## SIEMENS

## 50 kW Medium Wave Broadcast Transmitter



The Siemens MF-Transmitter type WR Send 50 M-03 for broadcasting in amplitude modulation works with a carrier power of 50 kW.

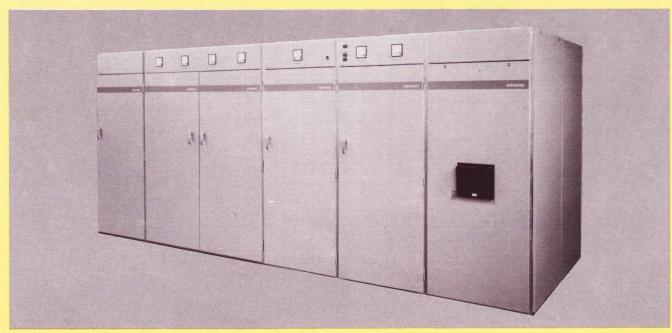
It is equipped with a crystal oscillator and can be adjusted to the operating frequency in the range of 525 ... 1605 kHz. The electrical data are corresponding to the CCIR and ARD standard.

All safety equipments and control function being necessary are available.

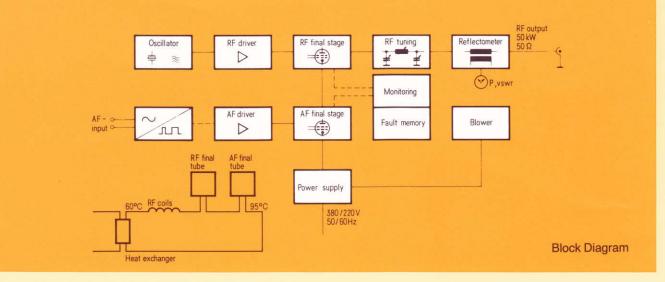
## **Special Characteristics**

- 2 valves only
- 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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## **Technical Data**

| Frequency range                      | 5251605 kHz<br>(transmitter prepared for 1 frequency)   |
|--------------------------------------|---|
| Frequency stability                  | ± 5 Hz  |
| Power output                         | 50 kW   |
| Power reduction                      | to 25 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<br>(Amplitude modulation, broadcasting,<br>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             | 1004000 Hz ±1 dB<br>605000 Hz ± 2 dB  |
| Audio frequency distorsion           | less than 3% at 605000 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 $\pm$ 10%, 50 Hz $\pm$ 5%  |
| Max. power consumption               | 120 kVA   |
| <b>Cos</b> φ                         | 0.9 or better   |
| Total efficiency                     | 65% or better   |
| Tubes                                | 2 tetrodes RS 1084 CJ   |
| Dimensions (W $\times$ H $\times$ D) | $4.0 \text{ m} \times 2.0 \text{ m} \times 1.8 \text{ m}$ (transmitter)<br>$0.8 \text{ m} \times 2.0 \text{ m} \times 1.8 \text{ m}$ (HT transformer) |
|                                      |   |

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