

WATER COOLED R.F. POWER TRIODE WITH INTEGRAL HELICAL COOLER

QUICK REFERENCE DATA

General purposes									
λ (m)	Freq. (MHz)	C telegr.		B teleph.		C _a mod.		B mod. 1)	
		V _a (kV)	W _o (kW)	V _a (kV)	W _o (kW)	V _a (kV)	W _o (kW)	V _a (kV)	W _o (kW)
4	75	6	6.9	6	1.9			6	13.3
		5	5.6	5	1.45	5	4.7	5	6.6
		4	4			4.5	4.1	4.5	6.0
						4	3.5	4	5.3
						3.5	3	3.5	4.6
						3	2.2	3	3.3
Television service									
Freq. (MHz)	Neg. mod.		Pos. sync.		Pos. mod.		Neg. sync.		
	V _a (kV)	W _o sync (kW)	W _o black (kW)		V _a (kV)		W _o white (kW)		
75	5	9	5.35		5		9		

HEATING: direct, filament thoriated tungsten

Filament voltage	V _f	12.6	V
Filament current	I _f	33	A

CAPACITANCES

Anode to all other elements except grid	C _a	0.3	pF
Grid to all other elements except anode	C _g	16	pF
Anode to grid	C _{ag}	11	pF

¹⁾ Two tubes

TYPICAL CHARACTERISTICS

Anode voltage	V_a	4 kV
Anode current	I_a	1 A
Amplification factor	μ	32
Mutual conductance	S	17 mA/V

COOLING : Water and low velocity air flow

TEMPERATURE LIMITS (Absolute limits)

Water inlet temperature	t_i	max. 50 °C
Temperature of filament seals		max. 210 °C
Temperature of anode and grid seals		max. 180 °C

WATER COOLING CHARACTERISTICS

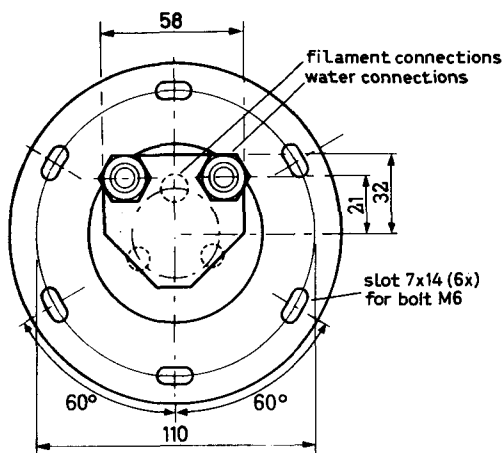
W_a (kW)	t_i (°C)	q_{min} (l/min)	P_i (atm)	t_o (°C)
2	20	1.5	0.06	44
	50	3	0.22	62
4	20	3	0.22	42
	50	6	0.73	61
6	20	5	0.54	39
	50	10	1.8	59

At water inlet temperatures between 20 °C and 50 °C the required quantity of water can be found by linear interpolation.

In general no air cooling will be required at ambient temperatures below 35 °C. At higher temperatures a low velocity air flow to the grid and filament seals will be necessary.

MECHANICAL DATA

Filament connectors	40634
Grid connector	40622
Net weight	0.8 kg



The use of wing nuts for connecting the water connections should be avoided

The centre tap f_c must not be used for filament current supply.

The connectors 40634, however, must be used for the cooling of all three filament pins, thus also of pin f_G .

Mounting position: vertical with anode down

For further data except cooling curves, please
refer to type TBW6/6000

Dimensions in mm

