Netzröhre für GW-Heizung
indirekt geheizt
Parallelspeisung

DC-AC-Heating
indirectly heated
connected in parallel

TELEFUNKEN

EL 86

Endpentode

Power pentode

Verwendung · Application

Speziell für transformatorlose Gegentakt-Endstufen
Especially for single-ended push-pull stages

U_f	**6,3**	V
I_f	760	mA

Meßwerte · Measuring values

U_a	**100**	**170**	V
U_{g2}	**100**	**170**	V
U_{g1}	−6,7	−12,5	V
I_a	**43**	**70**	mA
I_{g2}	3	5	mA
S	9	10	mA/V
R_i	23	23	kΩ
μ_{g2g1}	8	8	

Betriebswerte · Typical operation

Eintakt-A-Betrieb · Class A amplifier

U_a	**100**	**170**	V
U_{g2}	**100**	**170**	V
U_{g1}	−6,7	−12,5	V
I_a	**43**	**70**	mA
I_{g2o}	3	5	mA
$I_{g2\ ausgest.}$	11	22	mA
R_a	2,4	2,4	kΩ
$U_{g1\ eff}$ (N)	4,3	7	V
N (10 %)	1,9	5,6	W
$U_{g1\ eff}$ (50 mW)	0,55	0,5	V

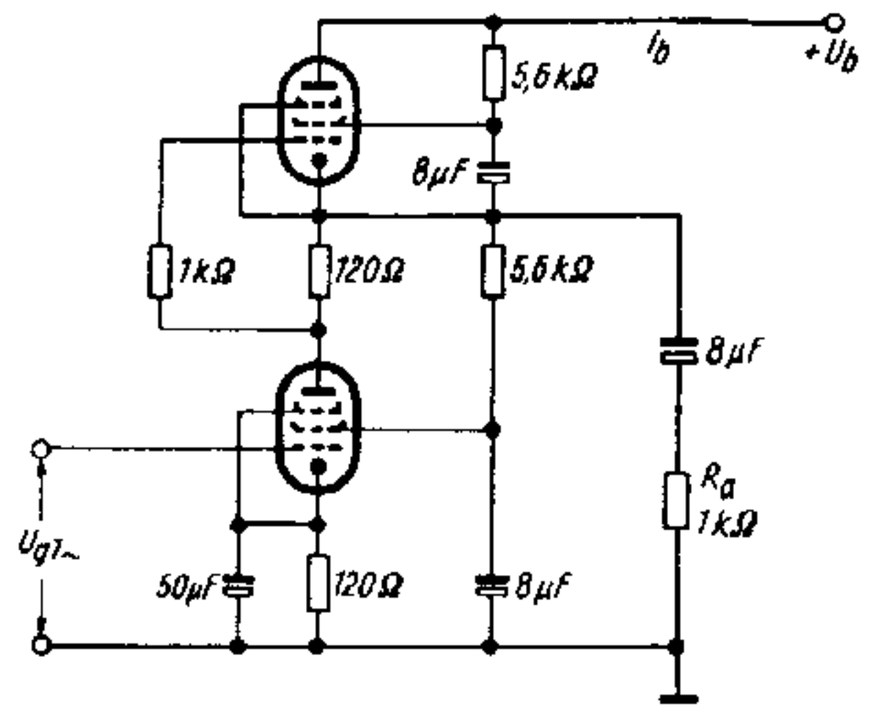
Betriebswerte · Typical operation

als transformatorlose Gegentakt-Endstufe

single-ended push-pull stage

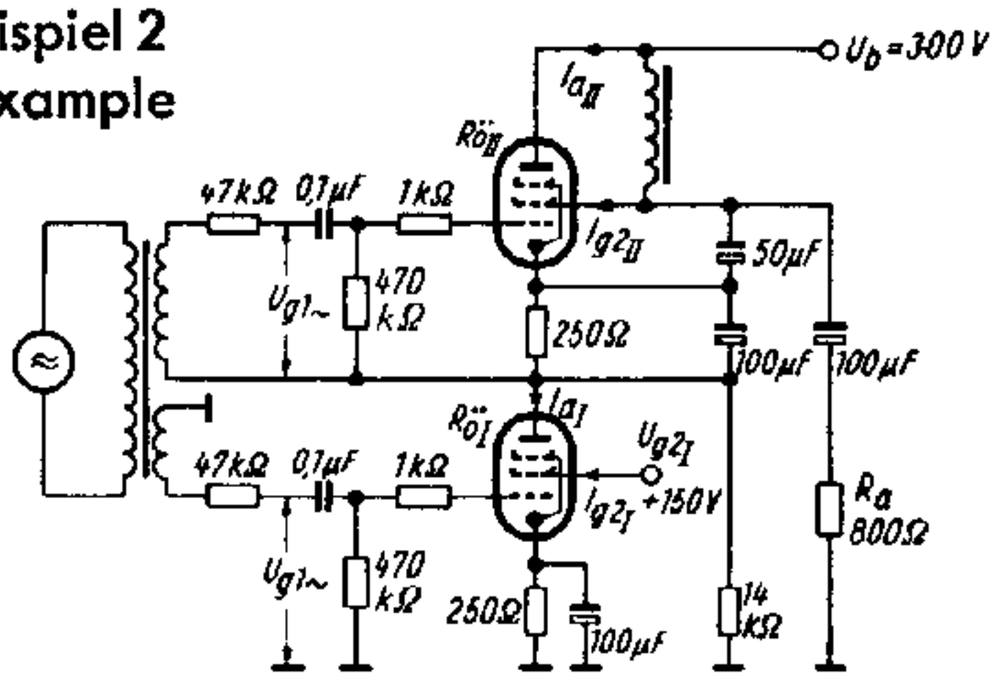
U_b	**300**	V
I_{bo}	**69**	mA
$I_{b\ ausgest.}$	67	mA
R_a	1	kΩ
$U_{g1\ eff}$ (N)	5,7	V
N (9,3 %)	4,8	W
$U_{g1\ eff}$ (50 mW)	0,55	V

Schaltbeispiel 1 · Circuit example



U_b	**300**	V
I_{allo}	**52**	mA
$I_{all\ ausgest.}$	51,5	mA
I_{g2llo}	3,9	mA
$I_{g2ll\ ausgest.}$	10,1	mA
R_a	800	Ω
$U_{g1\ eff}$ (N)	9,9	V
N (2,9 %)	7,5	W
$U_{g1\ eff}$ (50 mW)	0,53	V

Schaltbeispiel 2
Circuit example



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Grenzwerte · Maximum ratings

U_{ao}	**550**	V
U_a	**250**	V
N_a	**12**	W
U_{g2o}	**550**	V
U_{g2}	**200**	V
N_{g2}	**1,75**	W
$N_{g2\ ausgest.}$	**6**	W
I_k	**100**	mA
R_{g1} [1]	**1**	MΩ
$U_{f/k+sp}$ [2]	**300**	V
$U_{f/k-}$	**100**	V
R_{fk}	**20**	kΩ

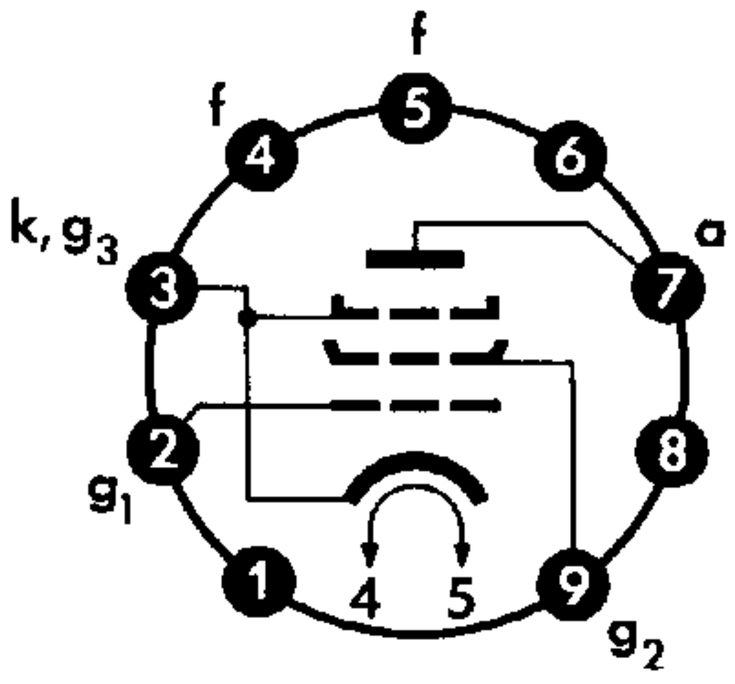
[1] $U_{g1\ autom.}$ · cathodes grid bias

[2] Gleichspannungsanteil max. 150 V · DC-component max. 150 V

Kapazitäten · Capacitances

c_{g1}		12	pF
c_a		6	pF
$c_{g1/a}$	<	1	pF
$c_{g1/f}$	<	0,25	pF

Sockelschaltbild
Base connection



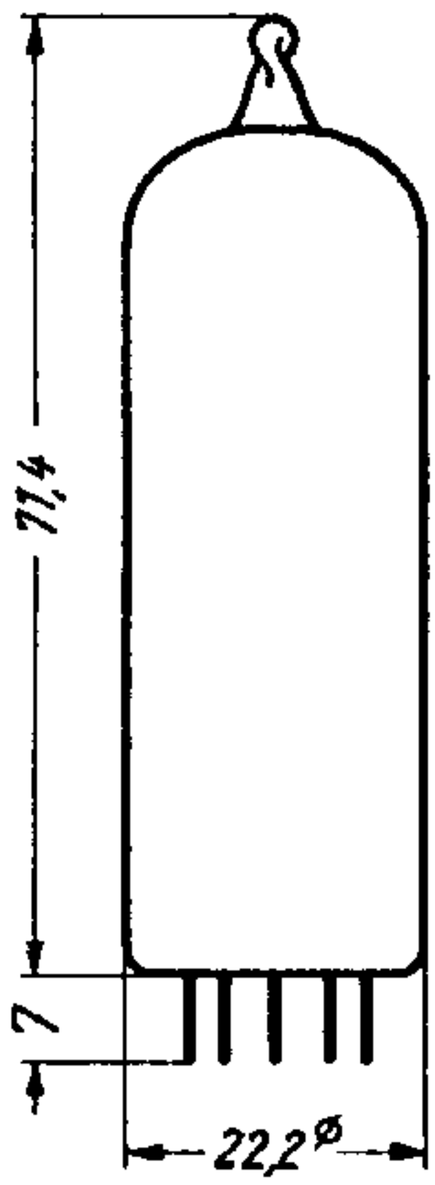
Pico 9 · Noval

Freie Stifte bzw. Fassungskontakte dürfen nicht als Stützpunkte für Schaltmittel benutzt werden.

Free pins not to be connected externally.

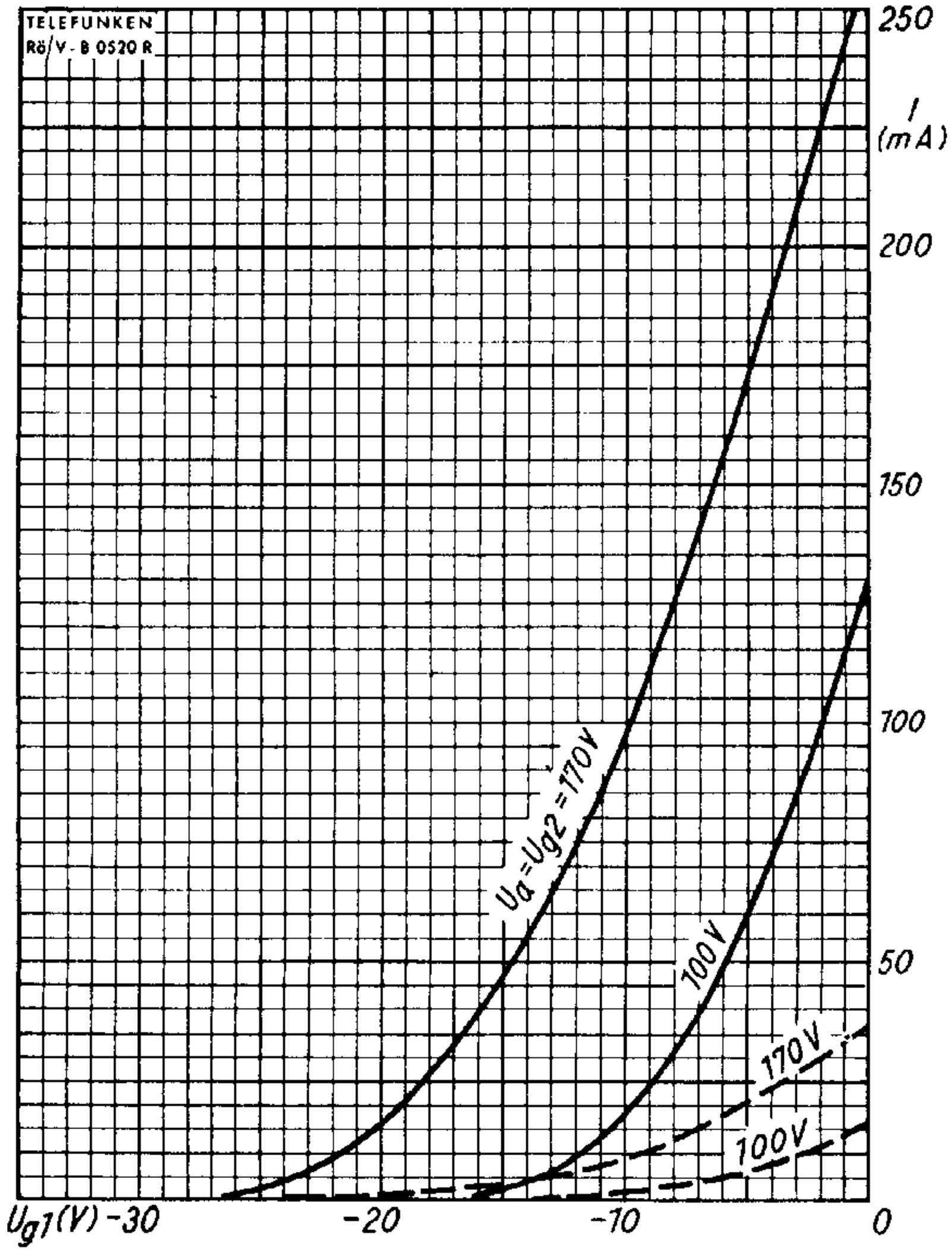
max. Abmessungen
max. dimensions

DIN 41 539, Nenngröße 62, Form A



Gewicht · Weight
max. 20 g

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



$I_a, I_{g2} = f(U_{g1})$

$U_a = U_{g2}$ = Parameter

——— I_a ---- I_{g2}

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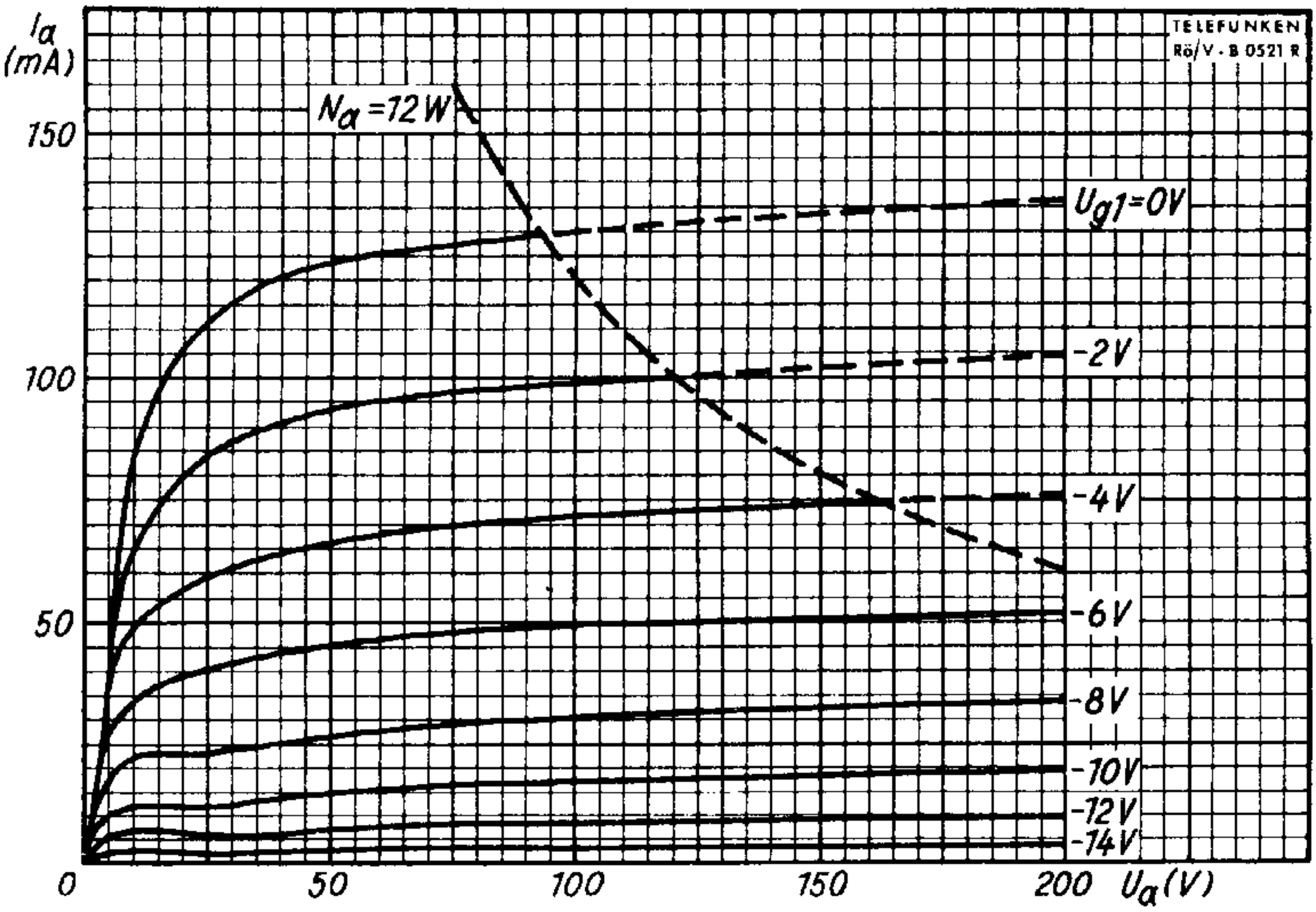
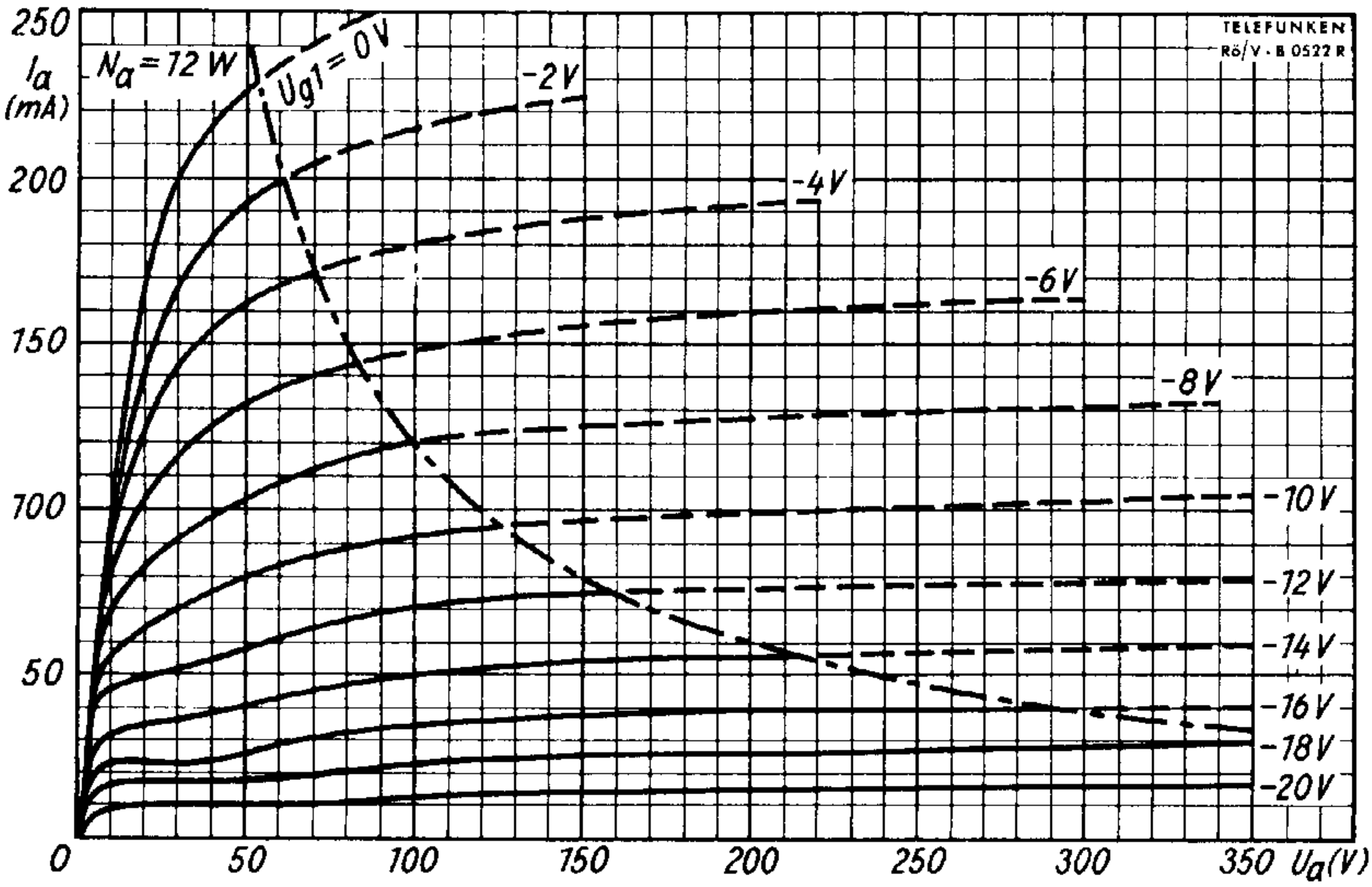
TELEFUNKEN



$I_a = f(U_a)$ $U_{g2} = 100\ V$ U_{g1} = Parameter



$I_a = f(U_a)$ $U_{g2} = 170\ V$ U_{g1} = Parameter

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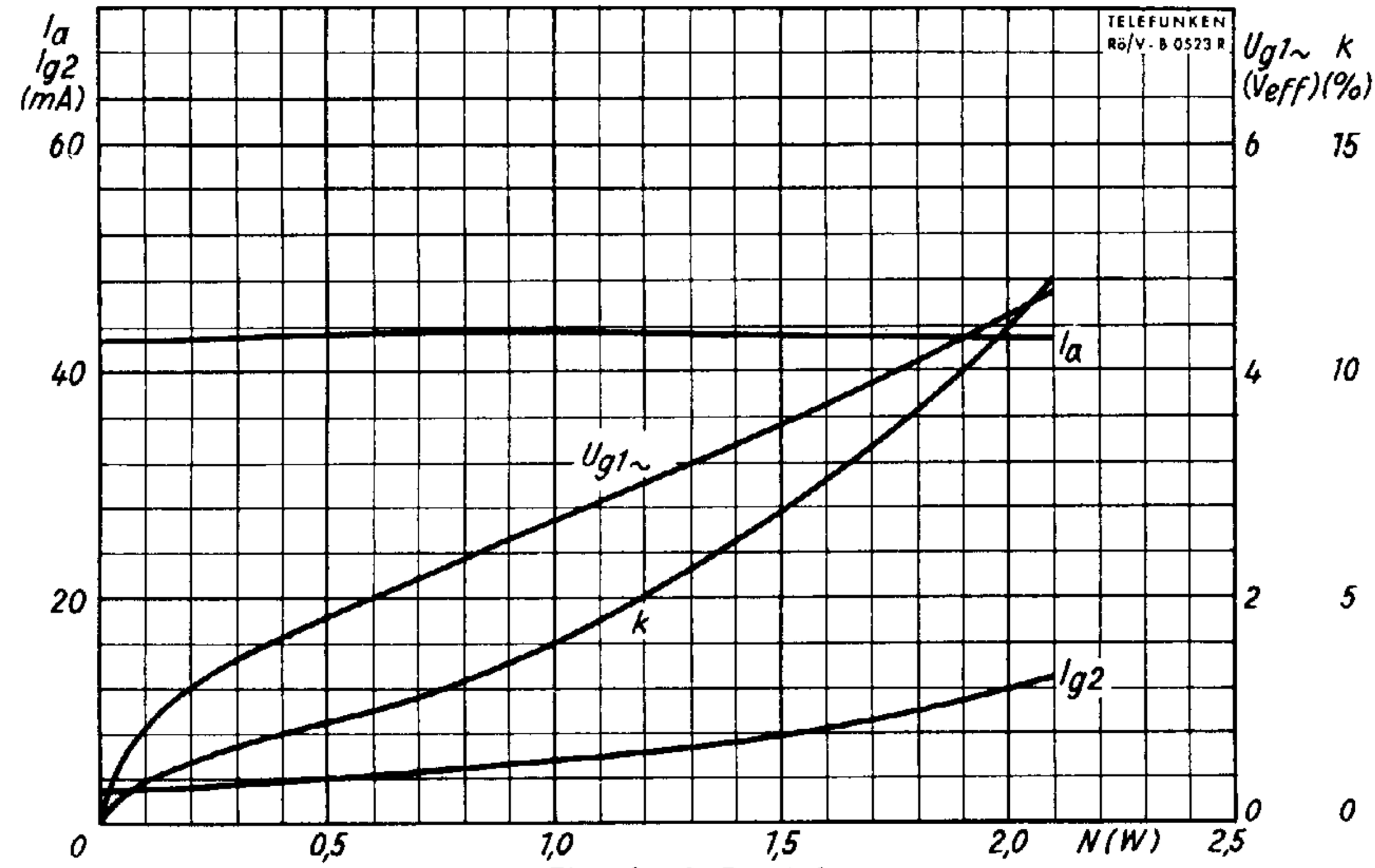
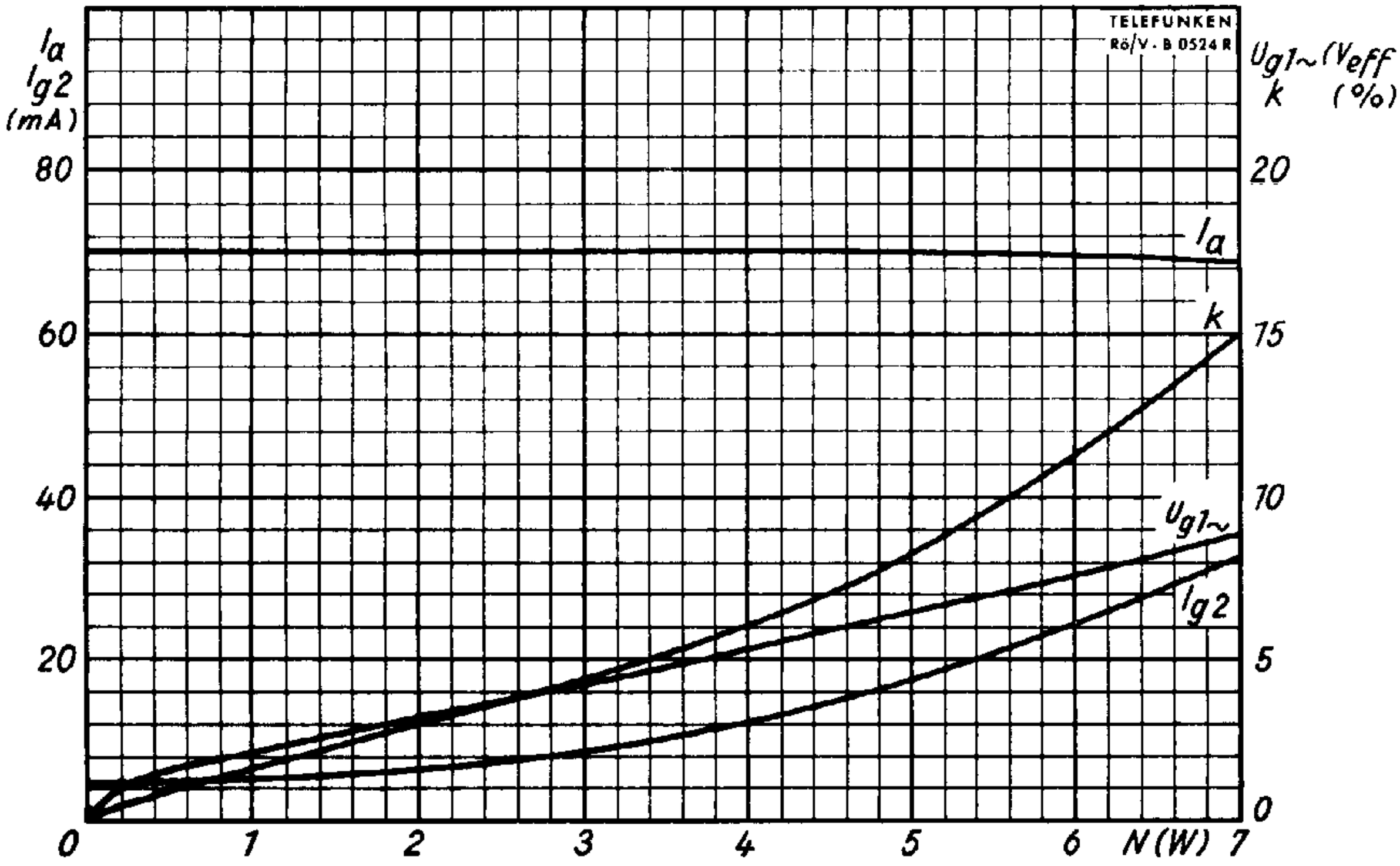


Eintakt-A-Betrieb

$I_a, I_{g2}, U_{g1\sim}, k = f(N)$ $U_a = 100\,V$ $U_{g2} = 100\,V$ $U_{g1} = -6{,}7\,V$ $R_a = 2{,}4\,k\Omega$



Eintakt-A-Betrieb

$U_a = 170\,V$ $U_{g2} = 170\,V$ $U_{g1} = -12{,}5\,V$ $R_a = 2{,}4\,k\Omega$

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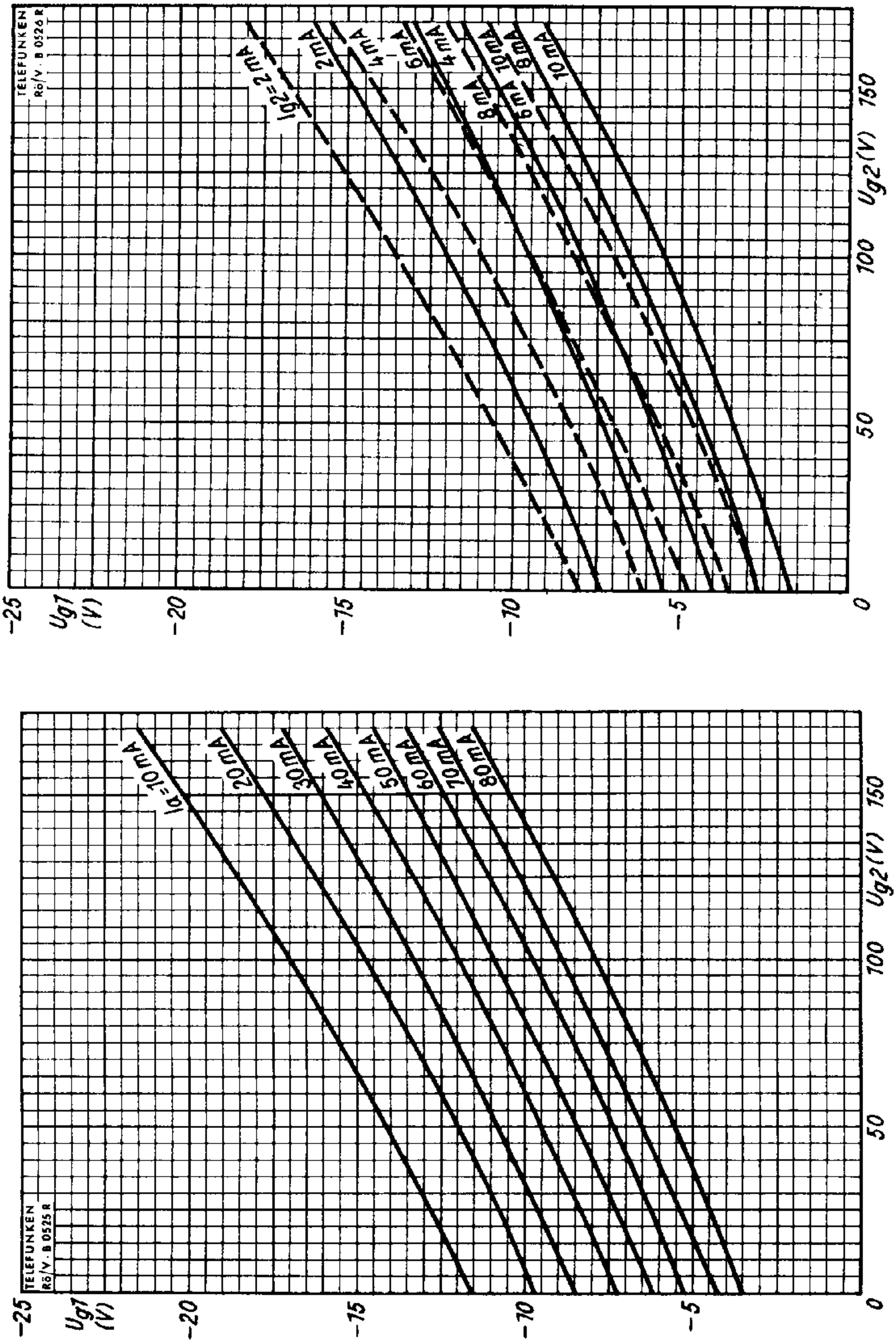
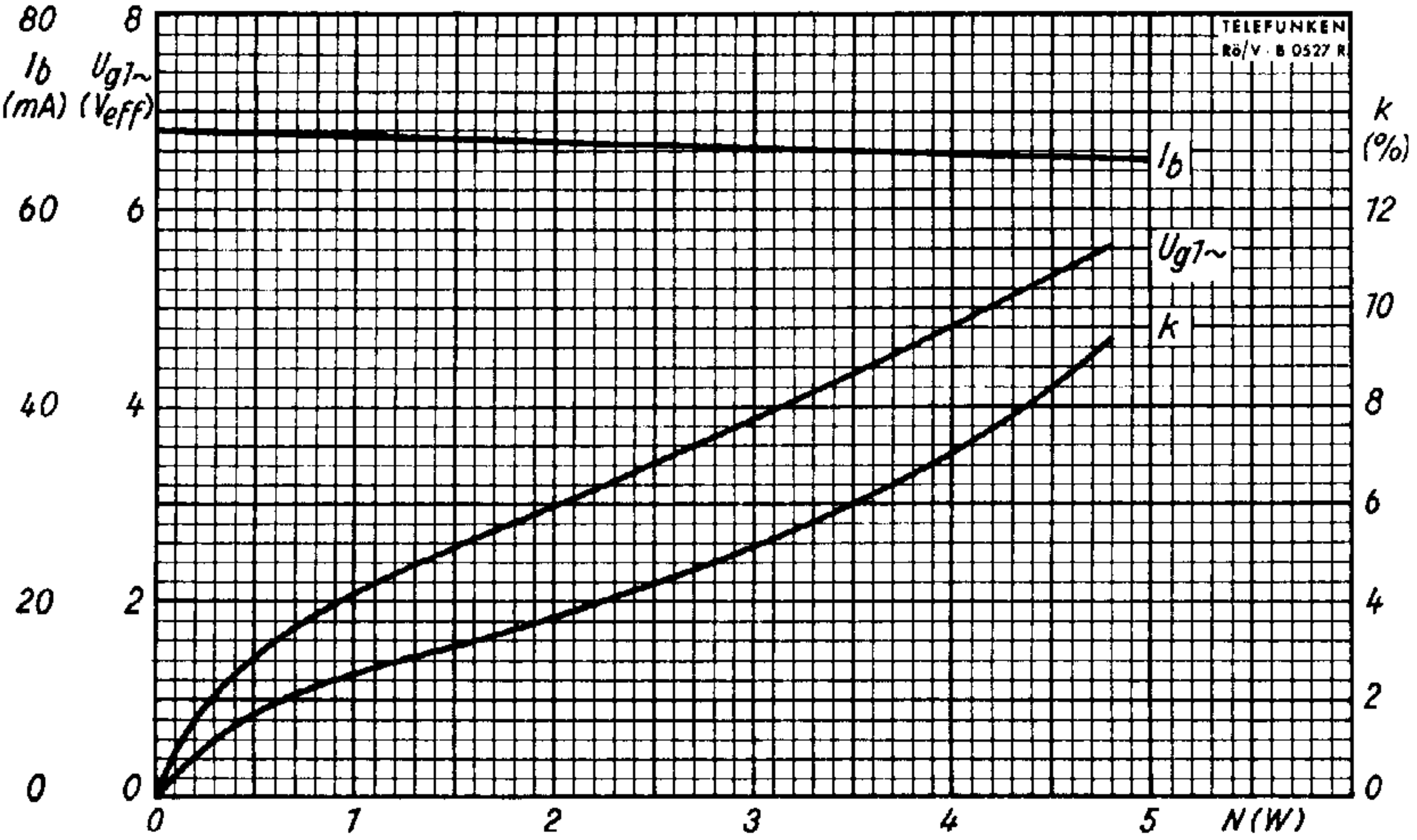
TELEFUNKEN





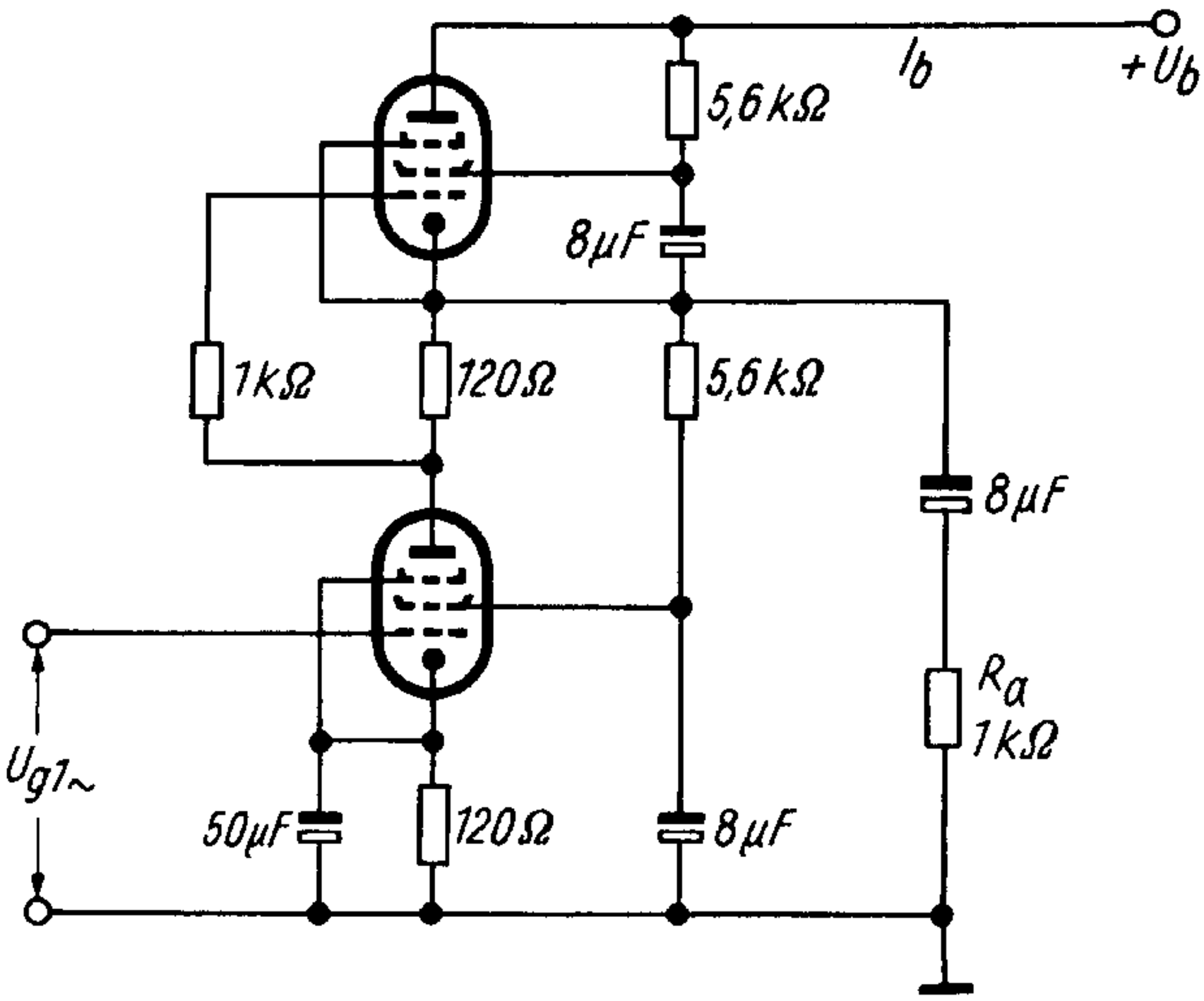
$I_b, U_{g1\sim}, k = f(N)$

$U_b = 300\ V$

$R_a = 1\ k\Omega$

Als transformatorlose Gegentakt-Endstufe

Schaltbeispiel 1



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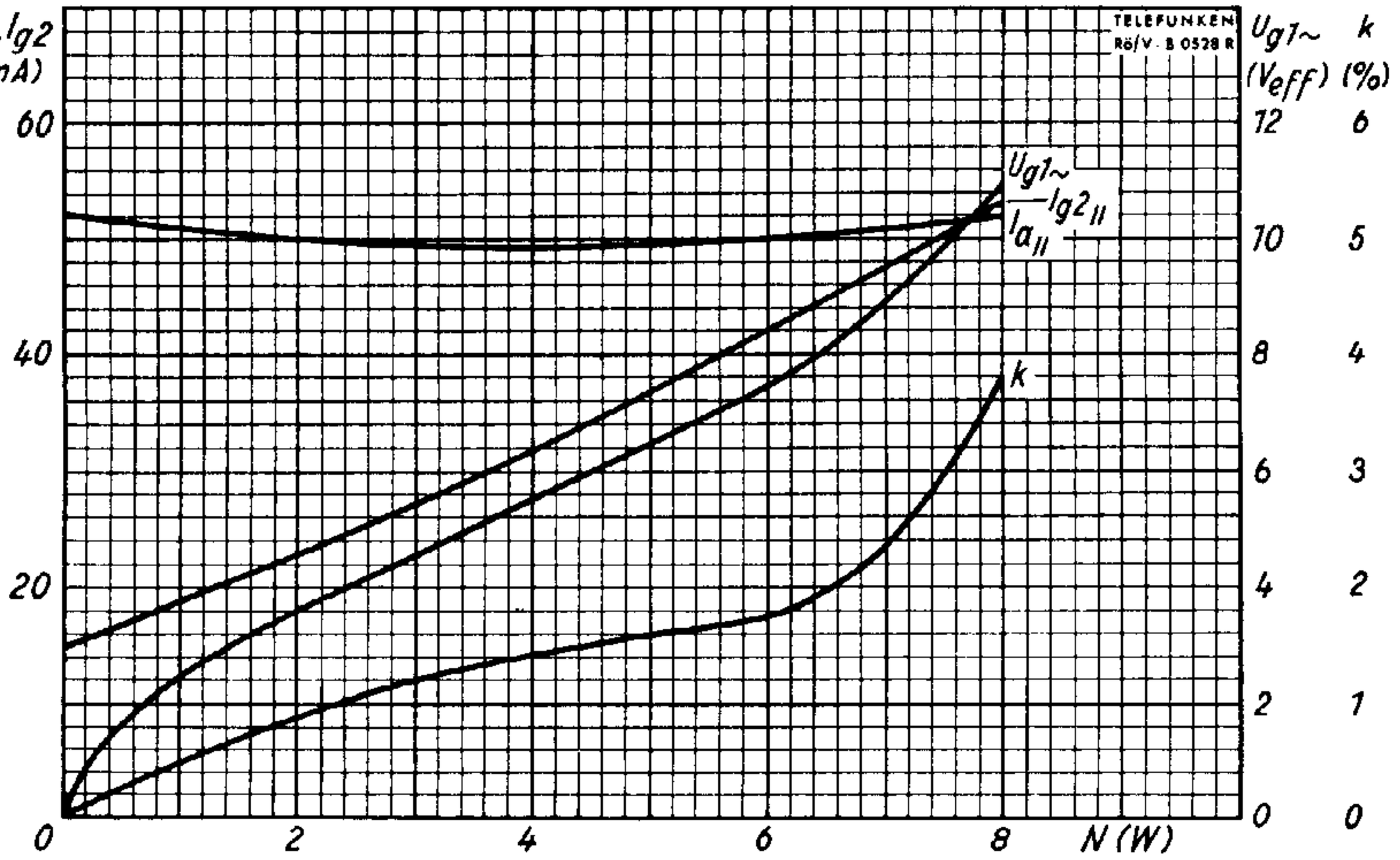

$I_a, I_{g2}, U_{g1\sim}, k = f(N)$

$U_b = 300\ V$

$R_a = 800\ \Omega$

Als transformatorlose Gegentakt-Endstufe

Schaltbeispiel 2