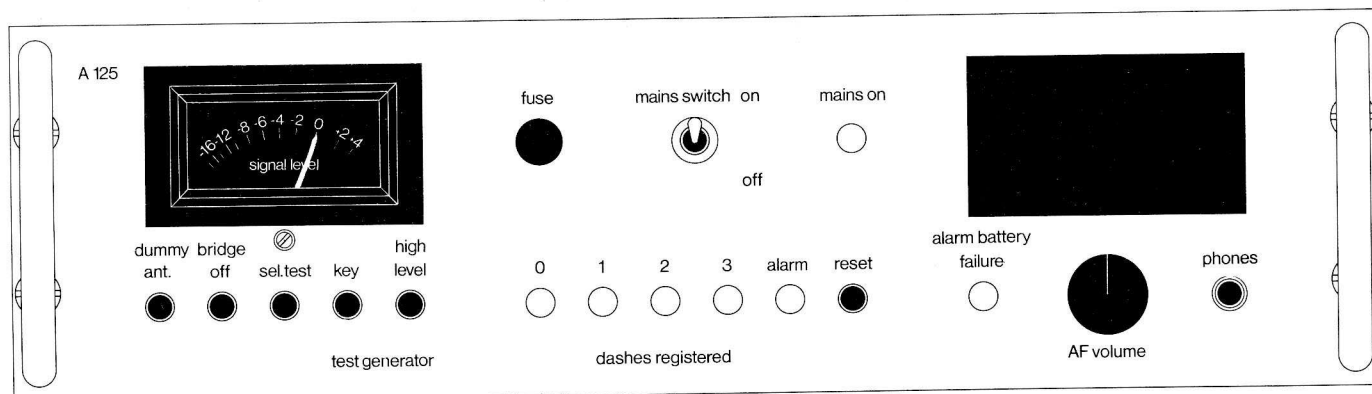


dansk radio aktieselskab



Auto Alarm

Radiotelegraph Automatic Alarm Equipment

elektromekano A125

all solid state selector for greater reliability - no rotating parts or relays

hybrid receiver for best signal-handling capability

reception of A1 as well as A2 signals

equipped with signal-strength indicating instrument

Complying with the applicable rules
in the Radio Regulations, Geneva 1967,
and SOLAS, London 1960

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ELEKTROMEKANO's Type A 125 Radiotelegraph Automatic Alarm Equipment is designed for the reception of radiotelegraph alarm signals transmitted on 500 kHz in accordance with the requirements of the International Convention for the Safety of Life at Sea, London, 1960.

The equipment consists basically of a receiver with a selector-and-alarm unit.

The hybrid receiver is pre-tuned to the 500 kHz radiotelegraph distress frequency. The receiver provides reception of type A1 and A2 signals for registering of alarm signals and of type A2 signals with a built-in loudspeaker. The receiver is provided with a gain control circuit which ensures proper reception during conditions of heavy interference or atmospheric noise.

The selector-and-alarm unit, which is completely solid-state, is designed to select and count four consecutive dashes of the alarm signal and to actuate audible alarms in the radio room, in the radio officer's cabin and on the bridge. Alarms will also be actuated in case of failure within the equipment or in case of supply voltage failure.

The equipment is designed to fit into a standard 19" rack and is compact and lightweight. All parts of the equipment are, however, easily accessible.

SPECIFICATION

RECEIVER UNIT

Circuit:

3-valve straight receiver pre-tuned to 500 kHz, semiconductor detectors and a 3-stage transistor A.F. amplifier. Hybrid gain control circuit.

Types of Reception:

For registering of alarm signal A1 and A2. For loudspeaker reception A2.

Sensitivity:

The selector will operate for a receiver input signal of at least 63 μ V (36 dB/1 μ V) A1.

Selectivity:

\pm 6 kHz at 3 dB
 \pm 9 kHz at 40 dB

SELECTOR UNIT

Circuit:

The selector consists mainly of the following circuits:
A counter circuit which counts four consecutive dashes of the alarm signal and actuates the alarm circuit.
A circuit that allows only signals of the correct length and spacing to be passed on to the counter.
A circuit that resets the counter if the signals are not of the correct length and spacing.
An alarm circuit which is operated by the counter circuit or is activated in the event of circuit or voltage failure.

POWER SUPPLY:

The equipment is designed to operate from a 110 or 220-volt A.C. supply. Power consumption is approx. 27 VA. A 24-volt battery supply is required for the alarm circuit.

Valve and Semiconductor Complement:

Four valves and 101 semiconductor devices.

DIMENSIONS AND WEIGHT:

Height: 133 mm (5 1/4")
Width: 483 mm (19")
Depth: 270 mm
Weight: 6.5 kg

(All data are subject to possible alterations of design).