SIEMENS

100 kW Medium Wave Broadcast Transmitter

The Siemens MF-Transmitter type WR Send 100 M-03 for broadcasting in amplitude modulation works with a carrier power of 100 kW.
It is equipped with a crystal oscillator and can be adjusted to the operating frequency in the range of 525 ... 1605 kHz. The electrical data are corresponding to the CCIR and ARD standard.
All safety equipments and control function being necessary are available.

Special Characteristics

- 3 valves only (vapor condensation cooling)
- Pulse duration modulation (advantage for modulation capability and efficiency)
- Automatic re-start in case of interference
- Fault memory
- Logical monitoring
- Power reduction for operation and adjustment
- Utilisation of silicon semiconductors in the prestages, blocking devices and power supplies
- RF measuring outputs and demodulator
- Crosspointer instrument for RF output power and VSWR
- Constructure as per the unit principle
- Removable trolleys
- Small dimensions
- Simple installation and operation
- Easy maintenance
- Provided for remote control

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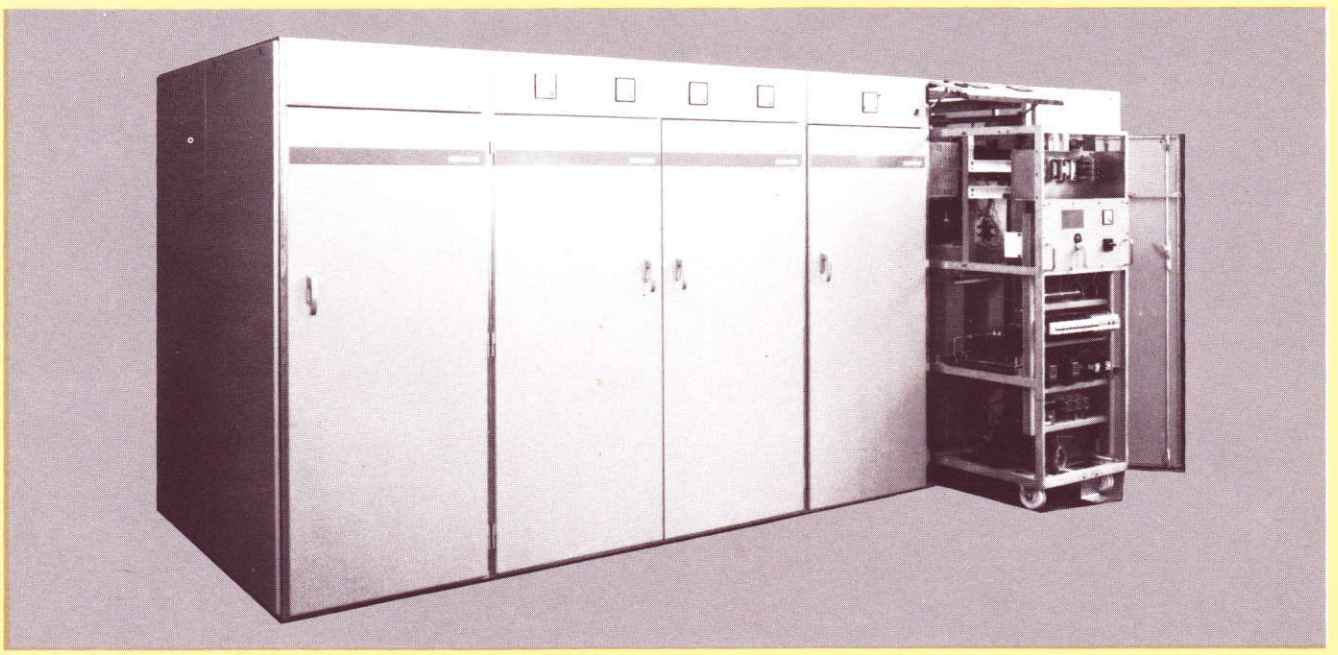

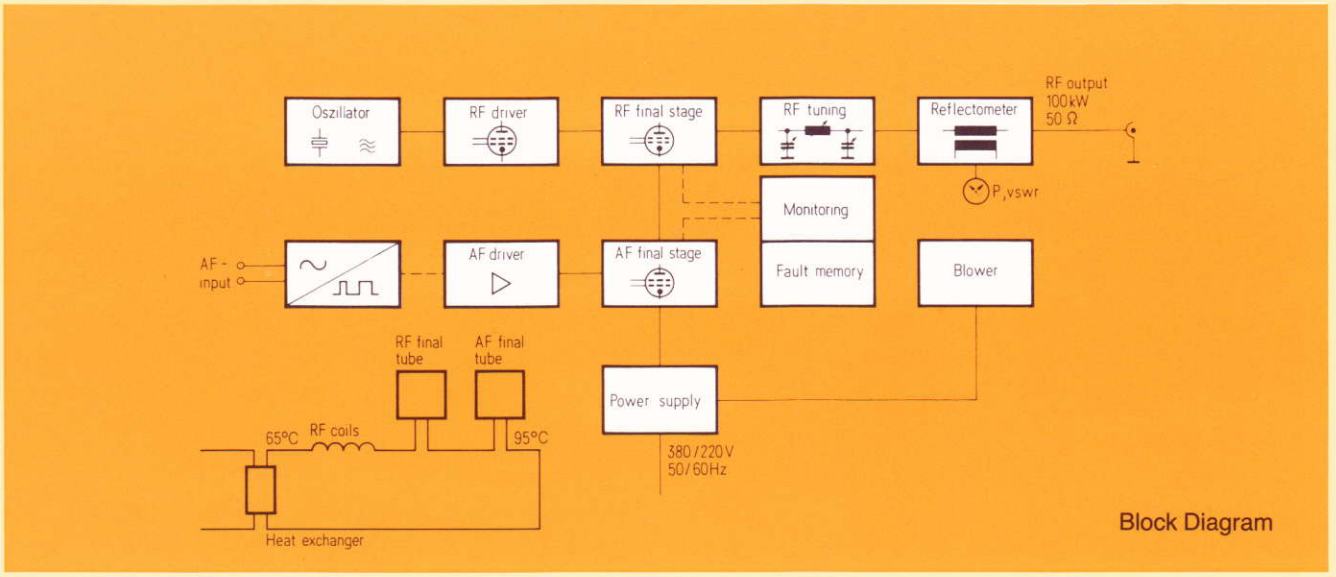

Block Diagram

Technical Data

Frequency range	525...1605 kHz (transmitter prepared for 1 frequency)
Frequency stability	± 5 Hz
Power output	100 kW
Power reduction	to 50 kW
Carrier shift	4% or less with 90% modulation at 1000 Hz
RF harmonic radiation	less than 50 mW
Type of transmission	9 A3 or 20 A3 (Amplitude modulation, broadcasting, double-side band, band-width 9 or 20 kHz)
Output impedance	50 Ohms unbalanced
VSWR	less than 1.5
Audio input	2000 Ohms balanced
Input level	−4...+10 dBm
Audio frequency response	100...4000 Hz ± 1 dB 60...5000 Hz ± 2 dB
Audio frequency distorsion	less than 3% at 60...5000 Hz with 80% modulation
Modulation capability	100%
Noise (unweighted)	50 dB or better
Noise (weighted)	60 dB or better
Power supply	three phases 380/220 V ± 10%, 50 Hz ± 5%
Max. power consumption	230 kVA
Cos φ	0.9 or better
Total efficiency	65% or better
Tubes	2 tetrodes RS 2054 SK 1 tetrode RS 1072 C
Dimensions (W × H × D)	4.0 m × 2.0 m × 1.8 m (transmitter) 0.8 m × 2.0 m × 1.8 m (HT transformer)

Terms of delivery and rights to change design reserved.
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