1.5.2 Amplifier

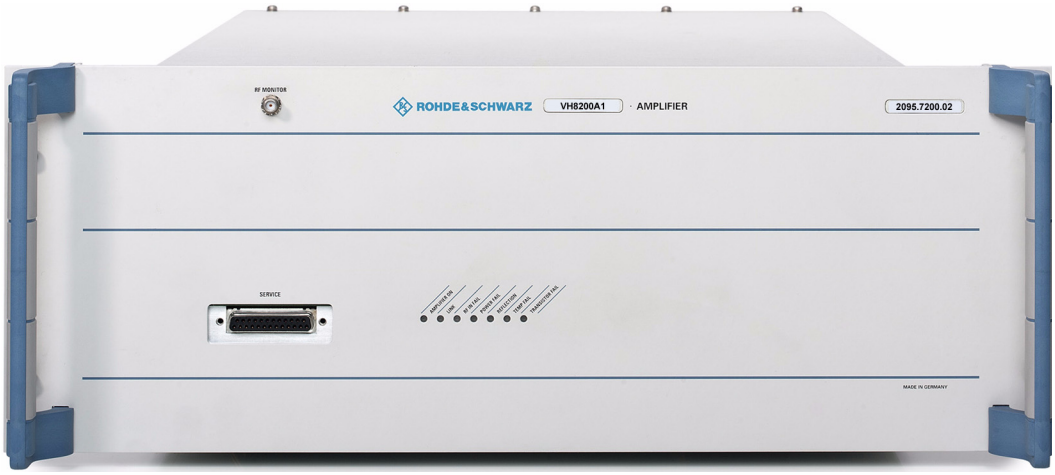

Fig. 22 *Amplifier*

The air-cooled, broadband VM8350A1 amplifier operates in the range from 170 MHz to 254 MHz (VHF band III). It can be used both for analog and digital signals without requiring any adjustments. The output power of an amplifier is 325 W in the case of digital TV.

The amplifiers amplify the exciter signals distributed by the splitter and forward them to the combiner. The amplifiers in a transmitter rack are controlled via the rack controller. Measured values and status information are recorded by the rack controller via CAN bus and forwarded to the NETCCU® transmitter control unit. The number of exciters in the transmitter depends on the transmit power.

Note *For detailed information about the amplifier, refer to the amplifier manual.*

1.5.3 Combiner

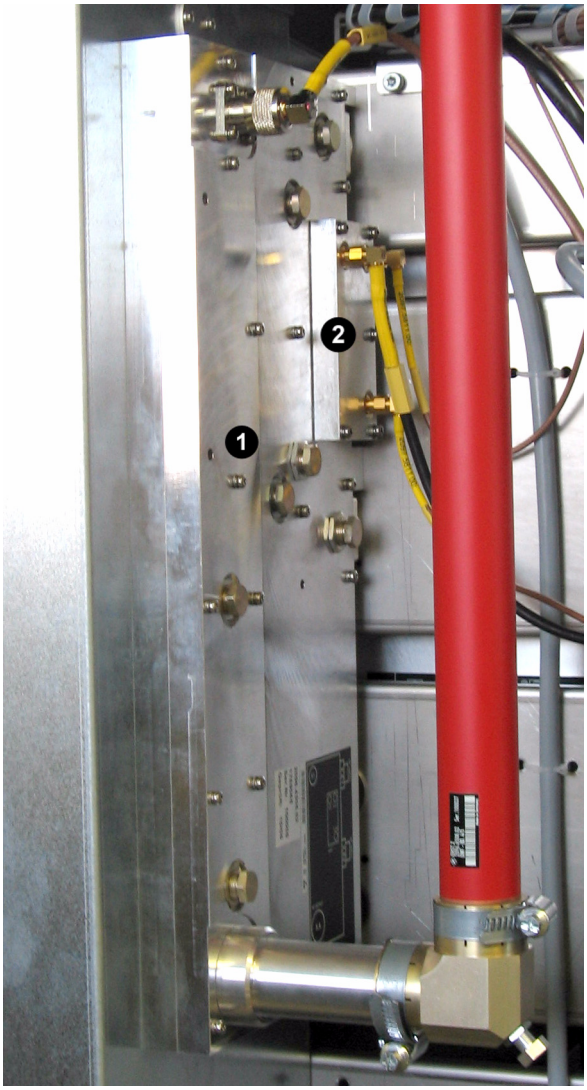

Fig. 23 *Combiner (1) with splitter (2)*

The RF power output by the amplifiers is merged via the combiner.

The combiner consists of a cascade of 3 dB couplers housed in a single unit.

1.5.4 Absorber

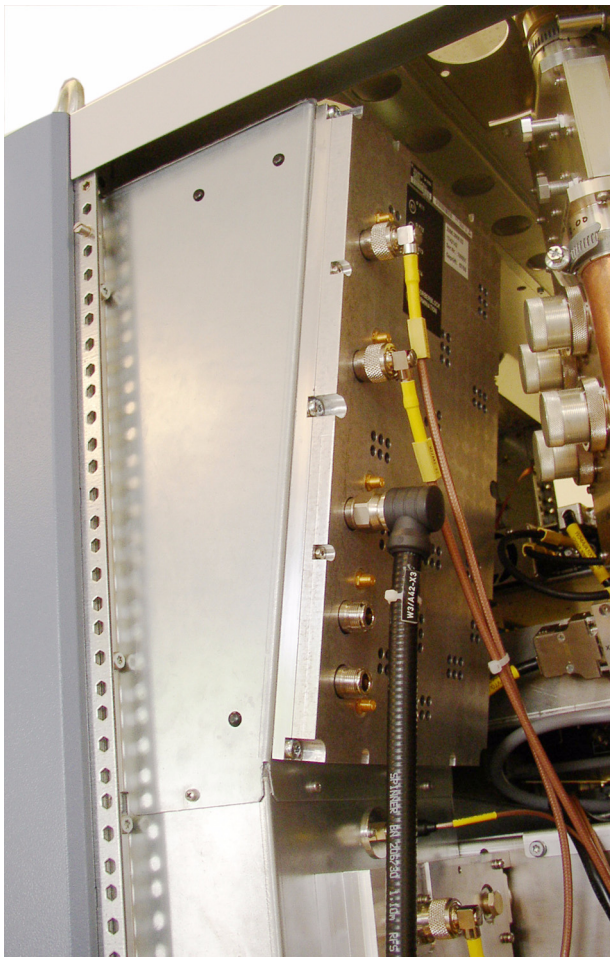

Fig. 24 Absorber

The absorber functions as the absorber resistor for the combiner. If combiner operation is not symmetrical (e.g. one or more amplifiers are disconnected or removed), the portion of the RF power that cannot be coupled in is expelled as additional thermal energy via the transmitter's exhaust system.