

Netzröhre für GW-Heizung
indirekt geheizt
Serienspeisung
DC-AC-heating
indirectly heated
connected in series

TELEFUNKEN

PL 95

Endpentode
Power Pentode

I_f 300 mA
 U_f ca. 4,5 V

Normierte Anheizzeit · Normalized heater warm-up time

Meßwerte · Measuring values

U_a	250	V
U_{g2}	250	V
U_{g1}	-9	V
I_a	24	mA
I_{g2}	4,5	mA
S	5	mA/V
R_i	80	k Ω
$\mu_{g2/g1}$	17	

Betriebswerte · Typical operation

Eintakt-A-Betrieb · Class A-amplifier

U_a	200	250	V
U_{g2}	200	250	V
R_k	230	320	Ω
I_a	23	24	mA
I_{g2}	4,2	4,5	mA
R_a	8	10	k Ω
$U_{g1\text{ eff}} (N)$	4,5	5	V
$N (12 \%)$	2,3	3	W
$U_{g1\text{ eff}} (50\text{ mW})$	0,5	0,5	V

2 Röhren in Gegentakt-AB-Betrieb

2 tubes push-pull, class AB

U_a	200	250	V
U_{g2}	200	250	V
R_k	360 *)	360 *)	Ω
I_{ao}	2x17,5	2x22	mA
$I_a\text{ ausgest.}$	2x20	2x26	mA
I_{g2o}	2x3,2	2x4,2	mA
$I_{g2\text{ ausgest.}}$	2x5,2	2x7,5	mA
R_{aa}	10	10	k Ω
$U_{g1\text{ eff}} (N)$	7 *)	9 *)	V
N	4,1	7	W
k	4,5	5	%
$U_{g1\text{ eff}} (50\text{ mW})$	0,5 *)	0,5 *)	V

2 Röhren in Gegentakt-B-Betrieb

2 tubes push-pull, class B

U_a	200	250	V
U_{g2}	200	250	V
U_{g1}	-10	-13	V
I_{ao}	2x7	2x8	mA
$I_a\text{ ausgest.}$	2x19	2x24	mA
I_{g2o}	2x1,2	2x1,2	mA
$I_{g2\text{ ausgest.}}$	2x5	2x7,2	mA
R_{aa}	10	10	k Ω
$U_{g1\text{ eff}} (N)$	7 *)	9 *)	V
N	4	6,5	W
k	3,5	3,5	%
$U_{g1\text{ eff}} (50\text{ mW})$	0,7 *)	0,7 *)	V

*) pro Röhre · each tube



Betriebswerte · Typical operation
Nennwert-Grenzdaten · Design centre ratings

2 Röhren in Gegentakt-AB-Betrieb

R_k gemeinsam

2 tubes push-pull, class AB

U _a	250	V
U _{g2}	250	V
R _k	220	Ω
I _{ao}	2 × 19	mA
I _a	2 × 24	mA
I _{g2o}	2 × 3,2	mA
I _{g2}	2 × 7,2	mA
R _{aa}	10	kΩ
U _{g1 eff} (N) ¹⁾	9,5	V
N	6	W
k	5	%

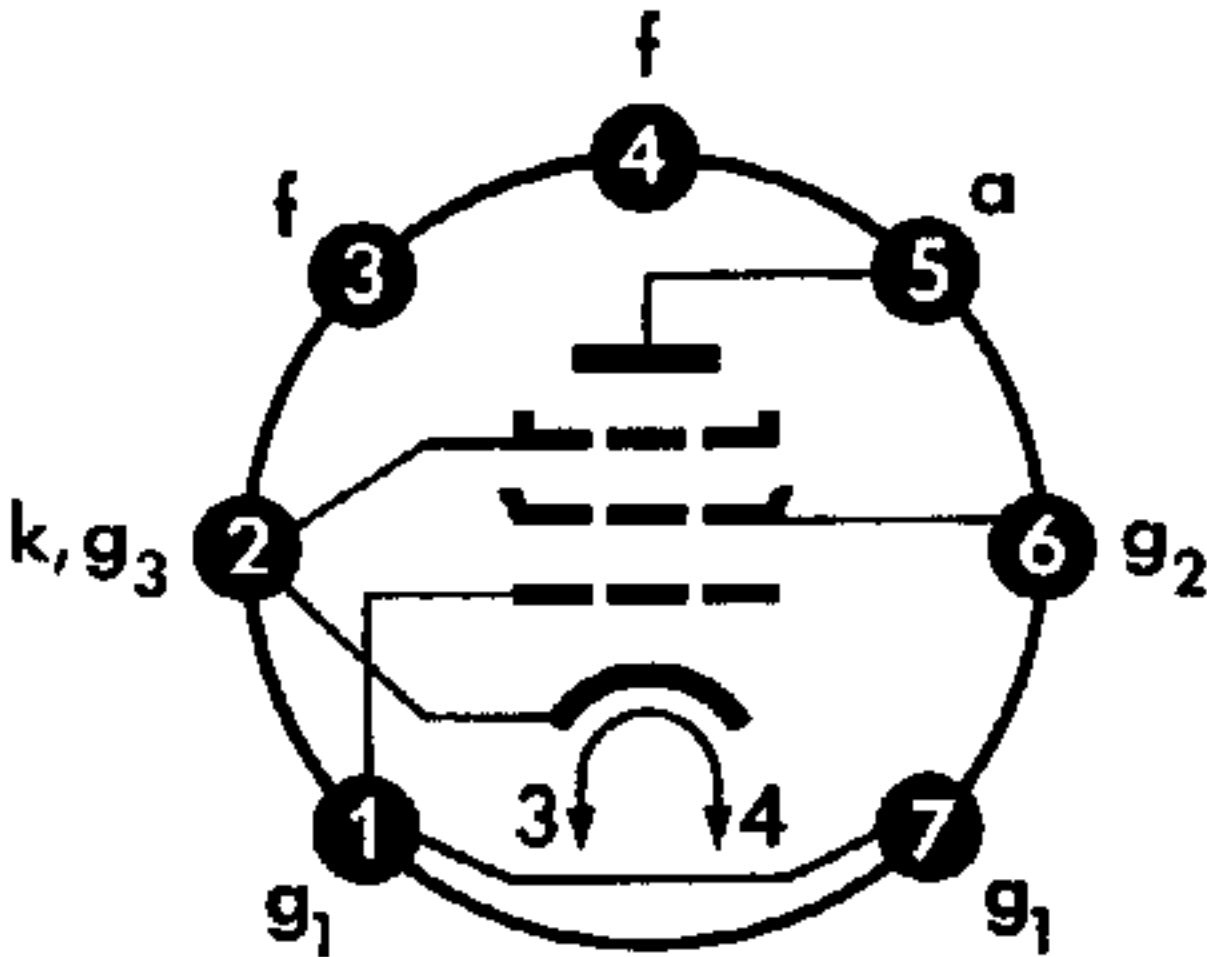
U _{ao}	550	V
U _a	300	V
N _a	6	W
N _a ²⁾	5	W
U _{g2o}	550	V
U _{g2}	300	V
N _{g2}	1,25	W
N _{g2} ausgest.	2,5	W
I _k	35	mA
R _{g1}	2	MΩ
U _{g1e} (I _{g1} ≤ +0,3 μA)	-1,3	V
U _{f/k}	200	V
R _{f/k}	20	kΩ

1) pro Röhre · each tube
2) R_k gemeinsam · R_k common

Kapazitäten · Capacitances

C _{g1}	ca.	5,3	pF
C _a	ca.	3,5	pF
C _{g1/a}	<	0,4	pF
C _{g1/f}	<	0,2	pF

Sockelschaltbild
Basing diagram

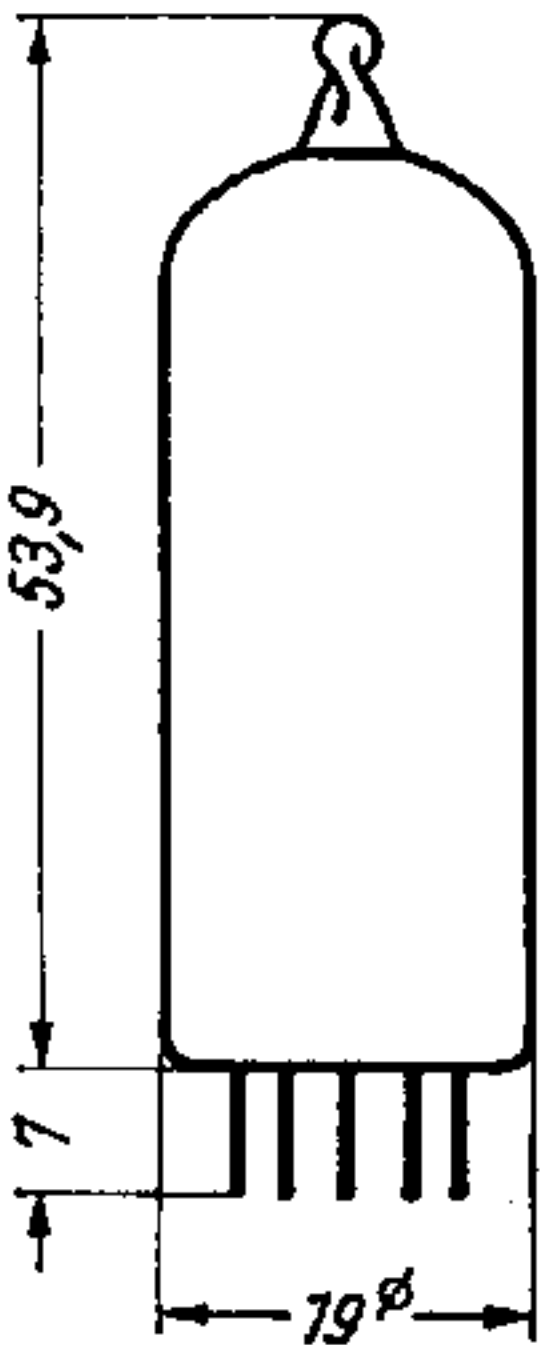


Pico 7 · Miniatur

Einbau: beliebig
Mounting position: any

max. Abmessungen
max. dimensions

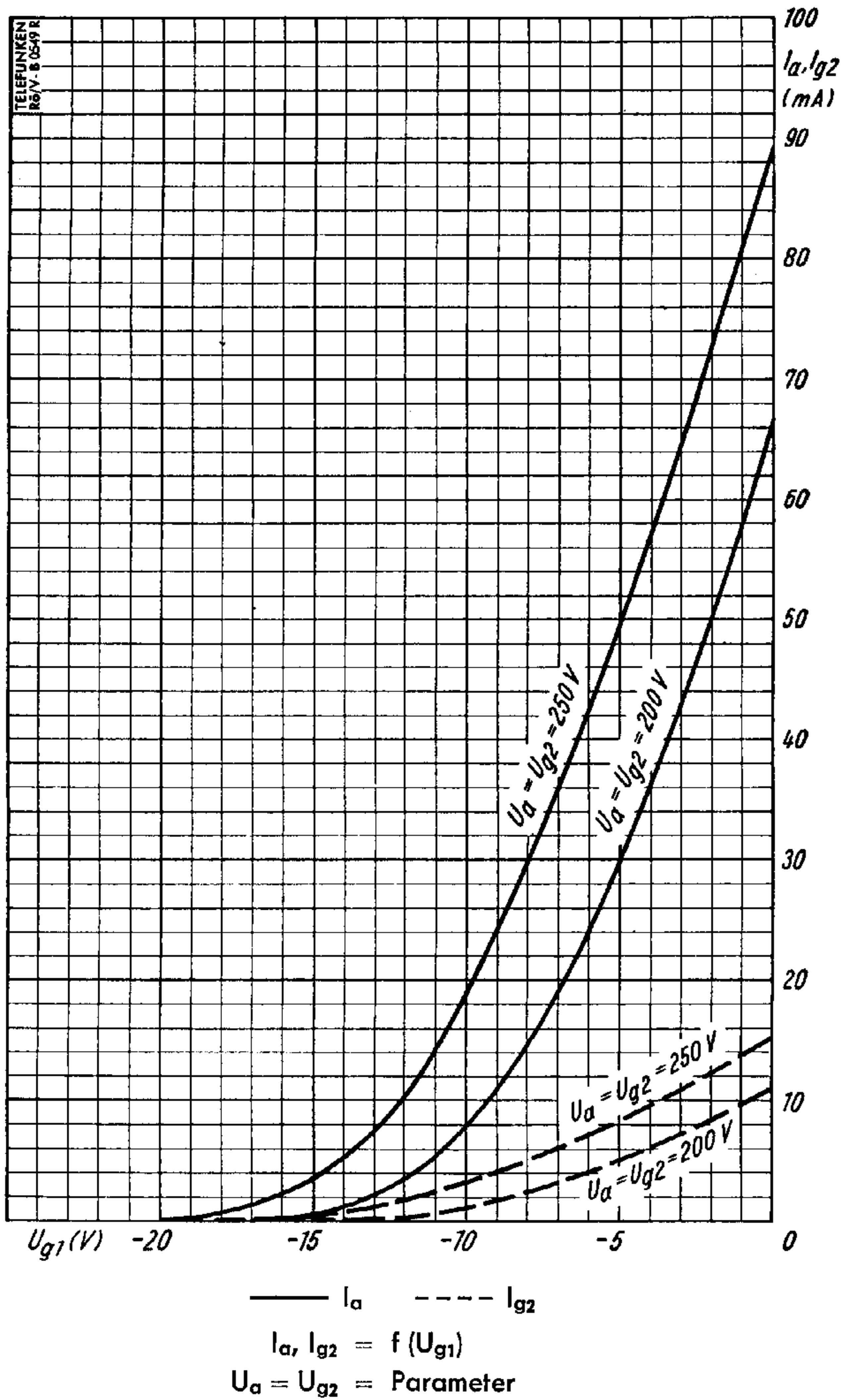
DIN 41 537, Nenngröße 44, Form A

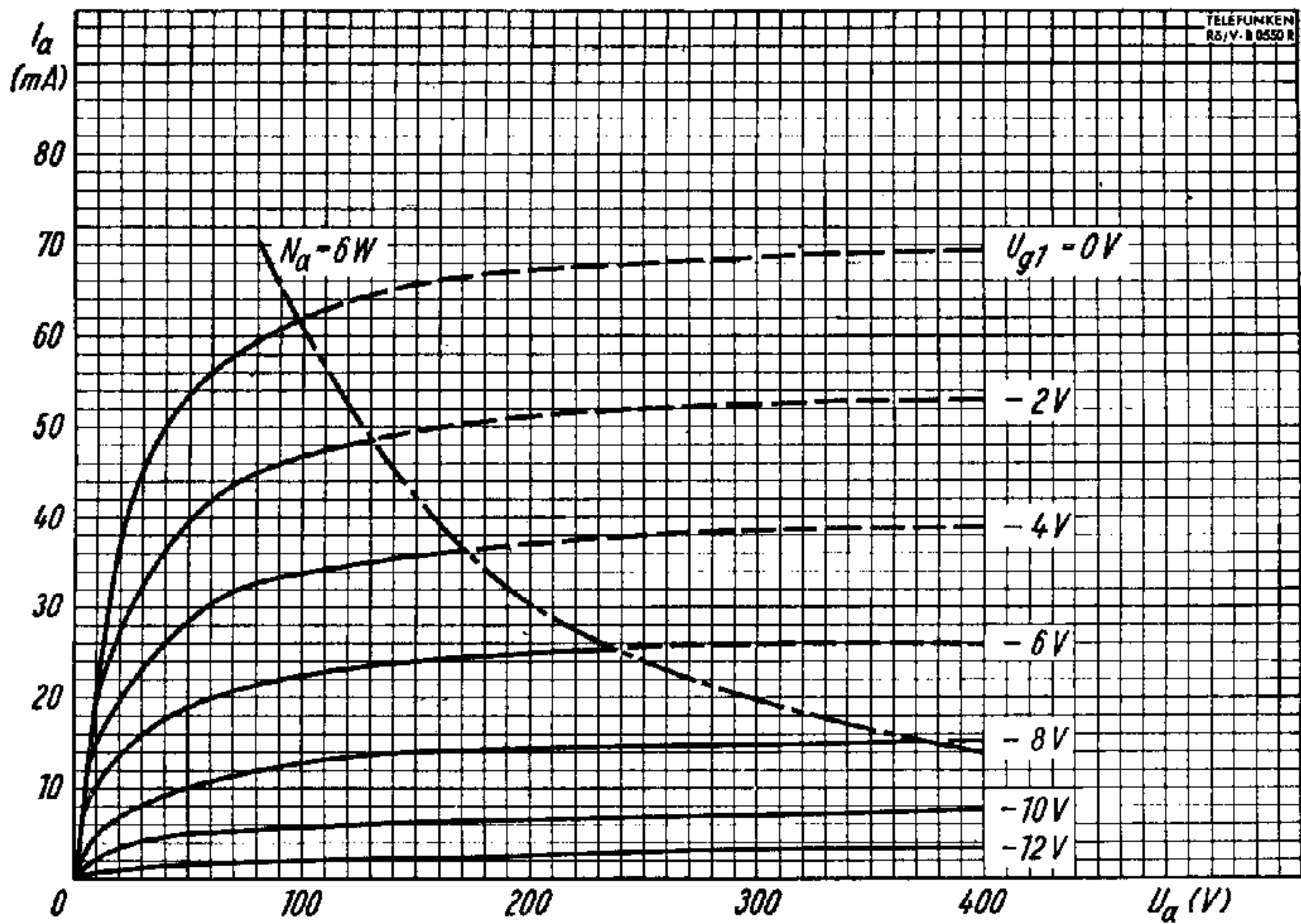


Gewicht · Weight
max. 10 g

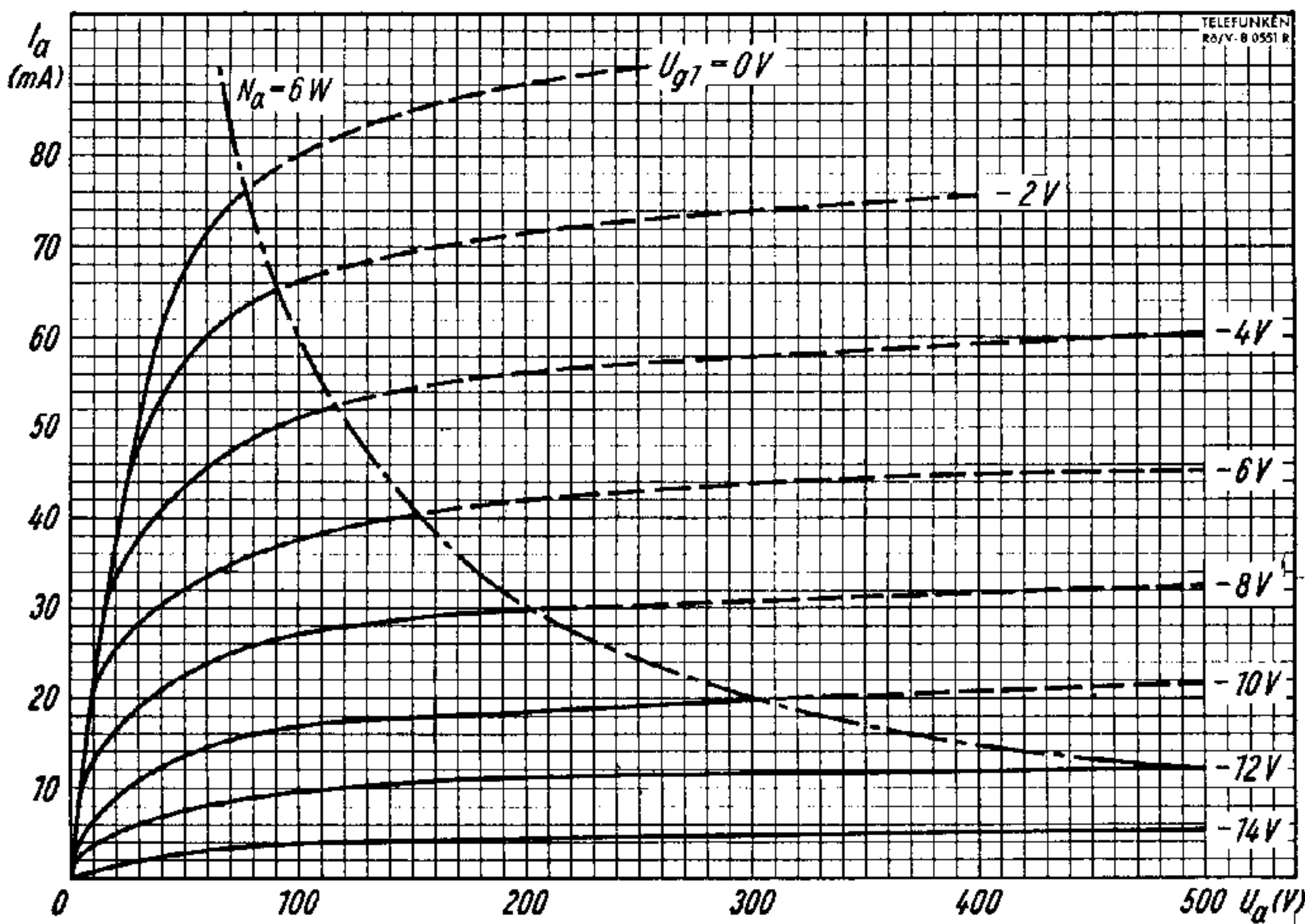
Wenn notwendig, muß gegen Herausfallen der Röhre aus der Fassung Vorsorge getroffen werden.
If necessary special precautions must be taken to prevent the tube from becoming dislodged from the socket.





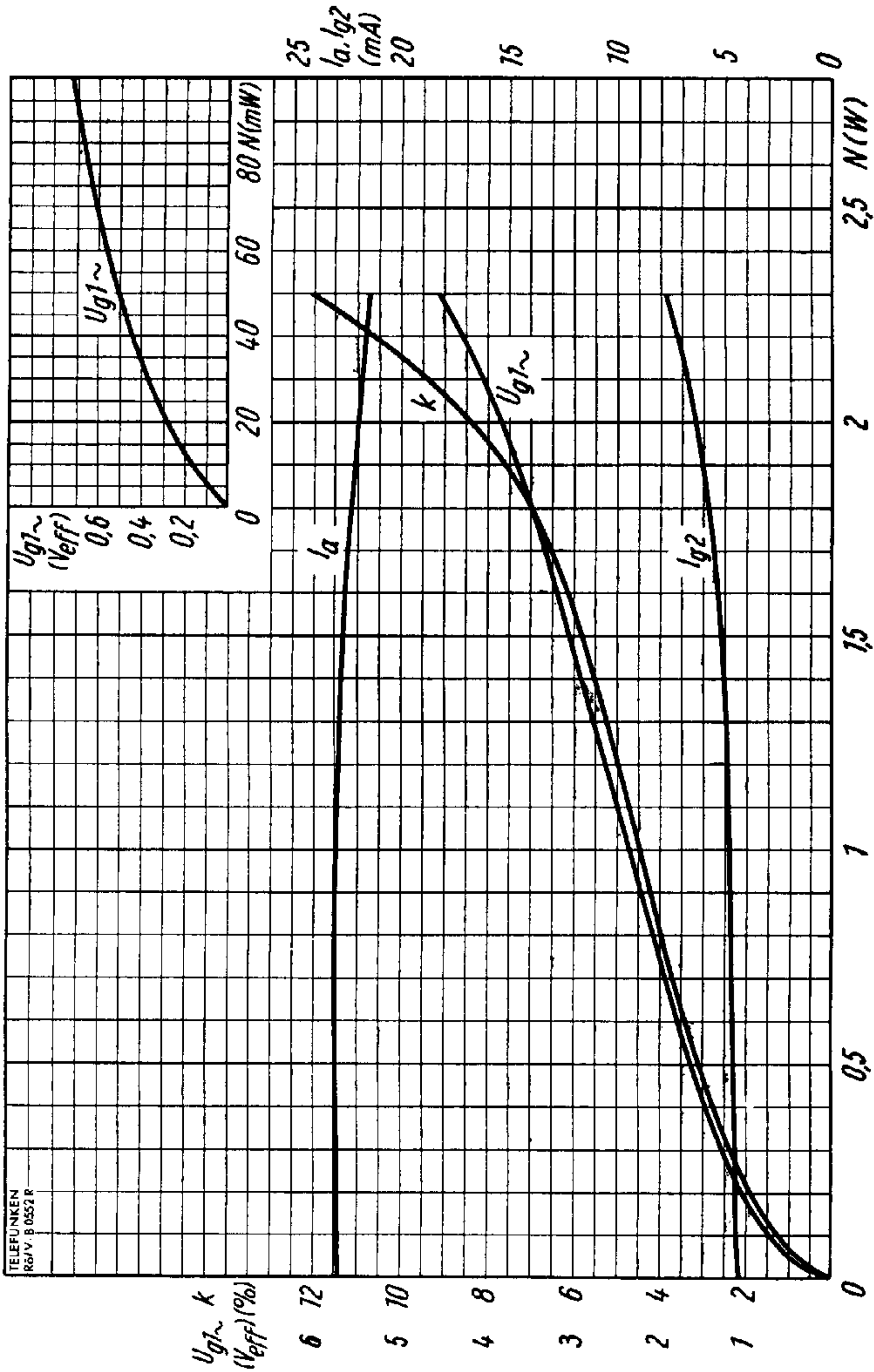


$I_a = f(U_a)$
 $U_{g2} = 200V$
 $U_{g1} = \text{Parameter}$



$I_a = f(U_a)$
 $U_{g2} = 250V$
 $U_{g1} = \text{Parameter}$

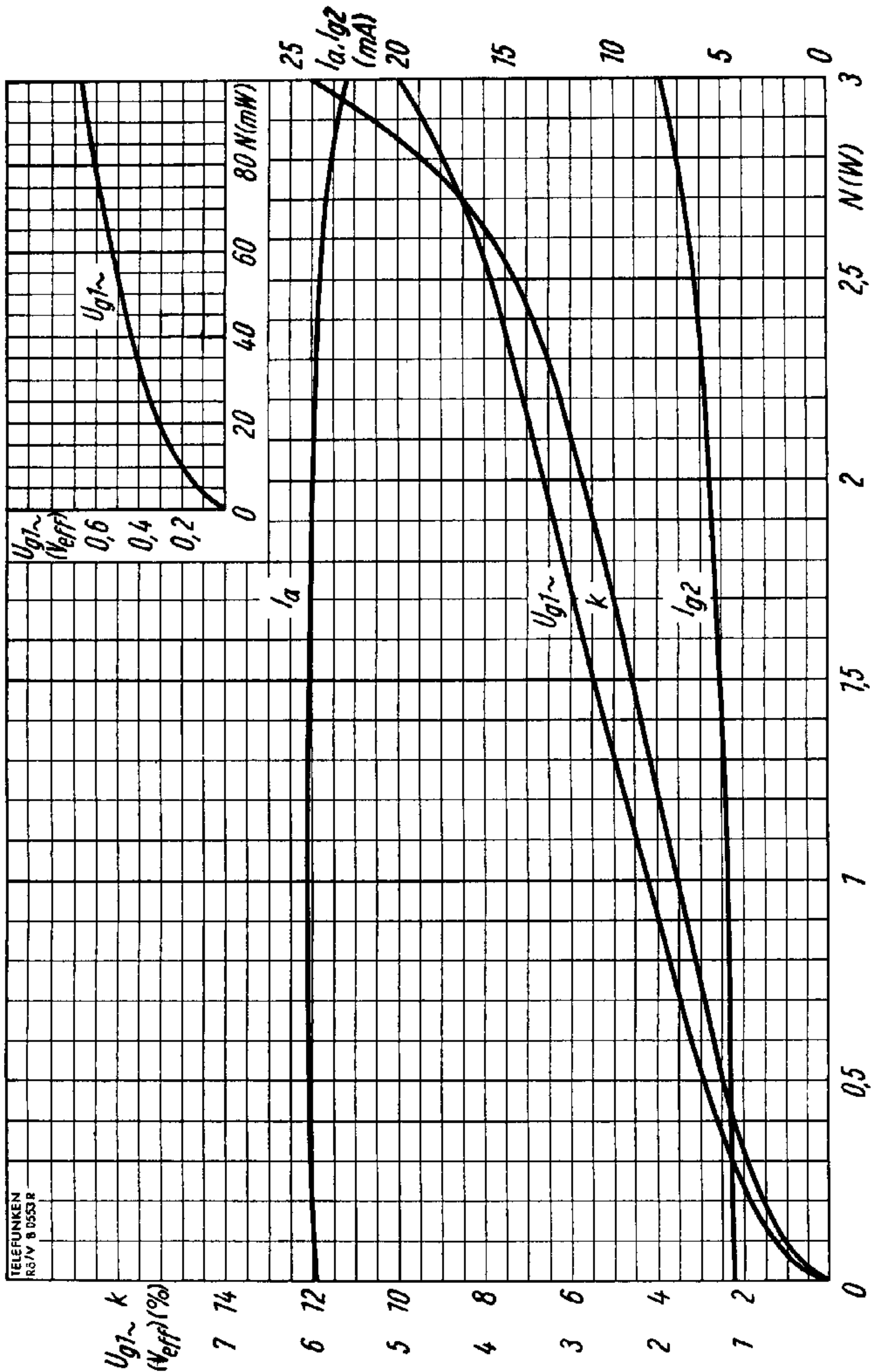




Eintakt-A-Betrieb · Class A-amplifier

$I_a, I_{g2}, U_{g1\text{eff}}, k = f(N)$
 $U_a = U_{g2} = 200 \text{ V}$
 $R_a = 8 \text{ k}\Omega$
 $R_k = 230 \Omega$

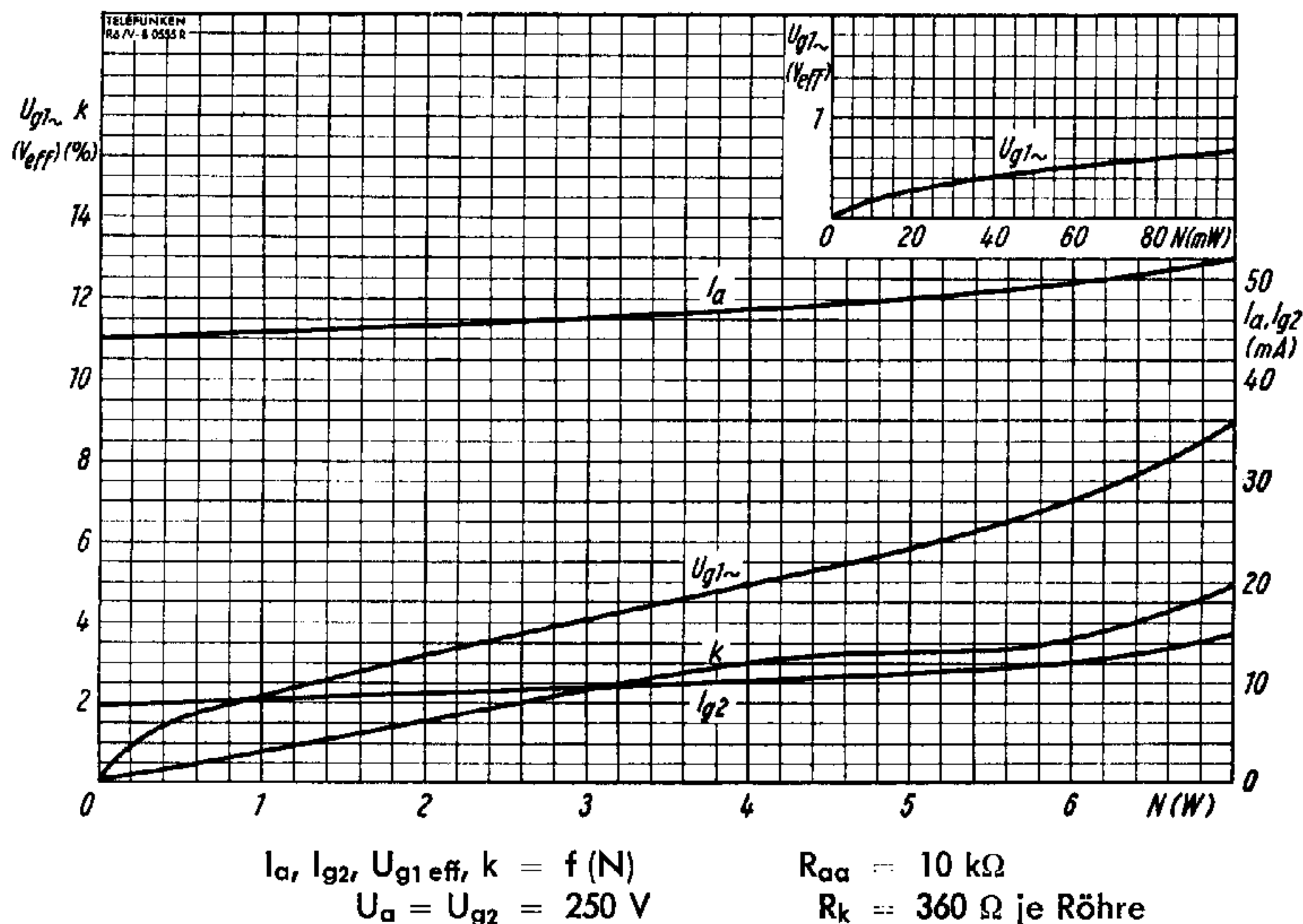
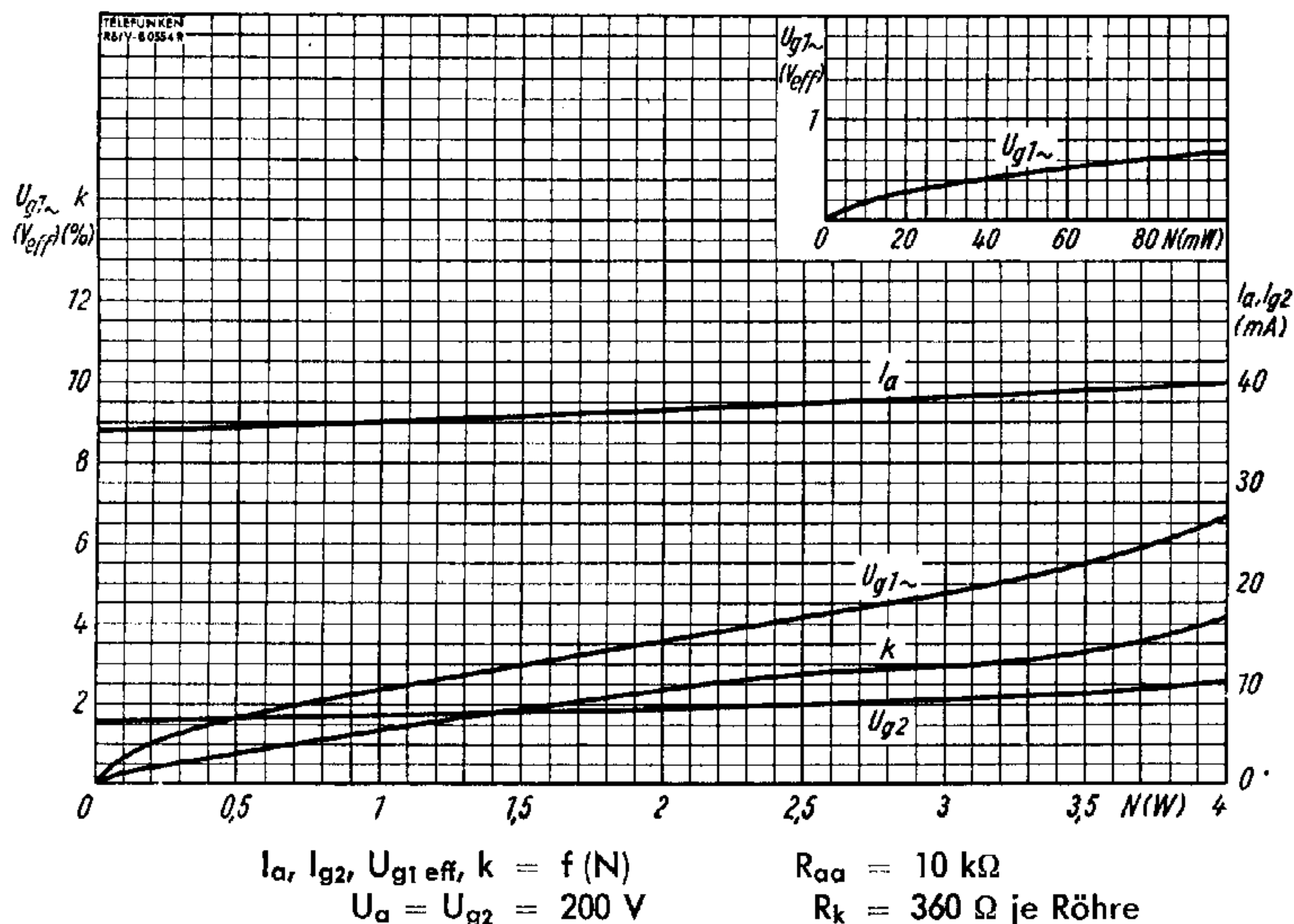




Eintakt-A-Betrieb · Class A-amplifier

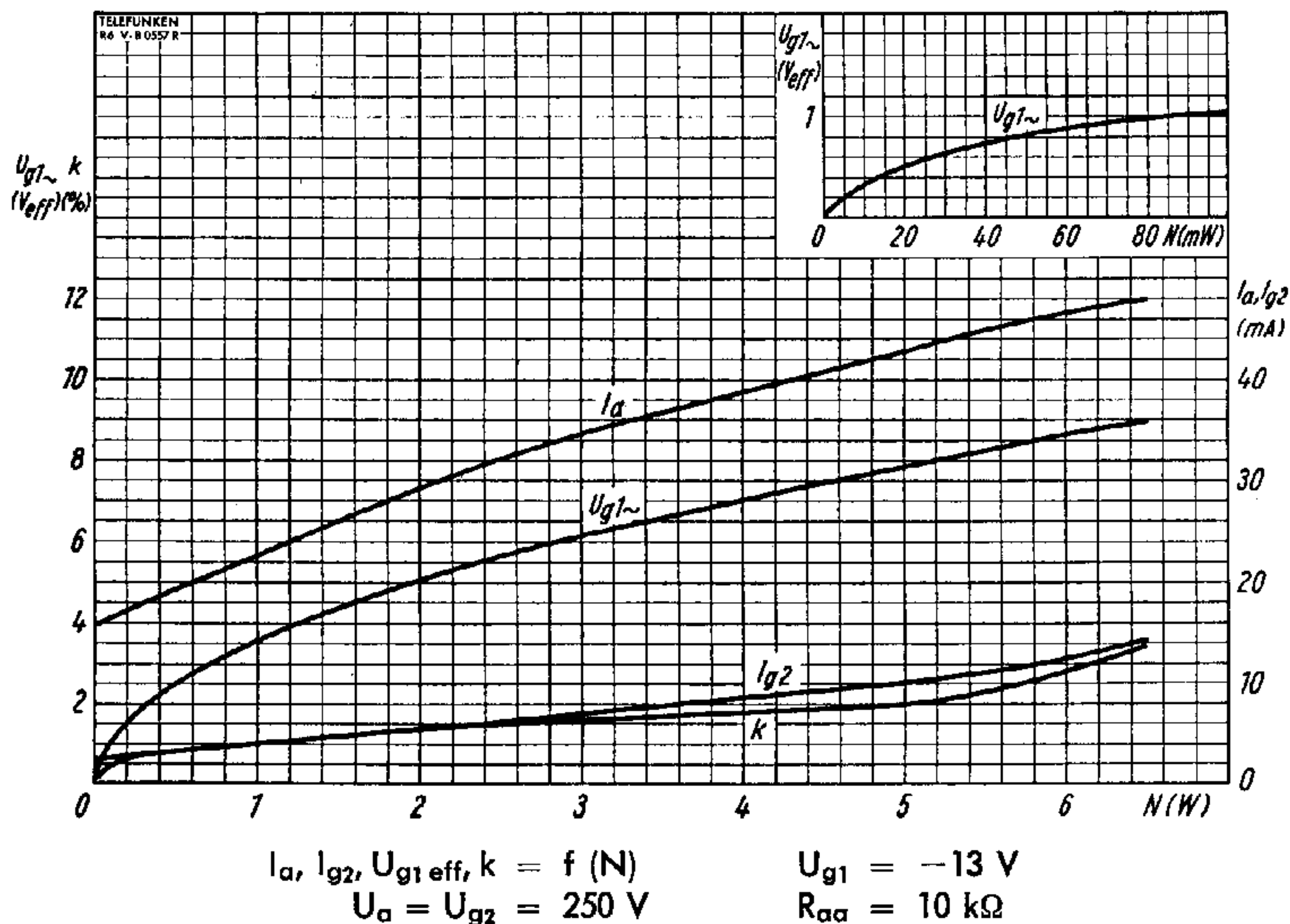
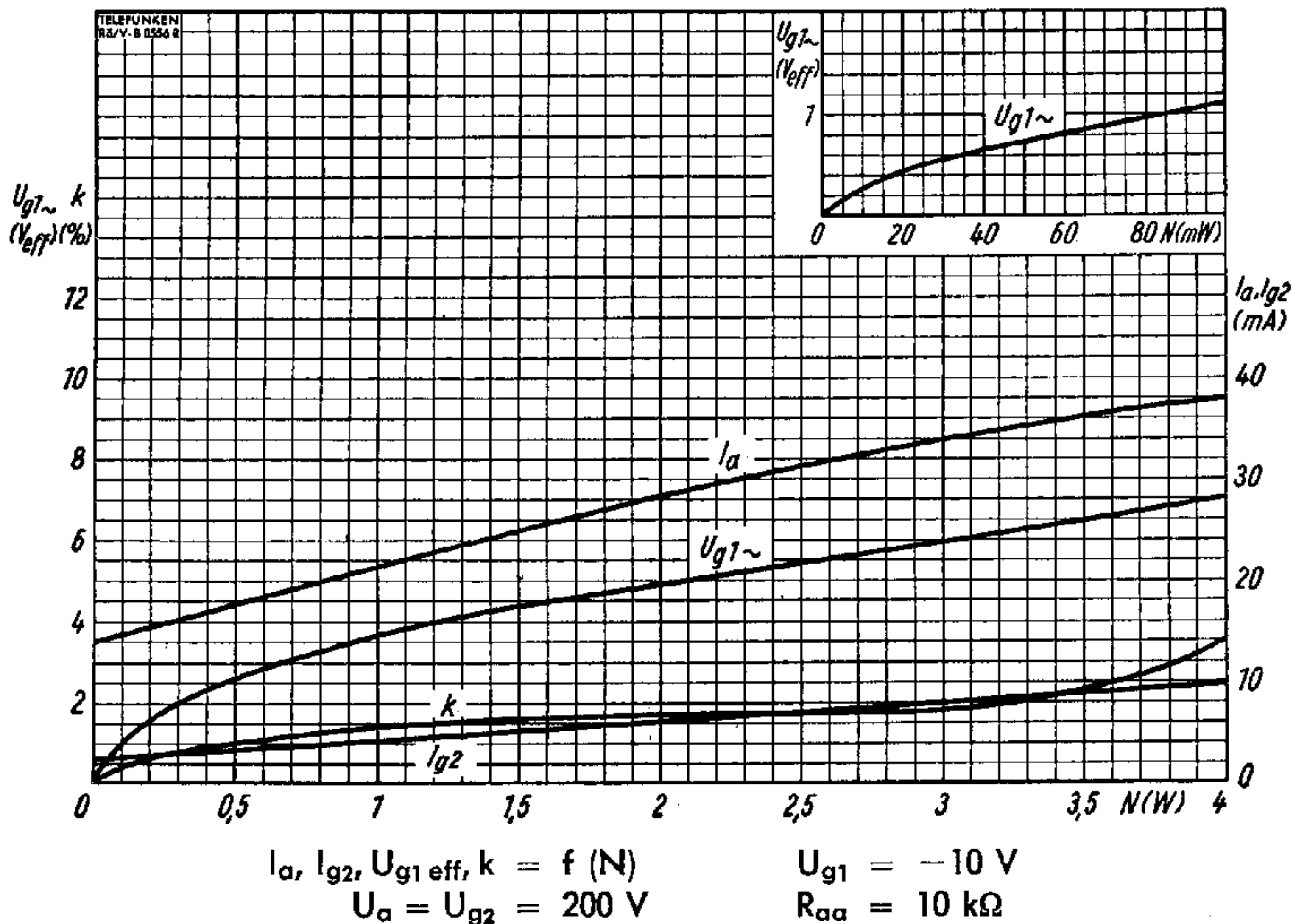
$I_a, I_{g2}, U_{g1\text{eff}}, k = f(N)$
 $U_a = U_{g2} = 250 \text{ V}$
 $R_a = 10 \text{ k}\Omega$
 $R_k = 320 \Omega$





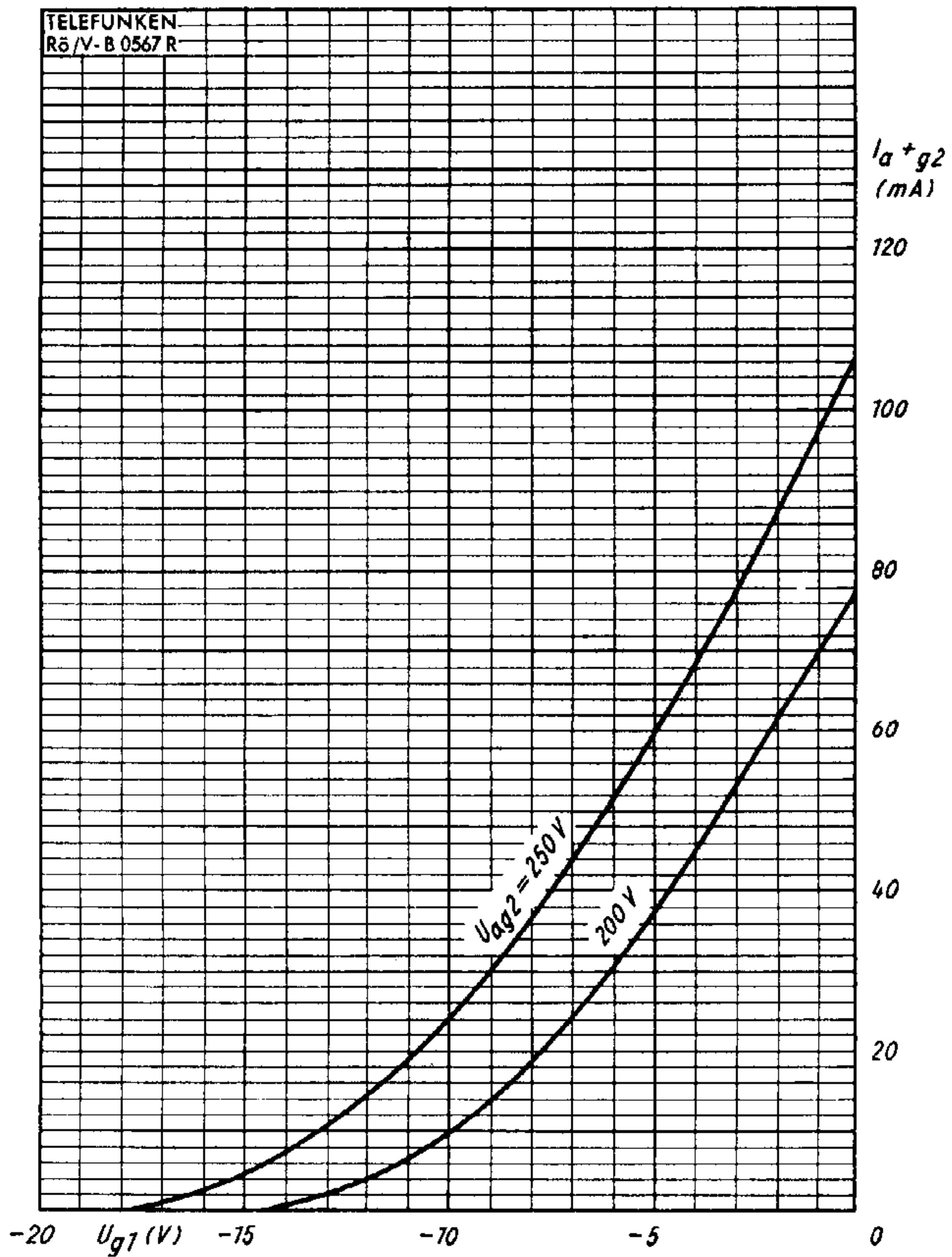
2 Röhren in Gegentakt-AB-Betrieb · 2 tubes push-pull class AB





2 Röhren in Gegentakt-B-Betrieb • 2 tubes push-pull class B





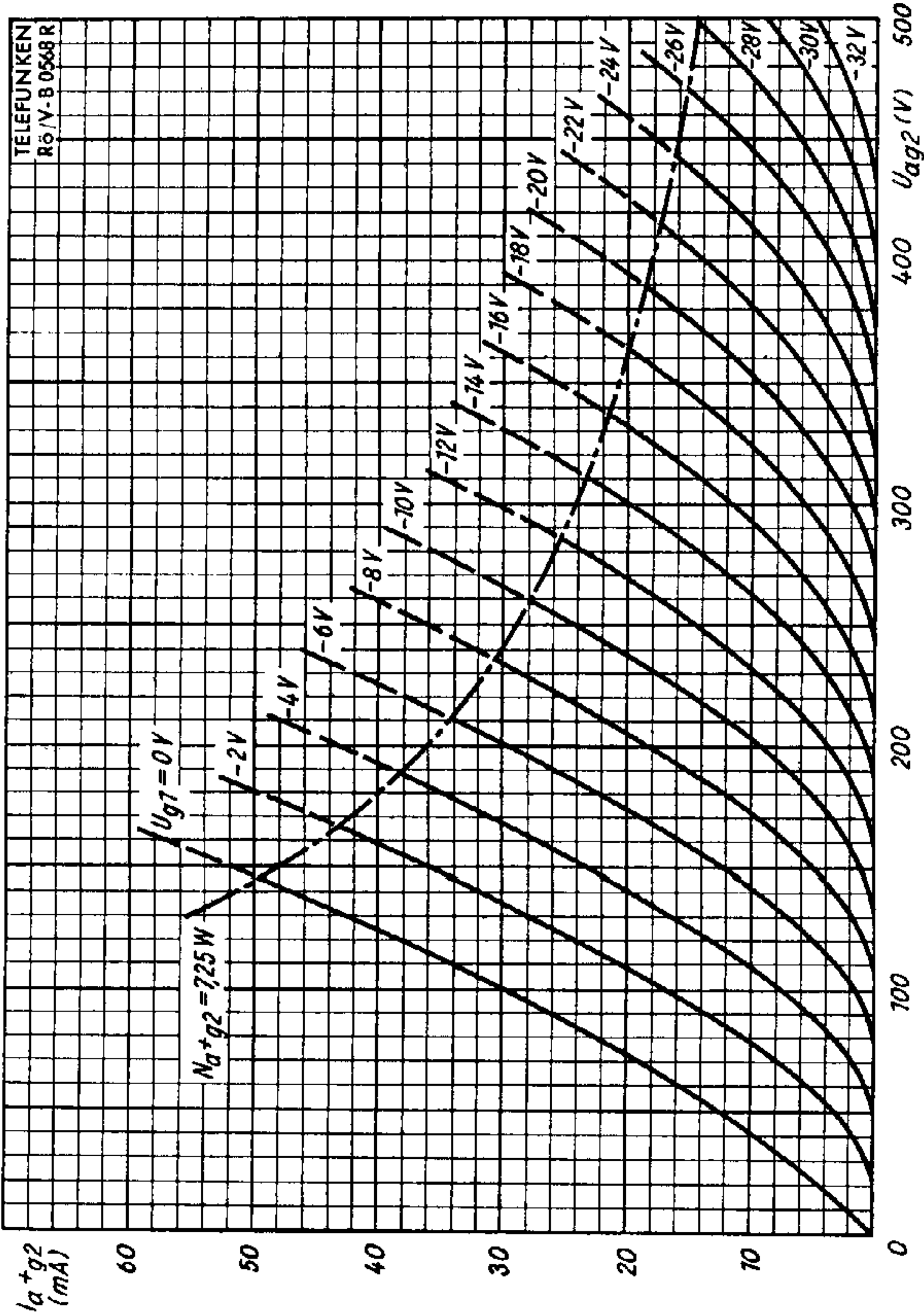
Als Triode geschaltet · As triode connected

g_2 an a

$$I_{a+g2} = f(U_{g1})$$

$$U_{ag2} = \text{Parameter}$$





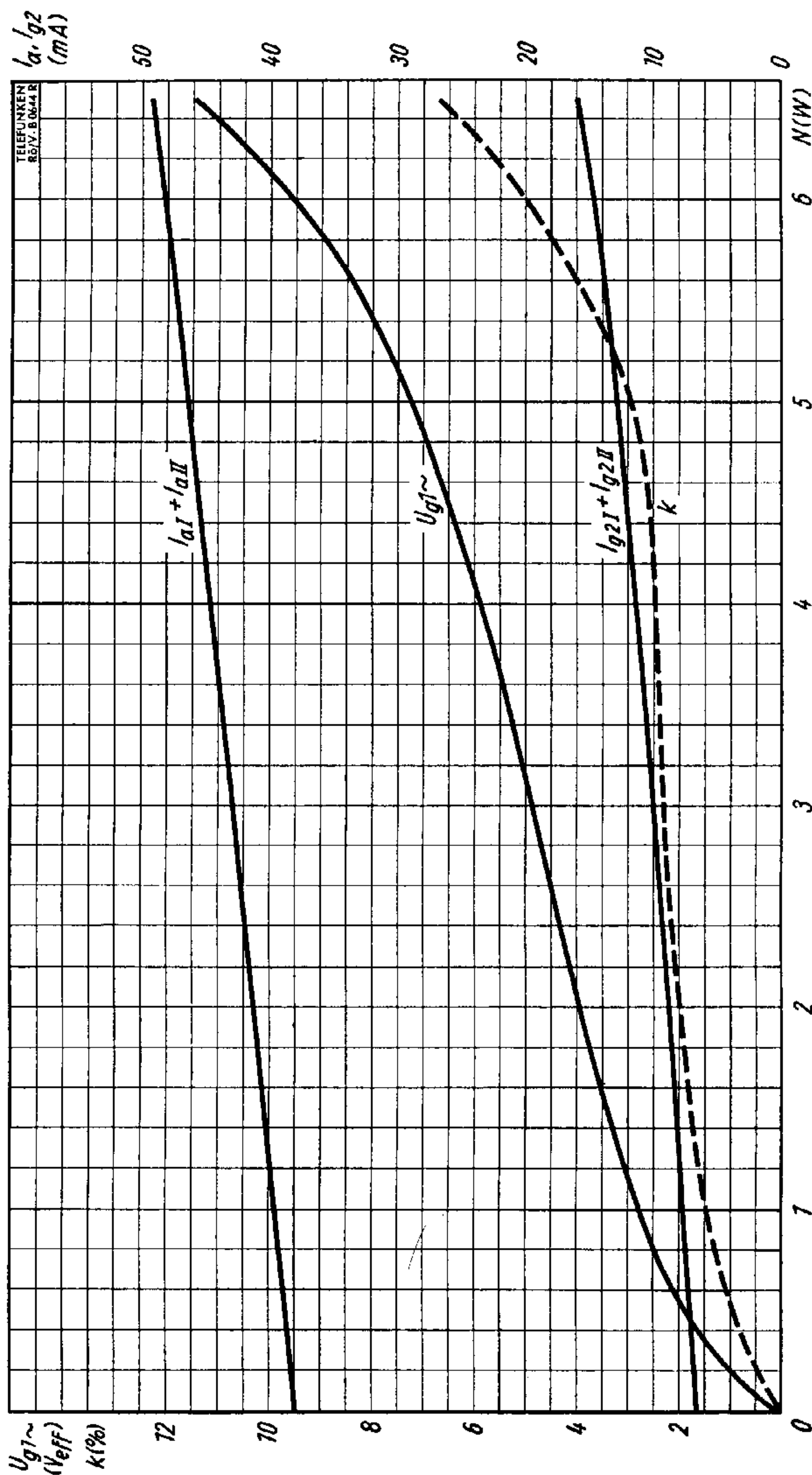
Als Triode geschaltet · As triode connected

g_2 an a

$I_{a+g2} = f(U_{ag2})$

U_{g1} = Parameter





2 Röhren in Gegentakt-AB-Betrieb, R_k gemeinsam
2 tubes push-pull class AB, R_k common

$U_a = 250\text{ V}$ $R_k = 220\ \Omega$
 $U_{g2} = 250\text{ V}$ $R_{aa} = 10\text{ k}\Omega$

