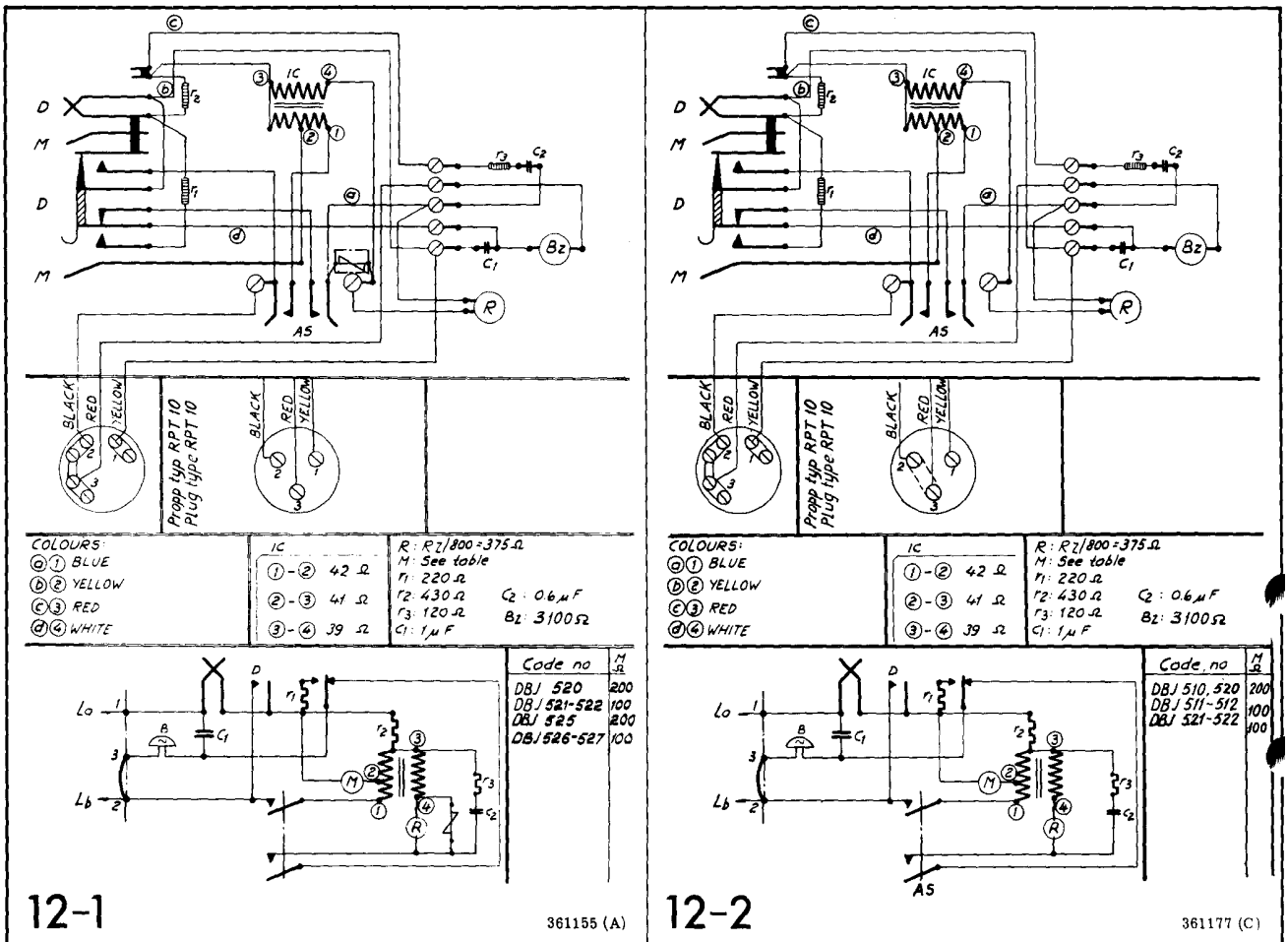
# 7. **DIAGRAMS**

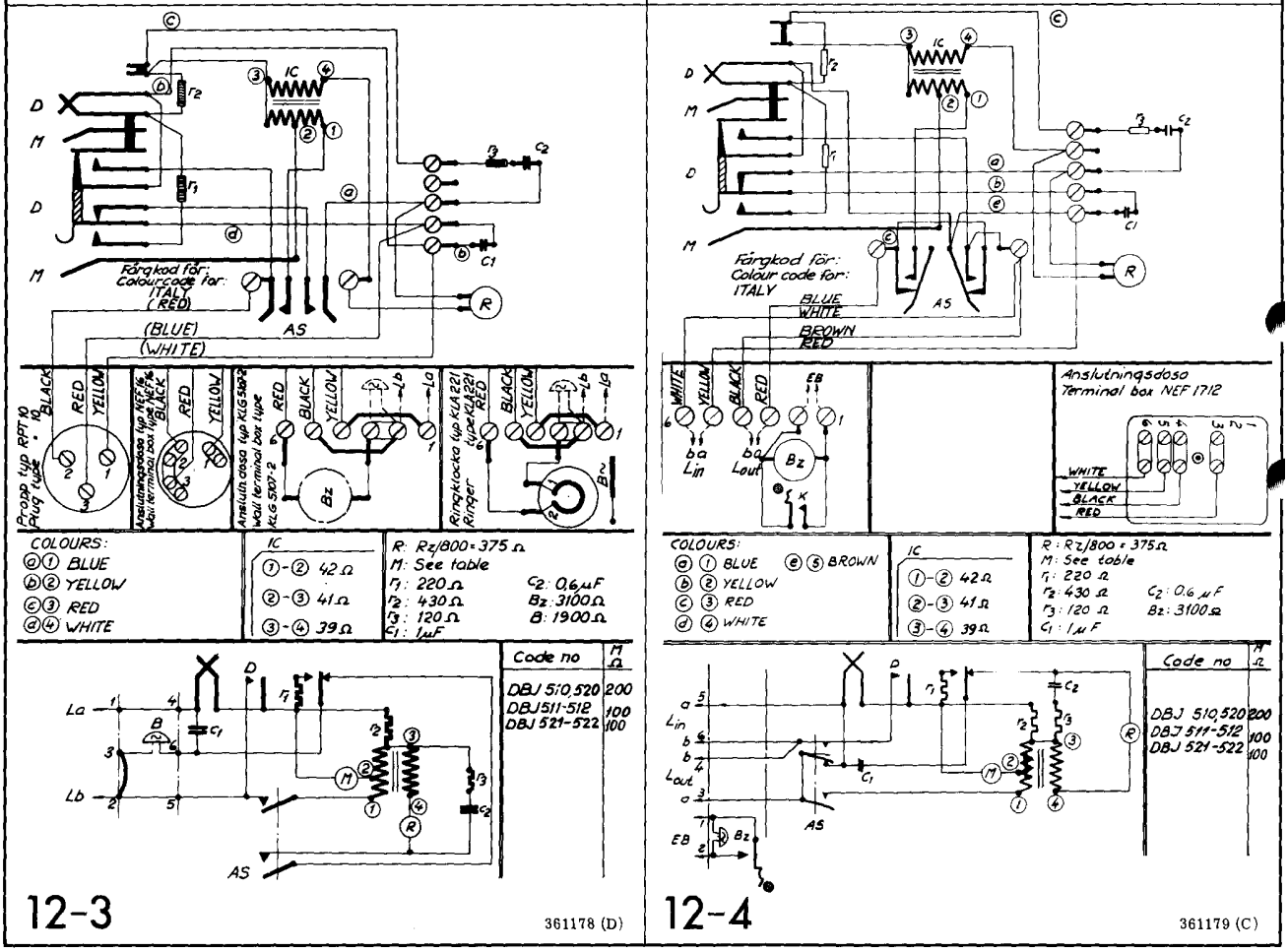
The circuit and connection diagrams can also be found in the spare parts register and spare parts list.

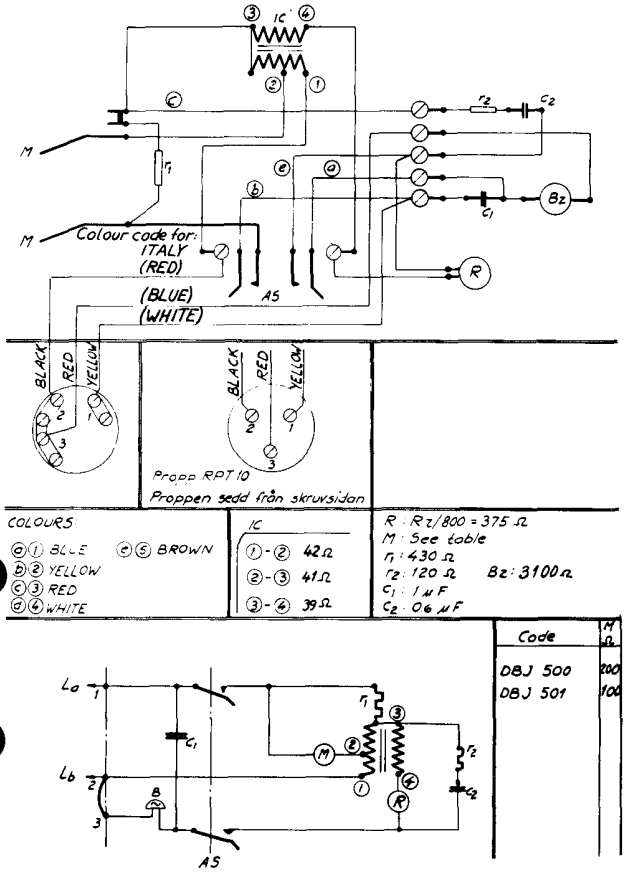
Example for selecting correct diagram:

Find the diagram for DBJ 52110

The spare parts register, column 12, gives the register figure 2 (12-2) against DBJ 52110. The spare parts list indicates diagram 361177 in column 12-2. The diagram can be found in subsequent sequence under the designation 12-2.

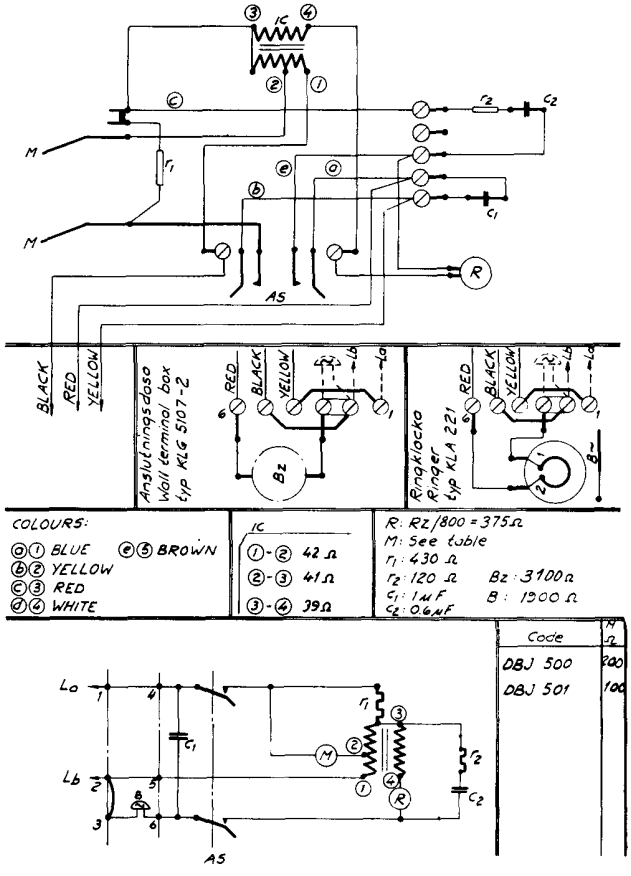

D
M
D
M
IC
r1
r2
r3
C1
C2
Bz
R
AS
BLACK
RED
YELLOW
Propp typ RPT 10
Plug type RPT 10
COLOURS:
ⓐ① BLUE
ⓑ② YELLOW
ⓒ③ RED
ⓓ④ WHITE
IC
①-② 42 Ω
②-③ 41 Ω
③-④ 39 Ω
R: Rz/800 = 375 Ω
M: See table
r1: 220 Ω
r2: 430 Ω
r3: 120 Ω
C1: 1 µF
C2: 0.6 µF
Bz: 3100 Ω
Code no
M Ω
DBJ 520 200
DBJ 521-522 100
DBJ 525 200
DBJ 526-527 100
La
Lb
B
12-1
361155 (A)
Code no
M Ω
DBJ 510, 520 200
DBJ 511-512 100
DBJ 521-522 100
12-2
361177 (C)


Färgkod för:
Colour code for:
ITALY
(RED)
(BLUE)
(WHITE)
BLUE
WHITE
BROWN
RED
Propp typ RPT 10
Plug type RPT 10
Anslutningsdosa typ NEF 1712
Wall terminal box type NEF 1712
Anslutn dosa typ KLG 5307:2
Wall terminal box type KLG 5307:2
Ringklocka typ KLA 221
type KLA 221
Ringer
Anslutningsdosa
Terminal box NEF 1712
WHITE
YELLOW
BLACK
RED
Lin
Lout
EB
COLOURS:
ⓐ① BLUE
ⓑ② YELLOW
ⓒ③ RED
ⓓ④ WHITE
ⓔ⑤ BROWN
IC
①-② 42 Ω
②-③ 41 Ω
③-④ 39 Ω
R: Rz/800 = 375 Ω
M: See table
r1: 220 Ω
r2: 430 Ω
r3: 120 Ω
C1: 1 µF
C2: 0.6 µF
Bz: 3100 Ω
B: 1900 Ω
Code no
M Ω
DBJ 510,520 200
DBJ 511-512 100
DBJ 521-522 100
12-3
361178 (D)
12-4
361179 (C)



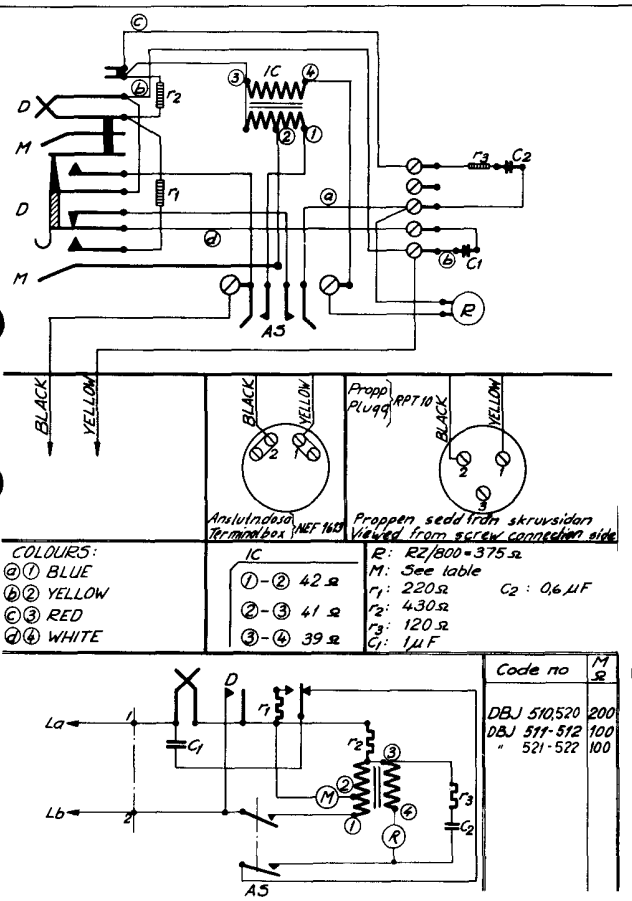

12-5

361425 (C)



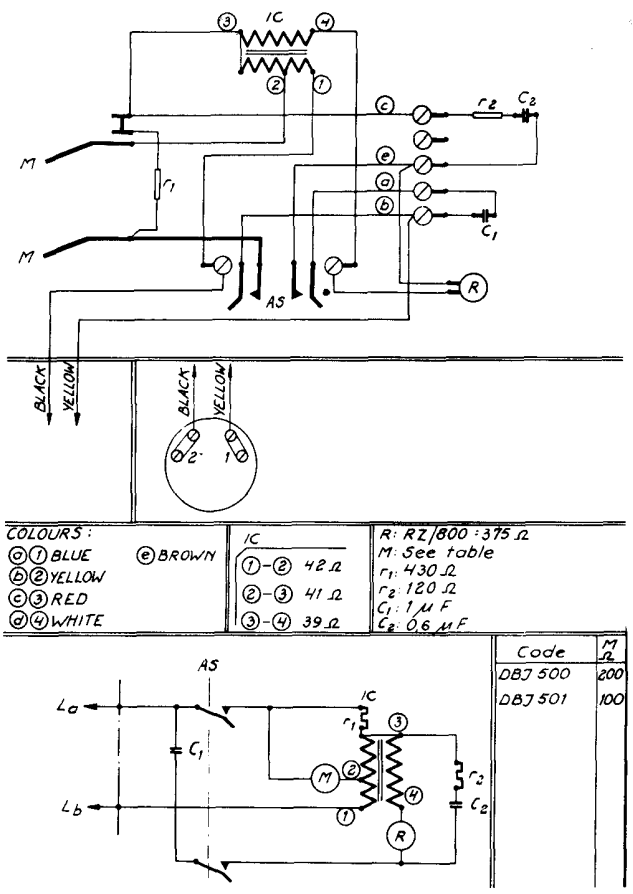

12-6

361426 (B)



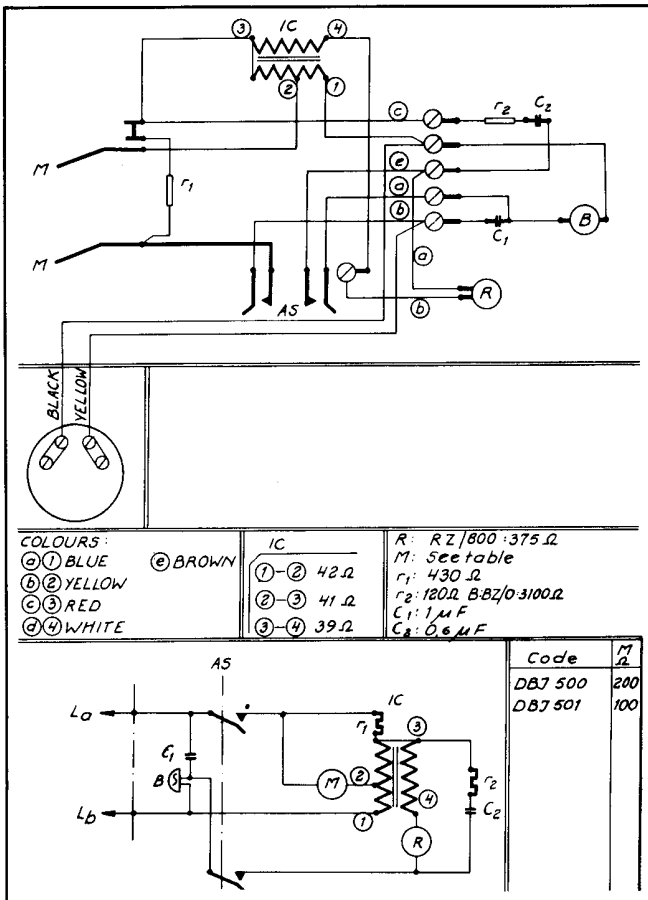

12-7

364505 (A)




12-8

364524




COLOURS:
ⓐ① BLUE ⓔ BROWN
ⓑ② YELLOW
ⓒ③ RED
ⓓ④ WHITE

| IC | |
|---|---|
| ①-② | 42 Ω |
| ②-③ | 41 Ω |
| ③-④ | 39 Ω |

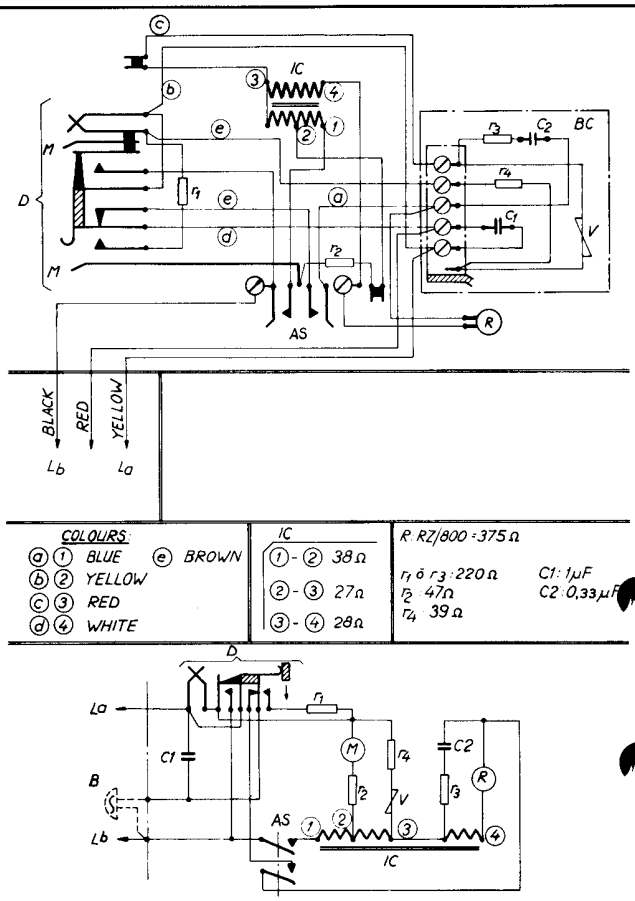
R: RZ/800 · 375 Ω
M: See table
$r_1$: 430 Ω
$r_2$: 120 Ω B:BZ/0·3100 Ω
$C_1$: 1 µF
$C_2$: 0,6 µF




| Code | M Ω |
|---|---|
| DBJ 500 | 200 |
| DBJ 501 | 100 |

# 12-9

364525 (A)




COLOURS:
ⓐ① BLUE ⓔ BROWN
ⓑ② YELLOW
ⓒ③ RED
ⓓ④ WHITE

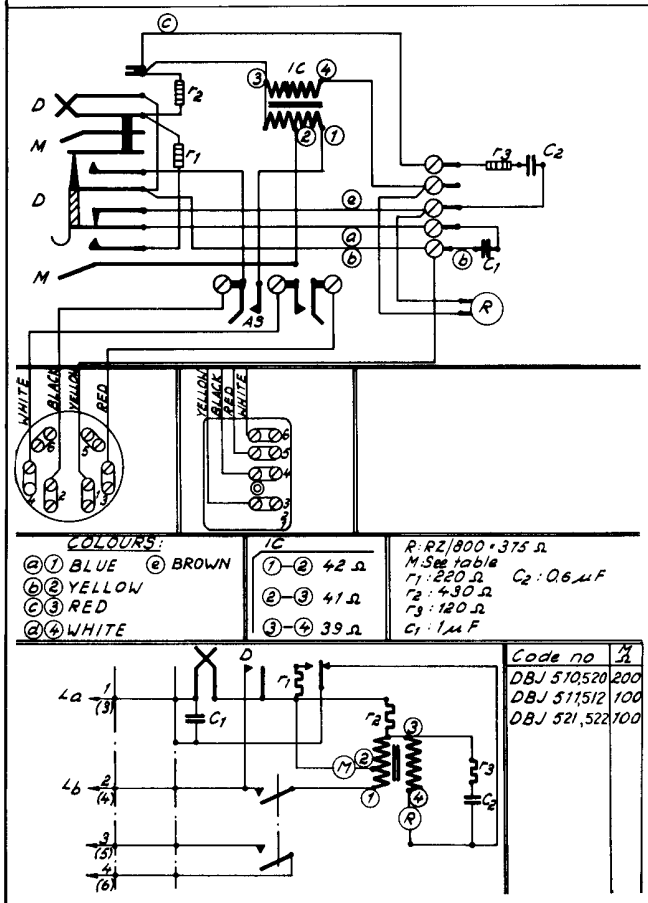
| IC | |
|---|---|
| ①-② | 38 Ω |
| ②-③ | 27 Ω |
| ③-④ | 28 Ω |

R: RZ/800 · 375 Ω
$r_1$ ö $r_3$: 220 Ω
$r_2$: 47 Ω
$r_4$: 39 Ω
C1: 1 µF
C2: 0,33 µF




# 12-10

364535 (A)




COLOURS:
ⓐ① BLUE ⓔ BROWN
ⓑ② YELLOW
ⓒ③ RED
ⓓ④ WHITE

| IC | |
|---|---|
| ①-② | 42 Ω |
| ②-③ | 41 Ω |
| ③-④ | 39 Ω |

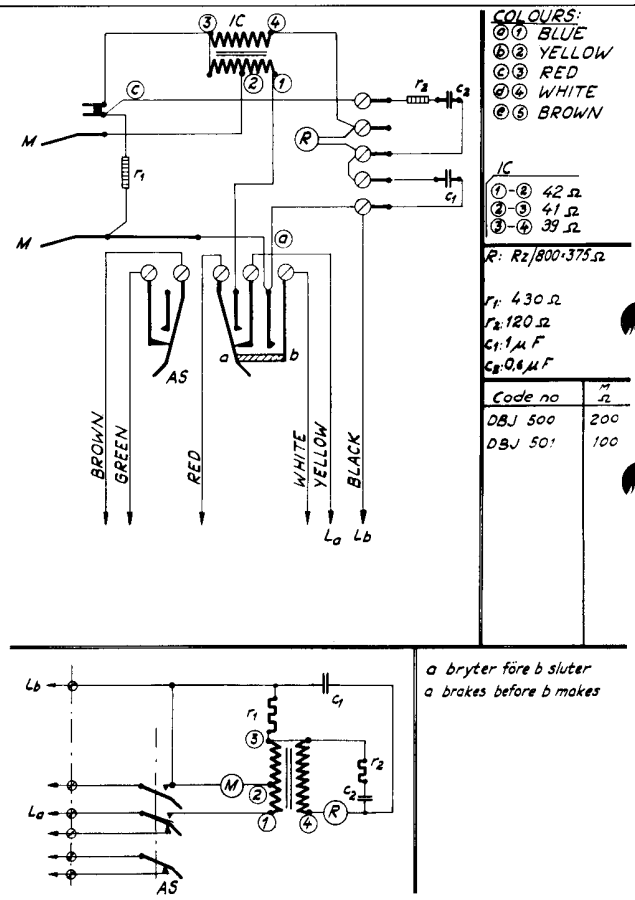
R: RZ/800 · 375 Ω
M: See table
$r_1$: 220 Ω
$r_2$: 430 Ω
$r_3$: 120 Ω
$C_1$: 1 µF
$C_2$: 0,6 µF




| Code no | M Ω |
|---|---|
| DBJ 510,520 | 200 |
| DBJ 511,512 | 100 |
| DBJ 521,522 | 100 |

# 12-11

364543 (A)




COLOURS:
ⓐ① BLUE
ⓑ② YELLOW
ⓒ③ RED
ⓓ④ WHITE
ⓔ⑤ BROWN

| IC | |
|---|---|
| ①-② | 42 Ω |
| ②-③ | 41 Ω |
| ③-④ | 39 Ω |

R: Rz/800 · 375 Ω
$r_1$: 430 Ω
$r_2$: 120 Ω
$C_1$: 1 µF
$C_2$: 0,6 µF

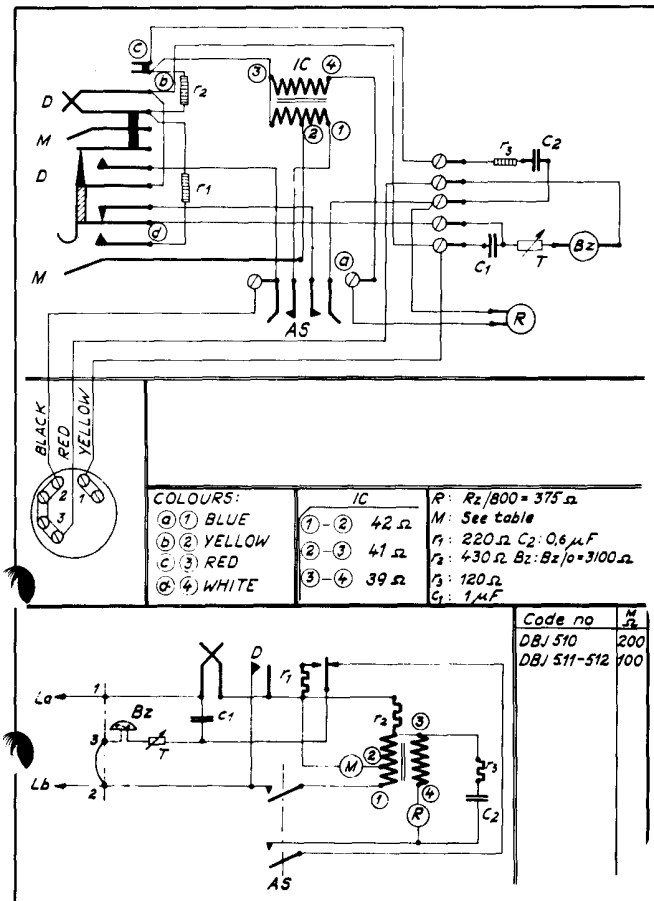
| Code no | M Ω |
|---|---|
| DBJ 500 | 200 |
| DBJ 501 | 100 |




a bryter före b sluter
a brakes before b makes

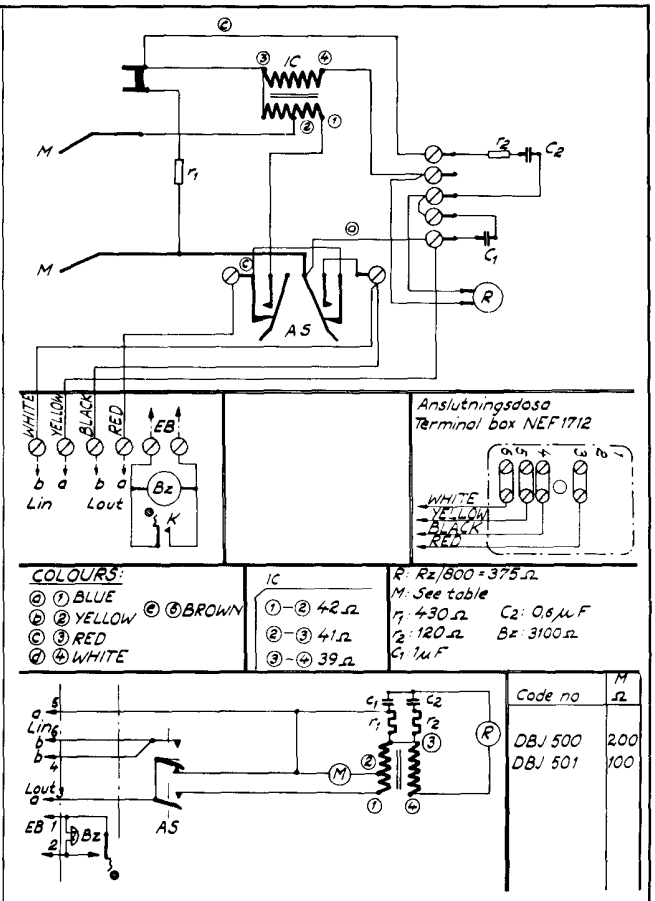
# 12-12

364547 (B)



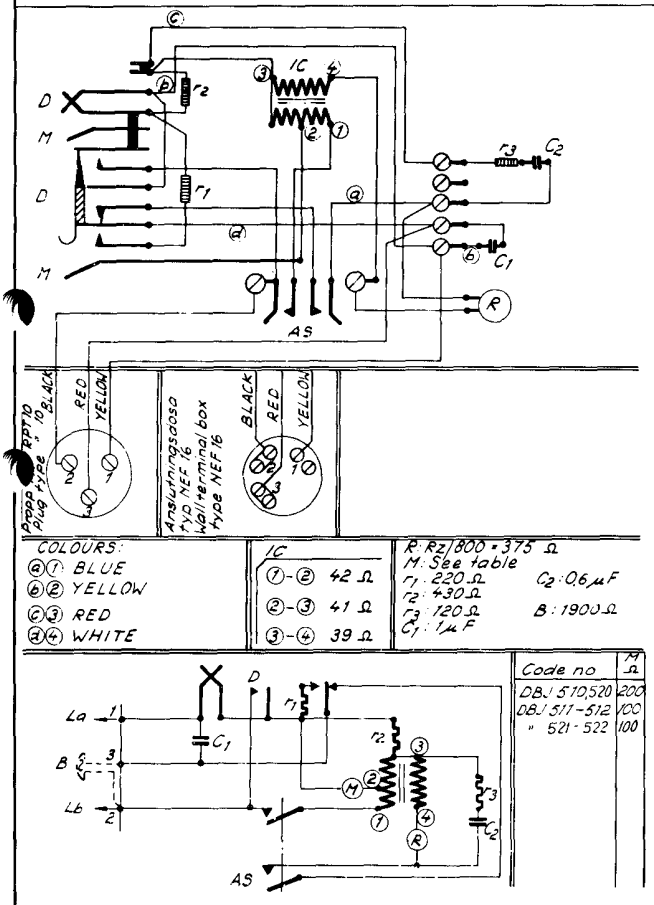

12-13

364549



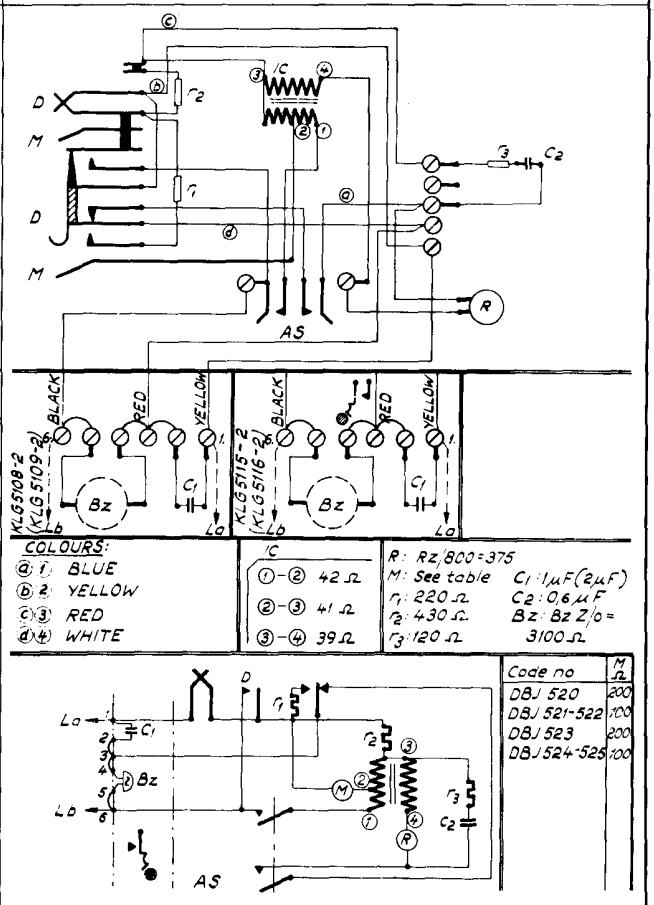

12-14

364552 (A)



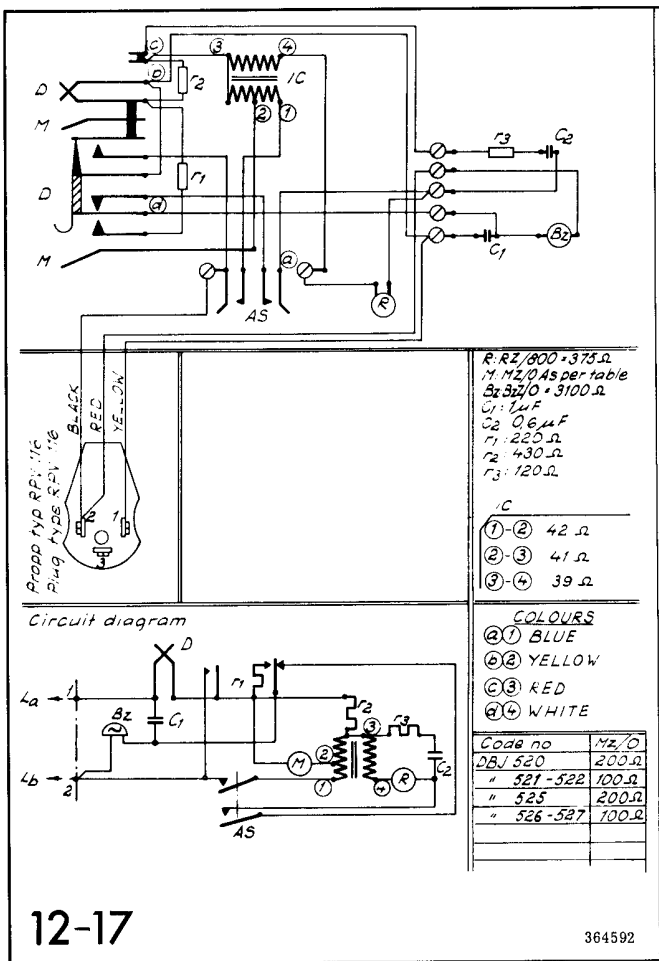

12-15

364576

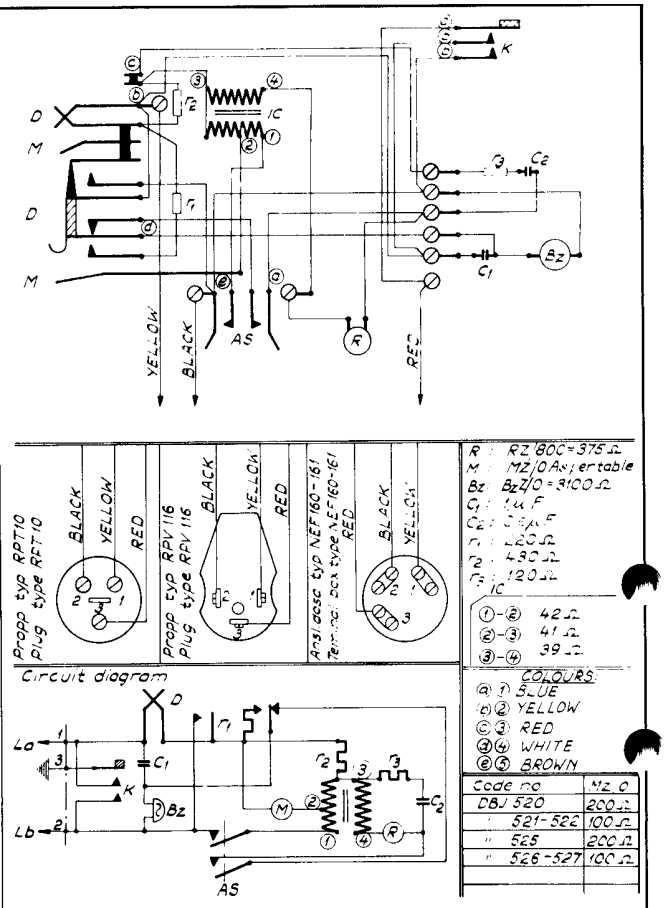



12-16

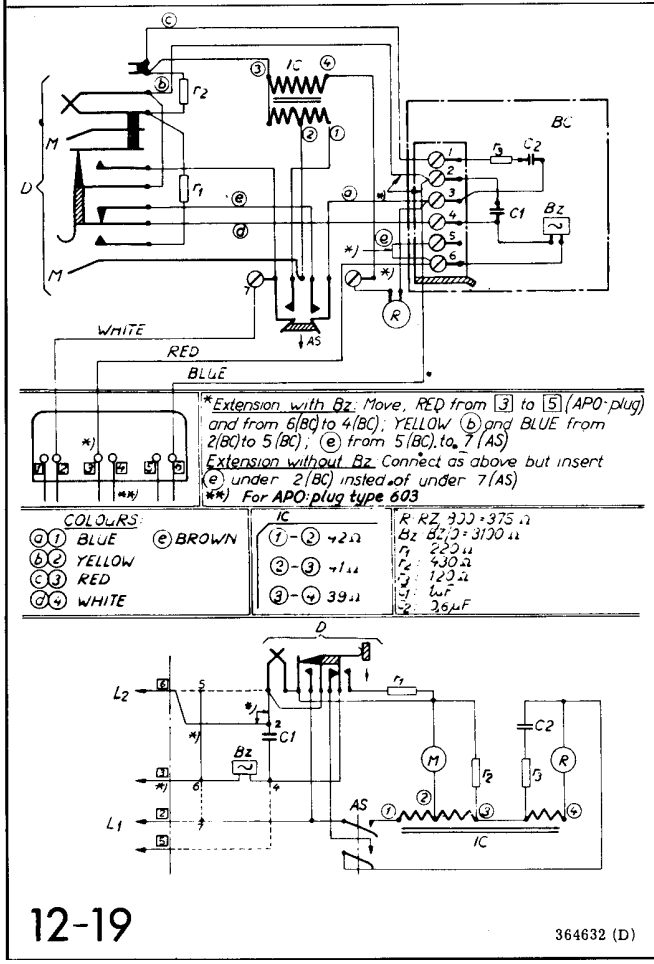
364578 (A)



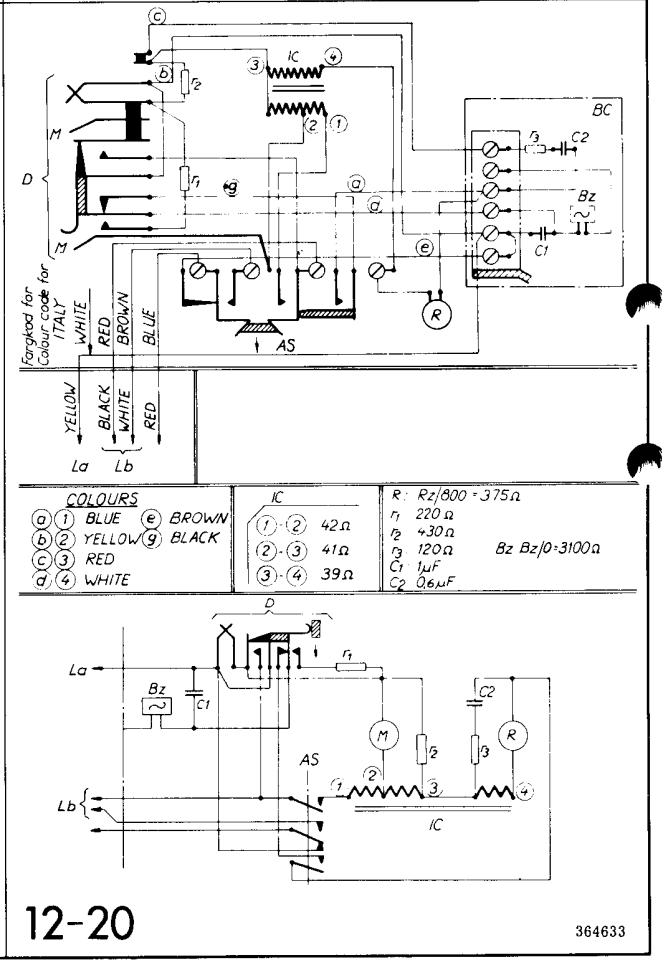

12-17 364592



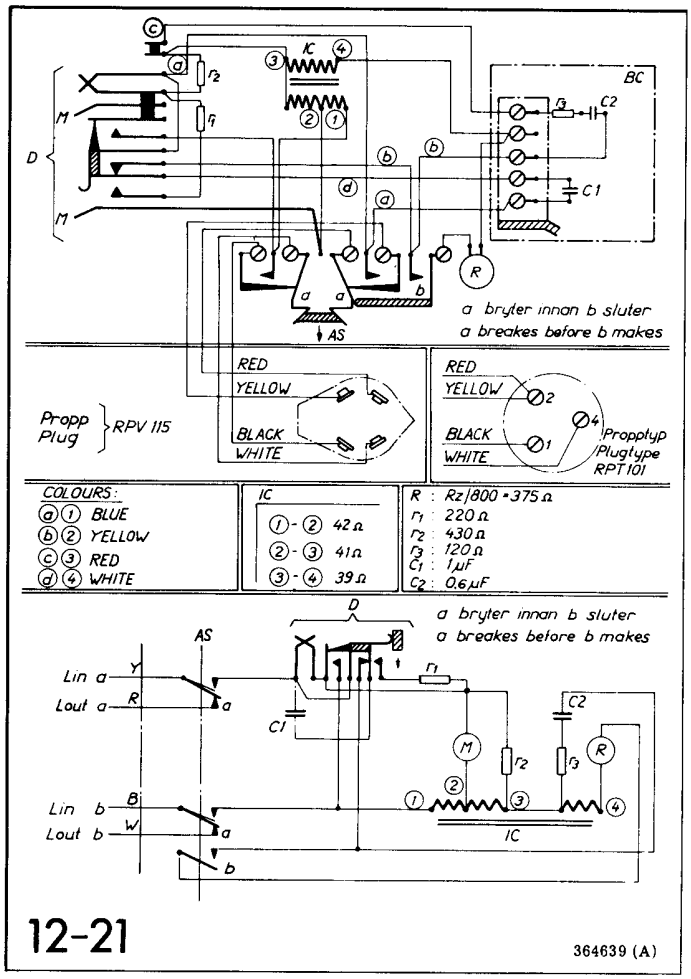

12-18 364593




12-19 364632 (D)




12-20 364633


IC
BC
C2
C1
M
D
R
AS
a bryter innan b sluter
a breakes before b makes
RED
YELLOW
BLACK
WHITE
Propp
Plug
RPV 115
Proppstyp
/Plugtype
RPT101
COLOURS:
① BLUE
② YELLOW
③ RED
④ WHITE
1 - 2 42 Ω
2 - 3 41 Ω
3 - 4 39 Ω
R : Rz/800 = 375 Ω
r1 : 220 Ω
r2 : 430 Ω
r3 : 120 Ω
C1 : 1 µF
C2 : 0,6 µF
Lin a
Lout a
Lin b
Lout b
Y
R
Bl
W
12-21
364639 (A)

# 8. ELECTRICAL COMPONENT DATA

## 8.1 Resistors

| Item No. | Resistance | Tolerance % | Rating W at 40 °C |
|---|---|---|---|
| REP 40333/22 | 220 | ±10 | 0.5 |
| REP 40333/43 | 430 | ±10 | 0.5 |
| REP 40342/39 | 39 | ± 5 | 0.5 |
| REP 40342/47 | 47 | ± 5 | 0.5 |
| REP 40343/12 | 120 | ± 5 | 0.5 |
| REP 40343/22 | 220 | ± 5 | 0.5 |

## 8.2 Capacitors

Rated voltage: 250 V
Test voltage: 275 V for 1 min.

| Item No. | Capacitance µF | Tolerance % | Width mm | Height mm | Length mm |
|---|---|---|---|---|---|
| RJK 36136/33 | 0.33 | ±10 | 7.8 | 14.0 | 19.5 |
| RJK 36136/6 | 0.6 | ±10 | 8.5 | 15.0 | 24.5 |
| RJK 36137/1 | 1.0 | ±10 | 11.5 | 16.5 | 20.3 |

## 8.3 Transmitter insets

| Item No. | Resistance | Tolerance % | Carbon item No. |
|---|---|---|---|
| RLA 20410 | 100 | ± 15 | RLY 1442 |
| RLA 20420 | 200 | ± 15 | RLY 1443 |

## 8.4 Varistors

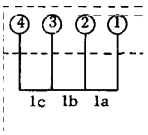
| Item No. | Continuous rating mA | Test voltage (V) at current 1 mA | 10 mA | 30 mA | 50 mA |
|---|---|---|---|---|---|
| REY 13101 | 30 | - | 0.5-0.6 | - | 1.5 |
| REY 20101 | 30 | 3.0-4.1 | 3.9-5.0 | 4.3-5.1 | - |

## 8.5 Thermistors

(Resistor with negative coefficient)

| Item No. | Resistance at +20°C | Derating %/C° at +20°C | Max. allowed dissipation mW | Max. allowed current mA |
|---|---|---|---|---|
| REZ 10102 | 100 ±20 KΩ | - 4 | 200 | 28 |

## 8.6 Transformers

| Item No. | Winding diagram | Coil section | Winding tap | Turns | Resistance Ω | Inductance between 1-2 at 400 Hz |
|---|---|---|---|---|---|---|
| | | 1a | 1-2 | 600 | 42 | |
| REK 17104/1 (wire Ø 0.12 mm) |   | 1b | 2-3 | 530 | 41 | ca 1.5H |
| | | 1c | 3-4 | 440 | 39 | |
| | | 1a | 1-2 | 720 | 38 | |
| REK 17107/1 (wire Ø 0.13 mm) | | 1b | 2-3 | 360 | 28 | ca 1.4H |
| | | 1c | 3-4 | 360 | 27 | |

## 8.7 Transmission values

| System | Transmitter inset | Receiver inset | SRE/0 db | MRE/0 db | MaD/1000 db |
|---|---|---|---|---|---|
| 24 V, 2x400 0 | RLA 20420 | RLD 5204 | +4.8 | -5.0 | 4.0 |
| 48 V, 2x400 S2 | " 20410 | " 5204 | +2.7 | -5.5 | 3.7 |
| 48 V. 2x250 Q | " 20410 | " 5204 | +1.7 | -5.5 | 4.2 |

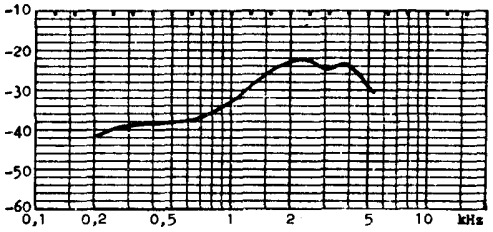
The above reference equivalents apply with a factory tolerance of ± 2 db.

SRE/0 sending reference equivalent against NOSFER without distortion, zero ohm local line.

MRE/0 receiving reference equivalent against NOSFER withoutdistortion, zero ohm local line

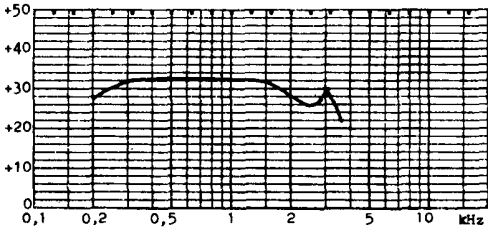
MaD/1000 transmitter output loss due to reduced feeding, 1000 ohms local line.

db **rel. 1** V per dyn/cm²




Transmitting frequency response. Voltage output across line terminals with 600 ohms load. Transmitter in constant undisturbed sound field 10 dynes/cm².

db rel. 1 dyn/cm² per V




Receiving frequency response. Sound output at constant input voltage in series with 600 ohms.

# 9. SIGNAL DEVICES AND SPARE PARTS DATA

## Wall terminal box for buzzer or bell

| Item No. | Symbol | Buzzer or bell mech. | Capacitor Item No. | Cap value | R | 25 Hz Rz | 25 Hz E min | 50 Ilz Rz | 50 Ilz E min | Case Item No. | Base plate Item No. | Switch Item No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KLA 22102 | | KLA 16002 | - | - | 1.900 Ω | 4.500 Ω | 15V | 8.000 Ω | 30V | 361079/3 | 361073/4 | - |
| KLA 22122 | | KLA 16022 | - | - | | | | | | 36107i/ 2 | 361073/2 | - |
| KLG 5107-2 | | KLG 52001 | - | - | | | | | | 360141/9 | 360140/3 | - |
| KLG 5108-2 | | KLG 52001 | RJK 361137/1 | 1 µF | 3 100 Ω | 5 600 Ω | 22 V | 1 700 Ω | 27 V | 360141/9 | 360140/3 | - |
| KLG 5109-2 | | KLG 52001 | RJK 361137/2 | 21jF | | | | | | 360141/9 | 360140/3 | - |
| KLG 5113-2 | | KLG 52001 | | | | | | | | 360141/2/9 | 360140/2 | RMF 3032 |
| KLG 5115-2 | | KLG 52001 | RJK 361137/1 | 1 µF | | | | | | 360141/2/9 | 360140/2 | RMF 3032 |

## Buzzer

| Item No. | Coil Item No. | Turns n. (Wire Ø 0.05 mm) | Max. rating | 800 Hz Rz |
|---|---|---|---|---|
| KLG 52001 | RCM 76101 | 10.000 | 90V- | 20. 500 Ω |