## **Supplement Chap. 117** - 1



S 87/20
Country of origin:
Germany WW2

#### DATA SUMMARY

Organisation: OKW Amt Ausland, Abwehr.

**Design:** Abt Ii, OKW\_Aussenstelle Berlin-Stahnsdorf. **Manufacturer:** Stahnsdorf until 1942, OKW Aussenstelle

Wurzen from 1942 onwards. **Year of Introduction:** Probably 1939.

**Purpose:** Central control station. **Transmitter:** S 87-20.

Circuit features: VFO (push-pull) and RF power amplifier (2 valves in push-pull). CW only.

Frequency Coverage: 4.5-7MHz and 8-12MHz.

RF output: 20W.

Valves: EDD 11, EL 11 or EL12 (2x). **Associated receiver:** Possibly E 75.

**Power Supply:** Separate AC Mains power unit. **Size (cm):** Height 19.5, Length 25, Width 10.5.

Weight: 2.5kg.

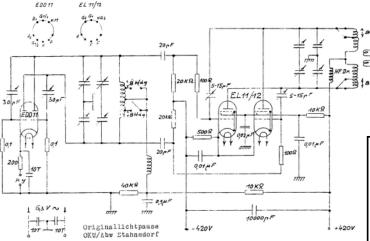
### REMARKS

The S 87/20 was a stand alone shortwave transmitter used with a separate receiver. It was primarily used in central control stations known as 'Funkmelde-Köpfe' for communication to agents and front reconnaissance groups, and other applications.

2x EL 11/12 EDD 11

Internal view of the S 87/20 transmitter showing a well crafted mechanical design. The EDD 11 oscillator valve was located on top of the right hand compartment, and the two EL 11 or EL12 valves with PA tuning at the other side of the RF screen.

# Circuit diagram of the S 87/20. (Below) Both VFO and RF power amplifier valves were connected in push-pull.



#### References:

- Photographs and additional information courtesy Gerhard Reinel, DH2FAI, Germany via Detlev Vreisleben, DC7KG, Germany.
- Original OKW Stahnsdorf circuit diagram by Rudolf Staritz, DL3CS, Germany.

© This WftW Volume 4 Amendment is a download from www.wftw.nl. It may be freely copied and distributed, but only in the current form.