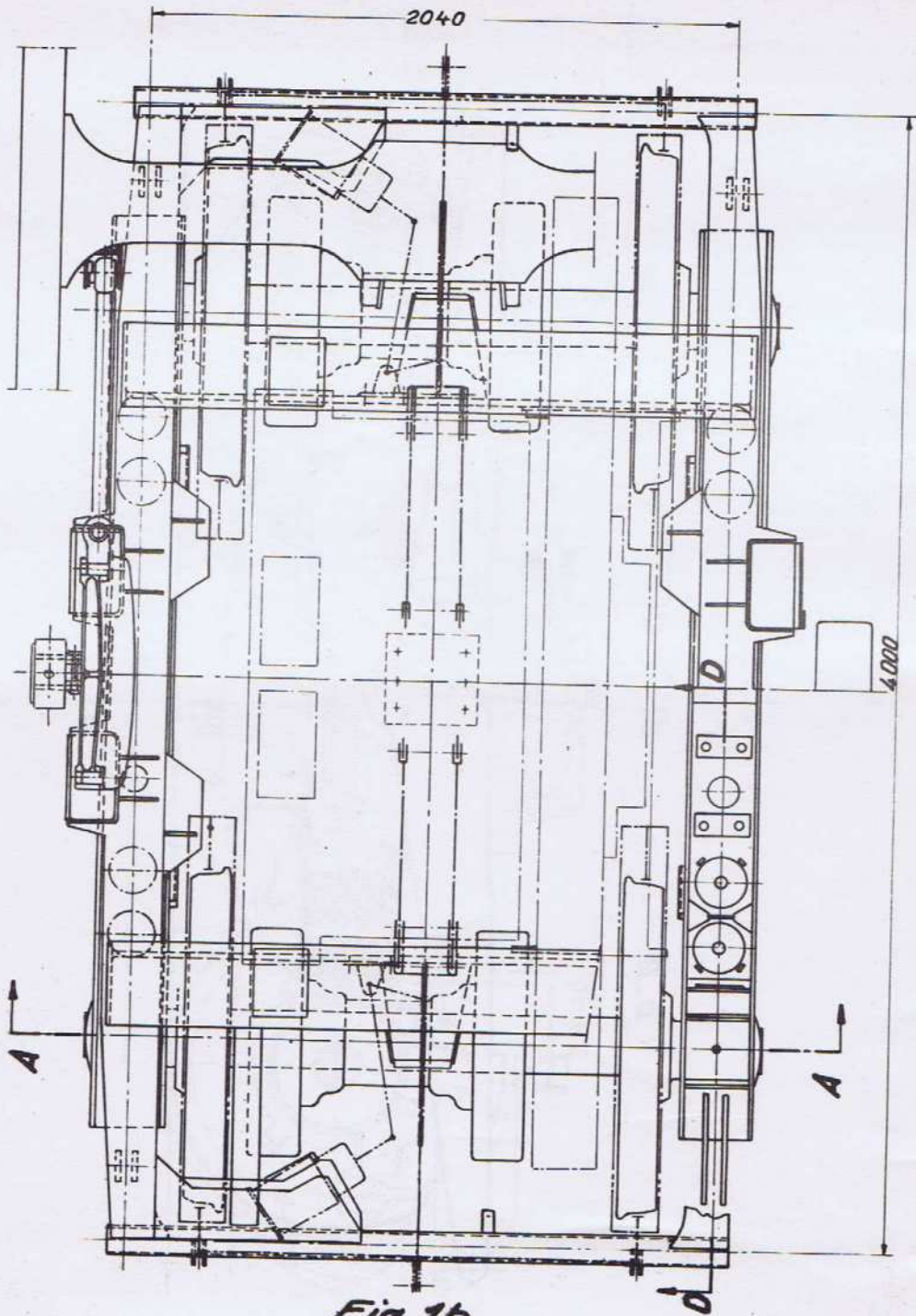
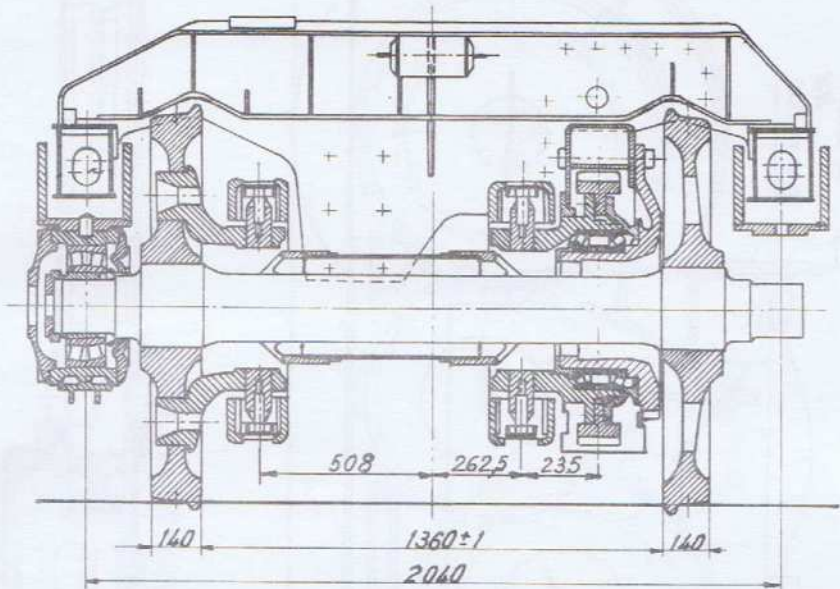


Fig. 1a.



A-A



C.C

B.B

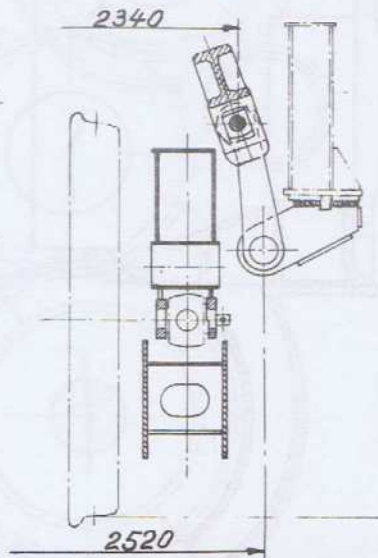
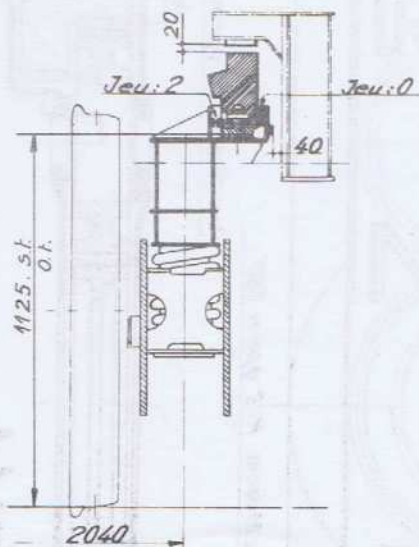
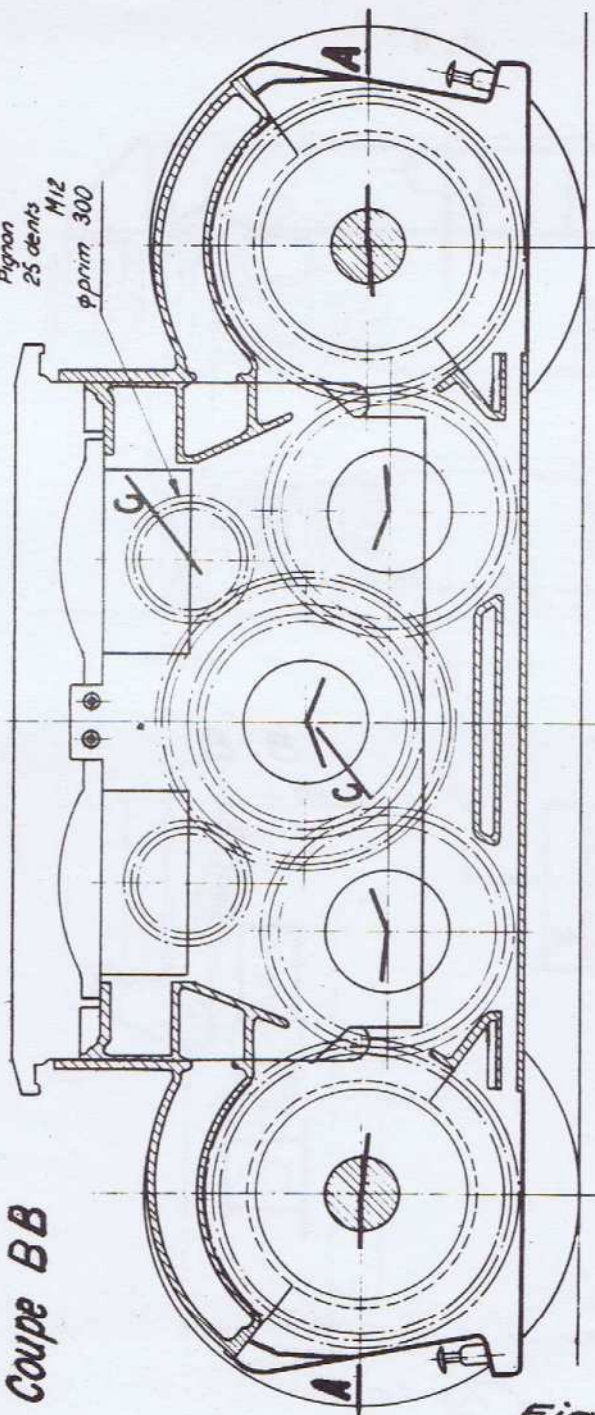


Fig. 1c.

Pignon
25 dents
M12
φ prim 300

Coupe B-B



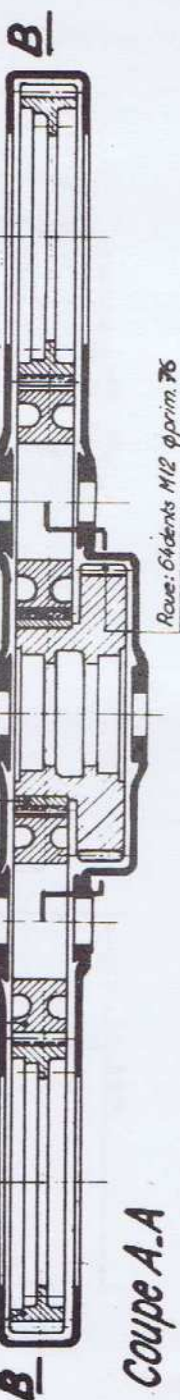
Roue: 55 dents M.12 φ prim. 780

Roue: 53 dents M.12 φ prim 636

Roue: 49 dents M12 φ prim. 598

Roue: 58 dents M12 φ prim. 76

Fig. 2



Coupe A-A

Coupe G.C

Roue
49 dents
Mod. 12
 ϕ prim 588

Pignon
25 dents
Mod. 12
 ϕ prim 300

Roue
64 dents
Mod. 12
 ϕ prim 768

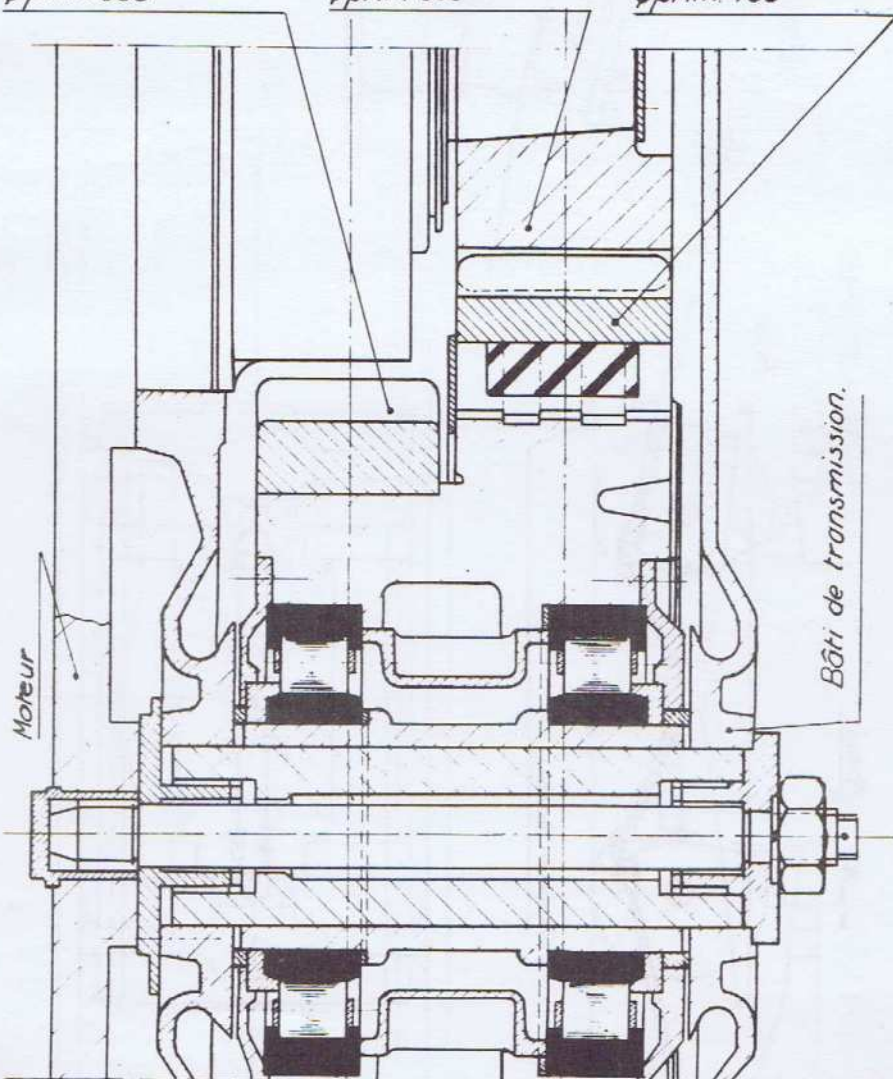


Fig. 2 bis.

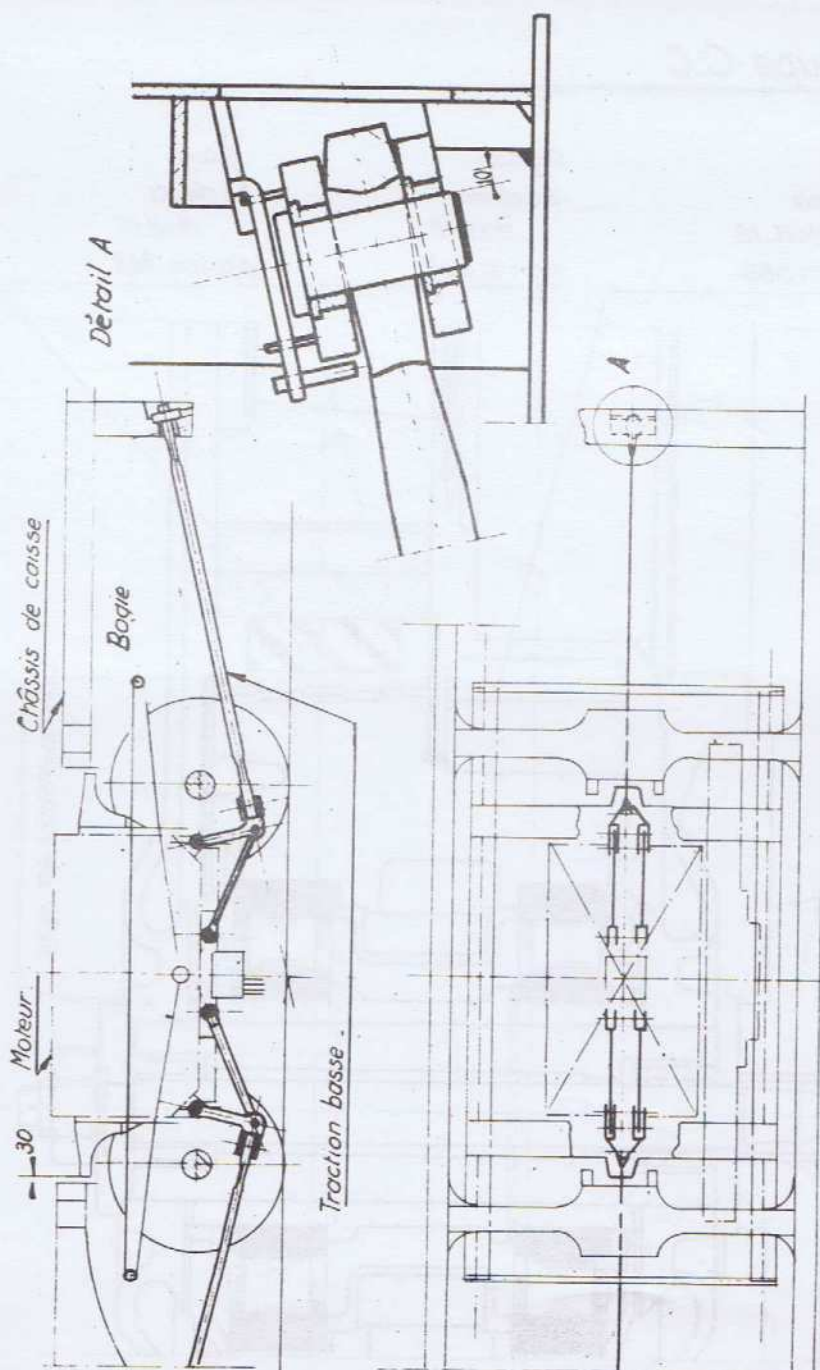


Fig. 3

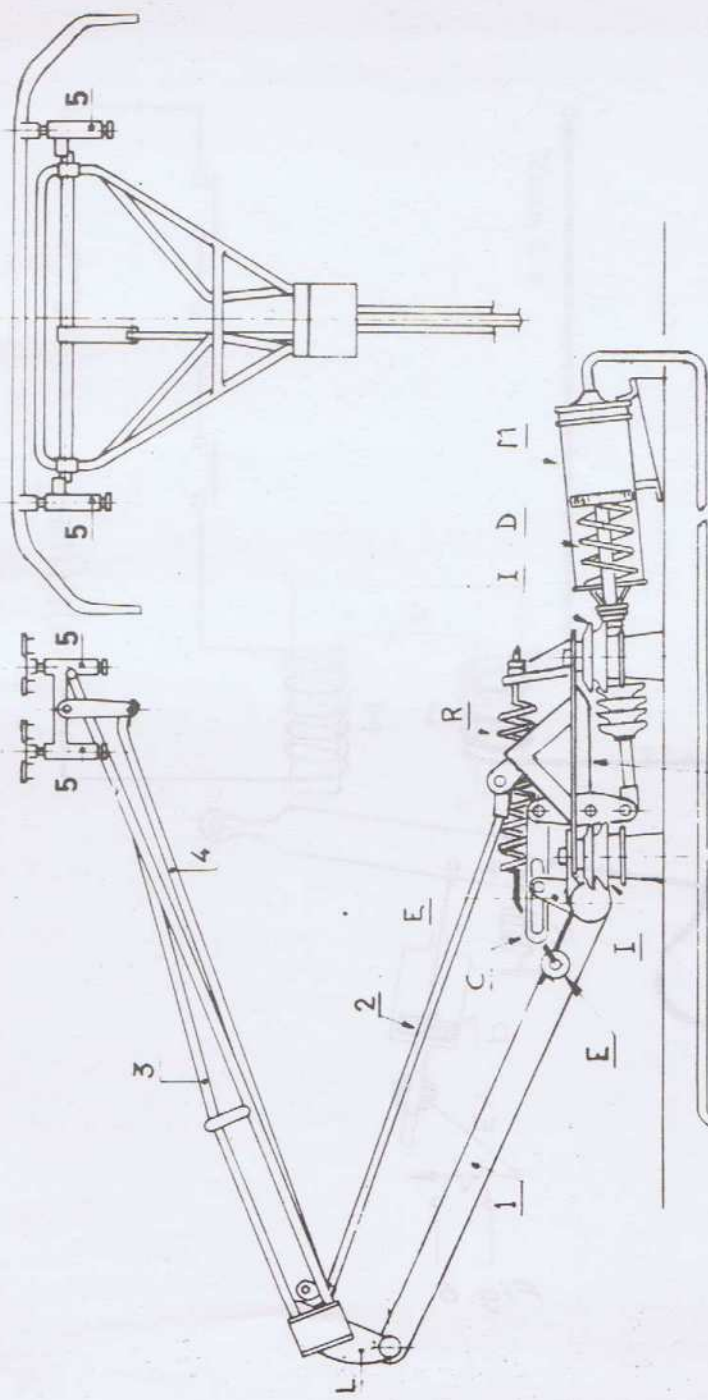


Fig 4

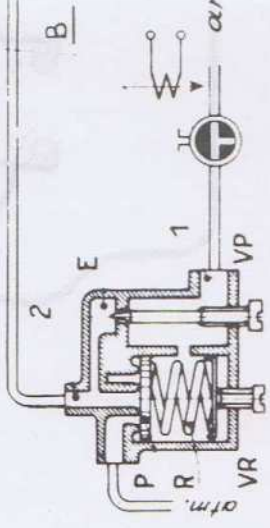


Fig.5

arrivée air comprimé

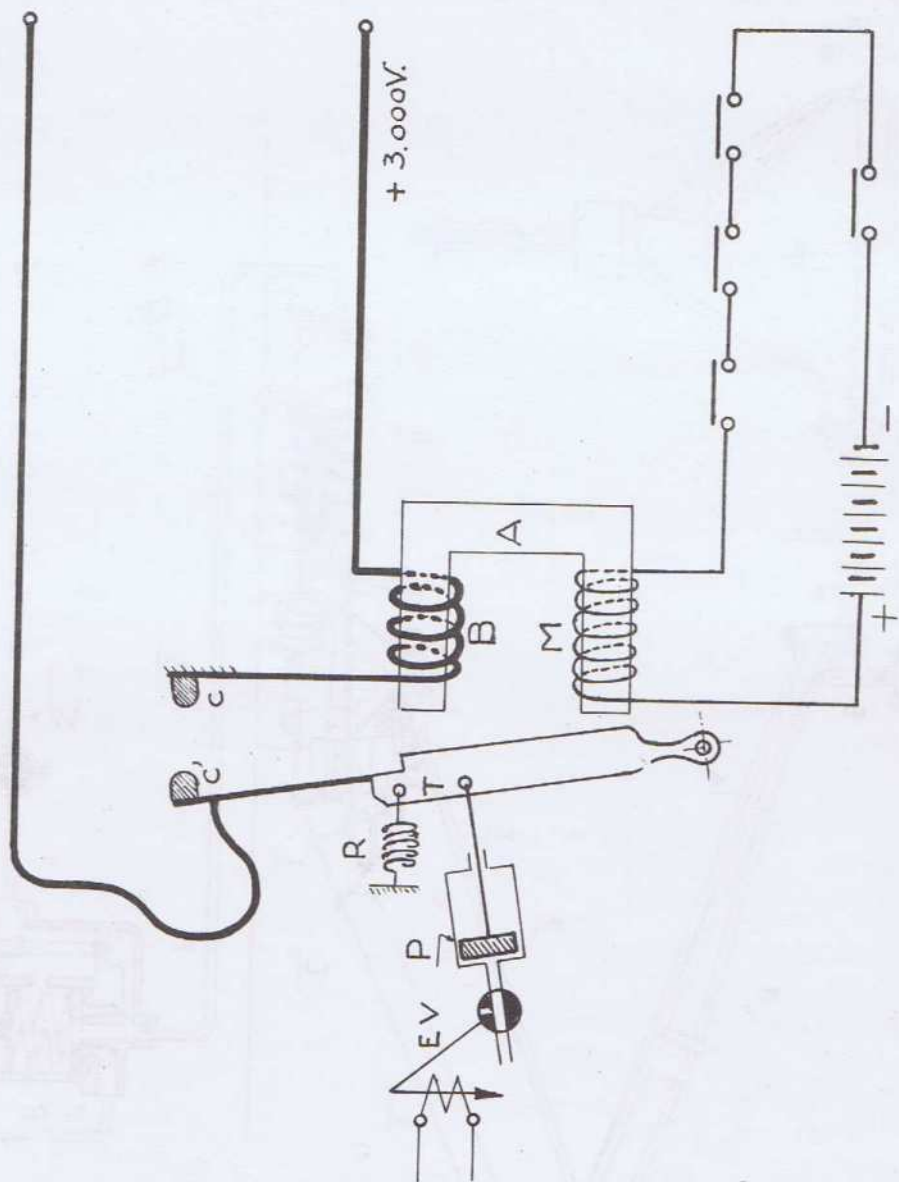


Fig. 6

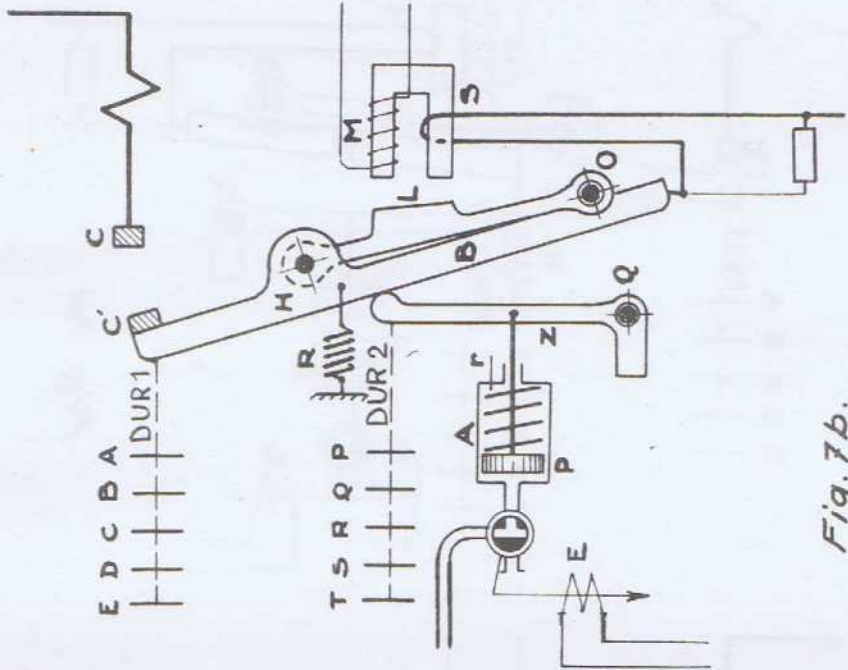


Fig. 7b.

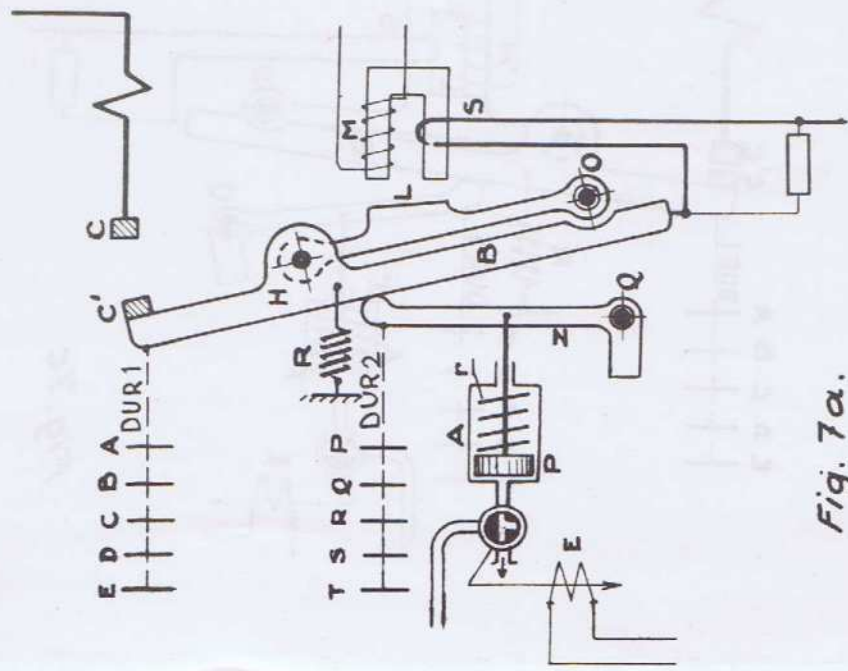


Fig. 7a.

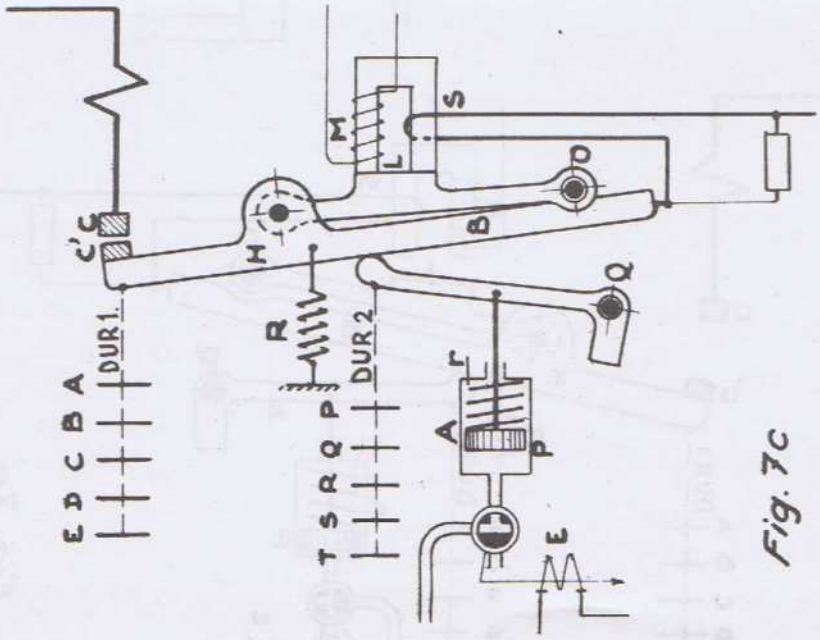


Fig. 7c

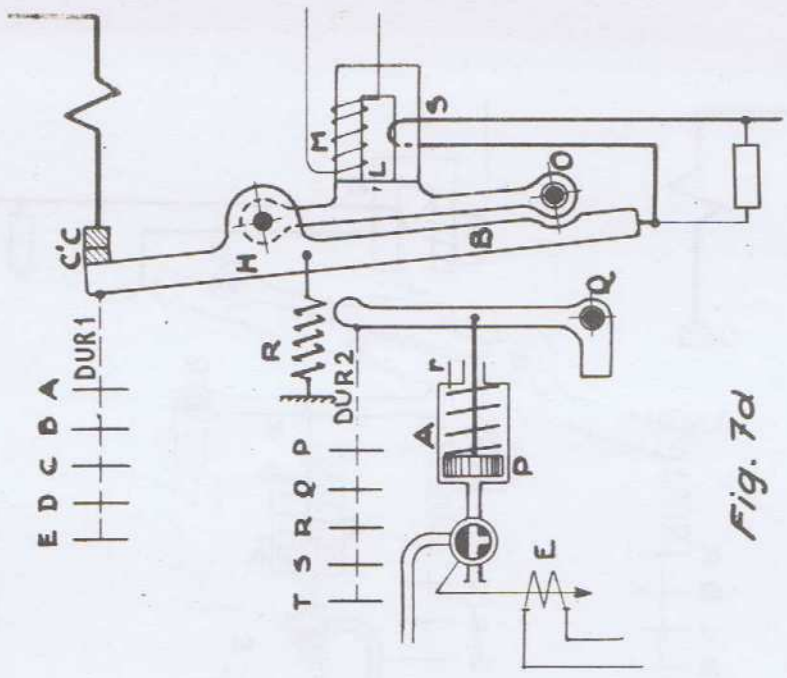


Fig. 7d

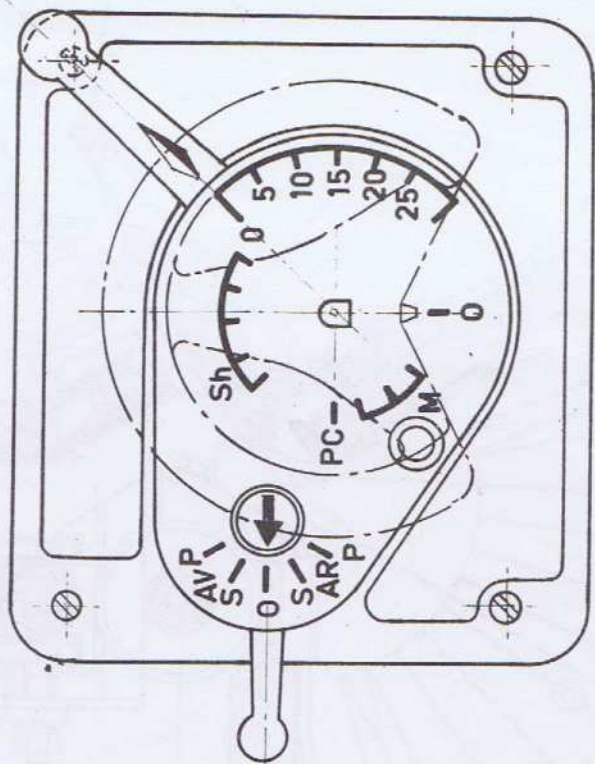


Fig. 9

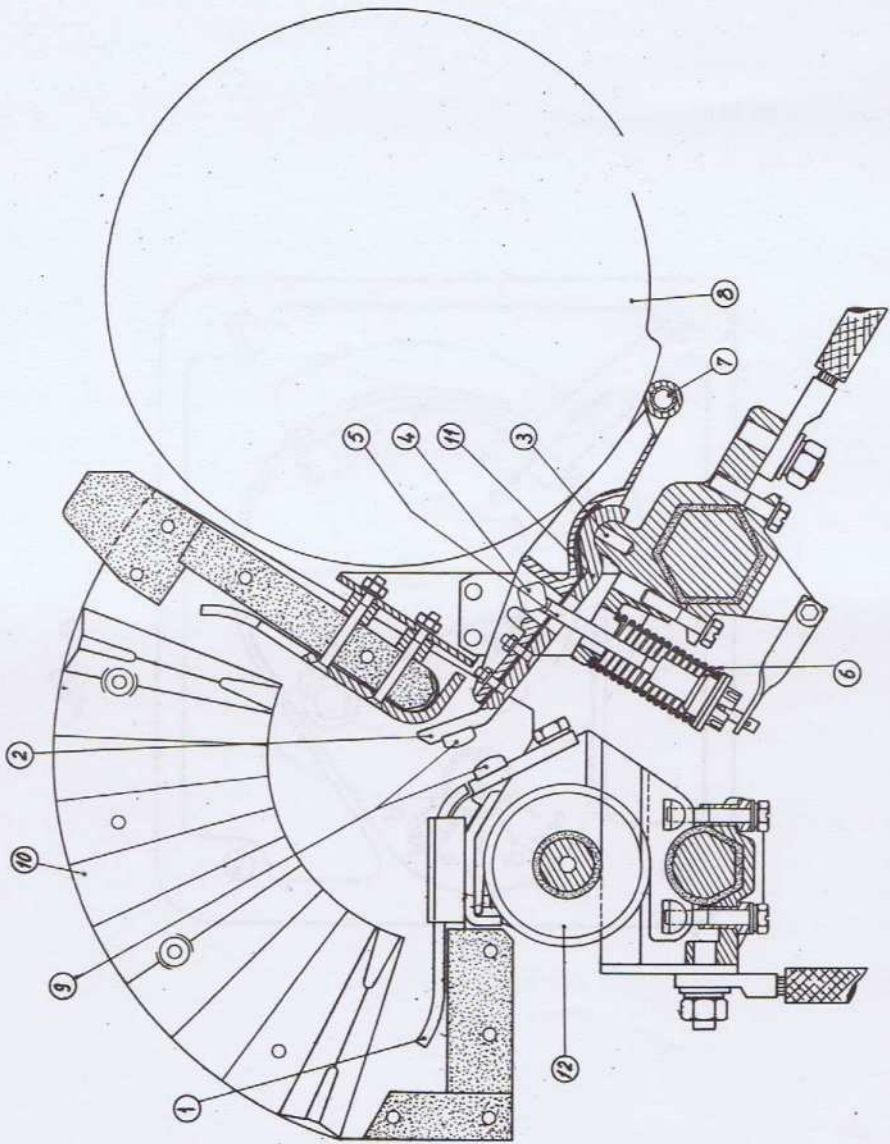


Fig 10

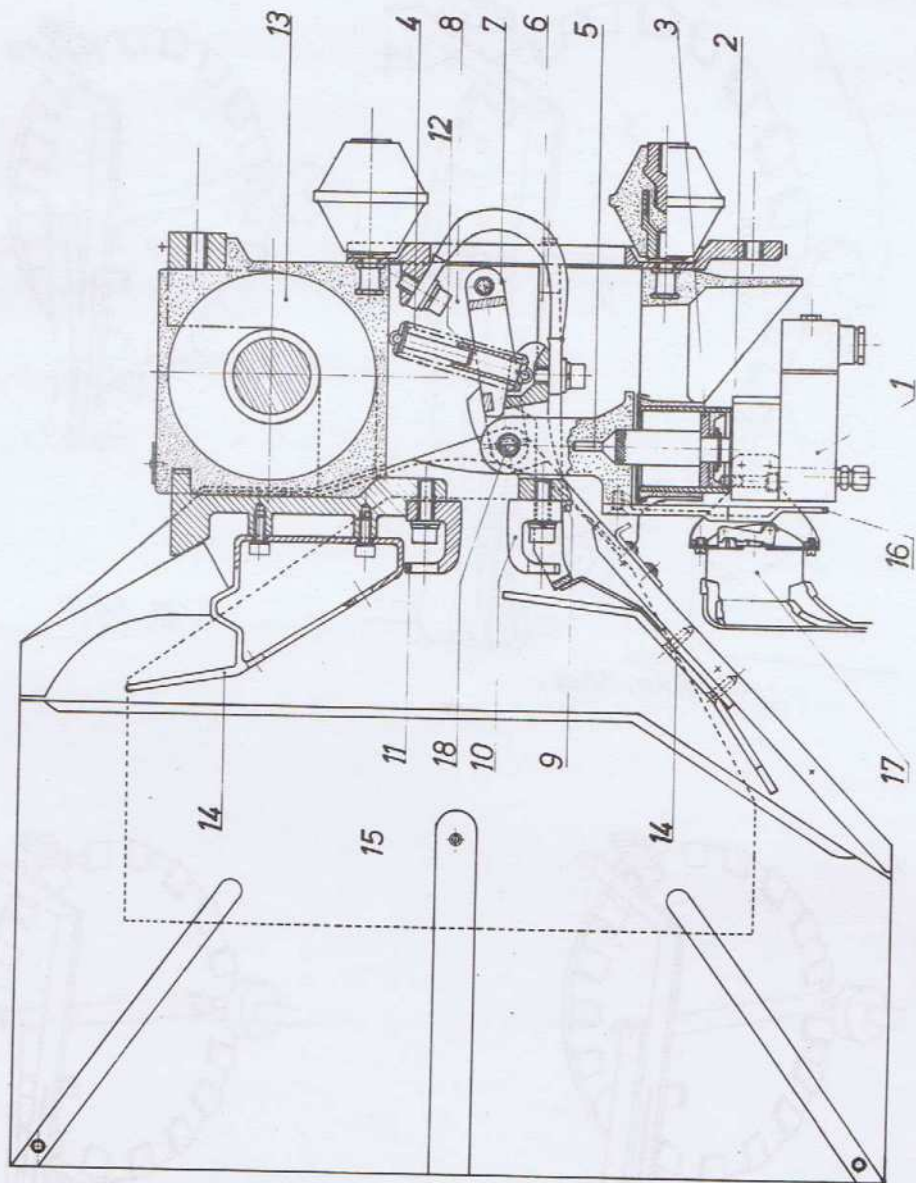


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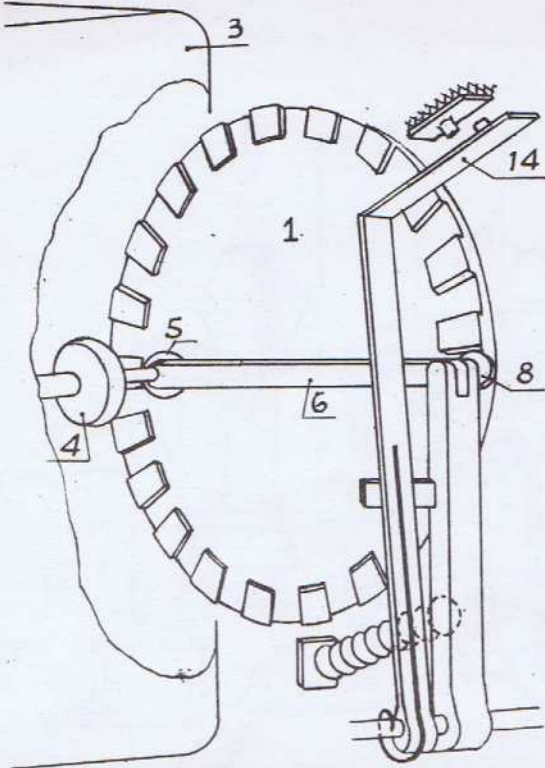


Fig. 12a.

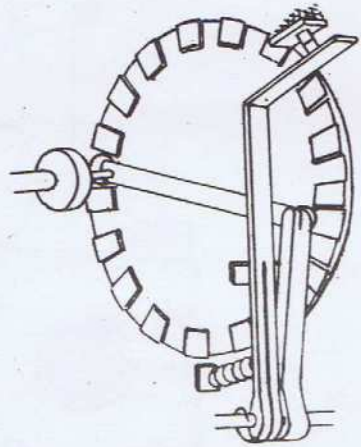


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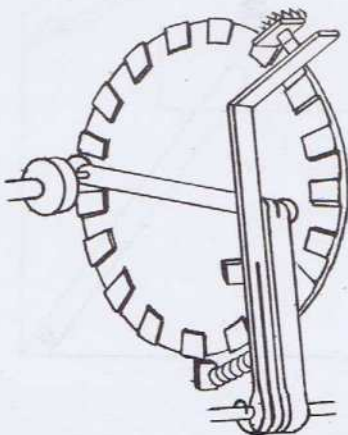


Fig. 12c.

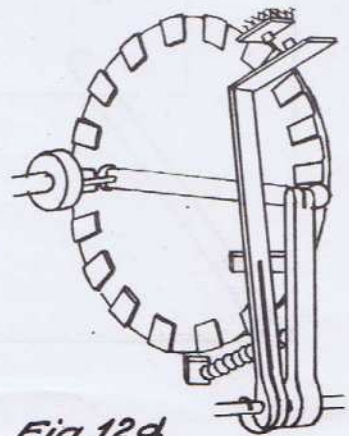
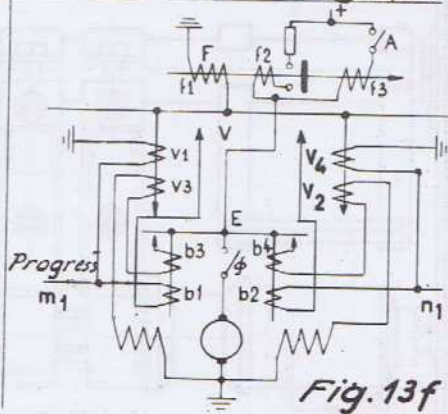
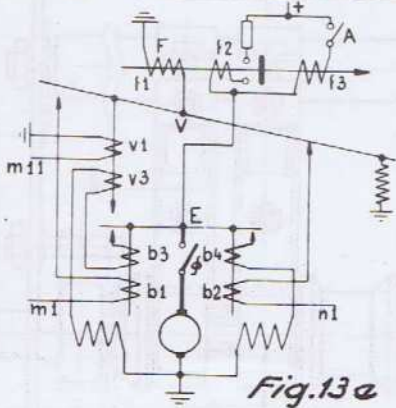
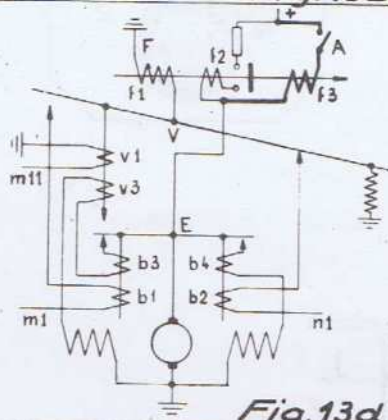
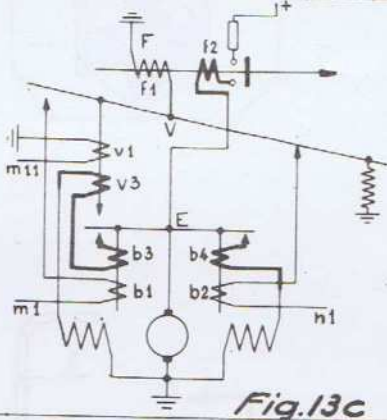
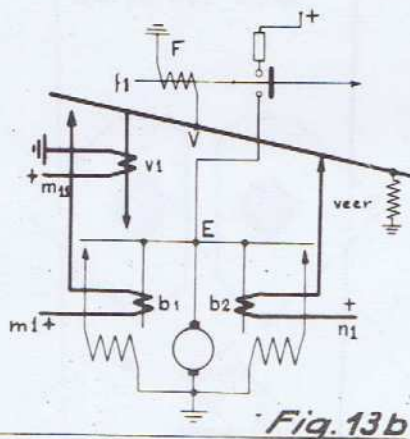
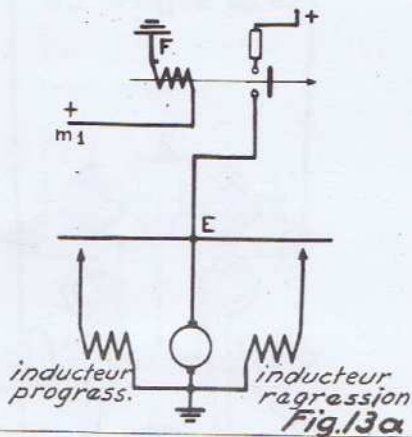


Fig. 12d.



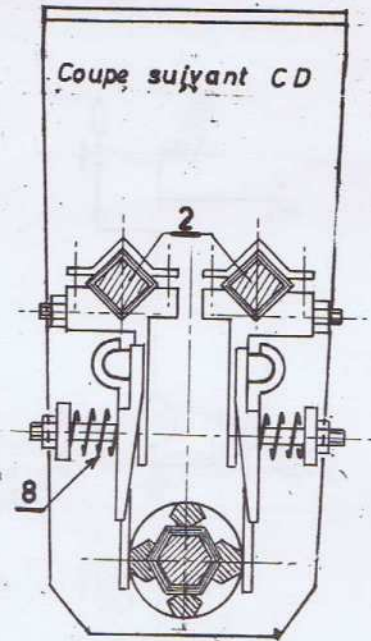
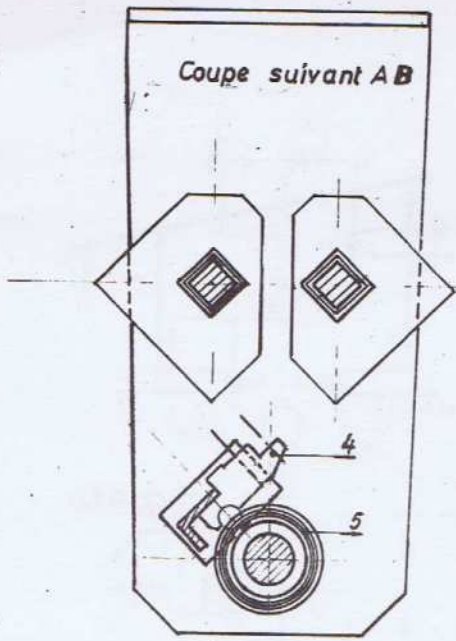
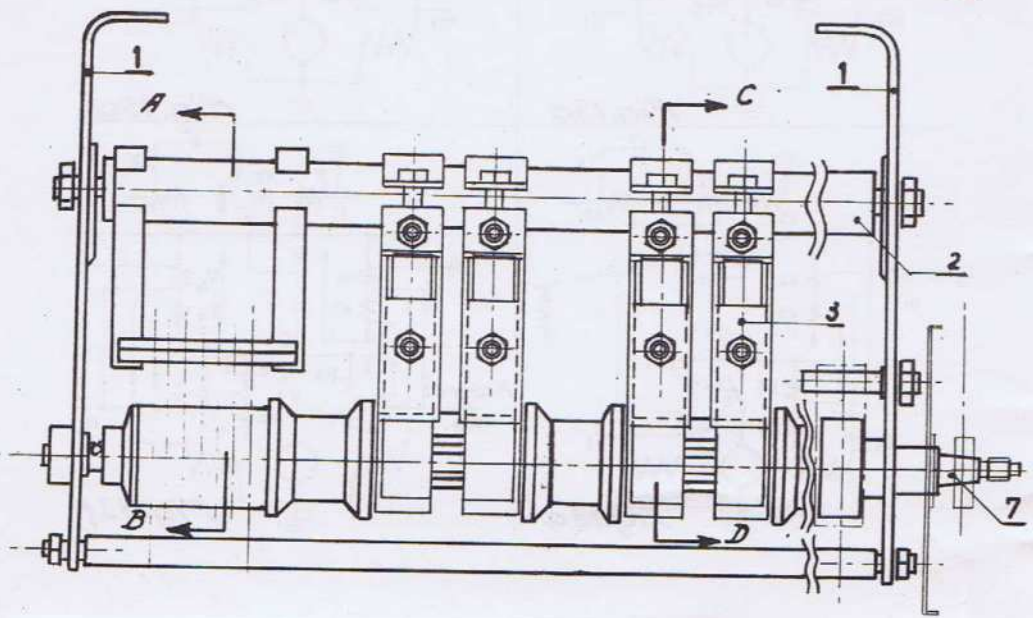


Fig. 14a



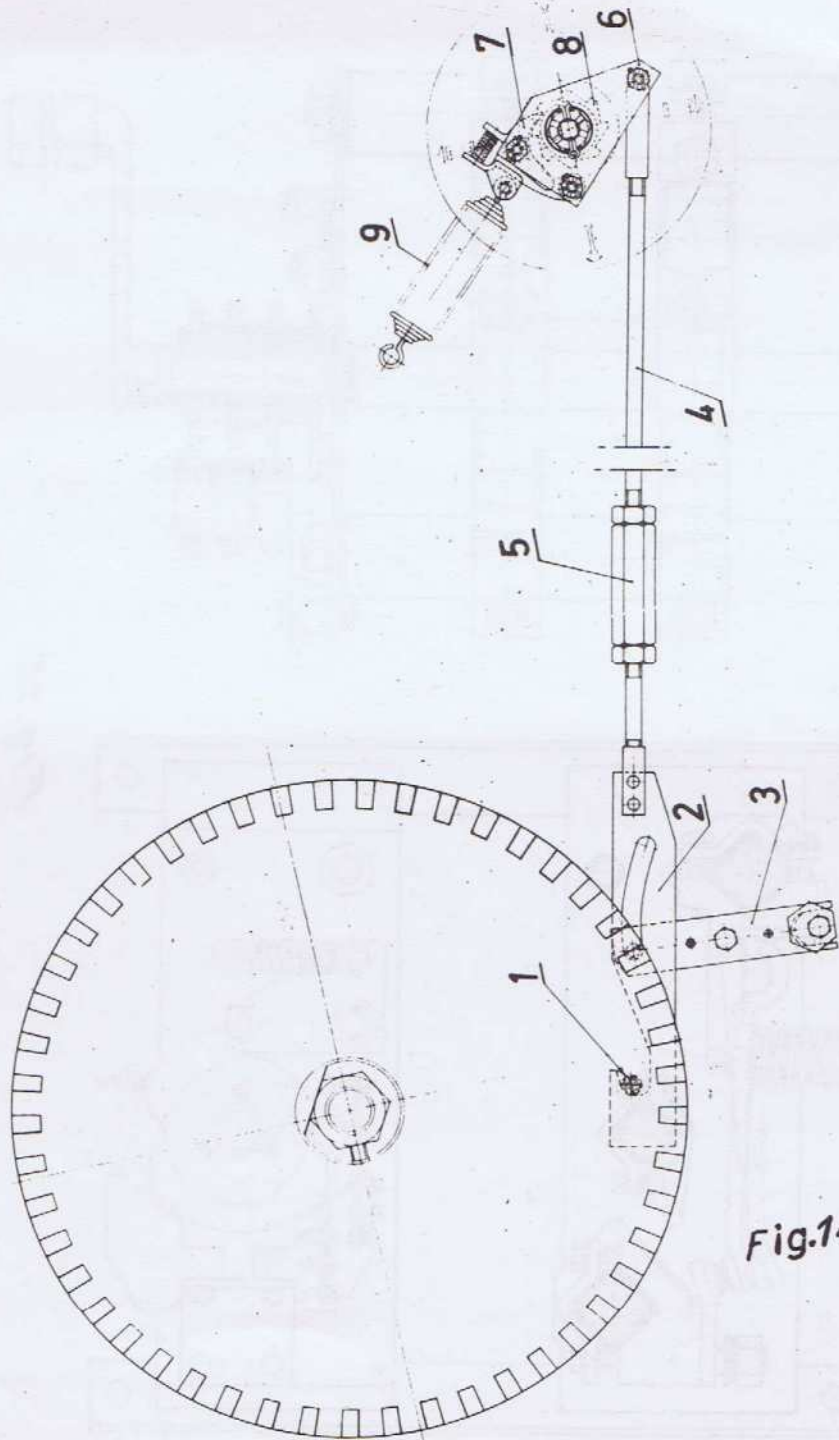


Fig.14 b.

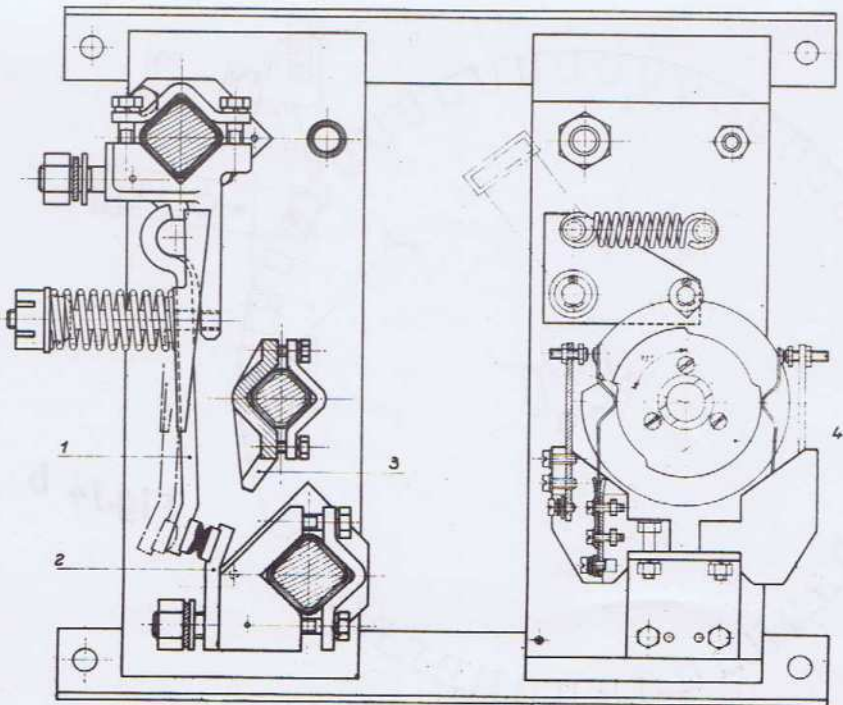
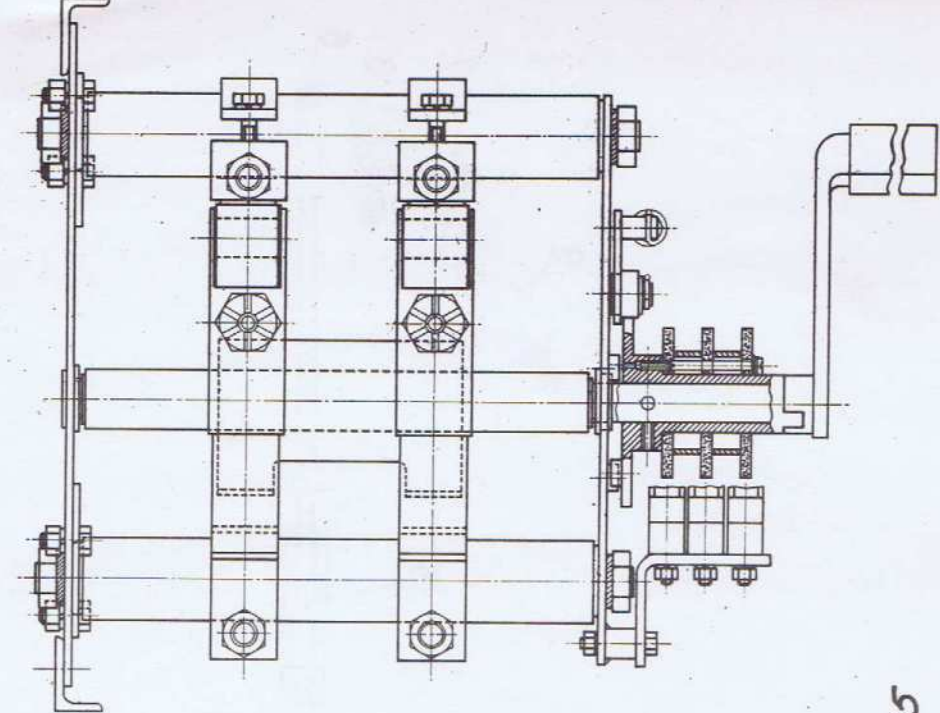


Fig. 15

● ———→ Coupleur (câble+tête)
 □ Boîte de repos
 ○ Boîte accouplement
 ■ Coupleur chauffage

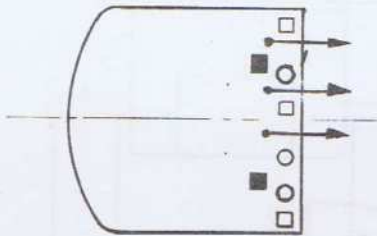
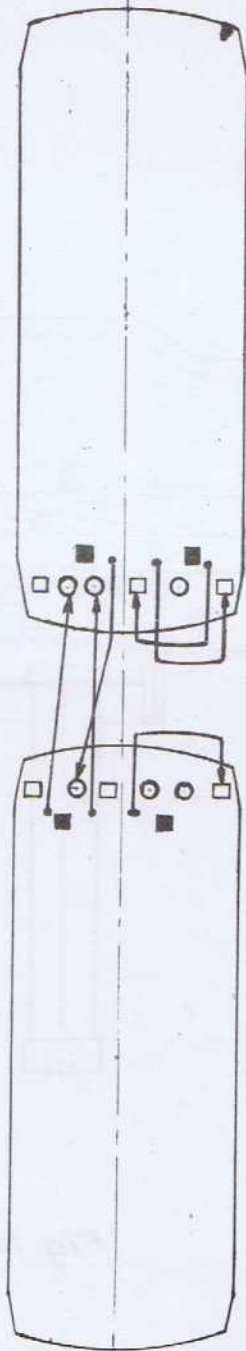


Fig. 16a.

Accouplement effectué



Non accouplé

Fig. 16b

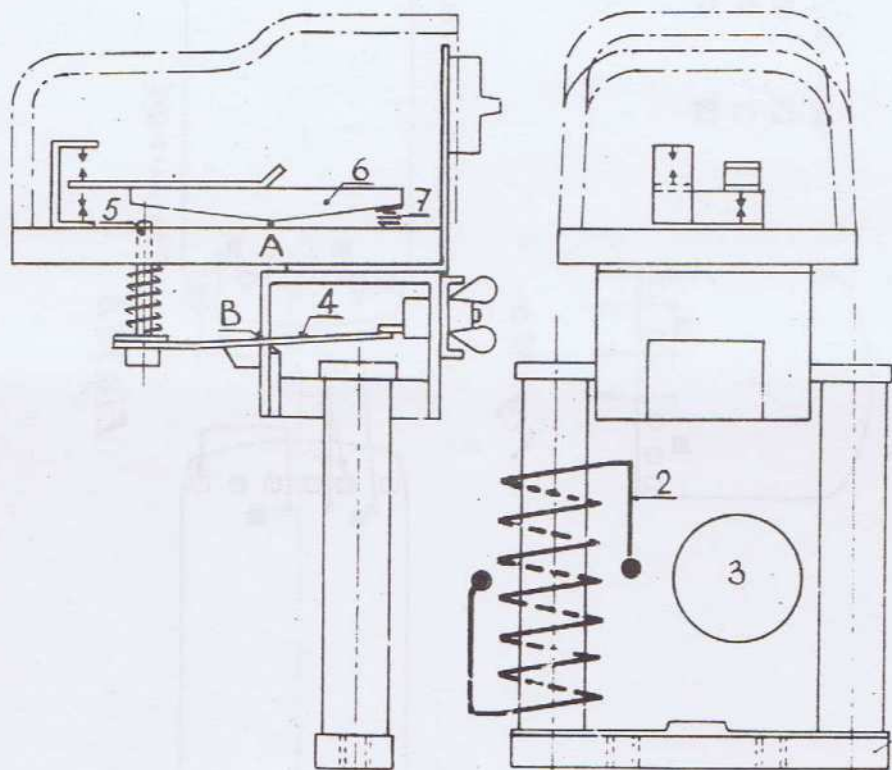


Fig.18

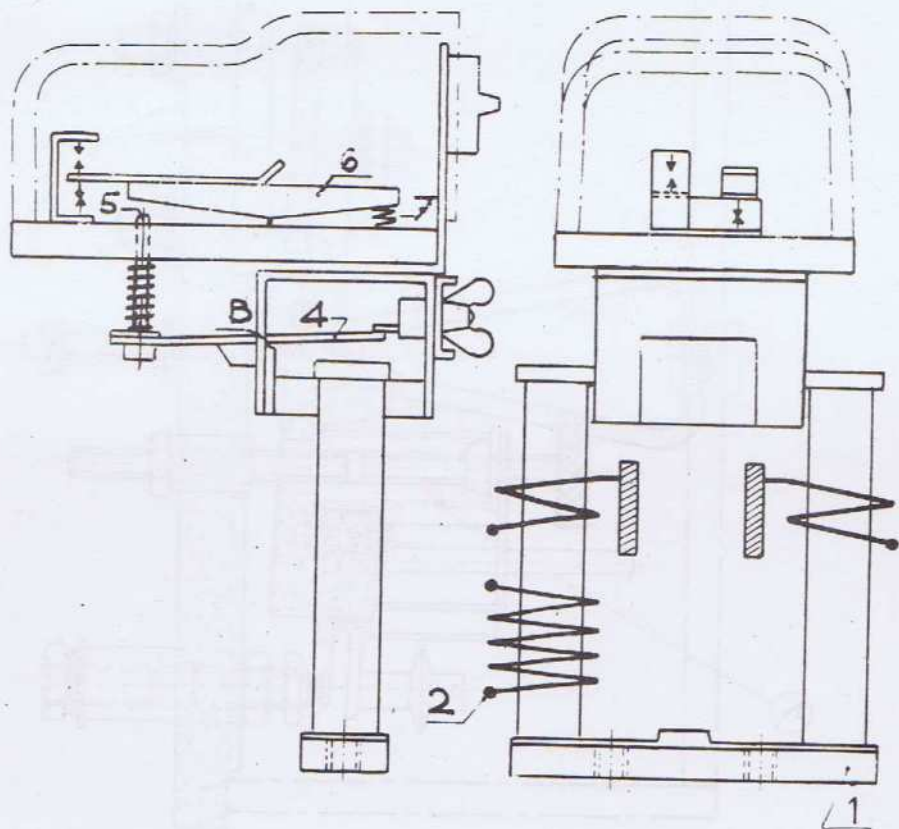


Fig.19

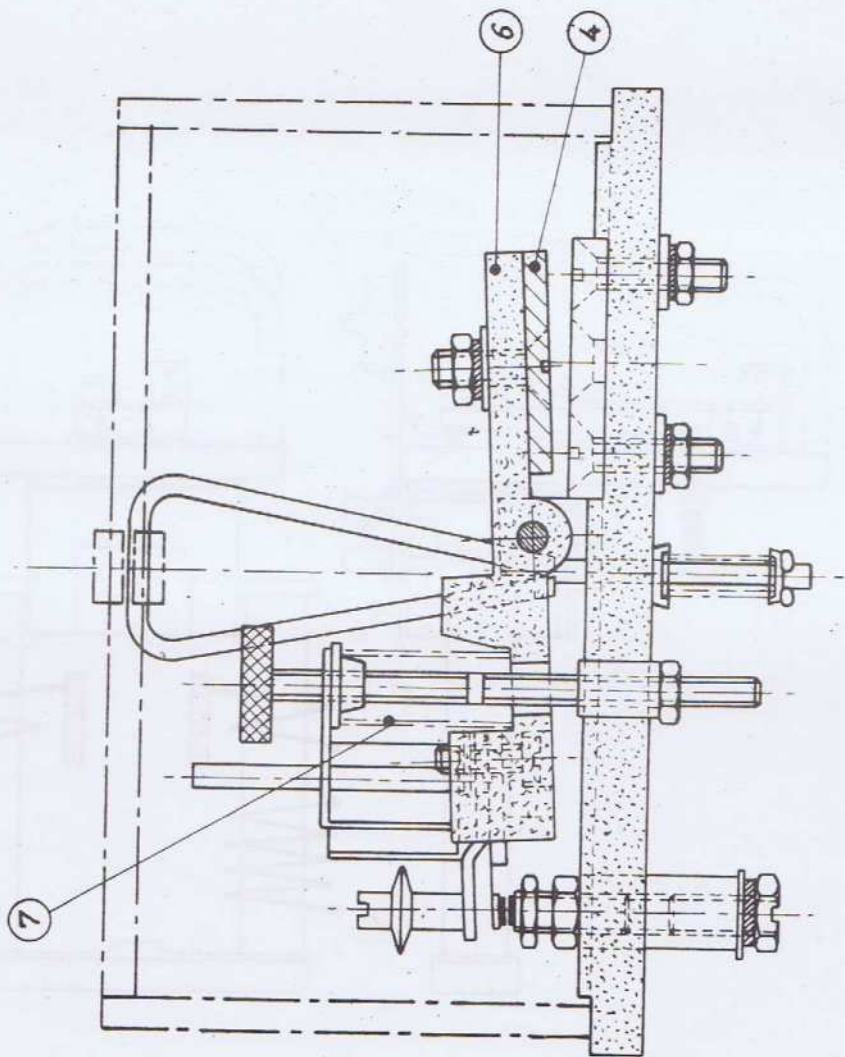


Fig. 20

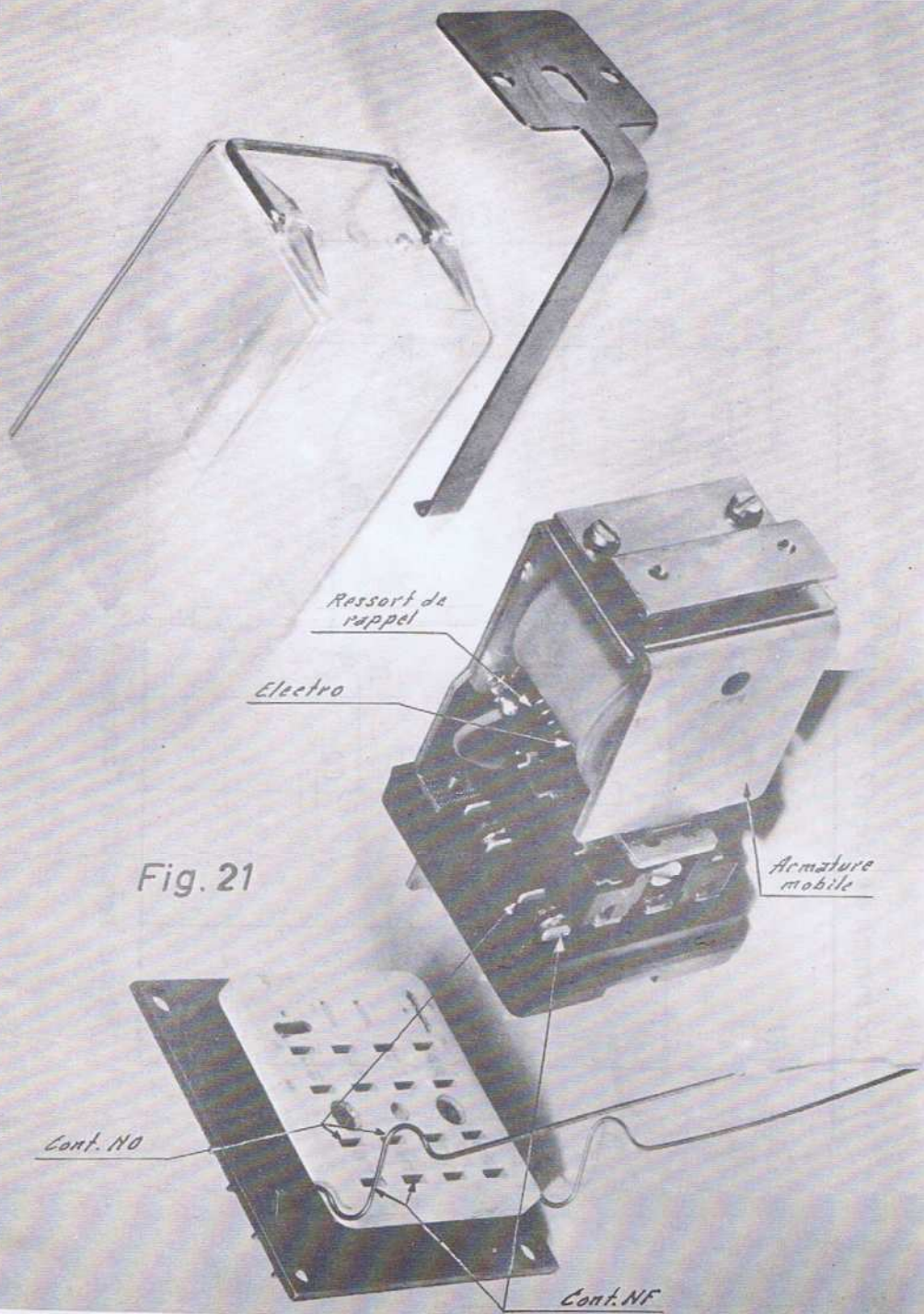


Fig. 21

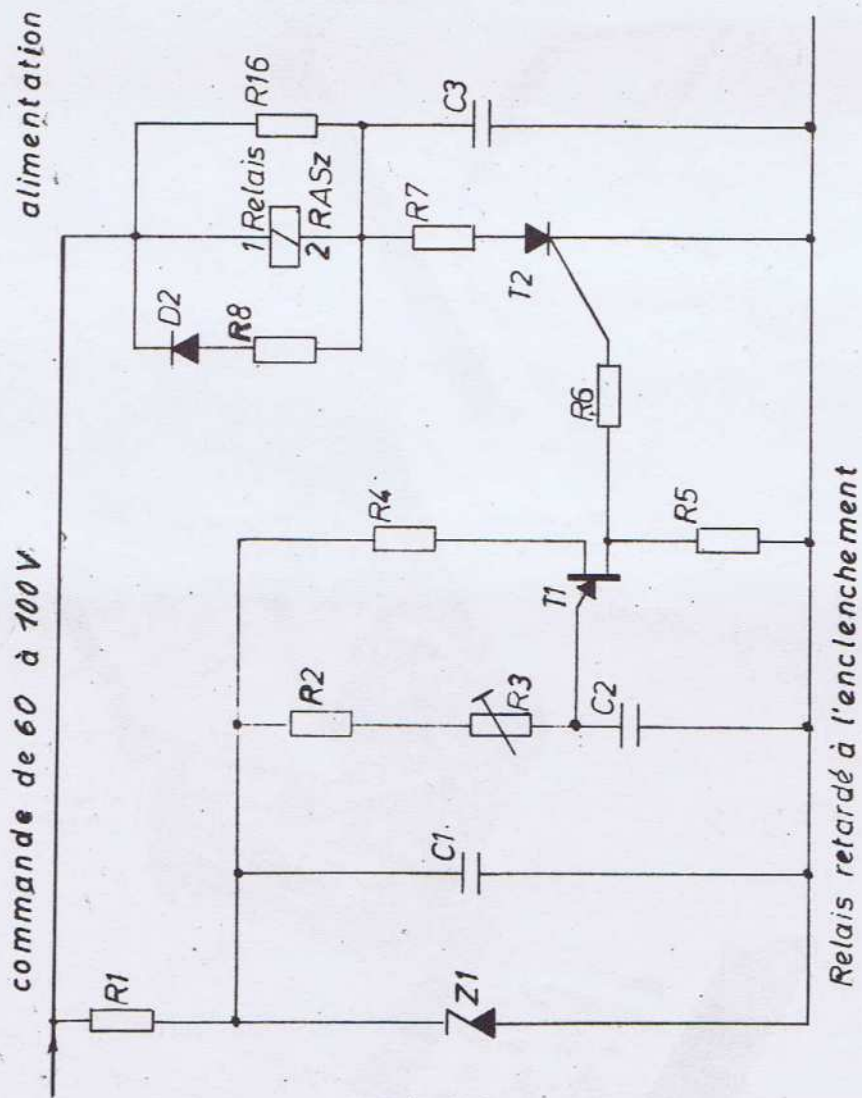


Fig 22 a

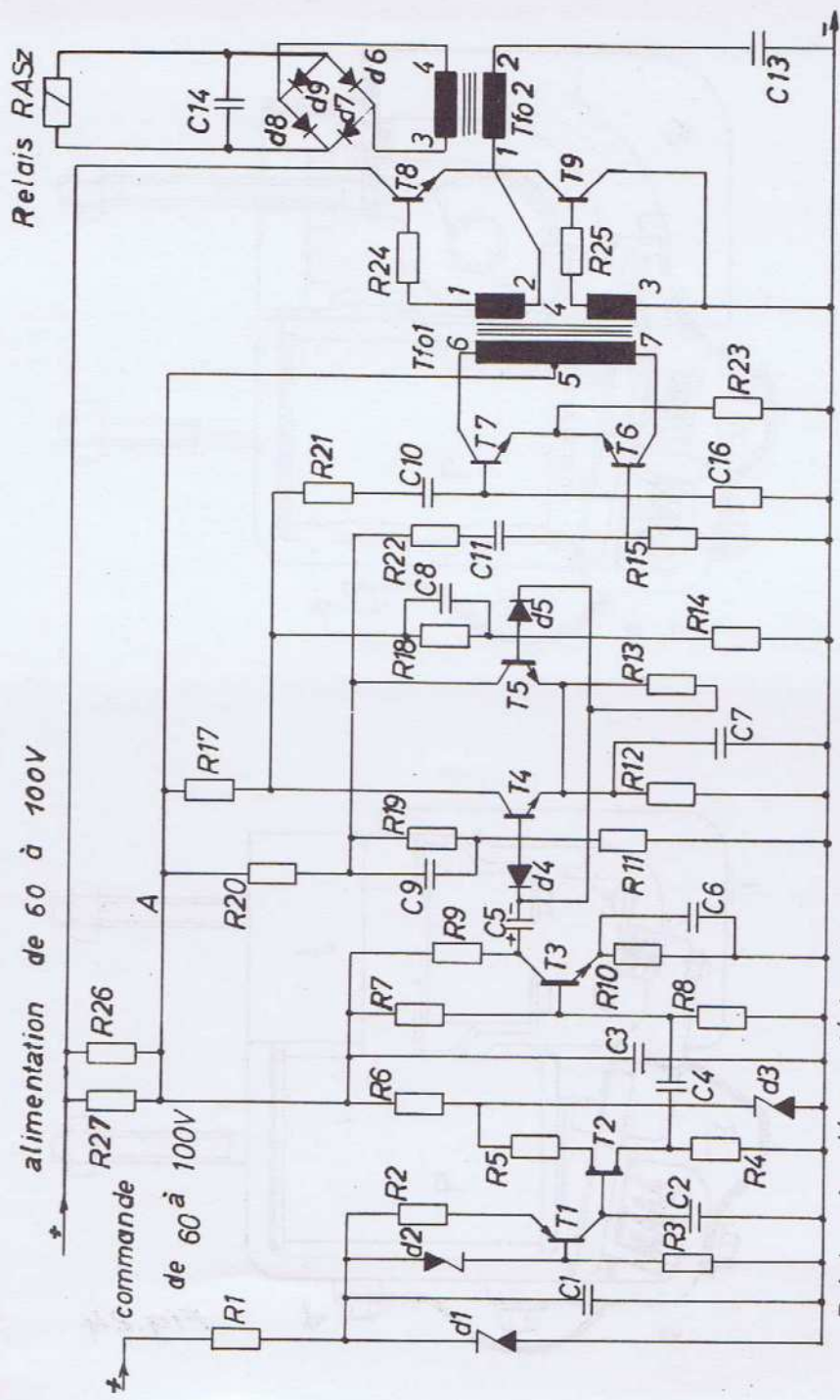


Fig 2 2 b

Relais retardé au déclenchement

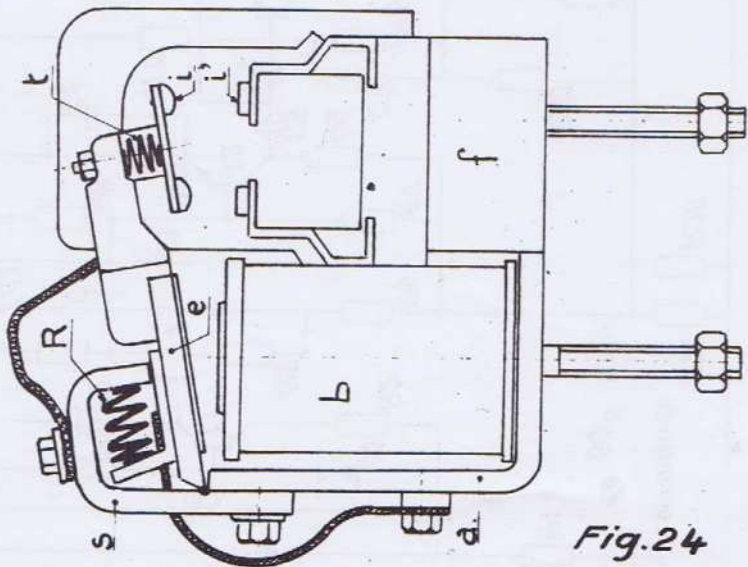
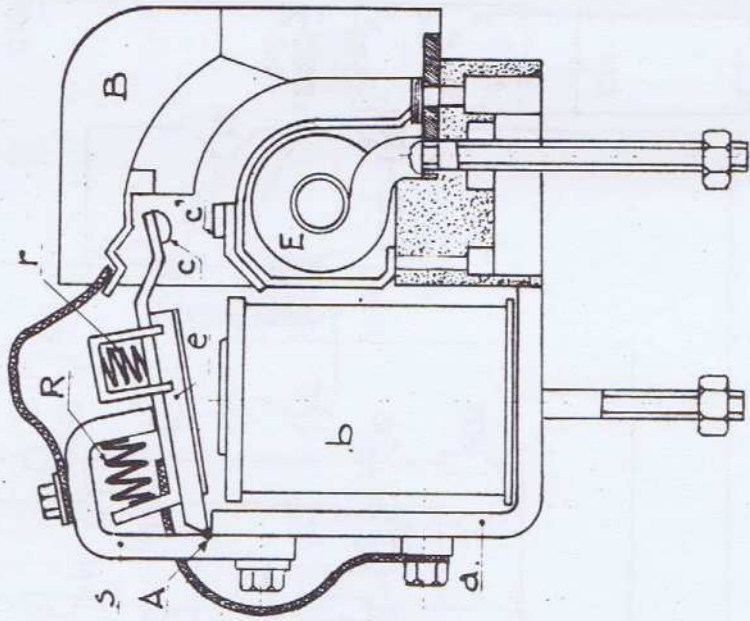


Fig. 24

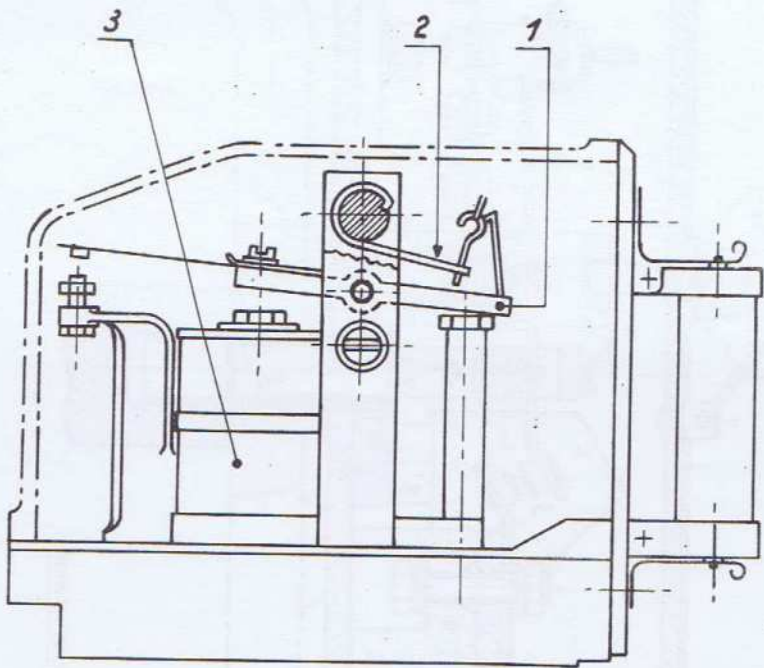


Fig. 25

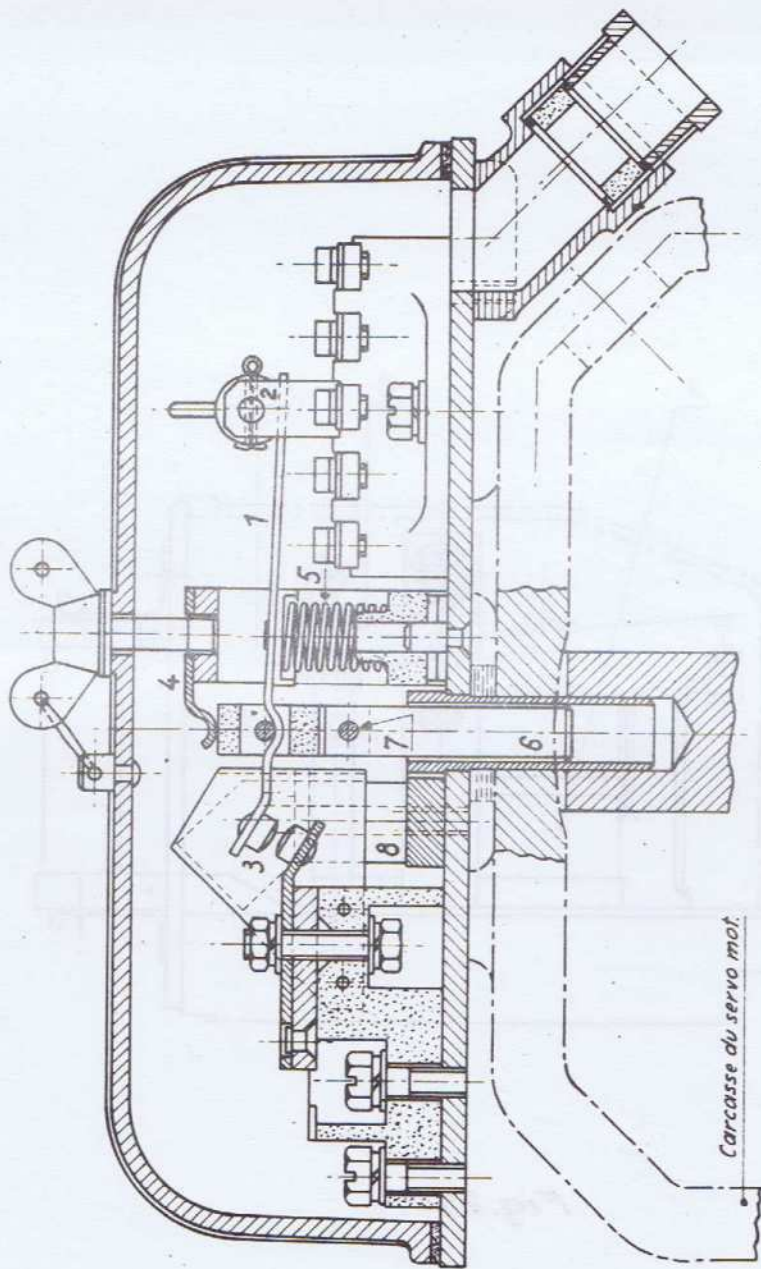


Fig. 26

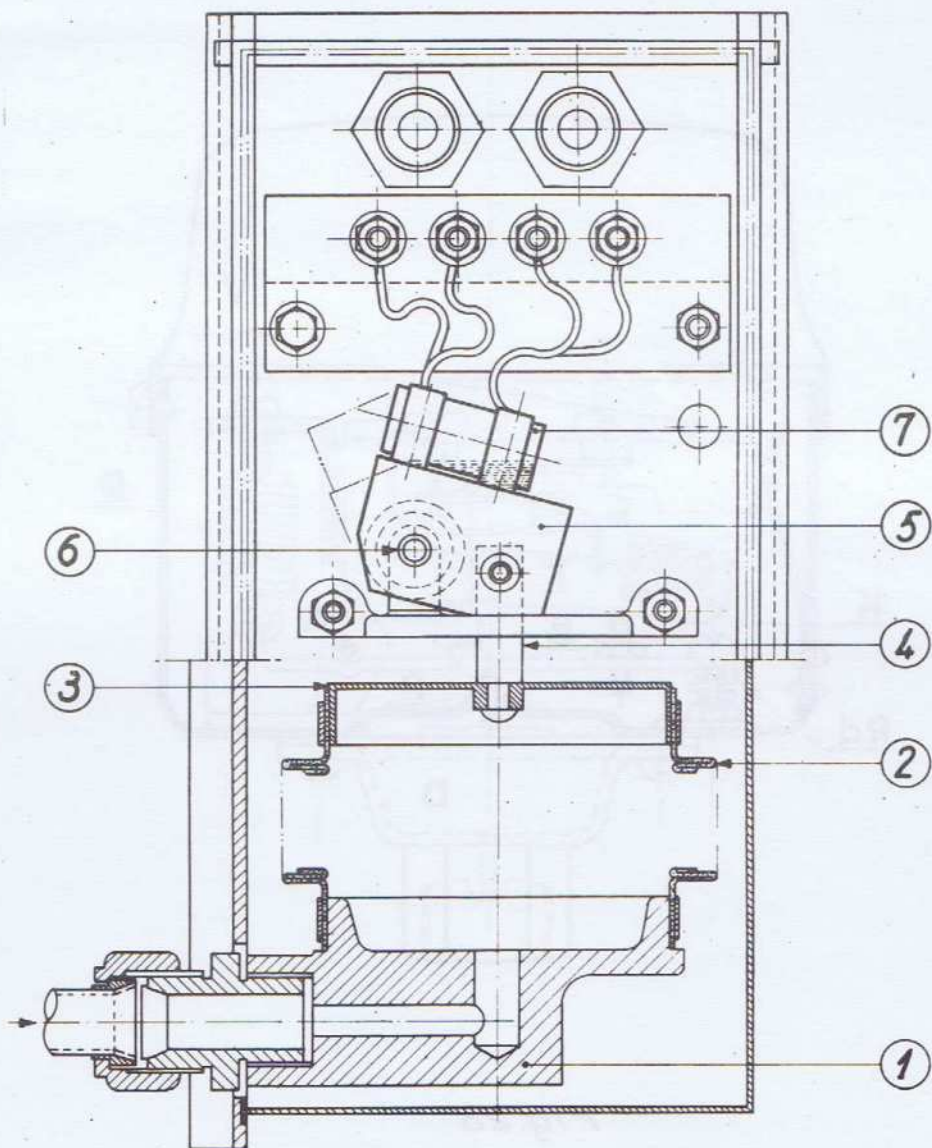


Fig. 27

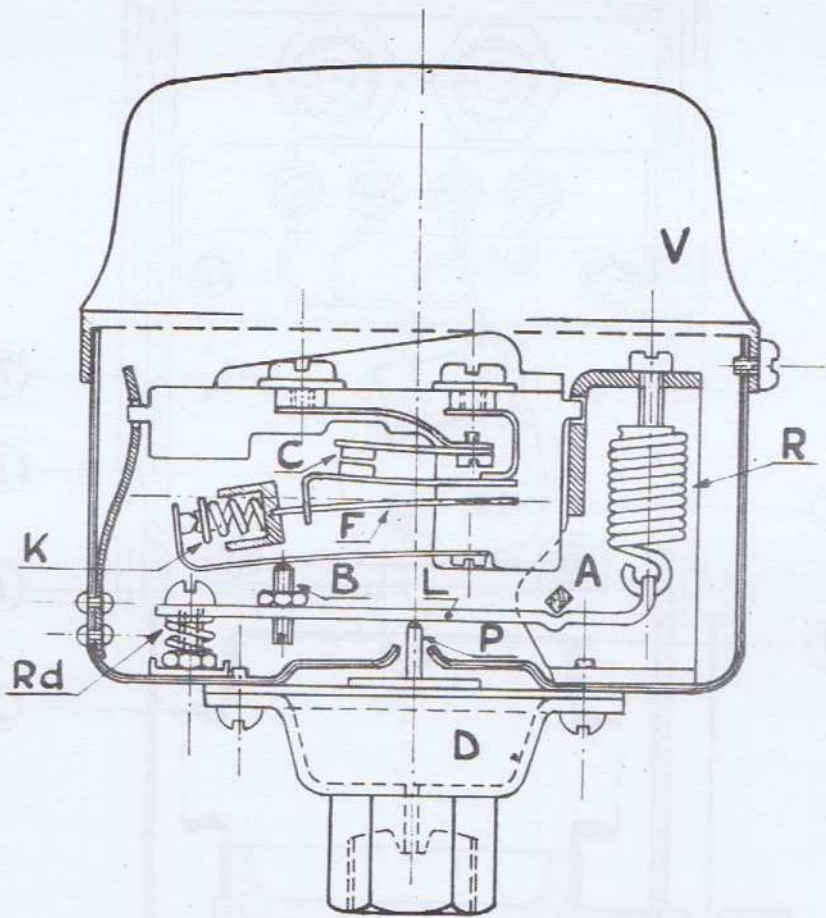


Fig.28

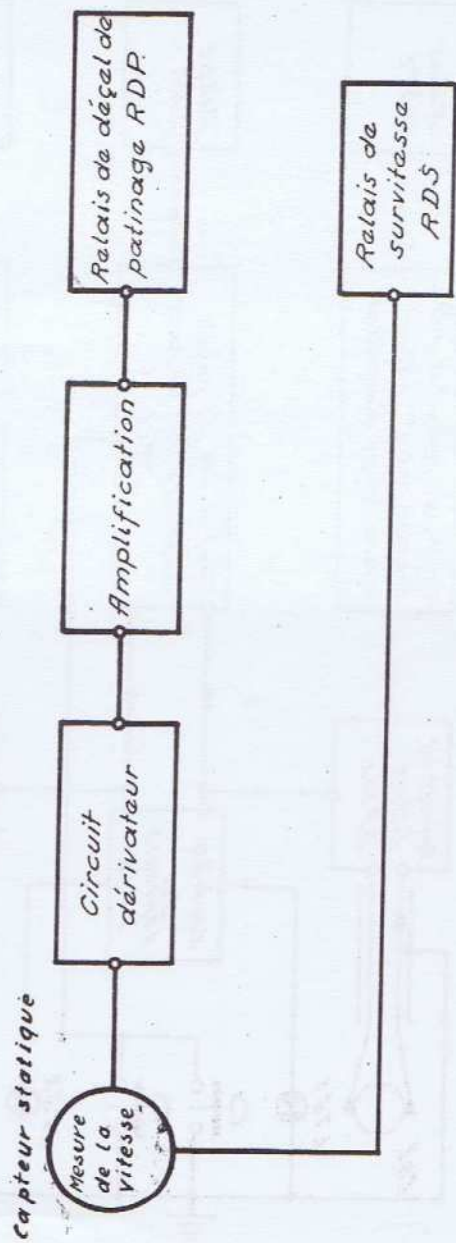


Fig. 29

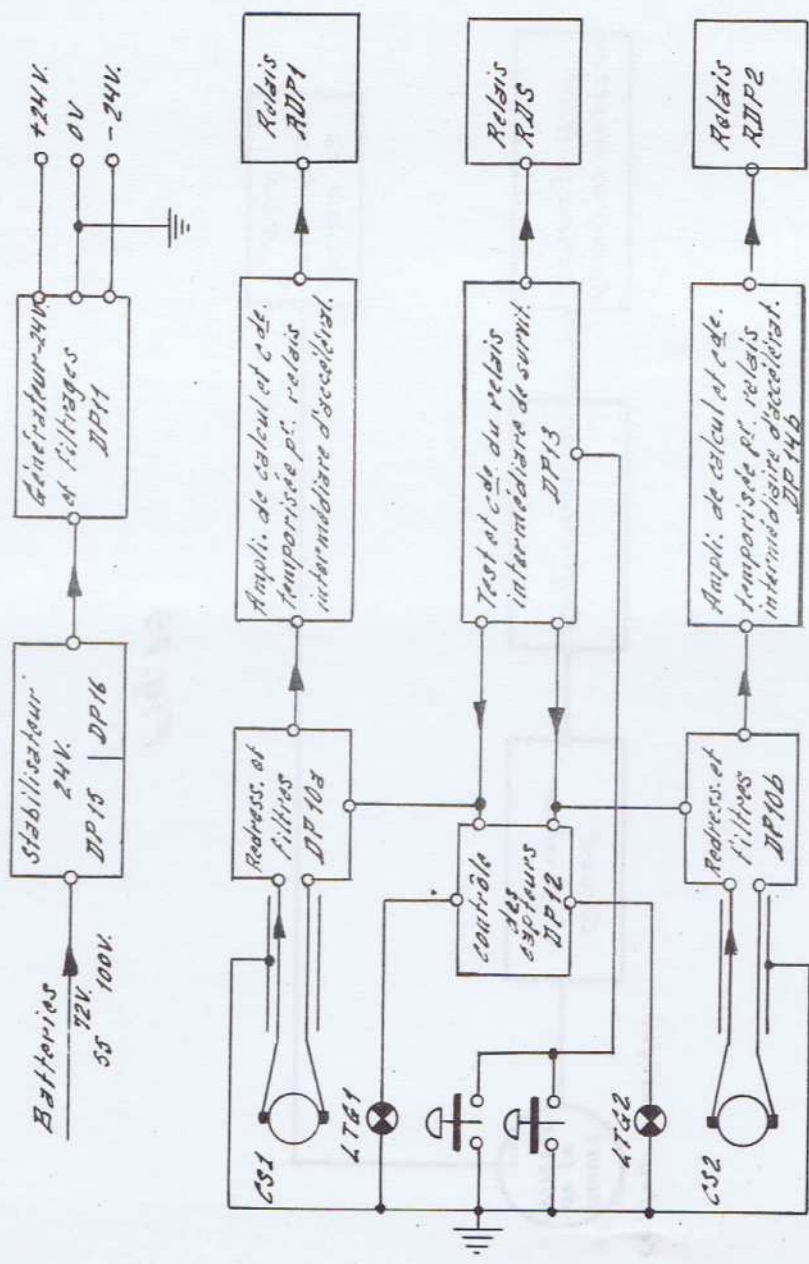


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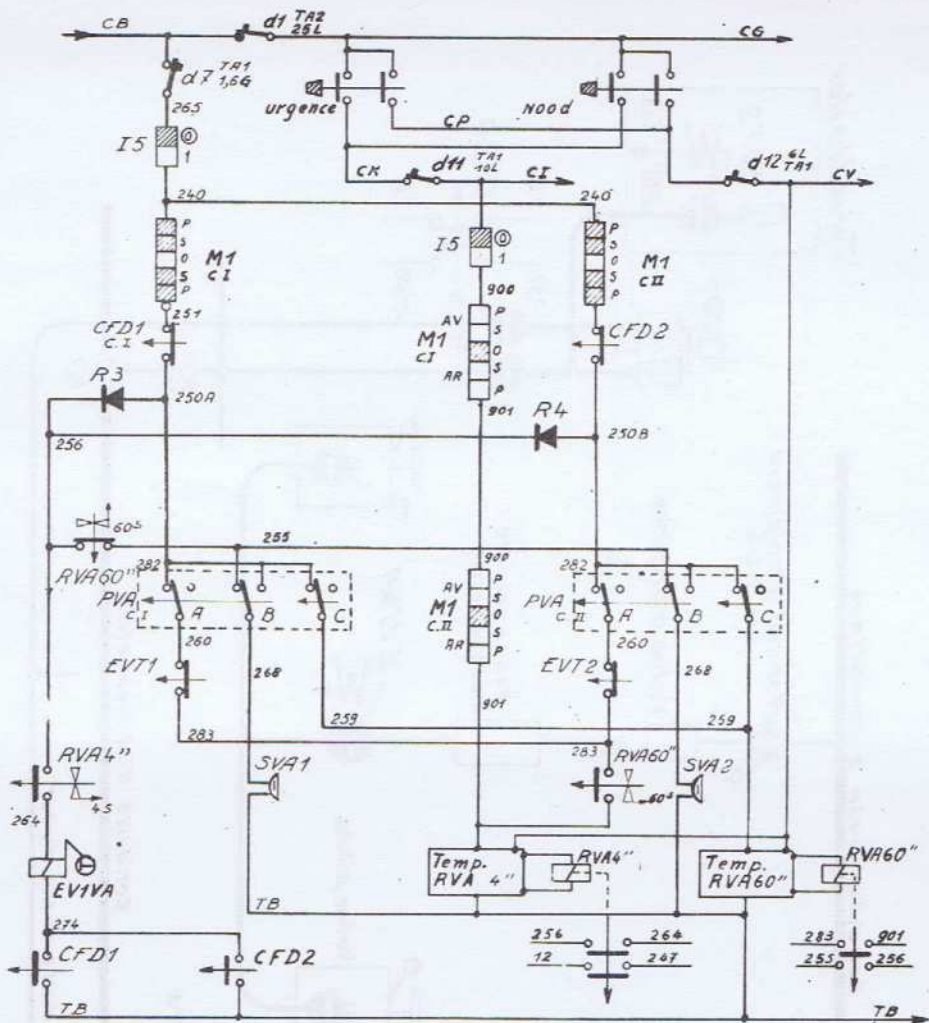
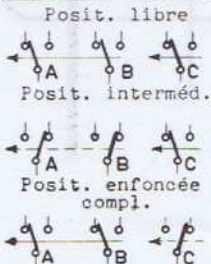


Fig. 31

POSITIONS DE LA PVA



Interrupteur à 3 positions, fermé dans la position "T". La position "0" est la position habituelle.

LEGENDE.

- | | |
|---------|---|
| CFD 1/2 | Contact sur robinet d'isolement frein direct. |
| EVI VA | Electro-valve inverse de veille aut. |
| EVT 1/2 | Contact electro-valve sifflet Hasler |
| I 5 | Int. d'isolement VA |
| M 1 | Manette d'inversion |
| PVA | Pédale du VA |
| R 3/4 | Diode |
| RVA 4" | Relais temporisé au déclenchement de 4 sec. |
| RVA 60" | " " " " " 60 sec. |

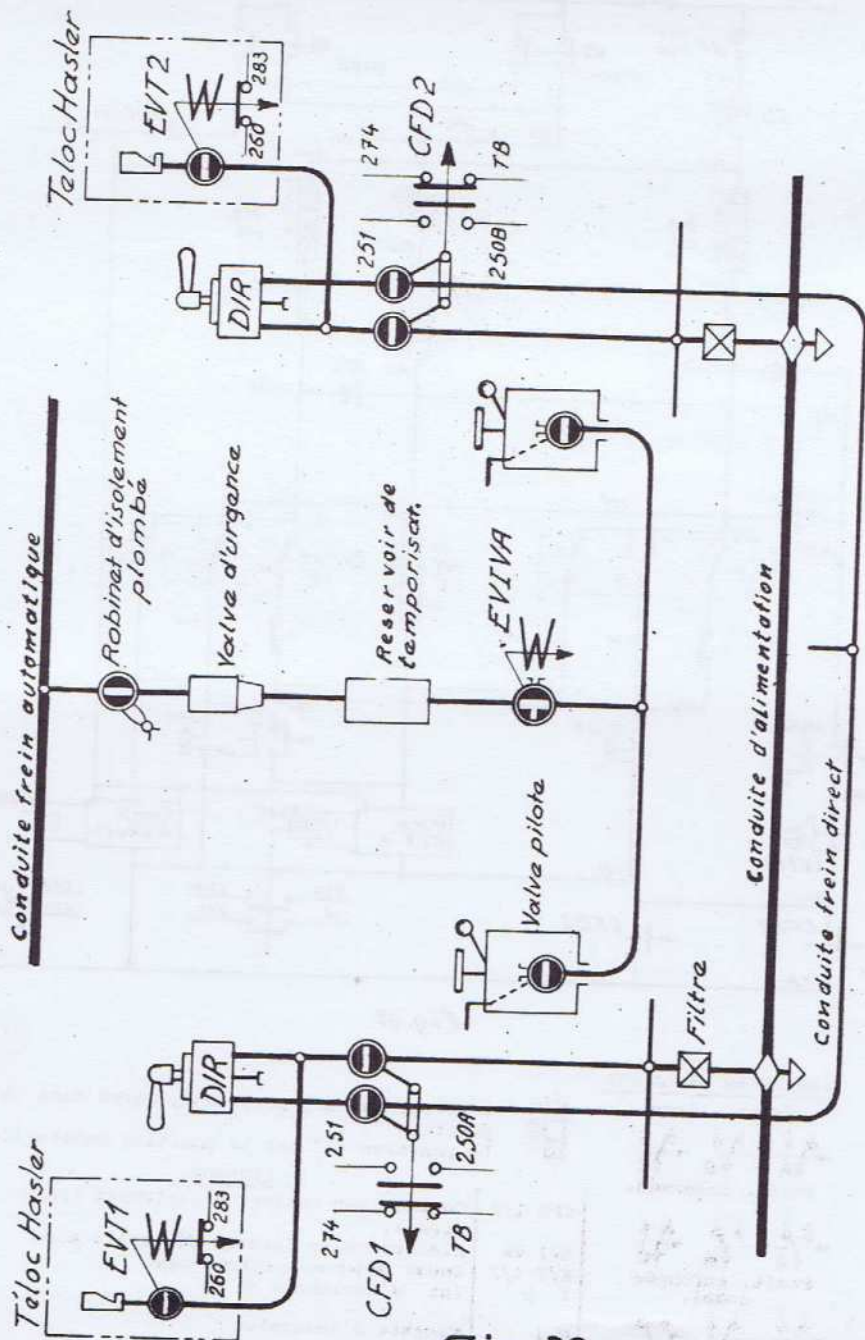


Fig. 32

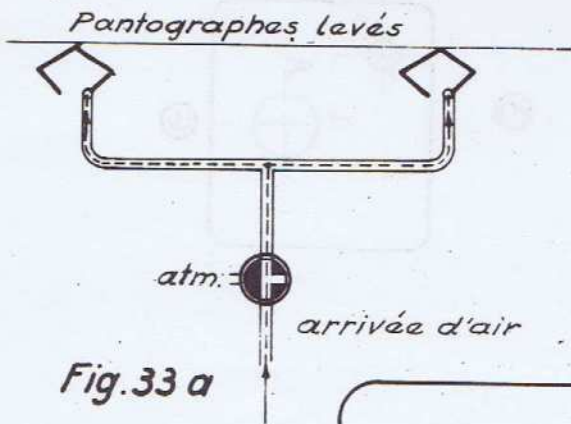


Fig.33 a

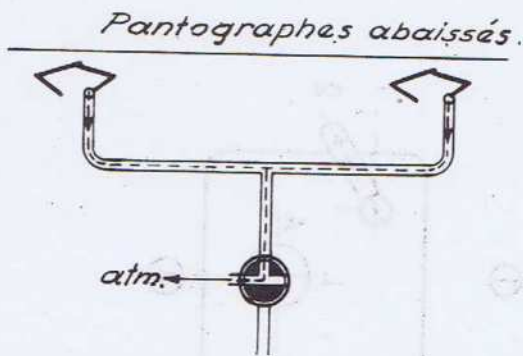
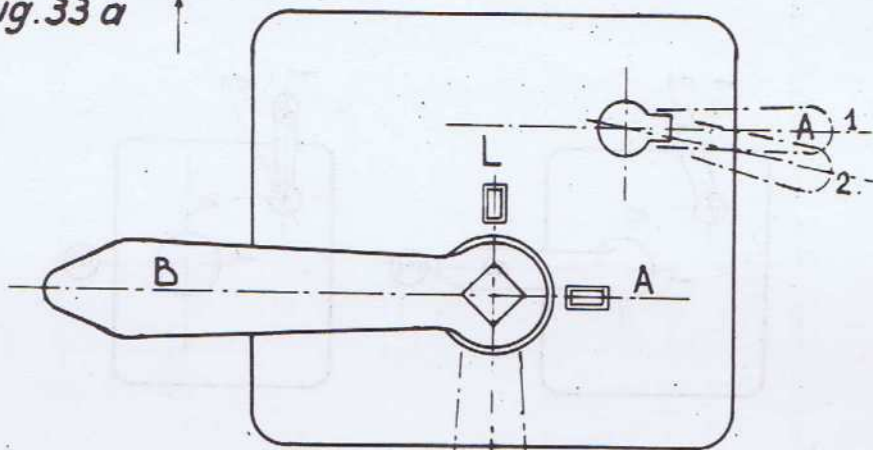
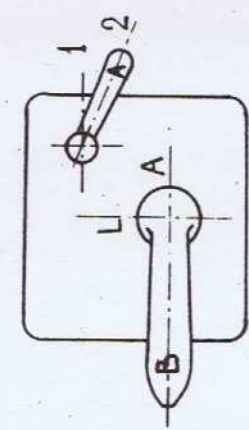


Fig.33 b

Fig.33 c



③

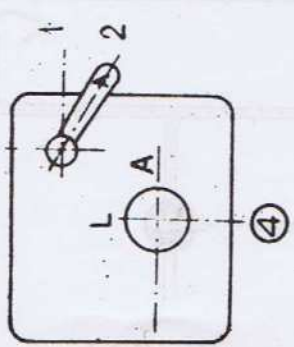
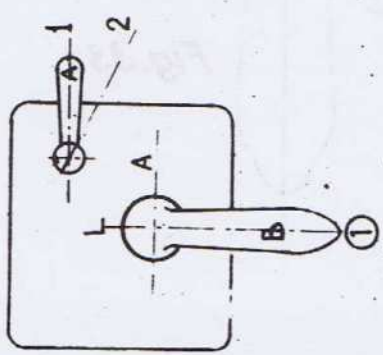
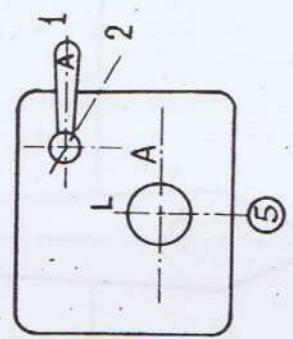
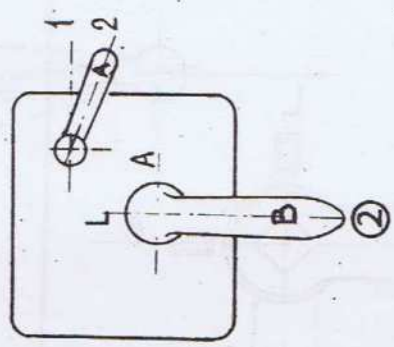
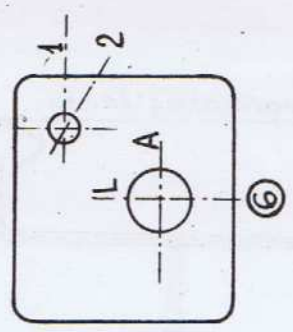


Fig.34

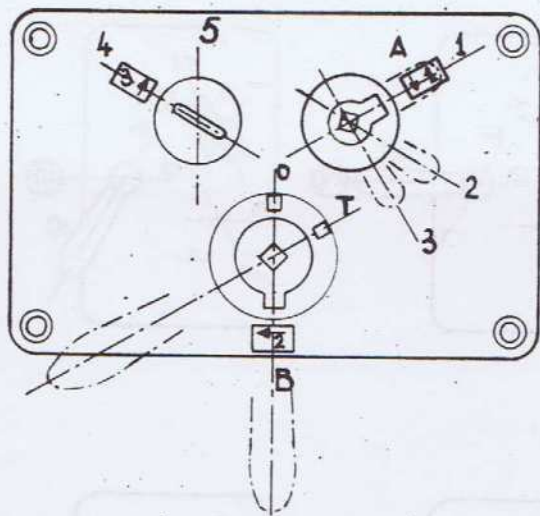


Fig. 35

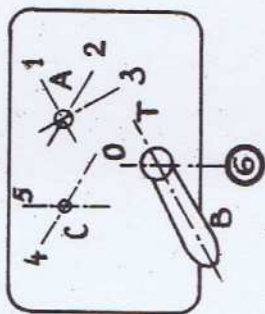
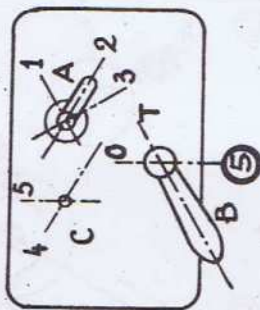
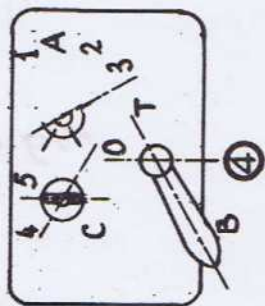
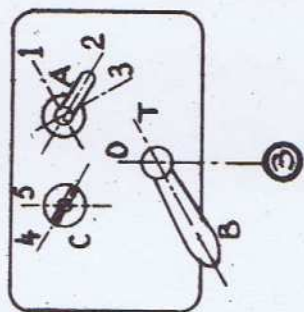
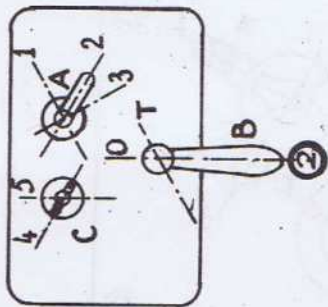
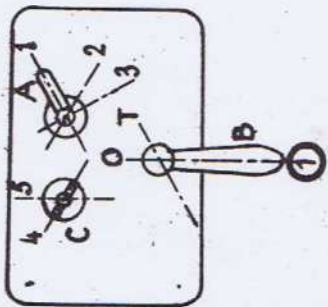


Fig. 36a

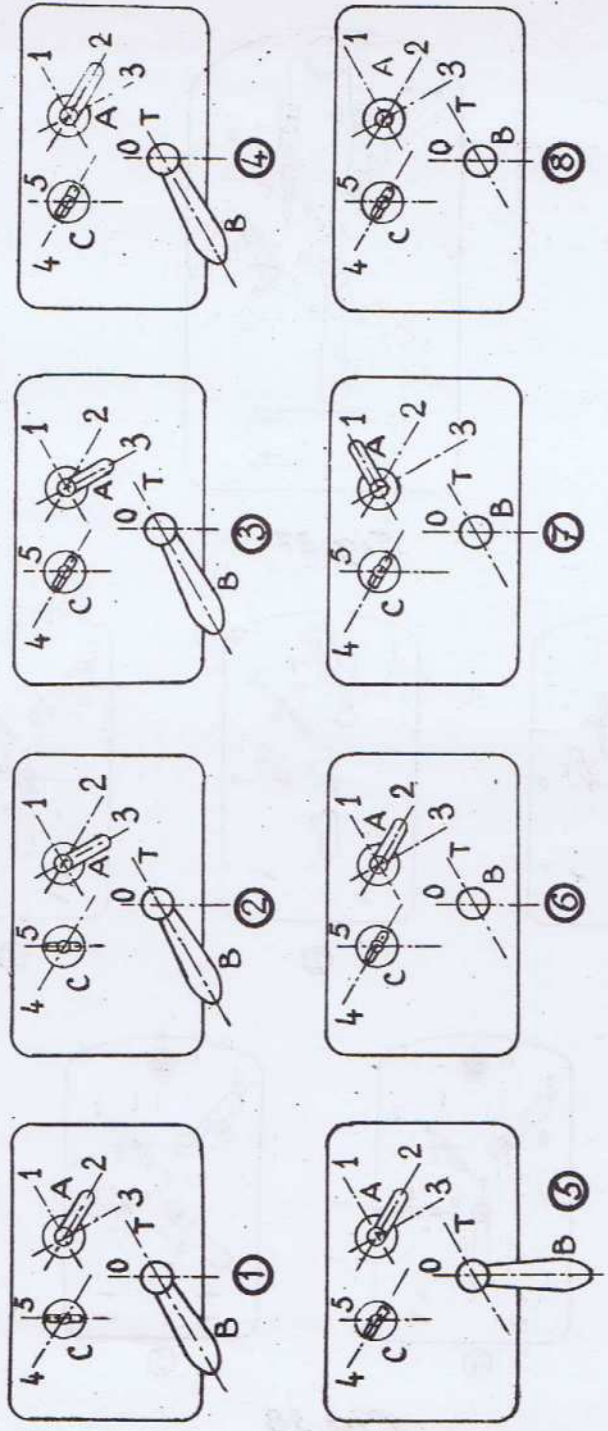


Fig. 36b.

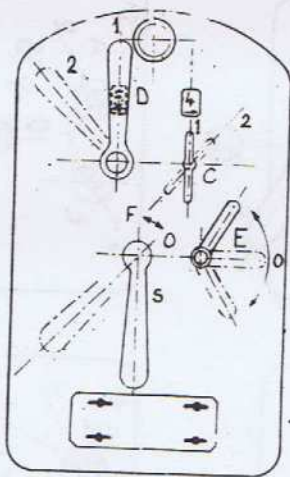
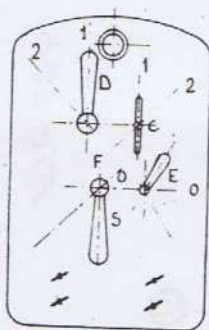
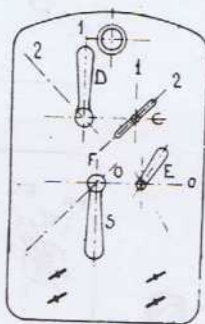


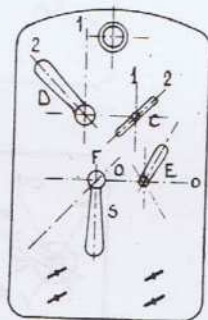
Fig. 37



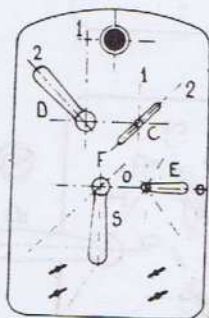
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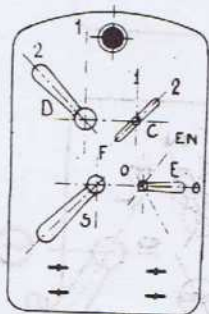
②



③



④



⑤

Fig. 38

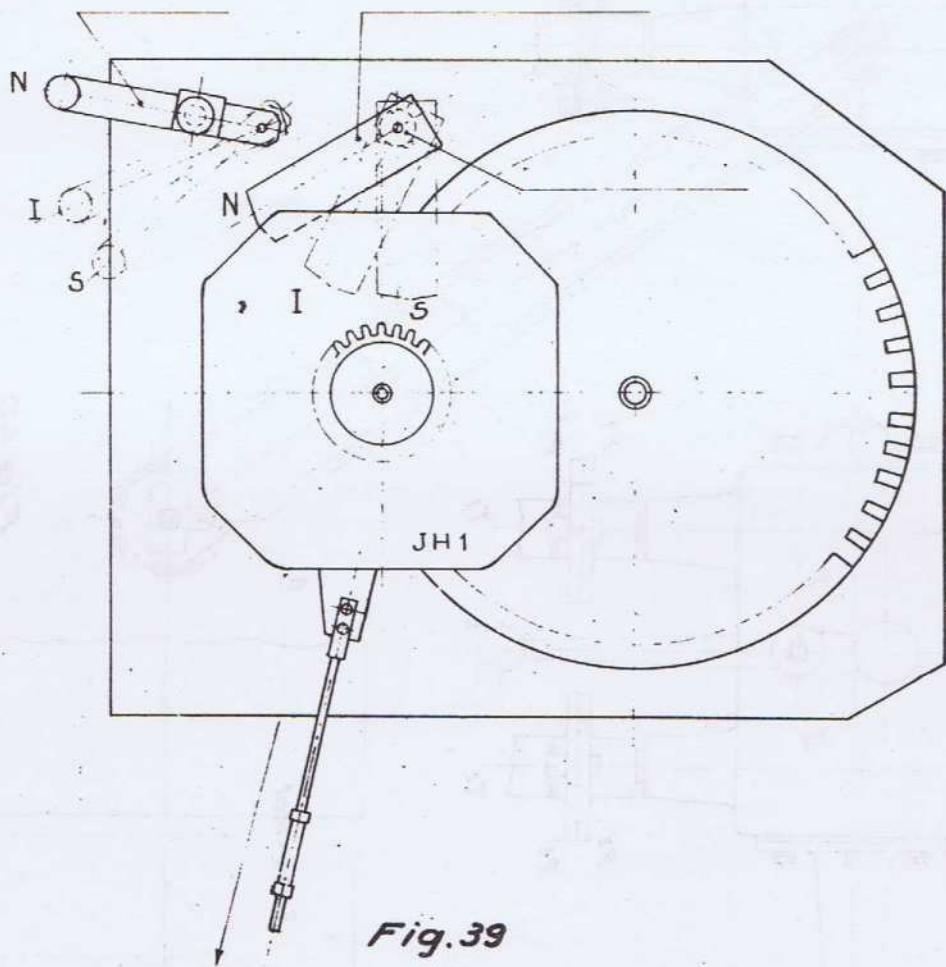


Fig. 39

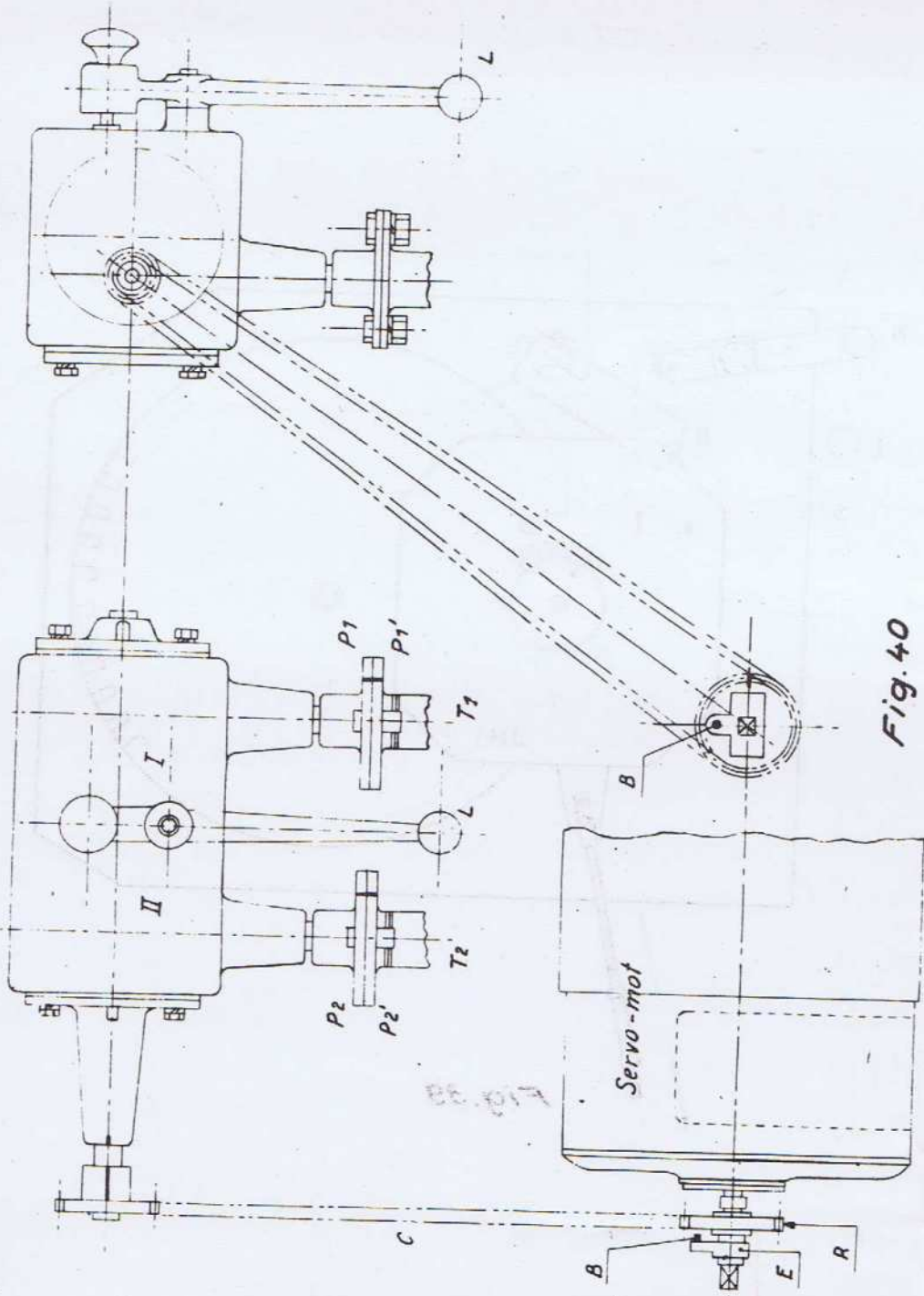


Fig. 40

Servo-moteur JH1.

chaîne.

embrayage

bloc JH

manivelle de commande

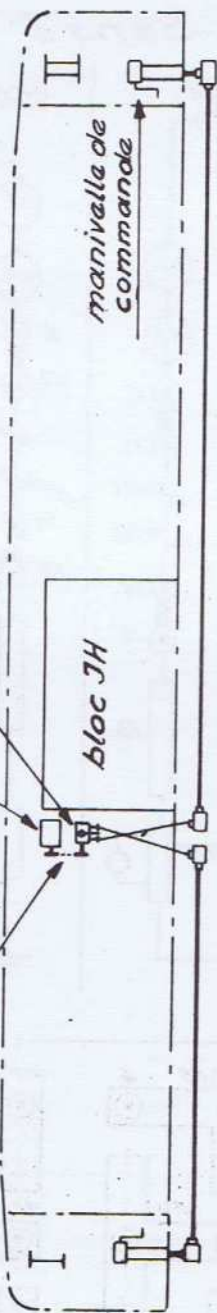


Fig. 41

Inverseur du sens de marche

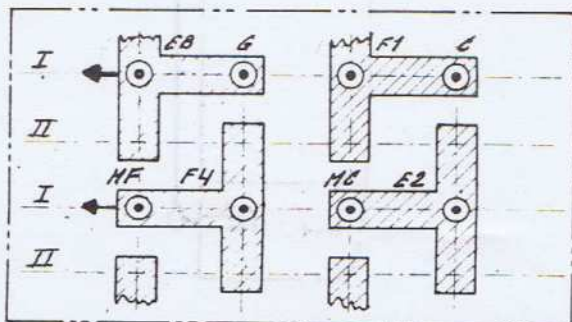
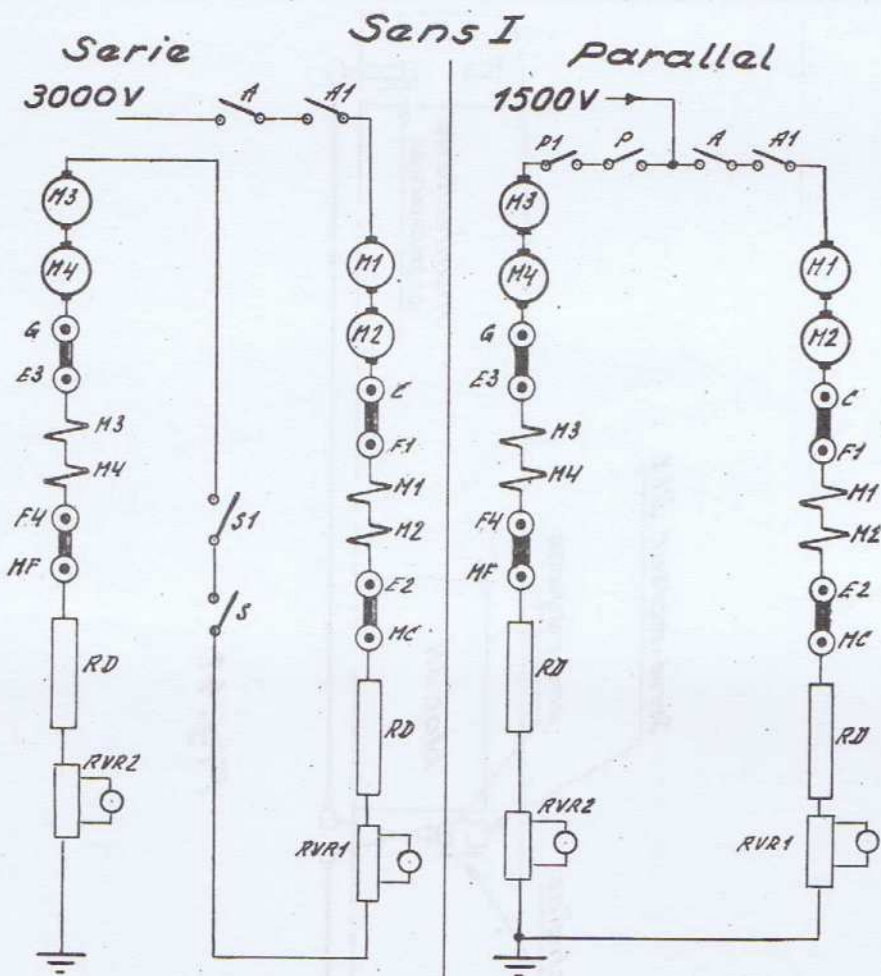


Fig. 42a.

Inverseur du sens de marche

Serie Sens II Parallel

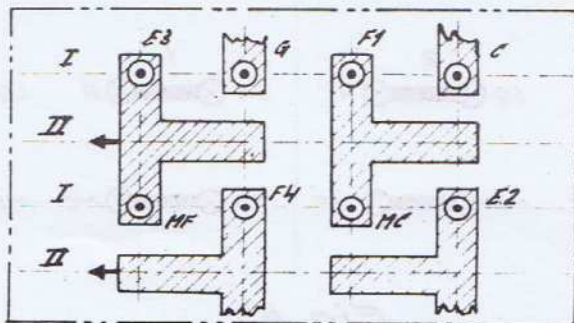
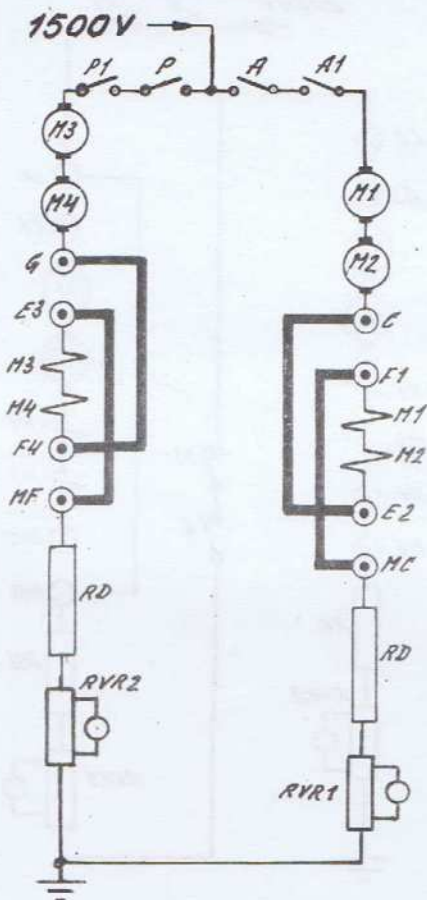
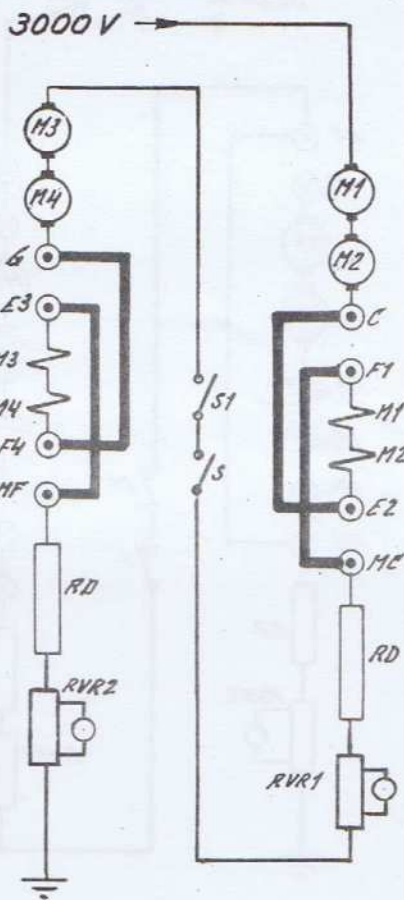


Fig. 42b.

Elimination d'un moteur de traction

Elimination moteur 1 Elimination moteur 2

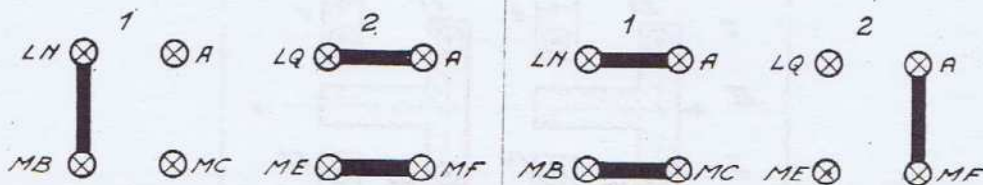
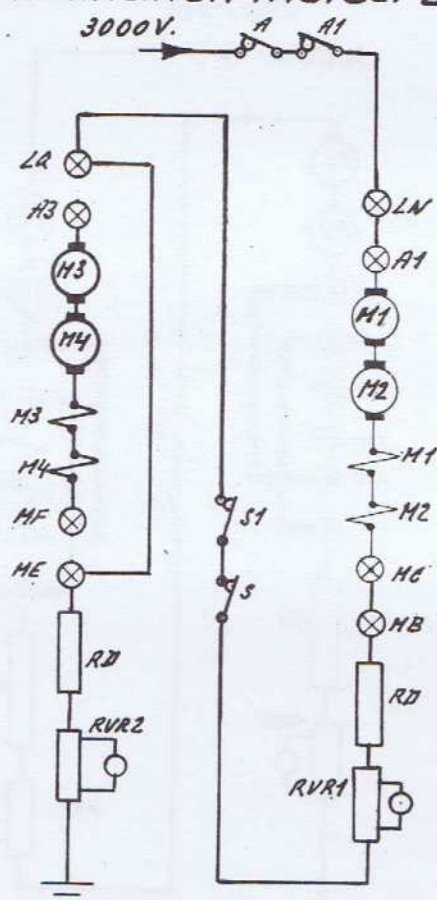
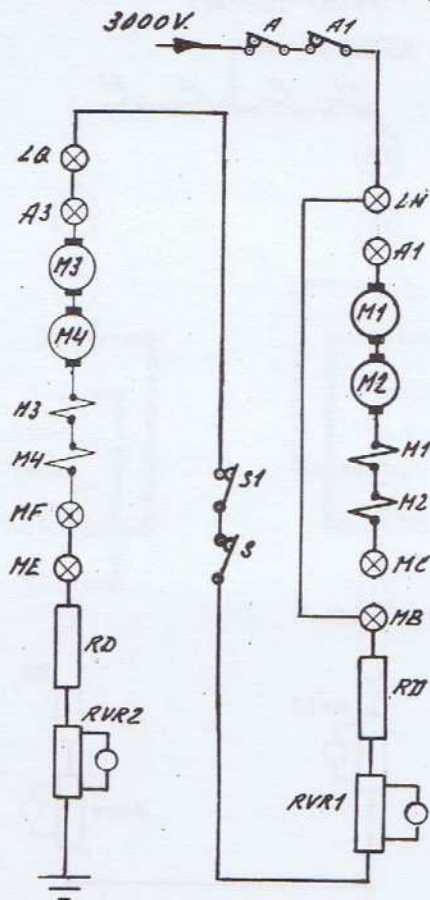
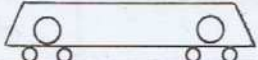



















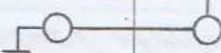








Fig. 43

Elimination des moteurs des traction

Simple traction

M	Icp				
S	SP ou P				
P	SP				
P	P				

Double traction

					
S	SP ou P				
P	SP			Série transition parallèle	
P	P				
S	SP P				
P	SP	Série transition parallèle			
P	P				

Légende




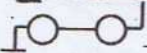
-  Groupe de moteurs éliminé
-  Groupe de moteurs ne tractionnant pas
-  Groupe de moteurs à 3000V. couplage parallèle
-  Groupe de moteurs à 3000V. couplage série

Fig. 44.

Compensation électrique du cabrage

Couplage série

Poste I à l'avant
 Réduction d'effort des inducts
 1 et 2 du bogie I par shuntage
 de leurs inducteurs.

Poste II à l'avant
 Réduction d'effort des inducts
 3 et 4 du bogie II par shuntage
 de leurs inducteurs.

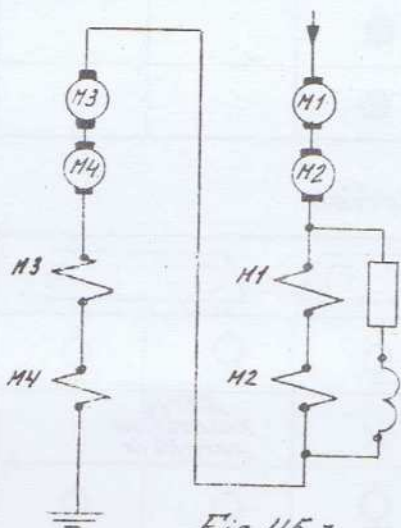


Fig. 45a

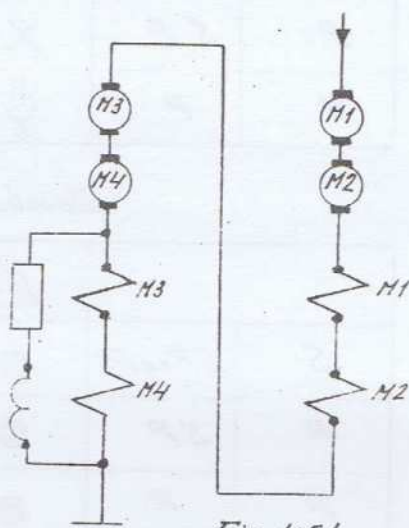


Fig. 45b.

Couplage parallèle

Poste I à l'avant

Poste II à l'avant

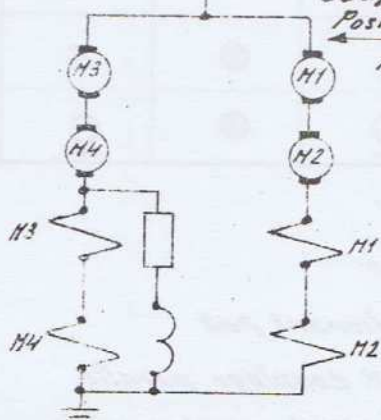
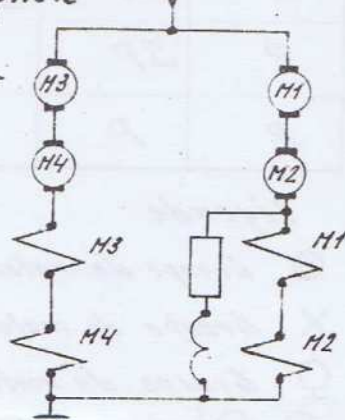


Fig. 45c.



Augmentation d'effort
 des inducts 3 et 4 équipant
 le bogie II par shuntage
 de leurs inducteurs

Augmentation d'effort
 des inducts 1 et 2 équipant
 le bogie I par shuntage
 de leurs inducteurs

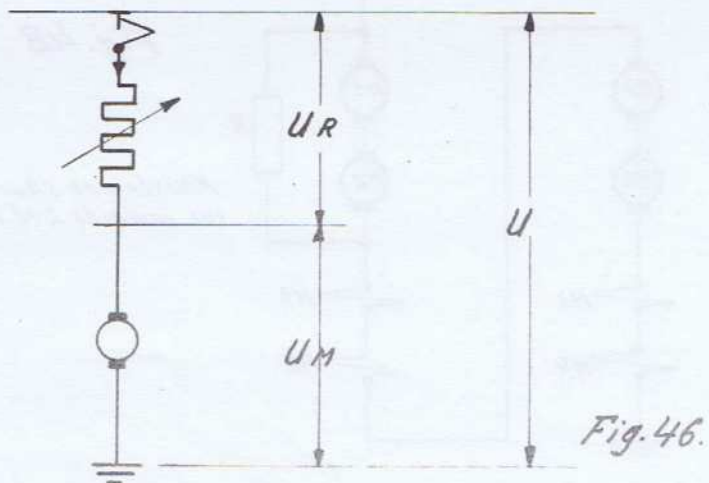


Fig. 46.

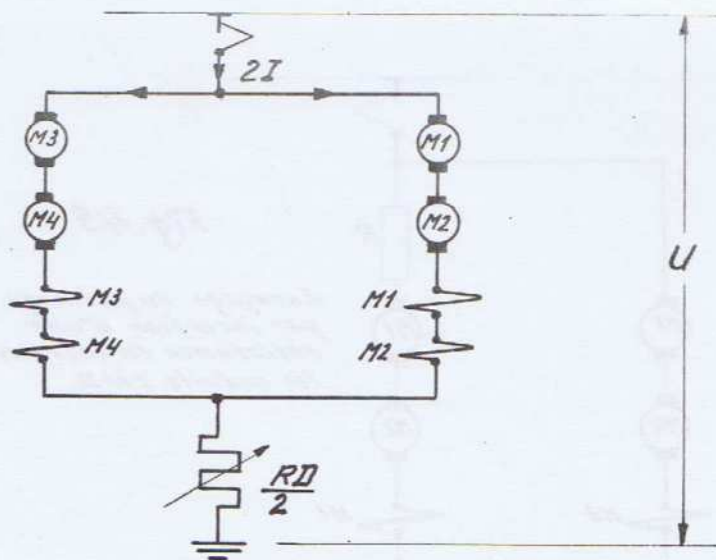


Fig. 47

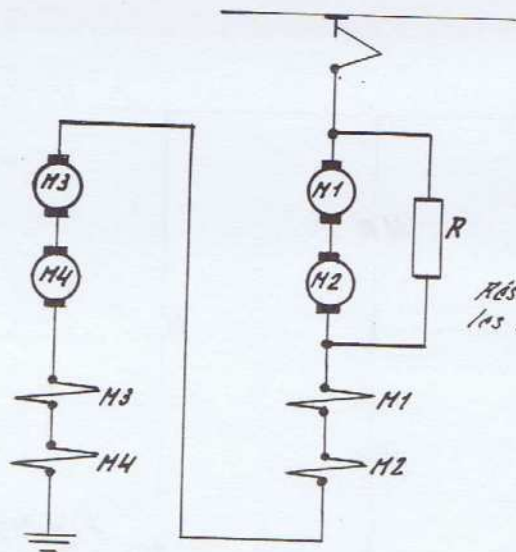


Fig. 48

Résistances shuntant
les inducts I et II

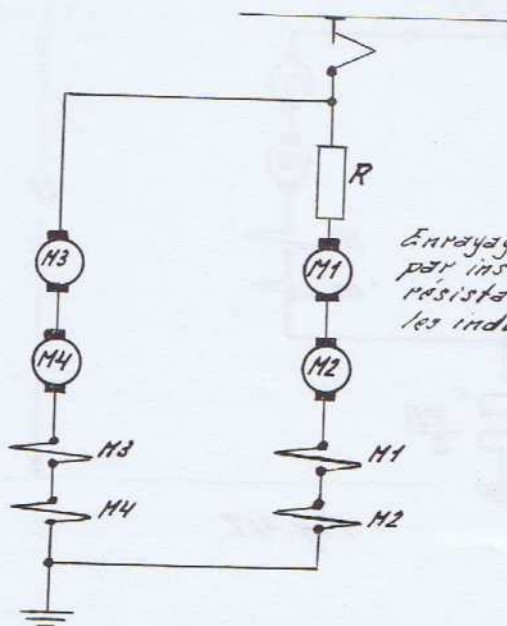
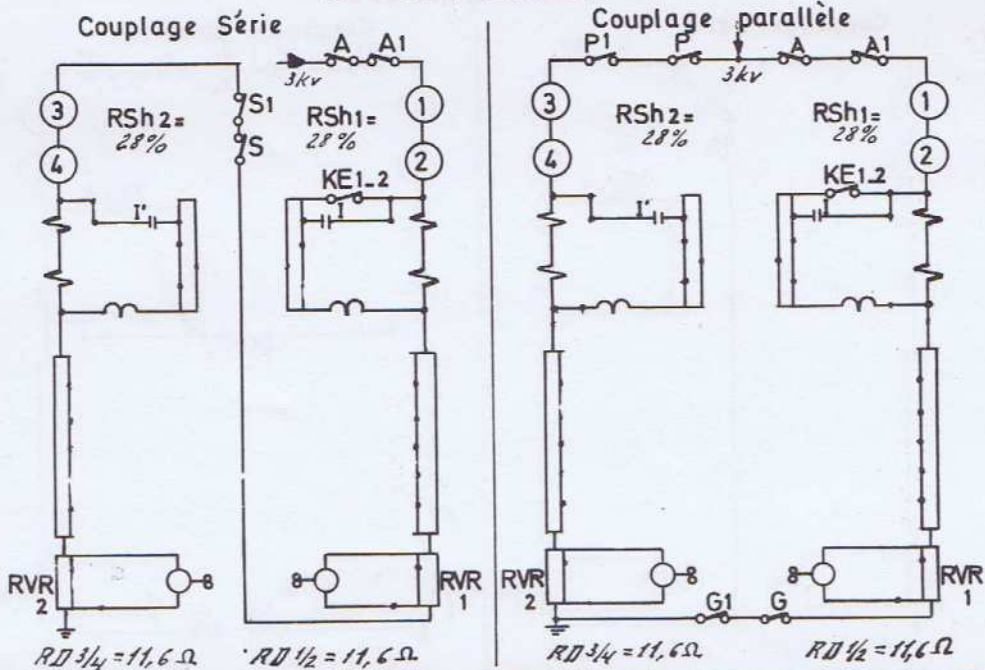


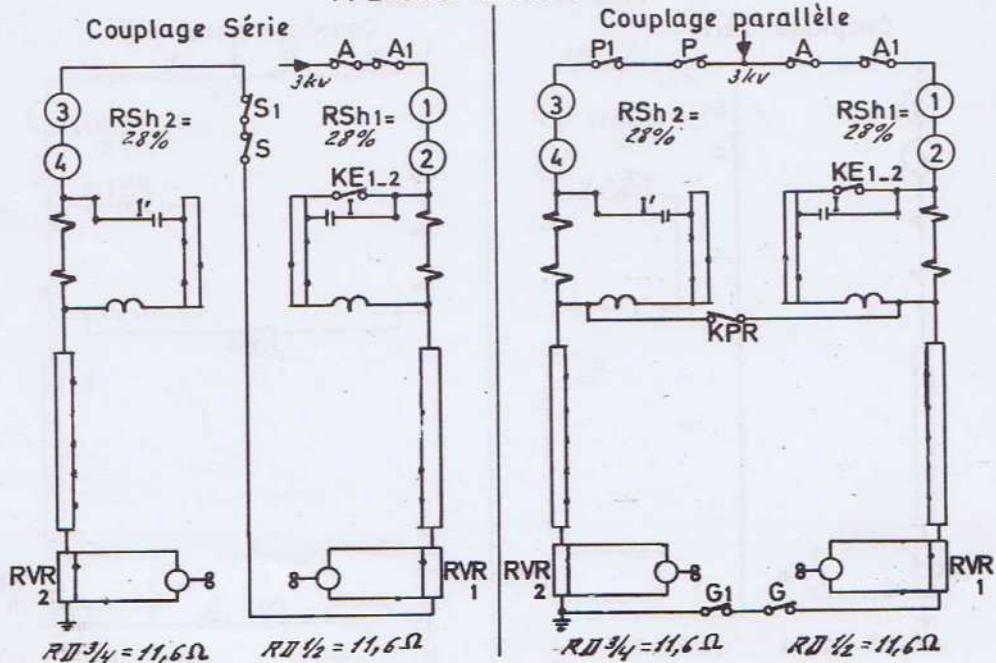
Fig. 49

Enrayage du patinage
par insertion d'une
résistance en série avec
les inducts I et II.

M 2 en 1 - JH en 1

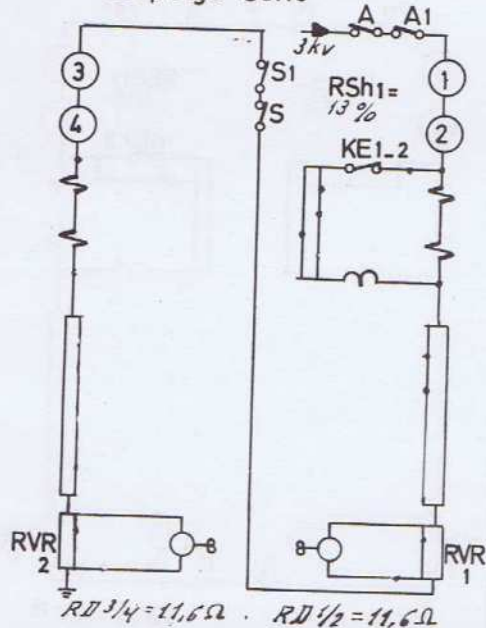


M 2 en 2 - JH en 2

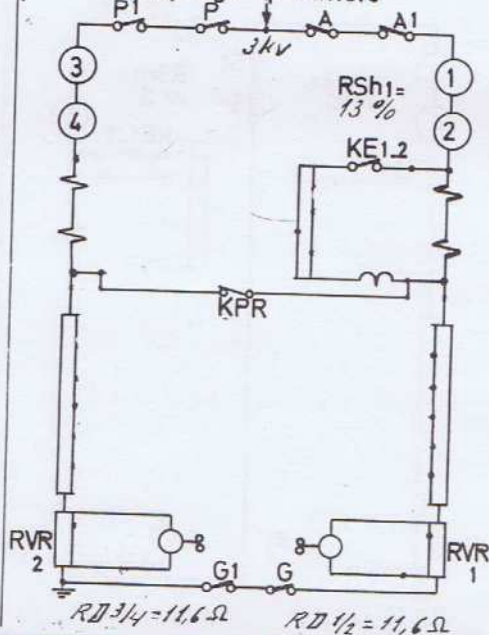


M 2 en 3 - JH en 3

Couplage Série

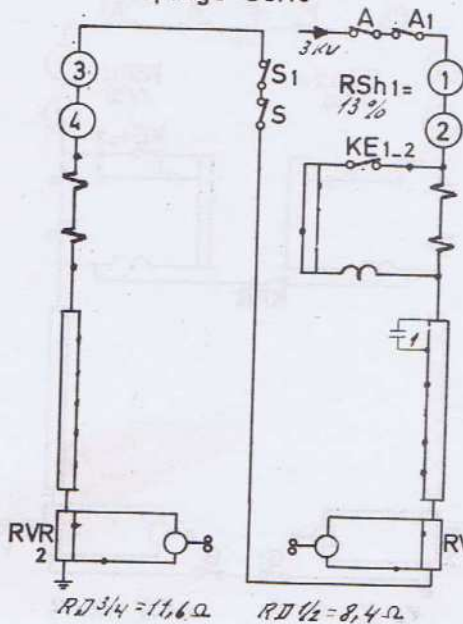


Couplage parallèle

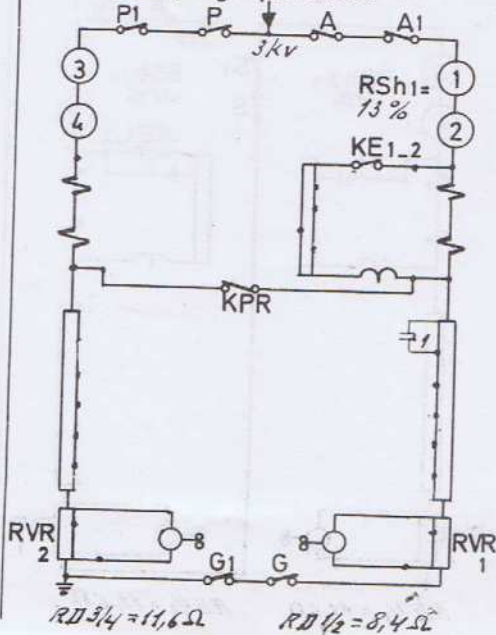


M 2 en 4 - JH en 4

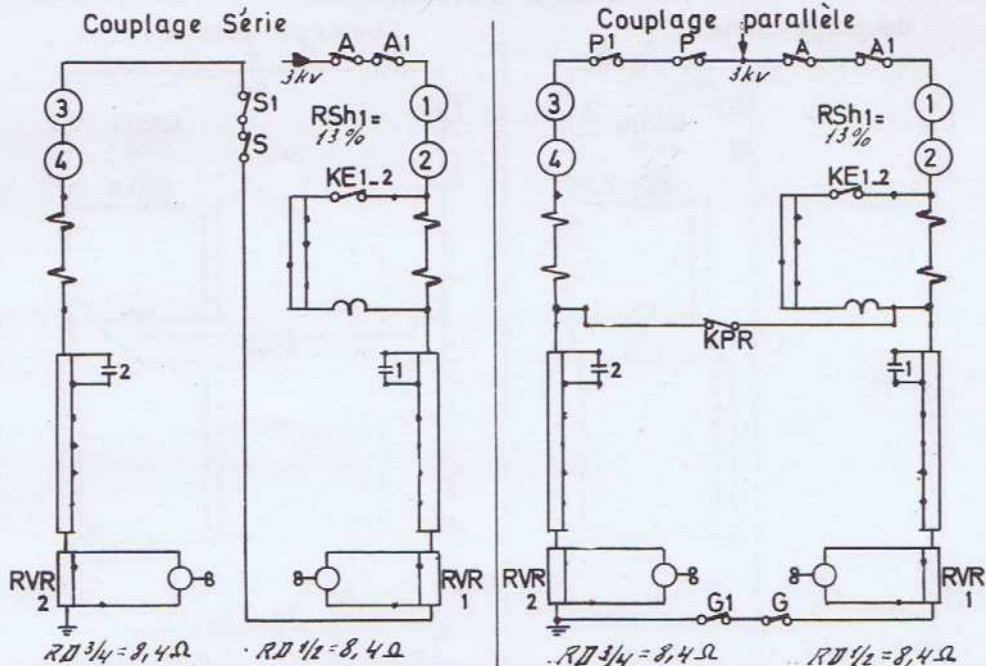
Couplage Série



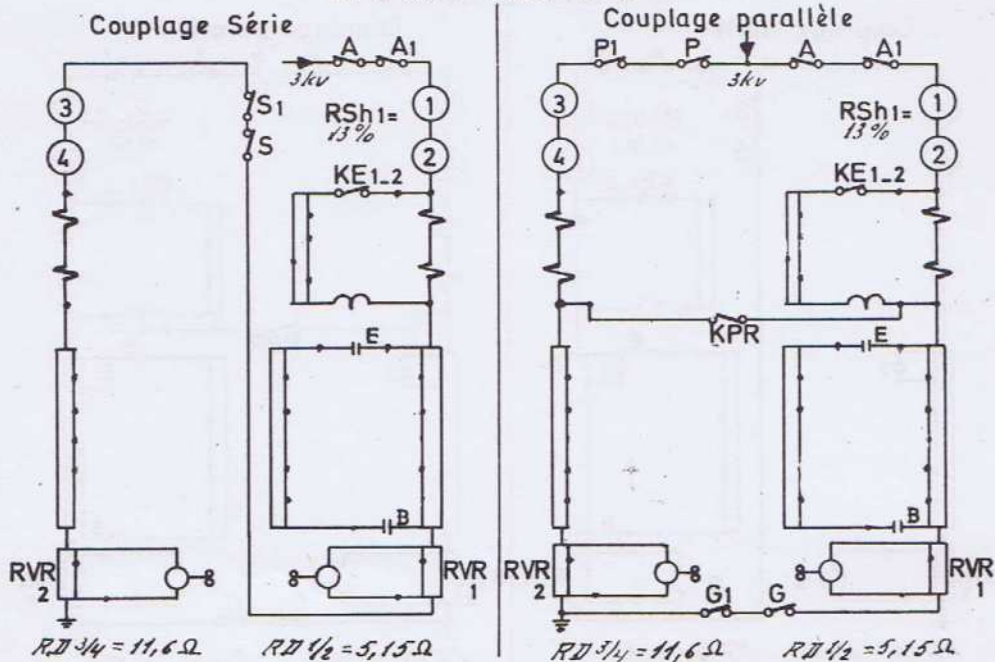
Couplage parallèle



M 2 en 4 - JH en 5

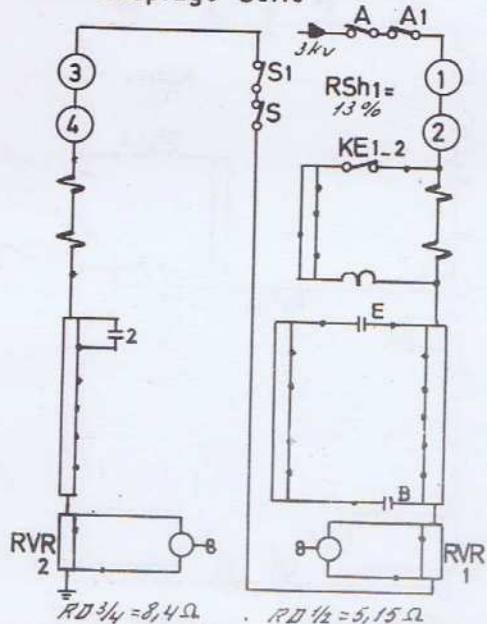


M 2 en 4 - JH en 6

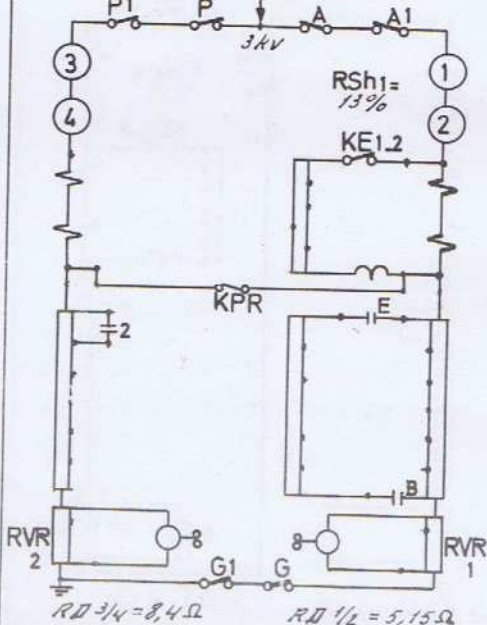


M 2 en 4 - JH en 7

Couplage Série

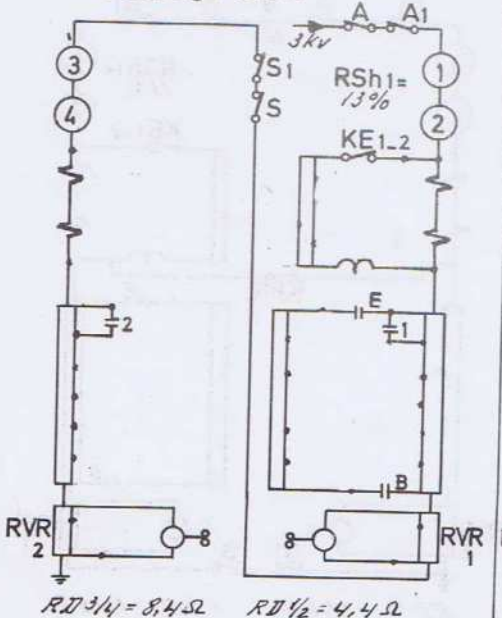


Couplage parallèle

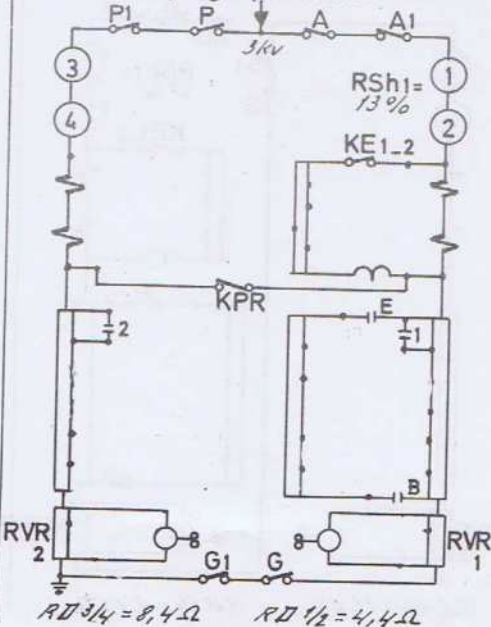


M 2 en 4 - JH en 8

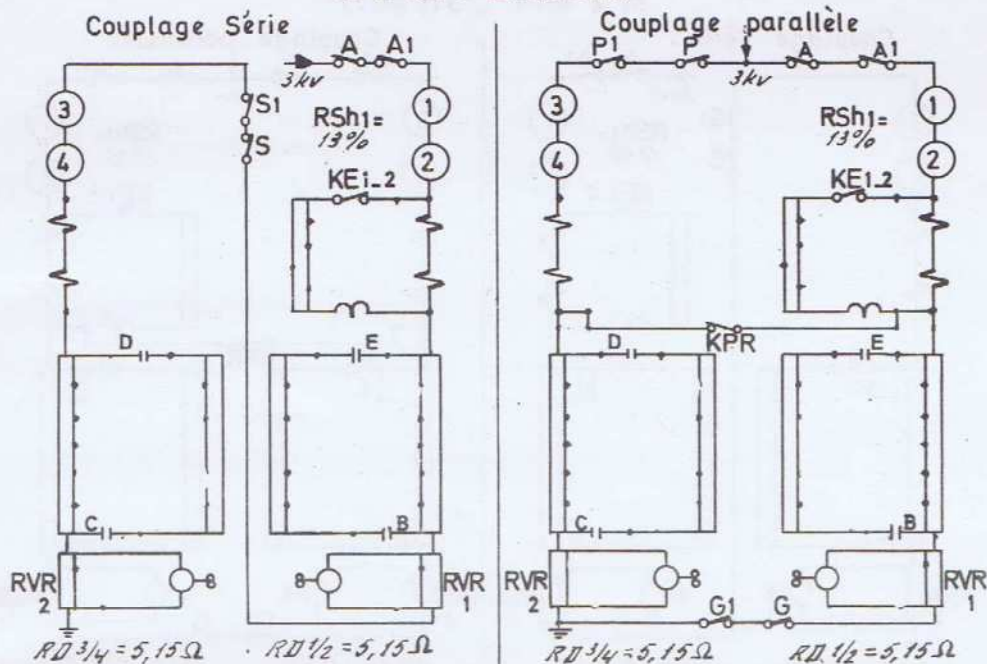
Couplage Série



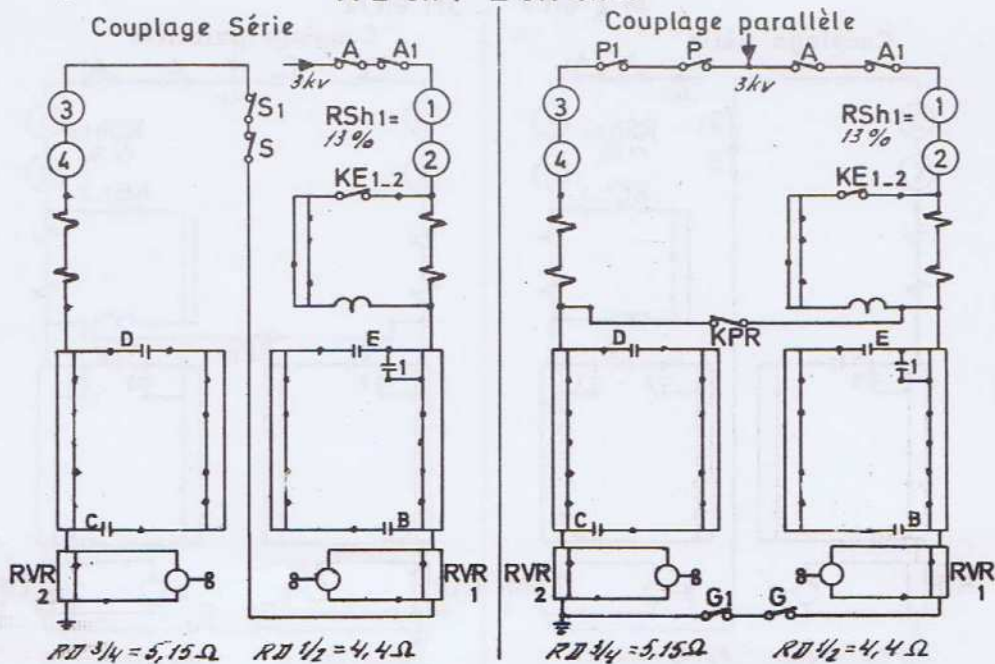
Couplage parallèle



M 2 en 4 - JH en 9

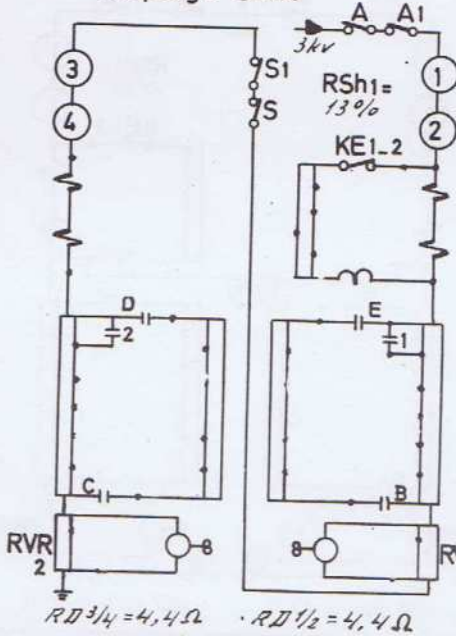


M 2 en 4 - JH en 10

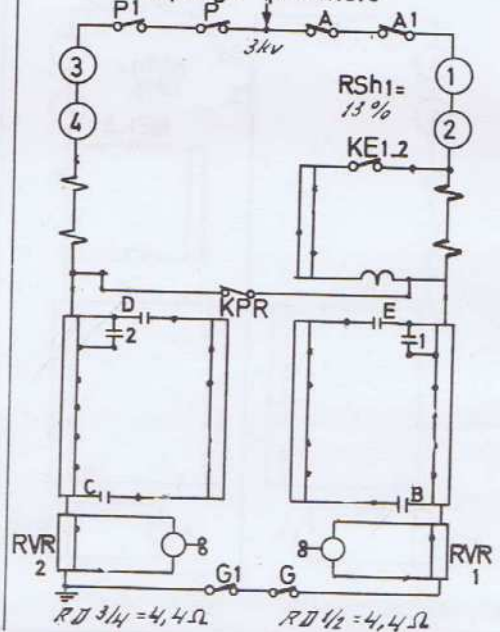


M 2 en 4 - JH en 11

Couplage Série

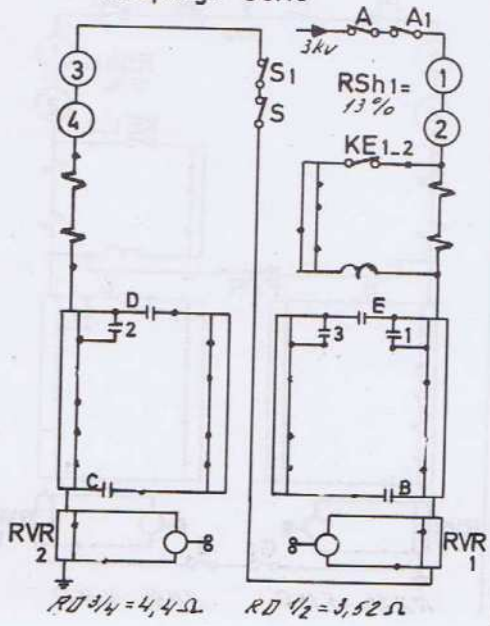


Couplage parallèle

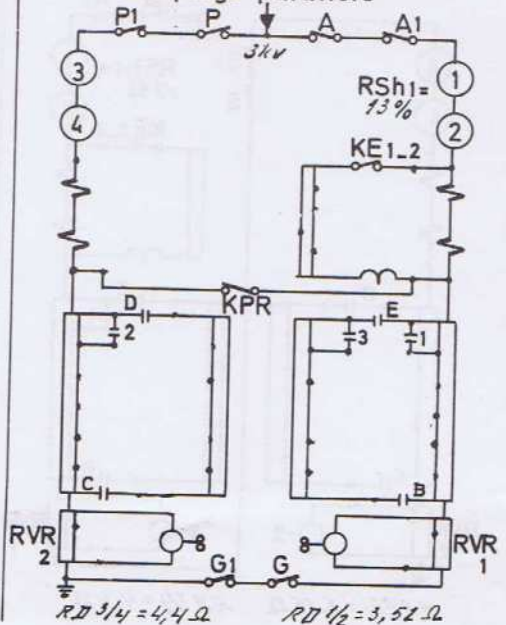


M 2 en 4 - JH en 12

Couplage Série

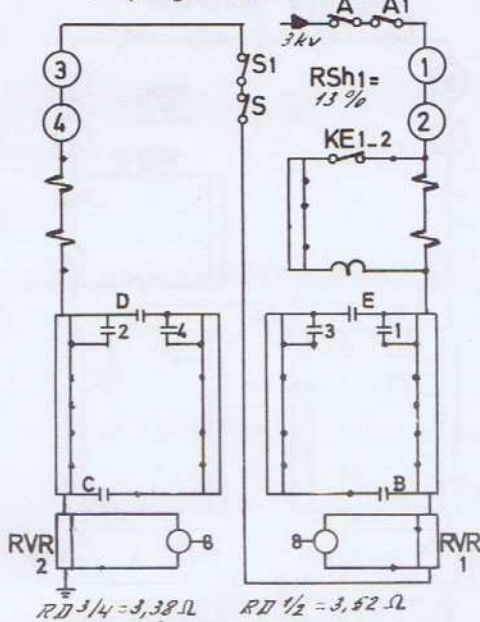


Couplage parallèle

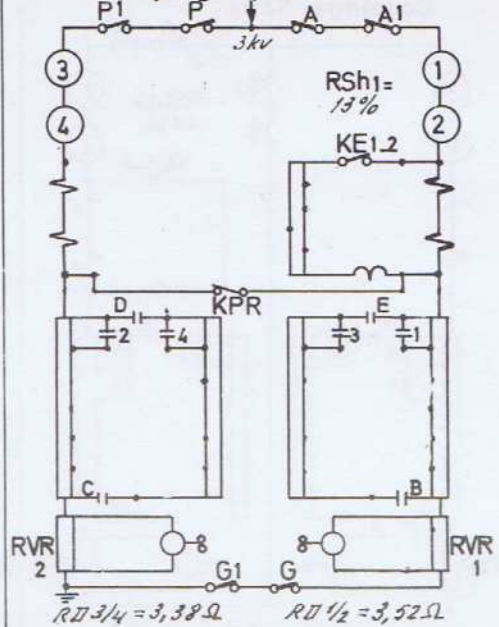


M 2 en 4 - JH en 13

Couplage Série

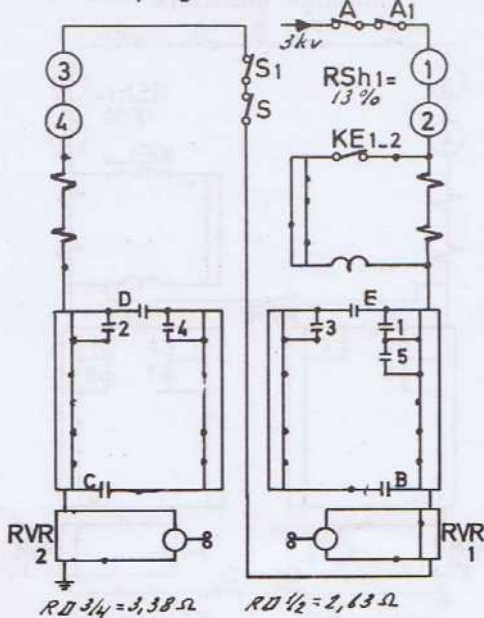


Couplage parallèle

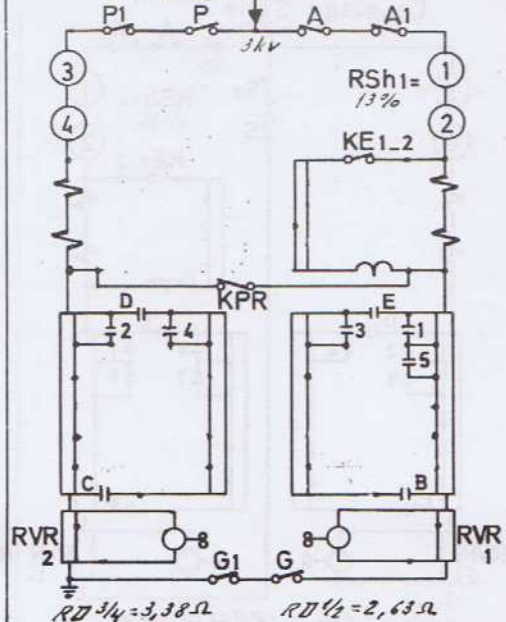


M 2 en 4 - JH en 14

Couplage Série

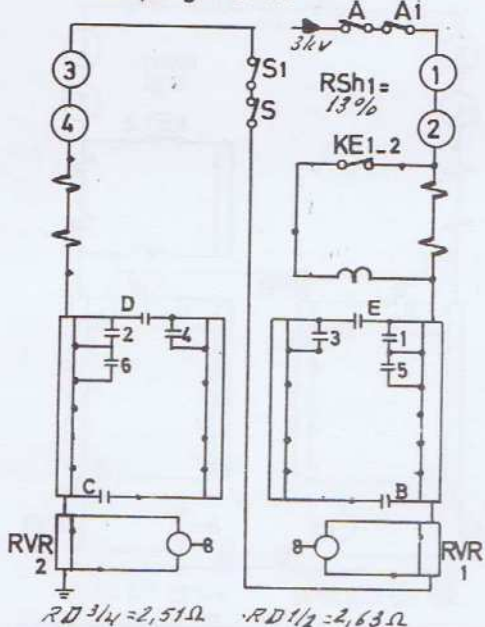


Couplage parallèle

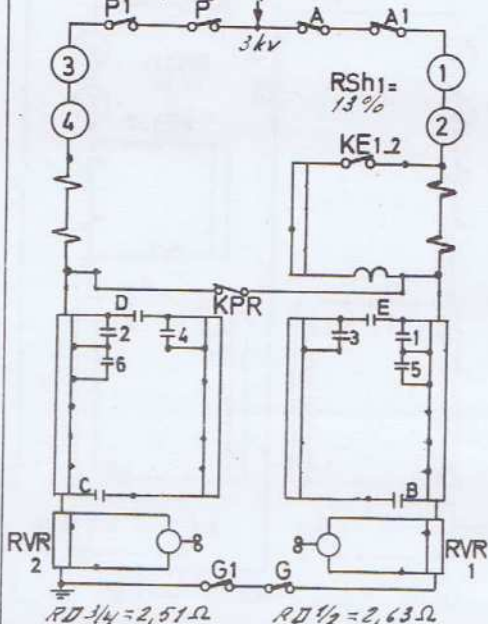


M 2 en 4 - JH en 15

Couplage Série

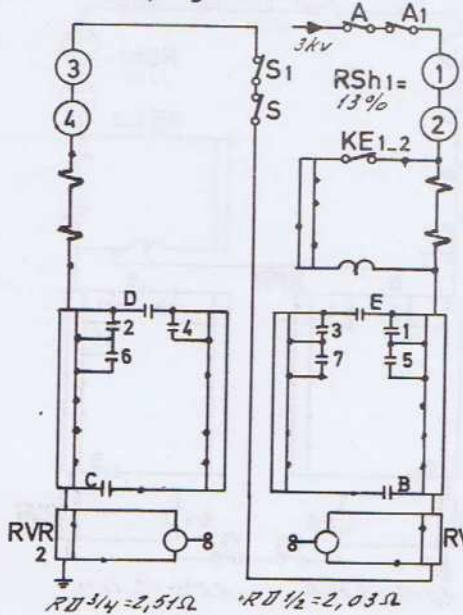


Couplage parallèle

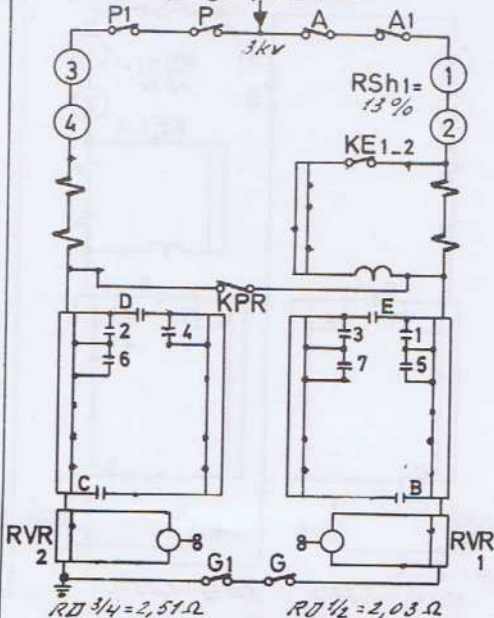


M 2 en 4 - JH en 16

Couplage Série

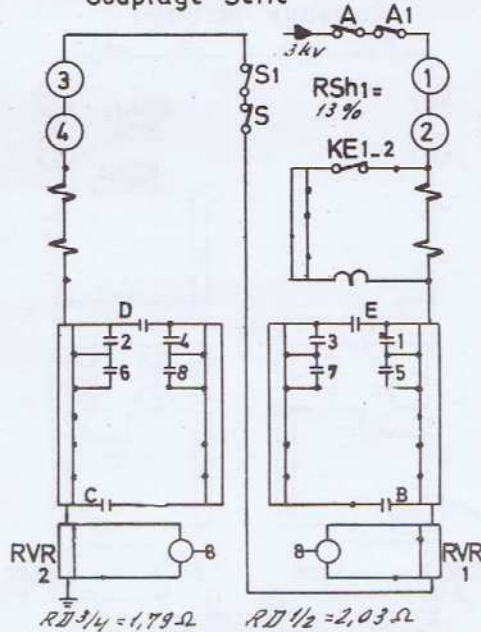


Couplage parallèle

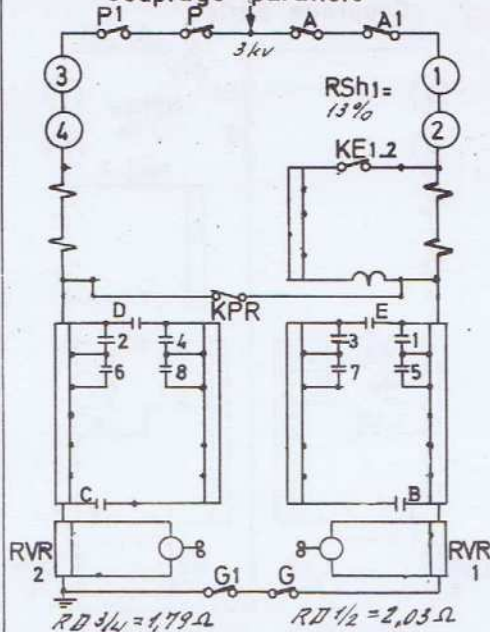


M 2 en 4 - JH en 17

Couplage Série

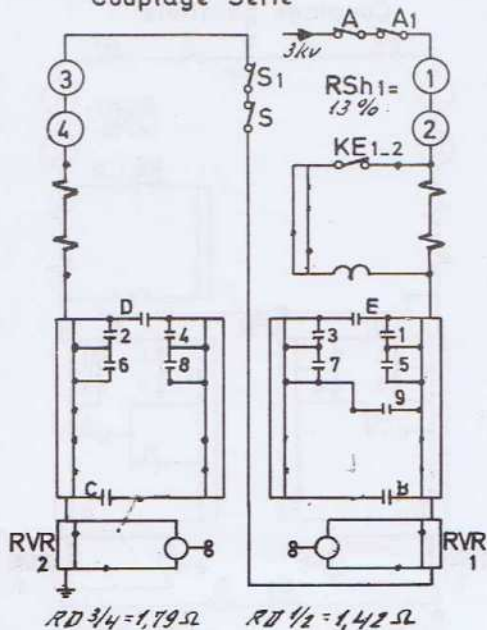


Couplage parallèle

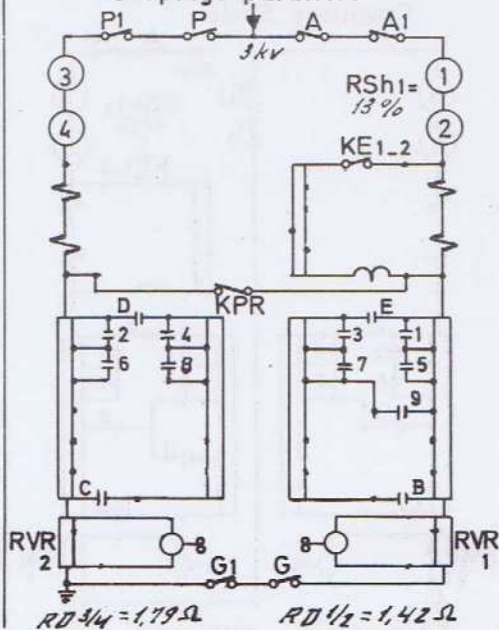


M 2 en 4 - JH en 18

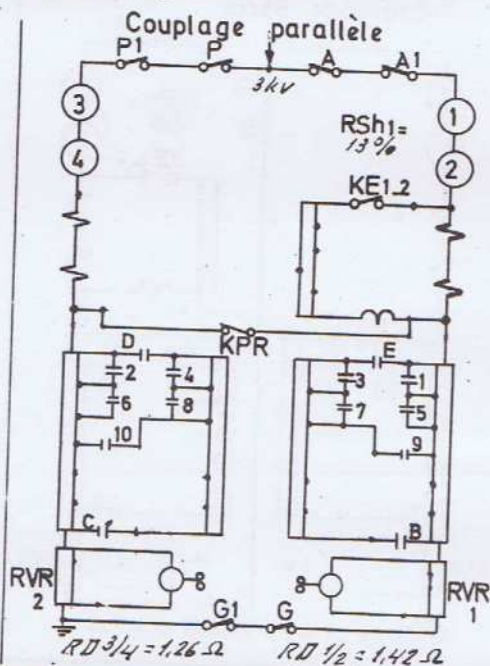
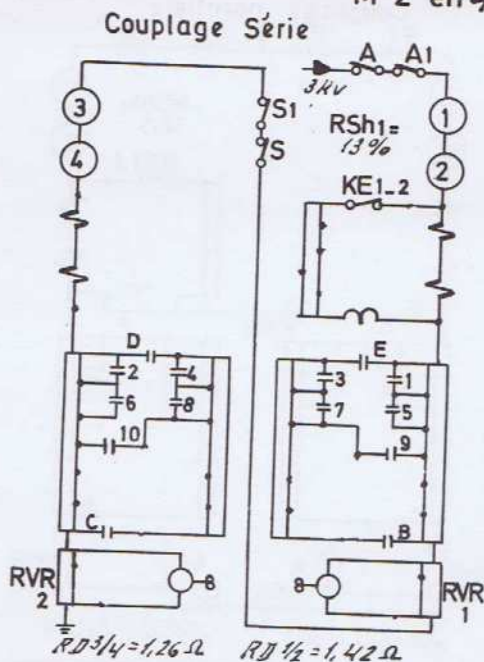
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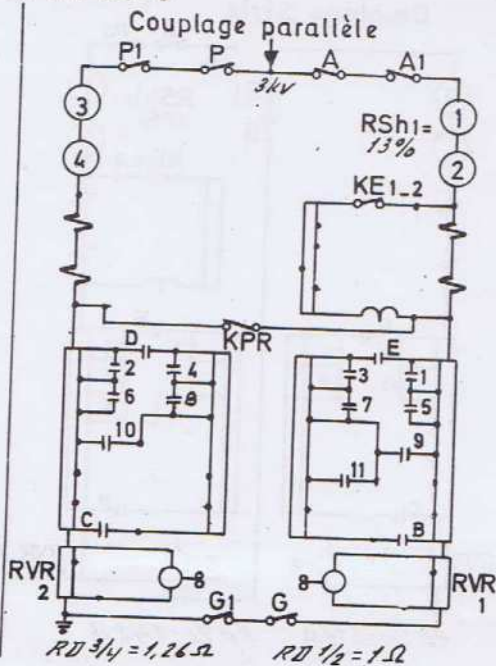
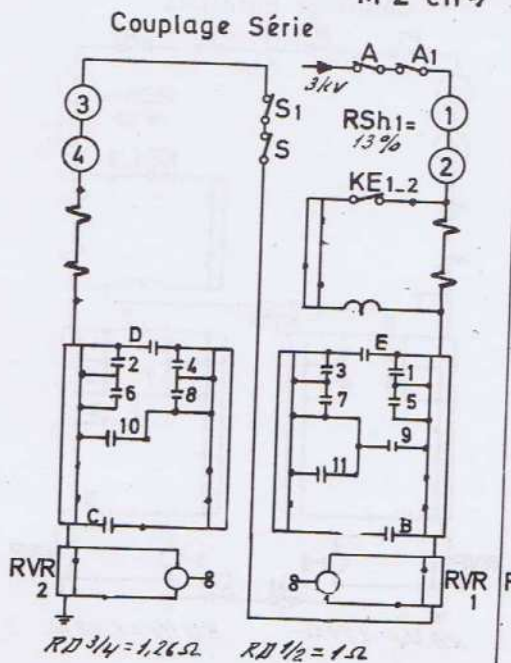
Couplage parallèle



M 2 en 4 - JH en 19

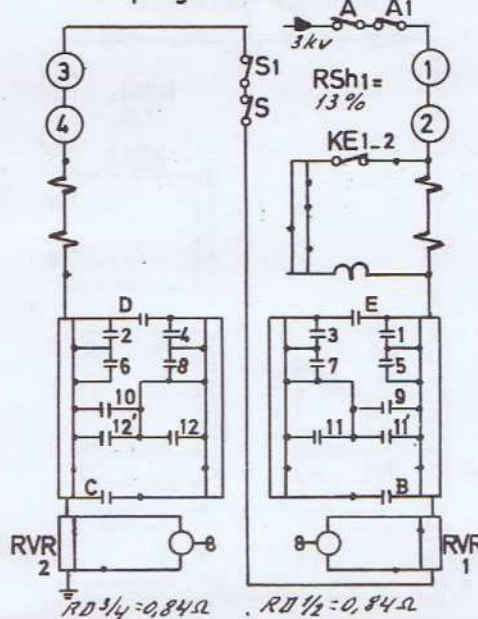


M 2 en 4 - JH en 20

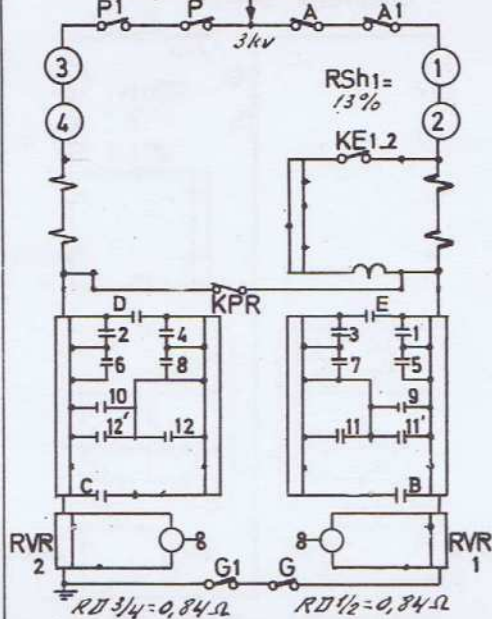


M 2 en 4 - JH en 21

Couplage Série

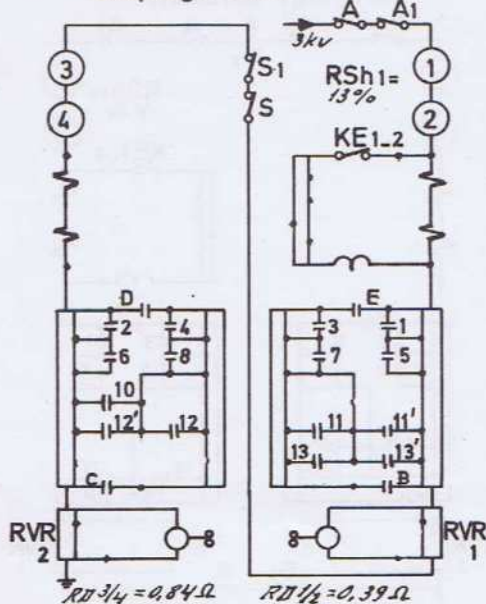


Couplage parallèle

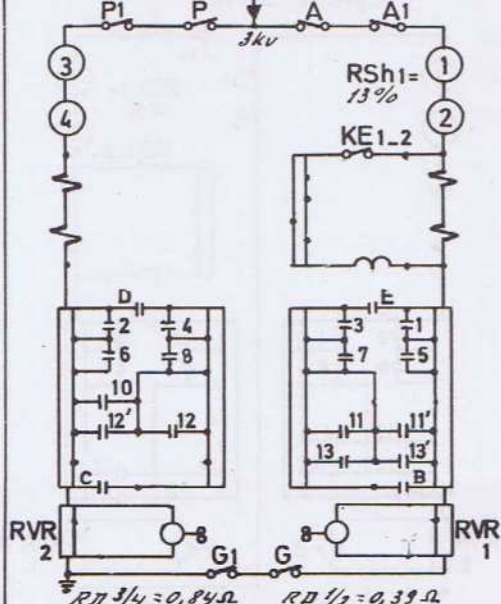


M 2 en 4 - JH en 22

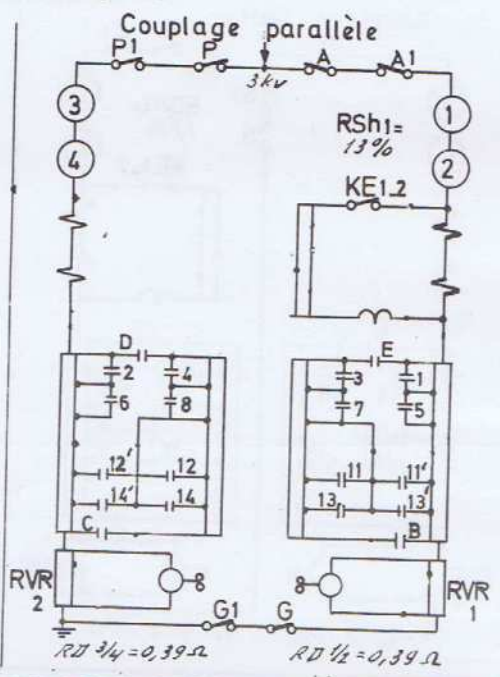
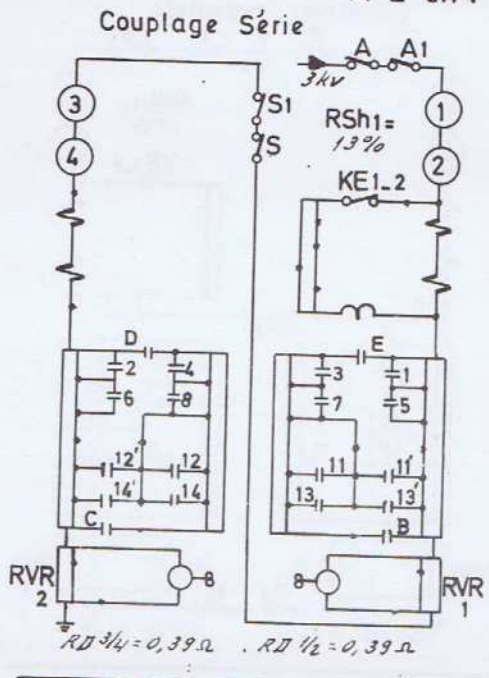
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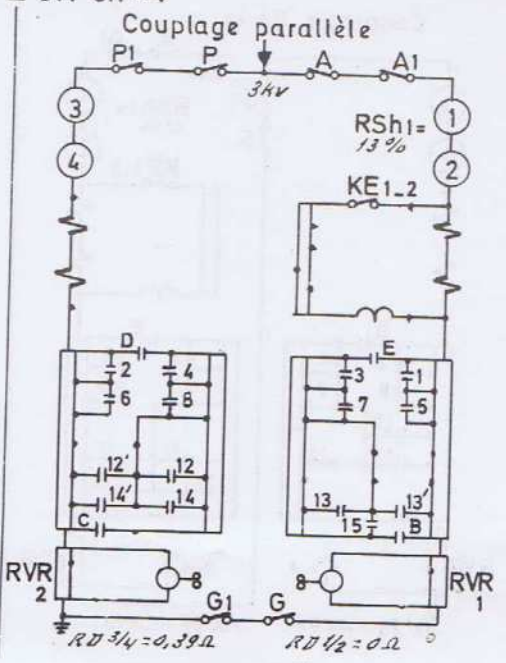
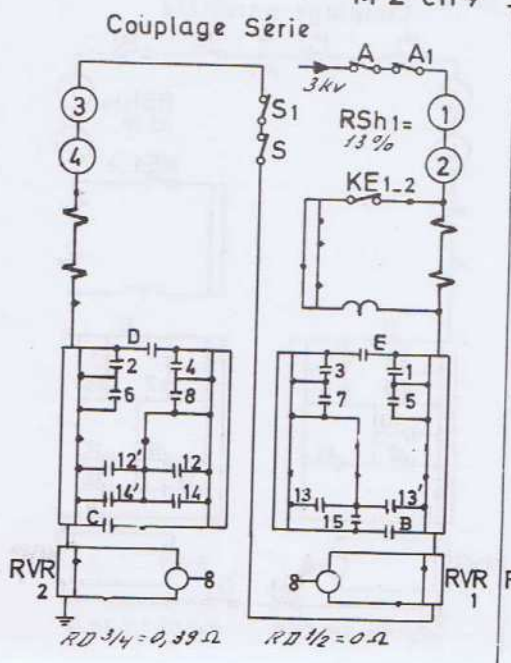
Couplage parallèle



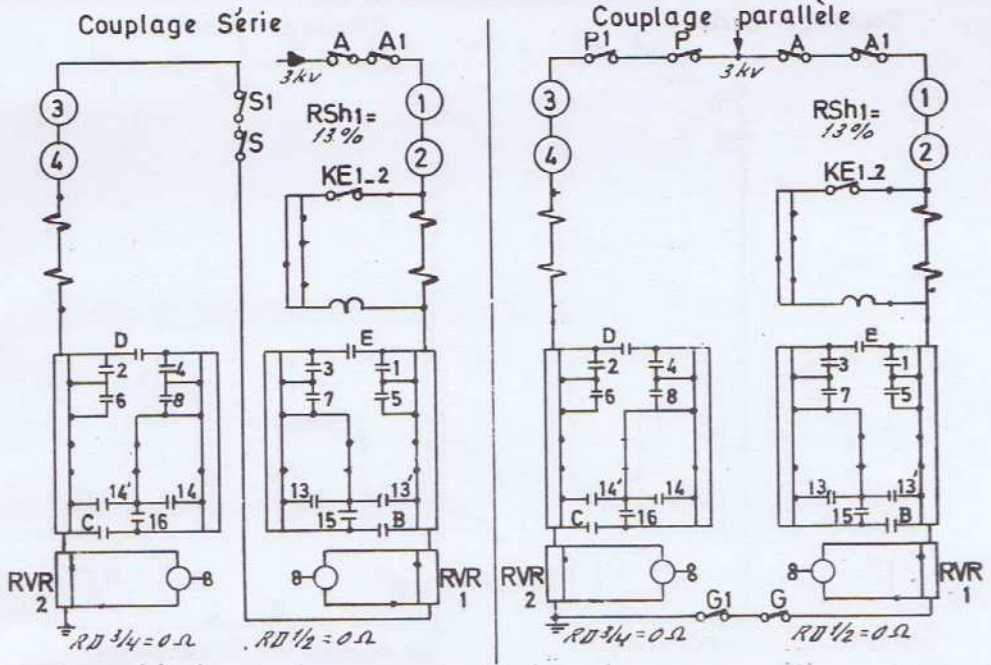
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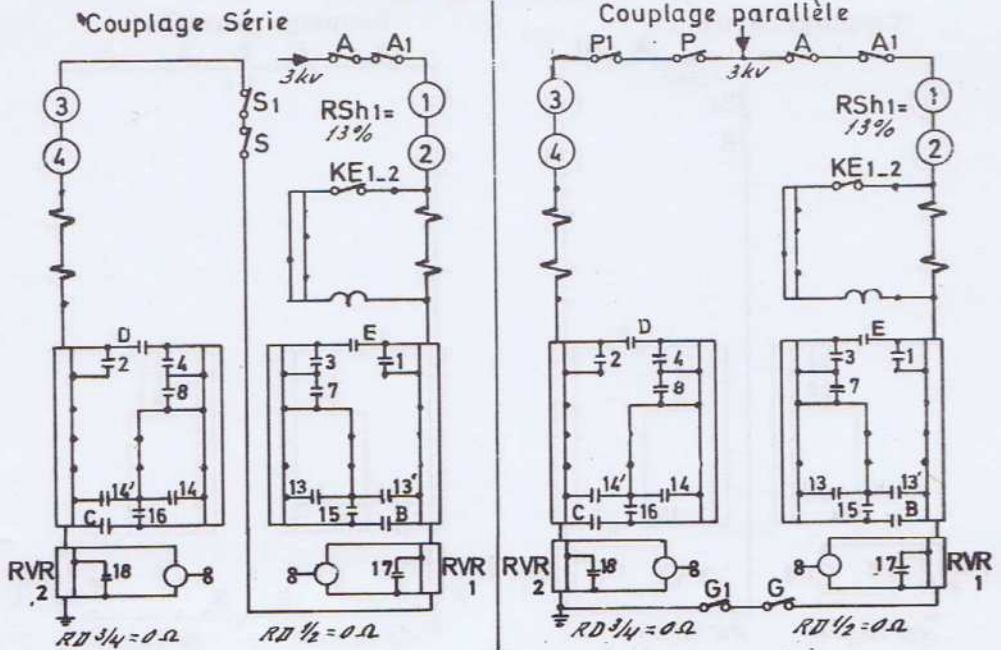
M 2 en 4 - JH en 24



M 2 en 4 - JH en 25

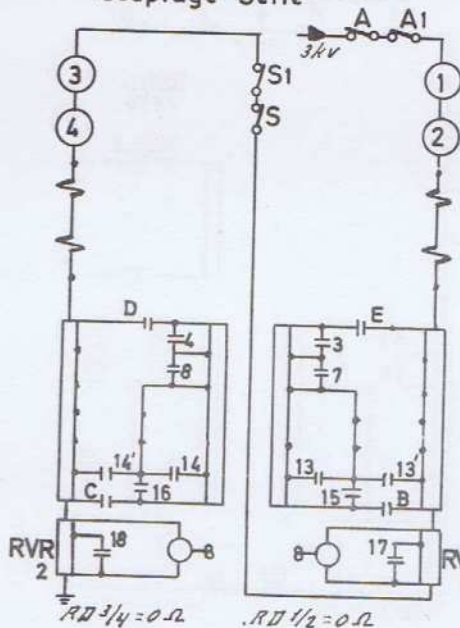


M 2 en 4 - JH en 26

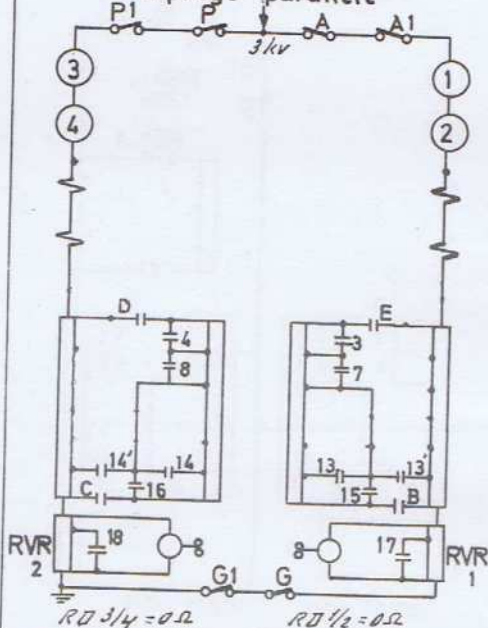


M 2 en 4 - JH en 27

Couplage Série

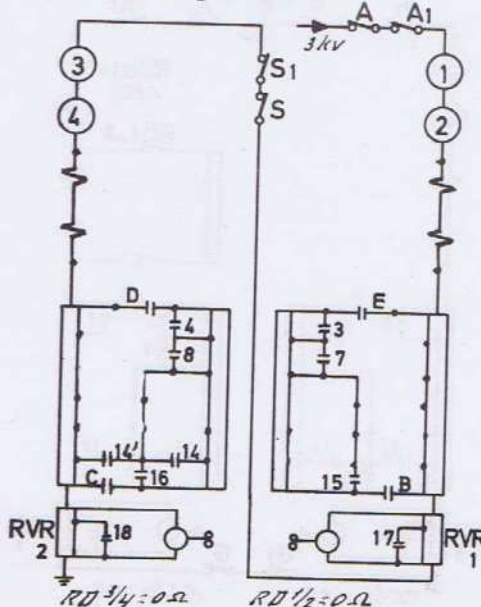


Couplage parallèle

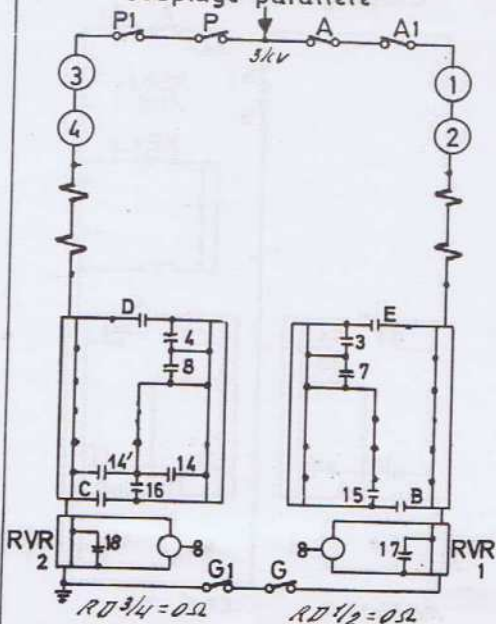


M 2 en 5 - JH en 28

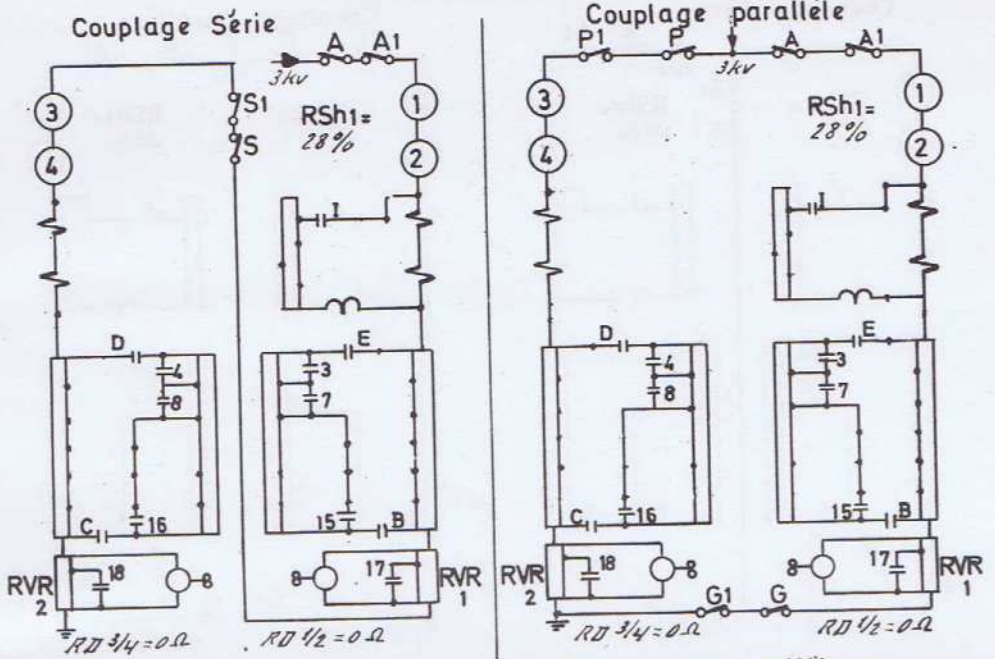
Couplage Série



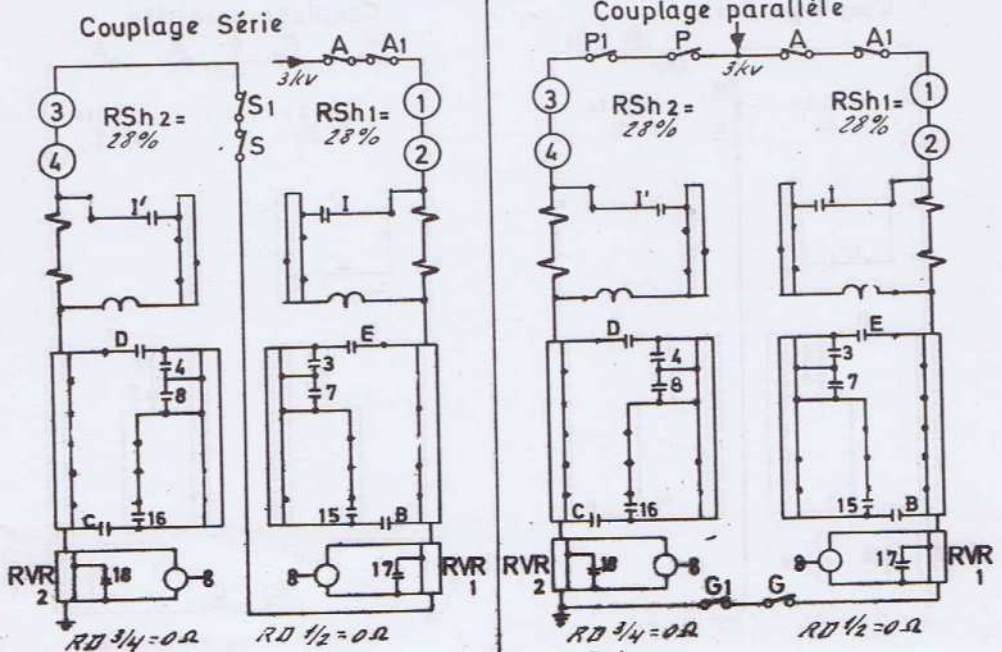
Couplage parallèle



M 2 en 5 - JH en 29

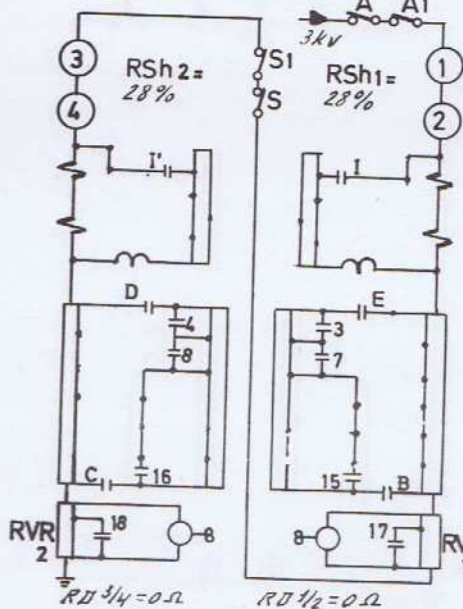


M 2 en 5 - JH en 30

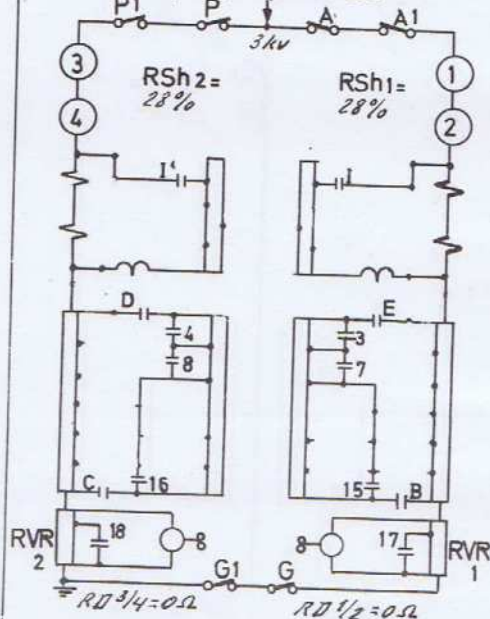


M 2 en 6 - JH en 31

Couplage Série

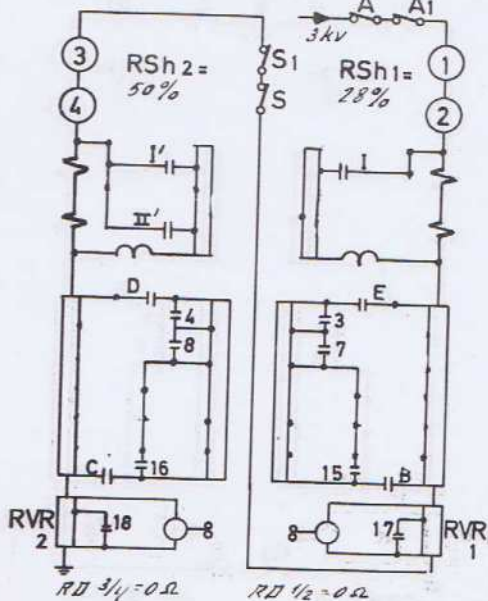


Couplage parallèle

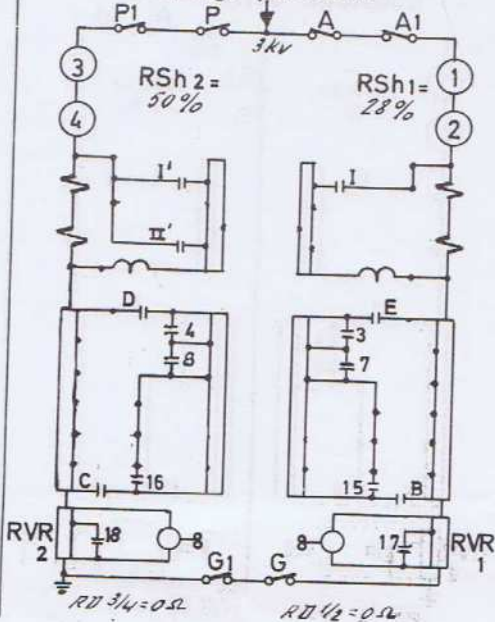


M 2 en 6 - JH en 32.

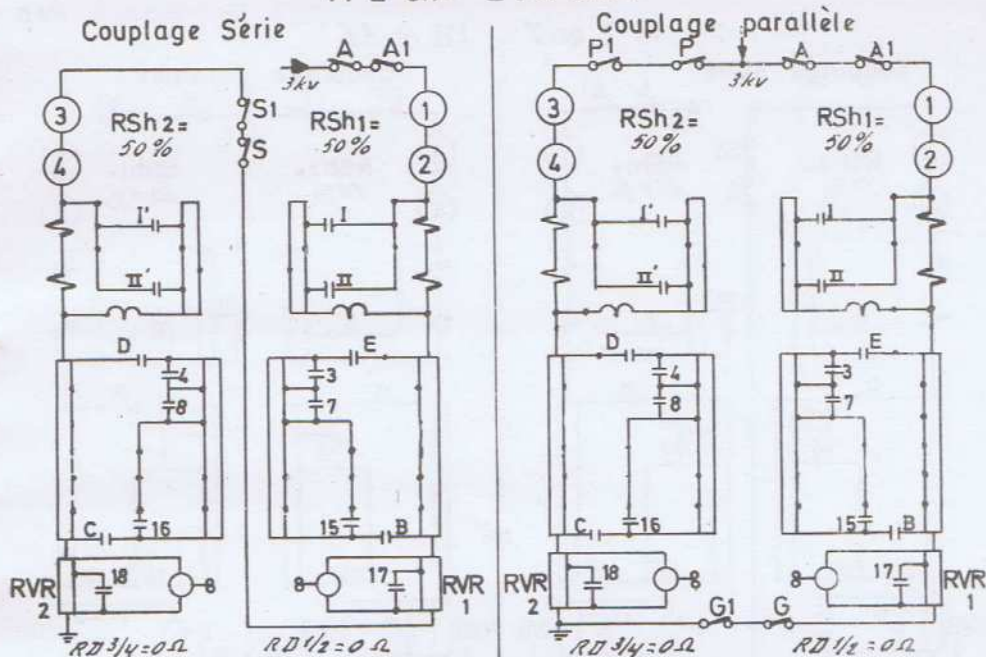
Couplage Série



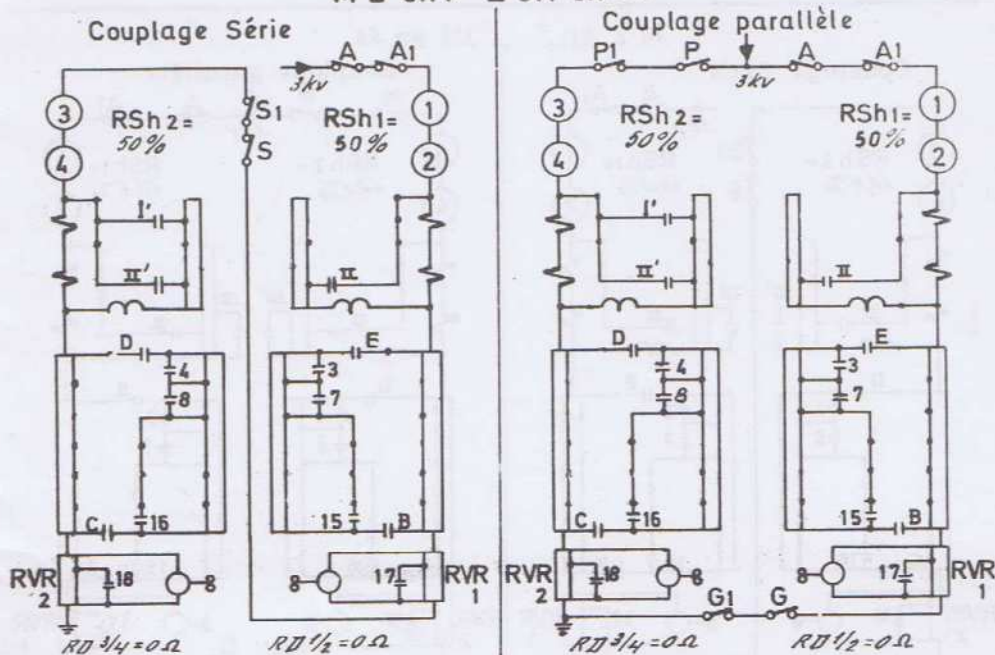
Couplage parallèle



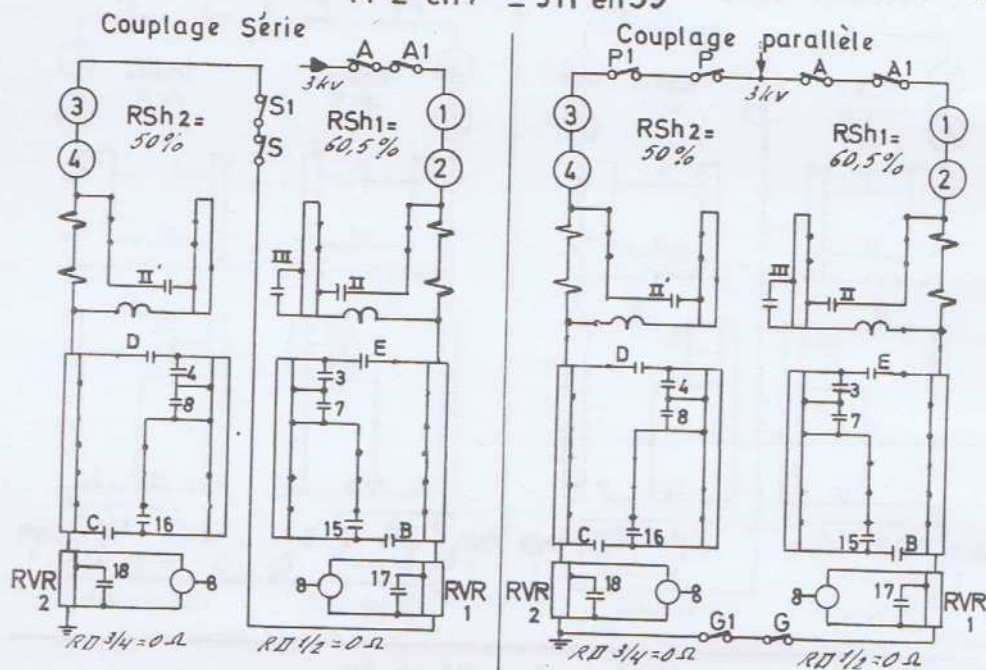
M 2 en 6 - JH en 33



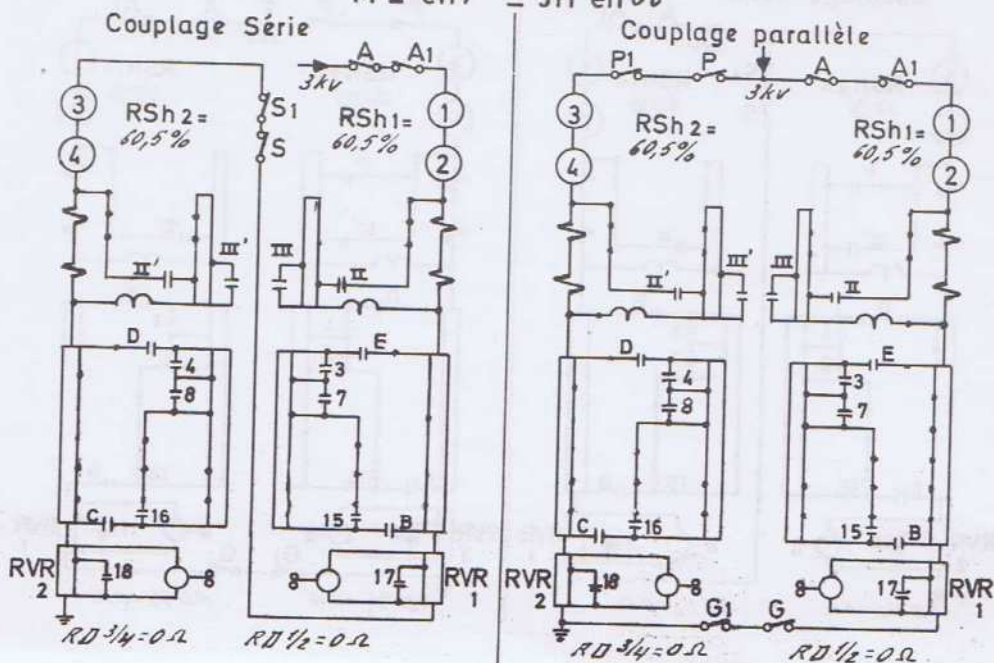
M 2 en 7 - JH en 34

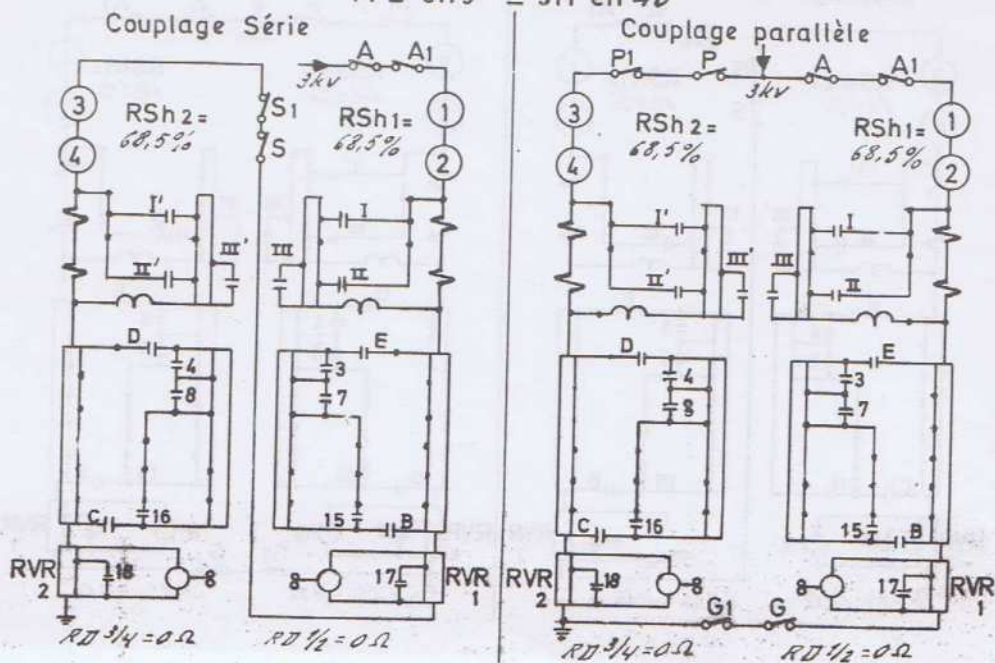
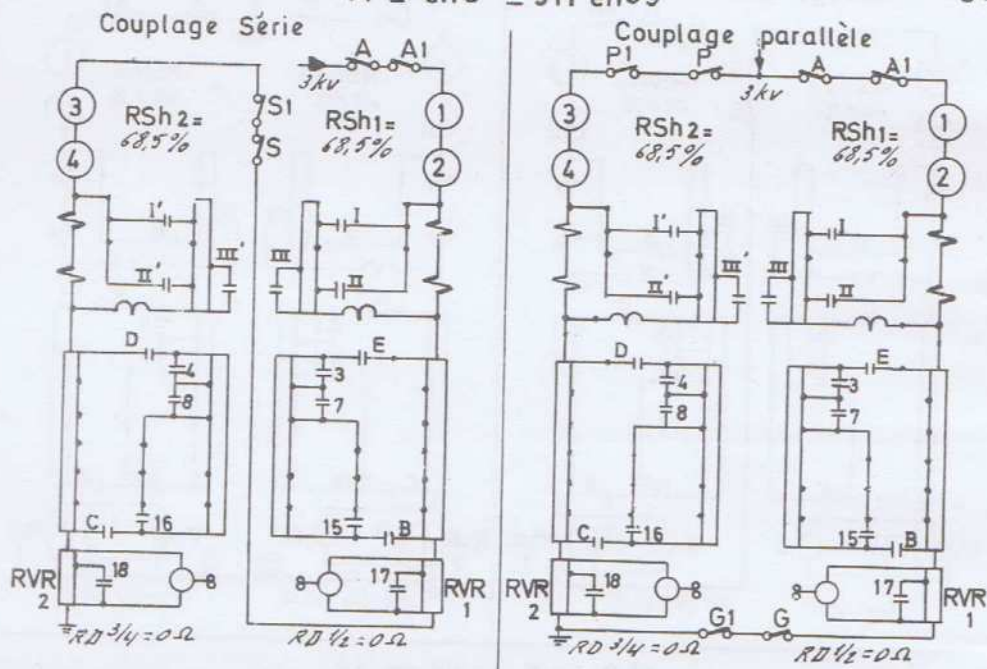


M 2 en 7 - JH en 35

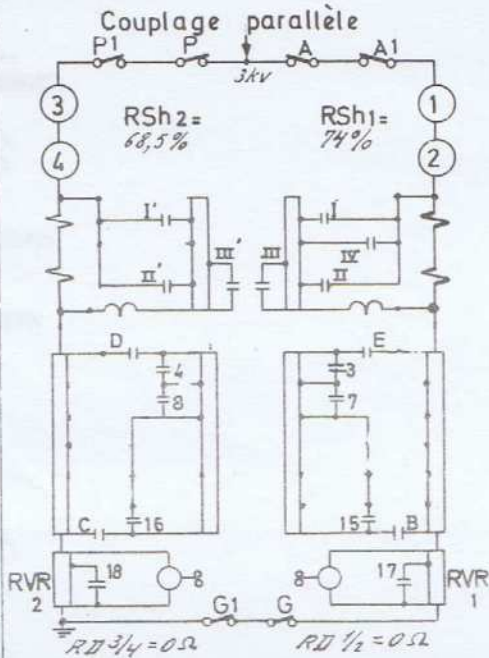
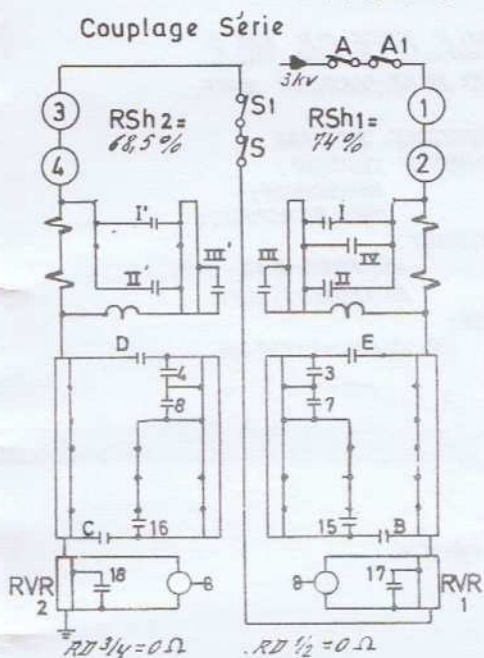


M 2 en 7 - JH en 36

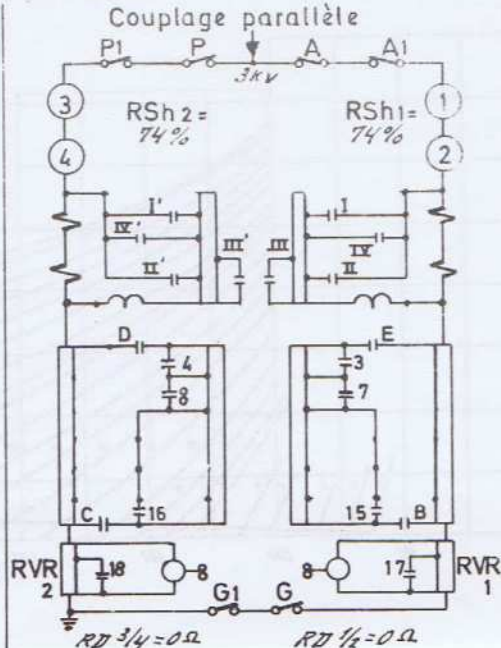
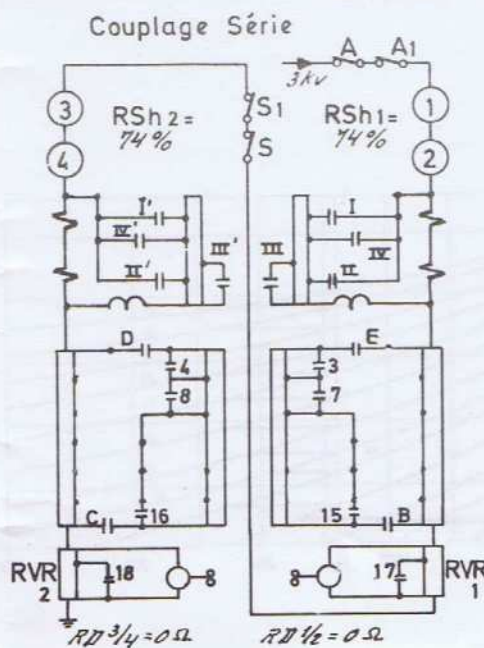




M 2 en 9 - JH en 41



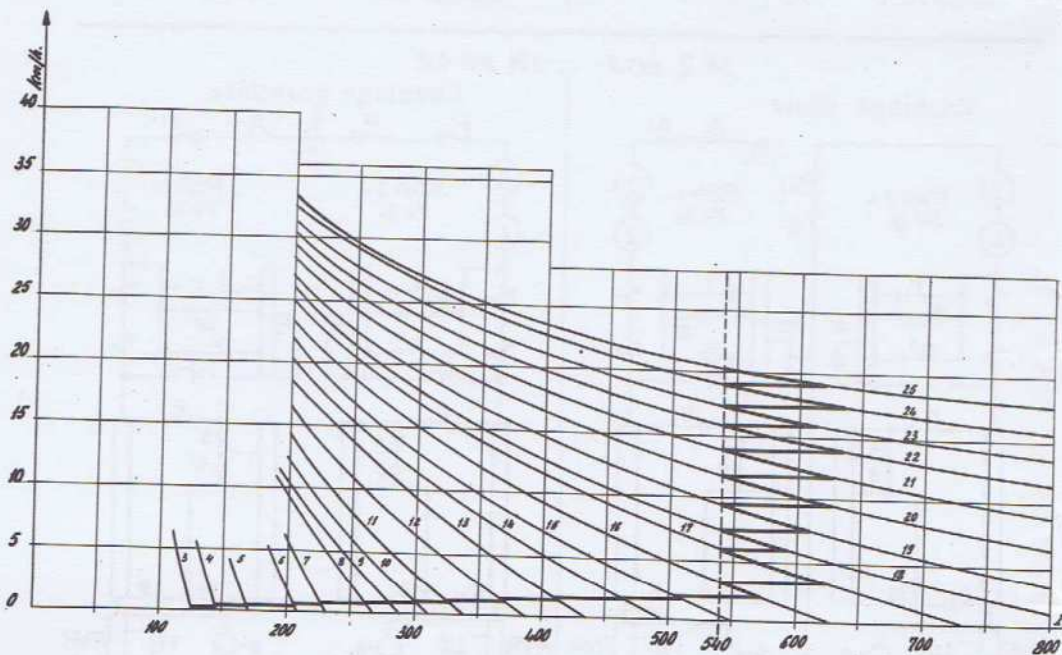
M 2 en 9 - JH en 42



HLE. TYPE BB. 126.2
COURBES DE DEMARRAGE SERIE.

MOTEURS: 2 ES. 508.
COURANT: CONTINU:
UNIHORAIRE:
MAX. DE REPRISE:
ENGRENAGES:
RAPPORT: 3,42
RENDEMENT: 0,97
ROUES:
MI-USEES ϕ 1110 mm.

Fig. 72



HLE. TYPE BB. 126.2

COURBES DE DEMARRAGE PARALLELE

MOTEUR : 2ES. 508

COURANT : CONTINU :

UNIHORAIRE :

MAX. DE REPRISE :

ENGRENAGES :

RAPPORT : 3,42

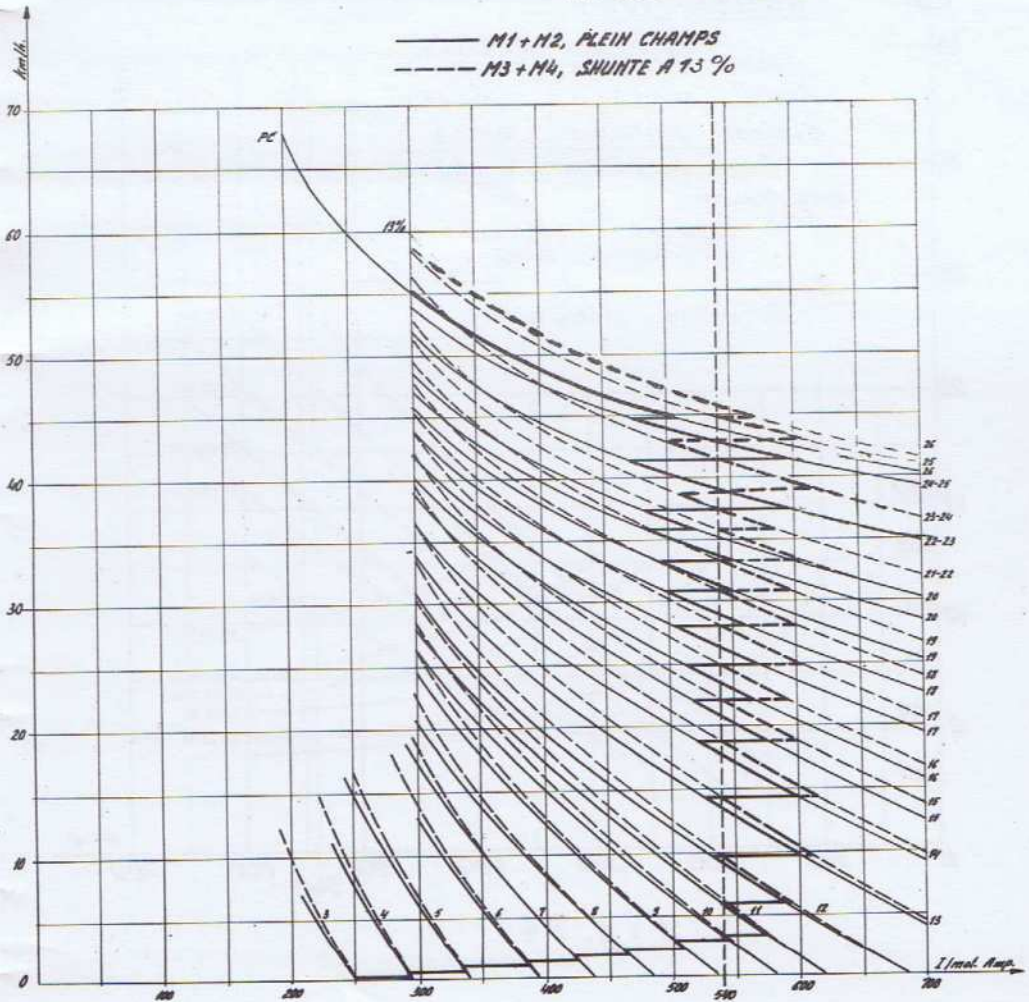
RENDEMENT : 0,97

ROUES :

M1-USEES ϕ 1110 mm.

Fig. 73

—— M1+M2, PLEIN CHAMPS
- - - M3+M4, SHUNTE A 13 %



HLE. TYPE BB. 126.

Courbes caractéristiques

Moteur : 2ES.508

Tension : 2x1500V

Régime continu : 400 A; 1520 pk; 885 tr./min.

Régime unihoraire : 420 A; 1600 pk; 860 tr./min.

Résistances :

	<u>à 20°C.</u>	<u>à 110°C.</u>
induit.	0,0593 Ω	0,080 Ω
P.auxil.	0,0196 Ω	0,0264 Ω
E.princip.	0,0438 Ω	0,059 Ω
Tot.	0,1227 Ω	0,1654 Ω

Engrenages

rapport : 3,42
rendement : 0,97

Roues

Mi-usées : ϕ 1110 mm.

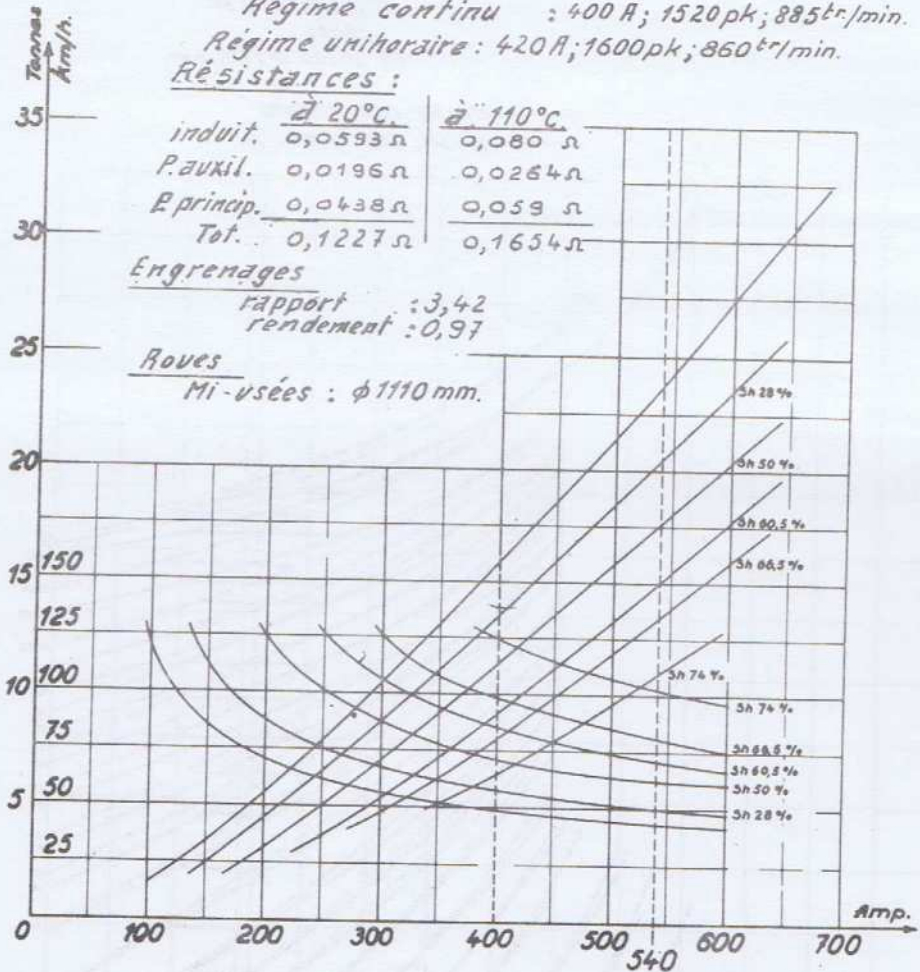


Fig. 74

HLE TYPE BB 126.

COURBE EFFORT/VITESSE

2 moteurs en service

Moteur: 2ES. 508

Engrenages:

rapport: 3,42

rendement: 0,97

Roues

Mi-usées ϕ 1110 mm.

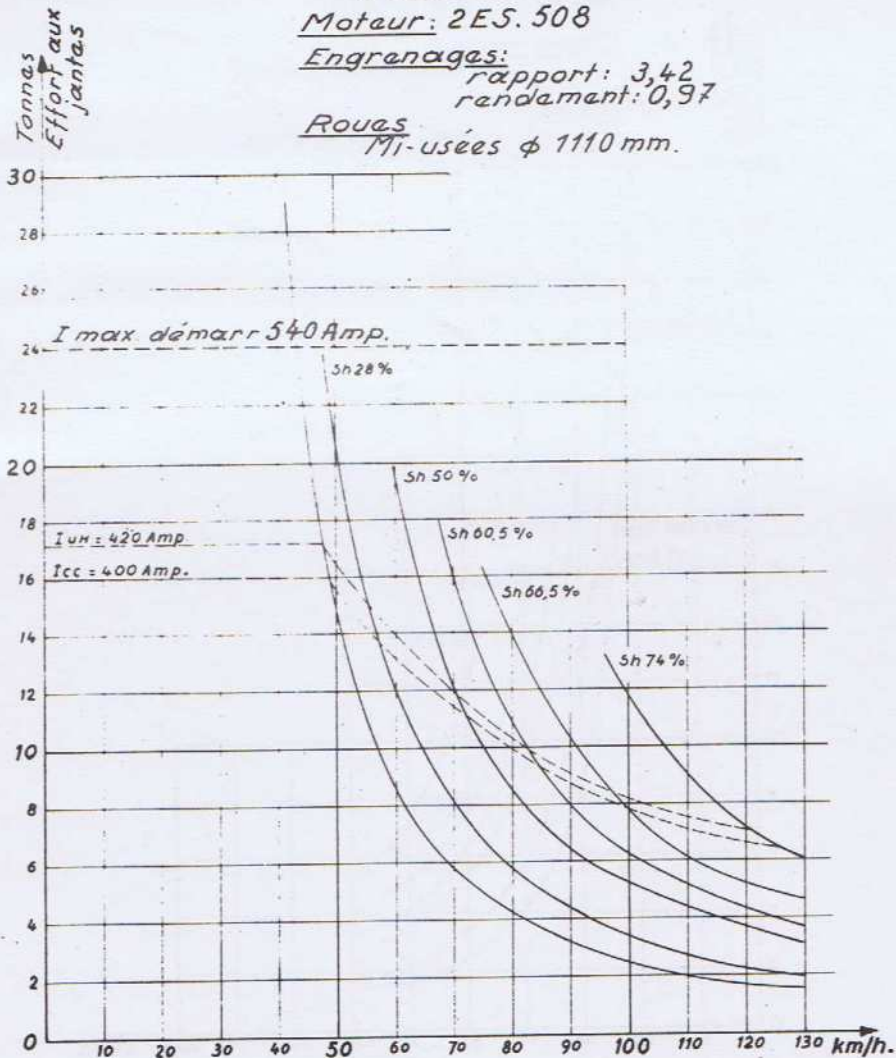


Fig. 75

HLE TYPE BB126.

COURBE EFFORT VITESSE

1 moteur en service

Moteur: 2 E5.508

Engrenages:

rapport: 3,42

rendement: 0,97

Roues

Mi-usées ϕ 1110 mm.

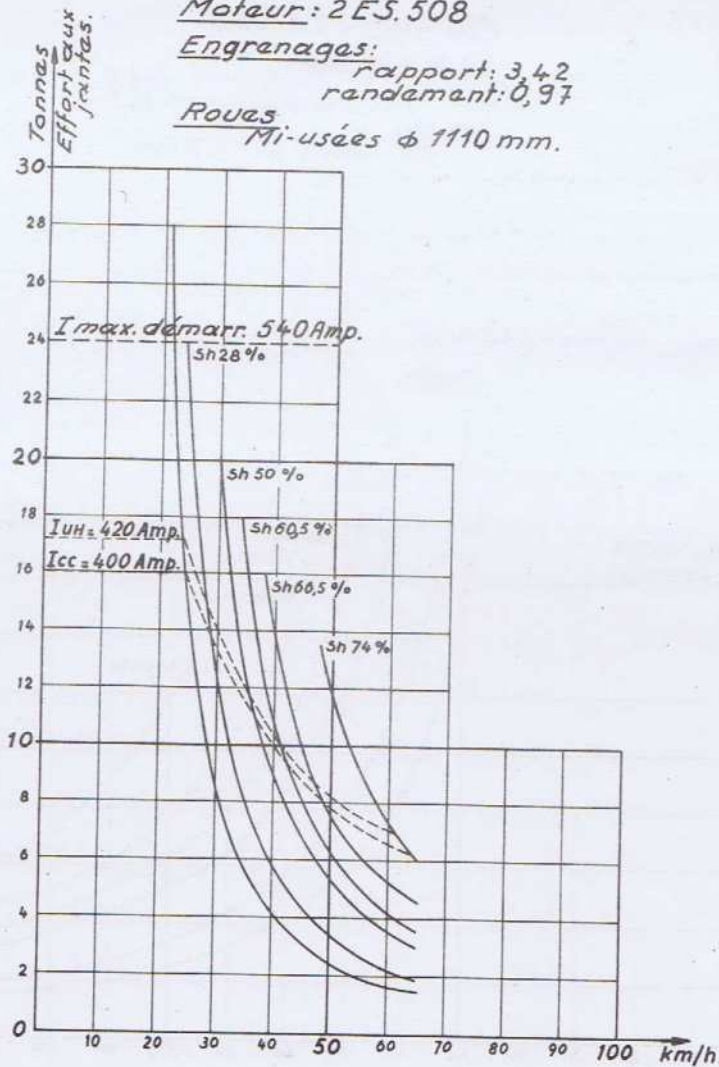


Fig 76

