BATTERY VALVES (Low filament current series) WITH SIDE CONTACT BASES

Type Number	Valve type	Maximum dimensions mm	Base (Connection reference in brackets) [11]	Application (see p. 2)	Filament data: Heating	Filament data: Voltage Volts	Filament data: Current Amps.	Anode voltage Va Volts	Anode current Ia mA	Neg. grid bias Vg_1 Volts	Screen-grid voltage Vg_2 Volts	Screen-grid current Ig_2 mA	Voltage on grids 3 (and 5) $Vg_3(_5)$ Volts	Voltage on grid 4 Vg_4 Volts	Mutual conduct. S mA/V	Amplification factor μ	Internal resistance Ri Ohms	External anode resist. or optimum matching imped. Ra Ohm	Output at 10 % distortion Wo Watts	Grid A.C. voltage at the indicated output Vi $V_{R.M.S.}$	Max. anode dissipation Wa_{max} Watts	Grid anode capacity Cag_1 μμF	Type Number
KK2	Octode	120×46	P35 (37)	4	dir.	2,0	0,13	135	0,7[1]) <0,015	0	135	2,1[3])	45	—0,5 —12	0,27[10]) <0,002	—	2,5.10⁶ >10⁷	—	—	—	—	<0,07[9])	**KK2**
								90	0.7[1]) <0.015	0	90	1,3[4])	45	—0,5 —12	0,27[10]) <0.002	—	2,0.10⁶ >10⁷						
								135	1,0[2])	0	135	2,3[5])	60	—1,5	0,27[10])	—	1,7.10⁶						
KF3	Variable-Mu Pentode	102×40	P30 (29)	1, 2, 5	dir.	2,0	0,045	135	2.0 <0,015	—0,5 —15	135	0,6	0	—	0,65 <0,002	850	1,3.10⁶ >10⁷	—	—	—	—	<0,006	**KF3**
								90	1.0 <0,015	—0,5 —10	90	0,3	0	—	0.5 <0.002	1000	2,0.10⁶ >10⁷						
KF4	H.F. Pentode	102×40	P30 (29)	1, 2, 7, 8, 11	dir.	2,0	0,065	135	2,6	—0,5	135	1,0	0	—	0,8	800	1,0.10⁶	—	—	—	—	<0,006	**KF4**
								90	1,2	—0,5	90	0,4	0	—	0,7	900	1,3.10⁶						
KB2	Duodiode	72×30	V24 (53)	13	indir.	2,0	0,095	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**KB2**
KC1	Triode	90×44	P30 (24)	7, 11	dir.	2,0	0,065	135	1,2	—1,5	—	—	—	—	0,6	25	40.000	—	—	—	0,5	3,5	**KC1**
								90	0,3	—1,5	—	—	—	—	0,4	25	60.000						
KC3	Triode	92×43	P30 (24)	10	dir.	2,0	0,21	135	3,0	—2,3	—	—	—	—	2,5	30	12.000	—	—	—	—	—	**KC3**
KBC1	Duodiode-Triode	112×47	P35 (27)	9	dir.	2,0	0,1	135	2,5	—4,5	—	—	—	—	1,0	16	16.000	—	—	—	—	—	**KBC1**
								90	1,0	—3,0	—	—	—	—	0,7	16	23.000						
KL4	Power Pentode	100×42	P35 (30)	12	dir.	2,0	0,14	135	6,5	—5	135	1,0	—	—	2,1	—	150.000	19.000	0,44	3,3	1,0	—	**KL4**
								90	4,7	—2,6	90	0,7	—	—	1,8	—	170.000	19.000	0,16	2,0			
KDD1	Double Triode	92×43	P30 (47)	16	dir.	2,0	0,22	135	2×1,5[6])	0	—	—	—	—	—	—	—	10.000[7])	2,0[8])	—	—	—	**KDD1**

[1]) The data of this horizontal column apply for the oscillating condition at V_{osc} = 8·5 $V_{R.M.S.}$ (Ig_1 = 100 μA) and for long and medium wave reception. The grid leak resistance amounts to 50,000 ohms and is connected to the neutral.

[2]) The data of this horizontal column apply for the oscillating condition at V_{osc} = 6 $V_{R.M.S.}$ (Ig_1 = 60 μA) and for short wave reception. In this range the valve must not be controlled by A.V.C. The grid leak resistance amounts to 50,000 ohms and is connected to the neutral.

[3]) Screen-grid current $Ig_3 + Ig_5$ = 0·7 mA.

[4]) Screen-grid current $Ig_3 + Ig_5$ = 0·6 mA.

[5]) Screen-grid current $Ig_3 + Ig_5$ = 1·0 mA.

[6]) Quiescent current, anode current at full load = 2 × 14 mA.

[7]) From anode to anode.

[8]) Ratio of intervalve transformer = 2 : (1 + 1) (primary to secundary turns). Driver valve KC 3, required A.C. voltage on grid of KC 3 = 2 $V_{R.M.S.}$

[9]) Capacity between anode and grid 4.

[10]) Conversion conductance.

[11]) See page 15. The numeral after the letter gives the maximum base diameter in mm.

PHILIPS NEON TUNING INDICATOR

Type Number	Dimensions without pins mm	Base (Connection reference in brackets)	Striking voltage at the auxiliary anode Va_2 Volts	Operating voltage at the main anode Va_1 Volts	Main anode current at fully lighted cathode Ia_1 mA	Auxiliary anode current Ia μA
4662	98×13	Small, 4-pin (XV, see page 12)	165—190	150—170	2	40—50