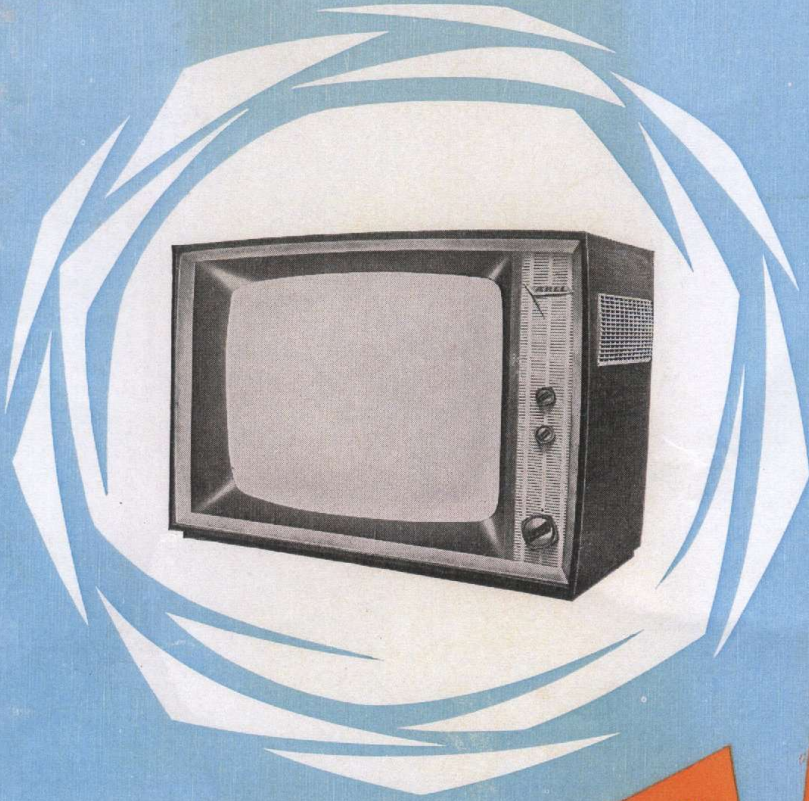


# SERIES 800 T.V. RECEIVERS



**AREL**



n. v. AREL s.a. PAALSTRAAT 271 - 277 / SCHOTEN / ANTWERP / BELGIUM

## AREL SERIES 800 TELEVISION RECEIVERS

### PROVISIONAL DATA

#### A. Subject

The series 800 is an economical TV chassis giving top performance at moderate cost, and intended for reception of CCIR systems.

It features :

- a 14 position rotor tuner with newest grid valves (Philips tuner type AT 7639/85 with mechanical memory optionnal)
- an IF amplifier with two frame grid tubes, band-filter circuits
- a keyed and delayed AGC
- a sync. separator with noise inversion
- intercarrier sound with ratio-detector
- a powerfull HI-FI sound output stage
- automatic sync circuits - horizontal sinus-oscillator
- exclusive deflection circuits matched to conventional Philips AT 1009/yokes for all types 23" CRT's.

It provides all mechanical and electrical facilities for mounting an UHF tuner for band IV and V and an FM receiver adaptor.

#### B. Tubes

PCC	807	Frame grid cascode tube
PCF	87	Frame grid mixer (optionnal Philips tuner type AT 7639/85 with PCC 189 - PCF 86)
EF	183	remote cut-off frame grid IF amplifier tube
EF	184	video IF amplifier
PCL	84	P Video amplifier tube T AGC gate
EF	80	intercarrier amplifier and limiter
PCL	86/82	T AF preamplifier P AF output tube
ECH	84/81	P sync. separator with noise inversion T sync. clipper inverter
PCF	80	T gated fase detector P horizontal sinusoscillator
PCL	85	vertical oscillator and output tube
PL	500	Horizontal output tube
PY	88	Damper
DY	87	EHT rectifier

Recommended CRT : Philips AW 59/90

Semi-conductors :

1	OA 70	video detector
2	OA 79	FM discriminator
1	OA 85	blanking clipper
1	TV 10	silicon mains rectifier

Additional tubes :

PC	88	UHF amplifier	} Philips UHF tuner
PC	86	UHF convertor	
PCC	85	FM RF amplifier and convertor	
PCF	80	FM 10,7 tot 5,5 MC convertor	

#### C. Electrical Specifications (Provisional)

Picture sensitivity 5 (CCIR)	≤ 10 microvolts
(with tuner type :	≤ 25 microvolts)
Noise figure	4,5 to 6,5 dB
(with tuner type :	5,5 to 7,5 dB)
Antenna input impedance	300 ohm symmetrical
Adjacent channel rejections	≥ 50 dB
Bandwidth at 6 dB	≥ 4,5 MC/s (400 lines)
Video output signal	≥ 80 V P.P. including sync.
AF response	60 - 14.000 c/s within 3 dB
AF output power	≥ 2 Watt at d=10 %
Vertical frequency	50 c/s
Vertical hold range	30 - 49 c/s
Horizontal frequency	15.625 c/s
Horizontal hold range	≥ 1.100 c/s
Horizontal pull-in range	≥ 700 c/s
EHT	≥ 14 KV
Mains voltage	220 V nominal
Power consumption	140 Watts
Mains voltage compensated	between 180 V and 240 V
Geometry changes at extreme mains voltages :	≤ 5 %

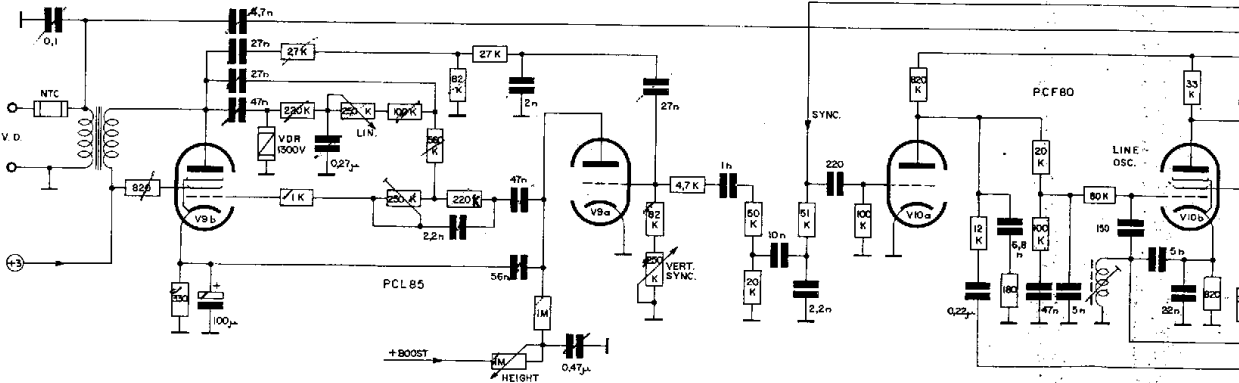
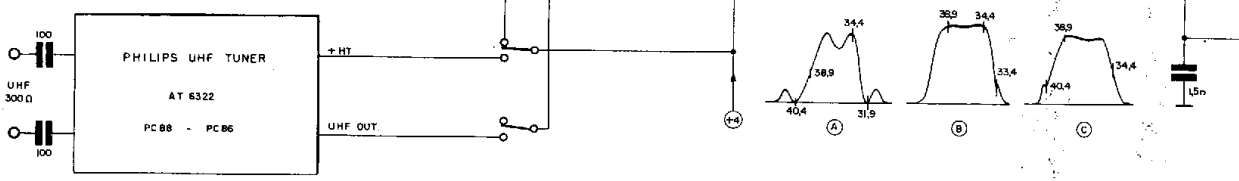
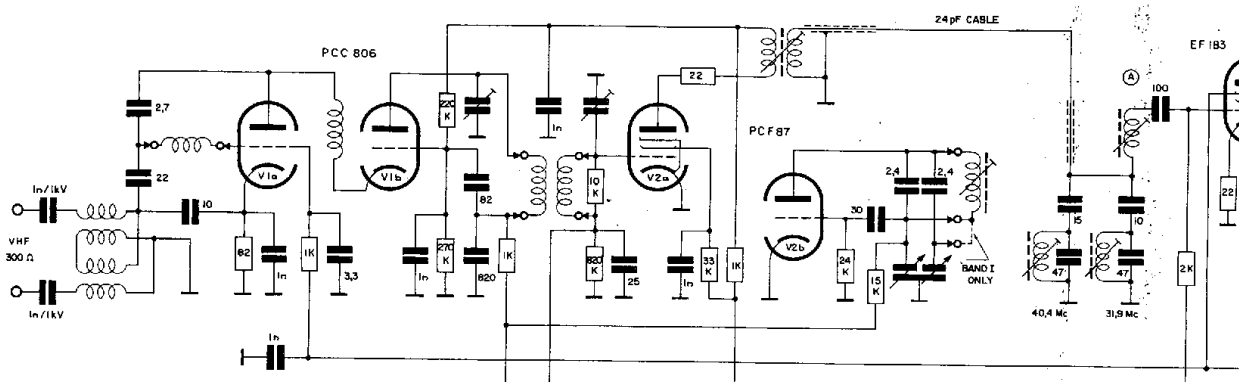
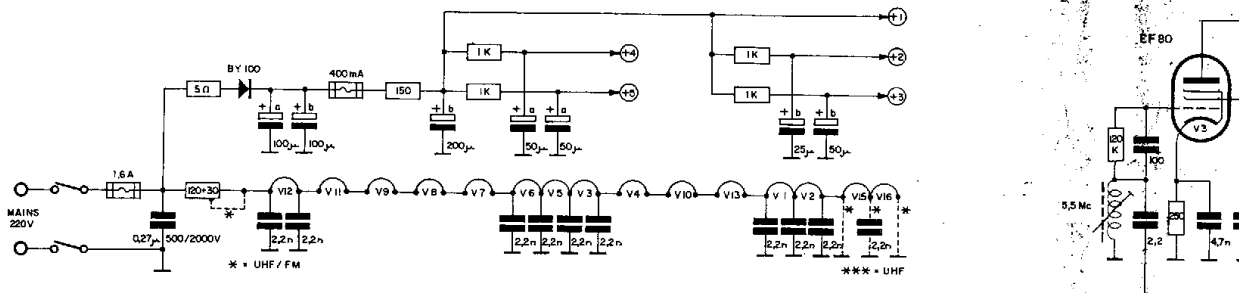
#### D. Mechanical Data

- a) Bolted metal frame - holding 1 printed board with all RF ; circuitry - another board with deflection oscillators and two subchassis (hand wired) one with the mains power pack, the other with the line output stage.
- b) Separate control-panel with tuner control knobw and provision for mounting UHF tuner and FM convertor.

The frame can be swung around a vertical axis, for easy service. Valves are mounted inside - towards the CRT.

- Dimensions (in mm)	frame height :	315
	width :	470
	depth total :	140
	outside cabinet :	90

control panel : location of controls and hence dimensions are built optionnally to customers requirements provision can be made for UHF and F<sup>V</sup> dials.



AREL SERIES 800 TV RECEIVERS  
PROVISIONAL DIAGRAM CCIR

